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NUBIA IN THE NEW KINGDOM

Lived experience, pharaonic control and indigenous traditions

edited by

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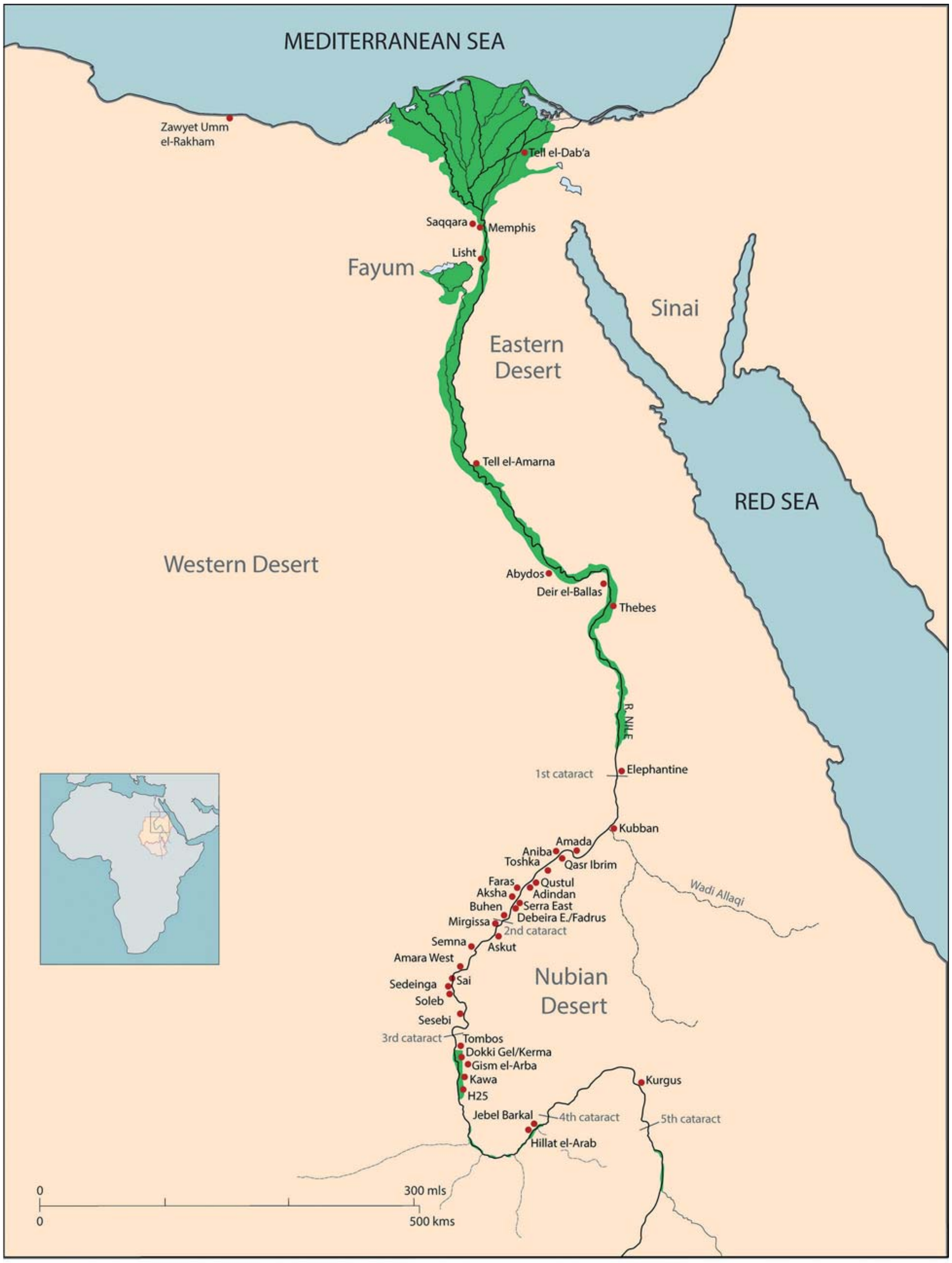

Fig. 1: Map of Egypt and Nubia showing location of key sites discussed in papers. (Claire Thorne).

INTRODUCTION: HISTORY AND HISTORIOGRAPHY OF A COLONIAL ENTANGLEMENT, AND THE SHAPING OF NEW ARCHAEOLOGIES FOR NUBIA IN THE NEW KINGDOM

Neal SPENCER, Anna STEVENS and Michaela BINDER

The archaeology of Nubia in the New Kingdom — the period from c. 1550 to 1070 BC — benefits from exceptionally well-preserved sites, set within an environment less intensively developed than much of North Africa and the Middle East, at least until the last century, and is informed by a significant body of contemporary textual evidence, albeit one-sided. Sustained fieldwork and research on the region in the last fifteen years have transformed how we view the realities of life in Egypt's southern colony during the New Kingdom. Entanglement and hybridisation are terms now frequently deployed in the study of this encounter, balancing the narratives of conquest and domination set out in Pharaonic texts and foregrounded by earlier scholarship. The latest research is also characterised by a focus on how individuals and communities play a key role in shaping the histories of the region, while not diminishing other, ostensibly more powerful, agents of change. This introduction seeks to provide readers — who we hope will extend beyond those familiar with northern Sudan and Egypt in ancient times — with context for the rest of the volume: the landscapes of Nubia, the historical framework and how the history of research has framed our understanding of New Kingdom Nubia. Thereafter, we focus on three themes that run through the volume, reflecting foci of ongoing research: the role(s) of the Pharaonic towns, insights into lived experience, and the impact of colonialism on indigenous populations. Considerable, and fundamental, questions remain to be answered, and some of these challenges are set out here. The volume is not intended to represent the definitive work on Nubia in the New Kingdom; rather, it captures an exciting moment in the ongoing process of archaeological enquiry into an ancient colonial context, one perhaps unrivalled in terms of documentary and archaeological evidence.

The landscapes of Nubia

Nubia is a term that generally designates the region in which Nile Nubian languages are spoken to this day, from the First Nile Cataract near Aswan in Egypt, upstream to the ed-Debba bend (Hale 1979; Fernea and Rouchdy 2010), although it can be used to encompass areas further south, including the Fourth and Fifth Nile Cataracts (Fig. 1). This larger area broadly mirrors the extent of Pharaonic Egypt's presence, reach, and — to a lesser degree — control, south of its borders during the latter half of the 2nd millennium BC.

It is a region with no formally recognised borders or edges, rather one defined and shaped by the Nile. While parts of the valley are similar to areas of Upper Egypt, with stretches of cultivable land flanking the river, it is the differences vis-à-vis the Egyptian Nile Valley that are perhaps more marked. An inscription recording a military campaign in the reign of Thutmose IV evokes the challenges encountered in one area of Nubia:

> 'He (the king) found all the enemies belonging to the Nehesy (Nubians) in a hidden/difficult valley which was unknown, they being concealed from the people (patrols?) who trod the mountains and lands distant from what was (normally) travelled (?) (Bryan 1991, 333–6)'.

The variety of landscapes within Nubia is worth emphasising. In the cataract zones, distinctive mountain and boulder formations cluster on either side of the Nile, and the river bed is shallow and often punctuated by rocks and boulders, creating rapids. These cataracts were not barriers across the river (as implied by maps that reduce these natural features to a line across the course of the Nile), but lengthy stretches of the river (see Fig. 3). Riverine progress in either direction is made challenging by these cataracts; a canal near the First Cataract was repeatedly re-excavated in ancient times to facilitate navigation (e.g. Klug 2002, 165–6). It is perhaps unsurprising that the First, Second and, to a lesser extent, the Third, Fourth and Fifth Cataracts were effective boundaries between polities at various periods in the history of the region. During Pharaonic times, the region was further divided into two sub-regions, Lower Nubia (Wawat) and Upper Nubia (Kush), which partly reflect political and cultural differences during certain

Fig. 2: The Nile near Buhen, a landscape now submerged beneath the reservoir of the Aswan High Dam. Sudan Archaeological Research Society Gentle Archive GEN S002.18.

Fig. 3: View over the rapids upstream of Kajbar (Third Cataract). Photo: Neal Spencer.

Fig. 4: View upstream of Sesebi, showing sandbank and cultivated land alongside the river. Photo: Neal Spencer.

eras. Lower Nubia, from Aswan to the Second Cataract, was submerged under the reservoir of the Aswan High Dam in the 1960s (see Fig. 2); new research fieldwork has been confined to Upper Nubia since that dam was completed, other than in the desert far from the original course of the river or at a small number of sites above the level of Lake Nubia/Nasser (for example Qasr Ibrim and Uronarti).

The reaches between the cataracts vary enormously. The alluvial plain broadens out in certain areas, providing land with considerable agricultural potential (Fig. 4), its growing seasons dictated — until the construction of modern dams — by the annual Nile flood that rose each summer. Within Nubia, the Dongola Reach represents the area with most agricultural potential, once fed by several Nile channels. Both the Kingdom of Kush centred at Kerma, Egypt's great rival in the 2nd millennium BC, and the later Medieval Kingdom of Makuria were centred in this fertile stretch of the Nile Valley. Other, smaller, alluvial plains and fans are found between the cataract zones, many in areas that formed focal points for the Pharaonic control of Nubia in the late 2nd millennium BC, for example around Jebel Barkal and Sesebi (Osman and Edwards 2012, 81–3).

The Nile is not the simple south–north corridor characteristic of much of southern Egypt. Rather, it twists and turns through the landscape, with big bends at Abu Hamed near Kurgus and at ed-Debba downstream of Jebel Barkal. Elsewhere, the river makes smaller changes of direction in numerous places, which would have impacted upon navigation,[1] such as around the Third Cataract (Osman and Edwards 2012, 7–8), but

[1] Though concerning the Nile further downstream, John Cooper's (2014) portrayal of river navigation in Medieval Egypt underlines the challenges of the river even in apparently calm stretches, emphasising that the idea of using wind for upstream navigation and the current for downstream is a simplification not reflected in large parts of the Nile — something also true for northern Sudan.

Fig. 5: View of desert west of Jebel Dosha. Photo: Neal Spencer.

may also have been a factor considered by those laying out towns and sacred monuments. Islands have played a more prominent role in Nubian settlement patterns than is the case in Egypt, offering security but also agricultural potential. The large island of Sai was an important strategic and population centre of both the Kushite and Pharaonic states, but smaller islands such as Amara West were also selected as locations for new Pharaonic towns.

The desert, of course, shapes Nubia as much as the Nile. This is a vastly varied landscape, from the yellow dune fields on the west bank opposite Sai Island, to the flat gravelly expanses on the desert route between Sesebi and Soleb, the low mountains west and north of Sesebi itself (Fig. 5), or the spectacular granite boulder formations around the Third Cataract (see Fig. 17). Single mountains pepper this landscape; through their distinctive profiles, they acted as convenient navigation aids. Drawings of these mountain profiles are shown on late 19th-century British maps of northern Sudan. Special meanings were ascribed to many mountains in ancient times, as evidenced by rock drawings — many of which pre-date the Egyptian conquest — and inscriptions. None more so than Jebel Barkal, which would become a centre for the cult of Amun from the 15th century BC onwards, with temples at the foot of the table-top mountain that rises prominently over the alluvial plain (Fig. 6).

Given the meandering course of the Nile through Nubia, the desert also offered short-cuts: tracks and routes, many of which bear evidence for ancient traffic. Routes such as the Sikket el-Maheilas might have provided a shorter journey time between two centres of Egyptian religious monuments, at Kawa and Jebel Barkal (Welsby and Welsby Sjöström 2007, 383), than travelling up the Nile. No major Egyptian settlements have been located between Kawa and Jebel Barkal,[2] so

[2] Note that there are no Nile-level inscriptions upstream of Tombos (dating to Year 10 in the reign of Amenhotep III, c. 1381 BC; Davies 2012, 33–4, figs 4–5, pls 7–8).

Fig. 6: View downstream (west) from the top of Jebel Barkal, with temples visible at the foot of the mountain. Photo: Neal Spencer.

this desert route may also have had strategic advantages; nonetheless, no inscriptions or material culture have been found to confirm its use in the New Kingdom.

The desert was also a provider — of wild game, gold and other mineral resources — and acted as an interface with regions further west and east. An array of Pharaonic toponyms refer to distinct polities or groups, some of whom may have been based in the deserts rather than the Nile Valley, and who included both sedentary and mobile communities.

Nubia in the New Kingdom: a history of exploration

The understanding of the history and archaeology of Nubia — across all periods — has been significantly shaped through the prism of its northern neighbour. Nubia has often been portrayed as a region conquered by Egypt, an extension of Egypt, even a landscape that mirrored Egypt, whether physically or ideologically. With few exceptions, only in the last decades of the 20th century has Nubia become a focus for archaeologists not trained as Egyptologists. From the first modern detailed accounts of the region and its monuments by European, and later American, travellers and scholars, the modern colonial context has also shaped the study of Nubia: from the Ottoman Empire through the Anglo-Egyptian Condominium, those who documented ancient Nubia were visiting a region occupied or controlled by an external power, other than during the short-lived Mahdiya period (1885–98). The difficulties of travel, initially by river or later by motor vehicles, have until recently limited the density of archaeological exploration in comparison to its northern neighbour, Egypt, which in the 19th century was already a popular tourist destination and a place for the wealthy European to winter. Nubia remained a challenging, difficult endeavour. In 1843, John Gardiner Wilkinson published *Modern Egypt and Thebes: Being a description of Egypt including the information required for travellers in that country*. A brief chapter is dedicated to the monuments upstream of the First Cataract, as far as Semna, with Abu Simbel and the view at the Second Cataract defined as highlights. Tellingly, Wilkinson ends the chapter by noting the Nubian monuments as being 'perhaps more suited to a work on archaeology than a guide-book for the traveller'.

One of the earliest travellers, the Danish Navy captain Frederick Norden, who journeyed as far as Korosko in 1737–8, described the Ramesside temple of Wadi es-Sebua (Norden 1757). James Bruce ended his epic journey to find the source of the Nile by travelling through Sudan in 1772, though he left the river downstream of Atbara and crossed the eastern Nubian desert to Aswan, thus missing the New Kingdom sites (Bruce 1790). Later, the scholars accompanying the Napoleonic expedition defined Philae, just upstream of Aswan, as the southerly limit to their recording campaign that resulted in the *Description de l'Égypte*. The ensuing decades saw a number of European travellers venture upstream of the First Cataract, where they encountered the standing remains of Pharaonic temples in Lower Nubia, principally of the New Kingdom, Ptolemaic and Roman eras. Alongside Wadi es-Sebua, the New Kingdom temples and rock-cut shrines of Gerf Hussein, Beit el-Wali, Amada, Derr, Ellesiya, Qasr Ibrim, Abu Simbel, Kubban and Buhen attracted the attention of travellers such as William John Bankes (in 1818: Usick 2002, 108–25), Charles Irby and James Mangles (in 1817–18: Irby and Mangles 1823), and Giovanni Belzoni (in 1812: Siliotti 2001). Many spent time clearing monuments of sand, making drawings and copying scenes and inscriptions, though local officials often restricted travel (Irby and Mangles 1823, 109). Franz Christian Gau travelled into Nubia in 1819, to extend coverage of the *Description de l'Égypte* up to the Second Cataract; the introduction to his publication (1822, v–viii) sets out how the monuments of Nubia encapsulate the whole of *Egyptian* history.

Some went further, into Upper Nubia and beyond. John Lewis Burckhardt described Beit el-Wali, Derr, Amada and Qasr Ibrim and then continued up through the Third Cataract, the Shendi Reach and onto the Red Sea (in 1813: Burckhardt 1822). Frédéric Caillaud reached Ethiopia as part of his journey of 1820–2, after a first visit as far as Wadi Halfa in 1816, the latter with the French consul-general Bernardino Drovetti. His publication (Caillaud 1826–7; see also Mainterot 2014), one of the first to describe the Meroitic temples in the Shendi Reach, also provides accounts of the New Kingdom temples at Semna, Kumma, Sai, Sesebi, Sedeinga and Soleb (for the history of exploration at the latter site, see Schiff Giorgini, Robichon and Leclant 1965), i.e. many of the key sites for the understanding of New Kingdom Nubia. George Waddington and Barnard Hanbury also journeyed through Nubia in 1820, regularly encountering officials and the armies of Mohamed Ali — a reminder of the colonial context within which scholars viewed ancient Nubia — and provide accounts of Semna, Sai, Sedeinga and Soleb, the Thutmoside inscriptions at Tombos and the temples and pyramids of Jebel Barkal (Waddington and Hanbury 1822). Their stop at Amara was limited to the Meroitic temple on the east bank, which they thought was more 'Grecian' than Egyptian (Waddington and Hanbury 1822, 17–18). The Pharaonic site on the opposite bank would not be 'rediscovered' until the end of the 19th century.

The decipherment of hieroglyphs by Jean-François Champollion, published in 1824, prompted a series of further scholarly expeditions, of varying scale, in Egypt and Nubia to record the monuments, and particularly the inscriptions, for the historical information they might reveal. The count Louis de Vaucelles, a contemporary of Champollion, was in many ways a pioneer of Nubian studies, as his book *Chronologie des monuments antiques de la Nubie* (Vaucelles 1829) presented the first systematic chronology of Nubian temples, based on his 1826 journey as far upstream as Wadi Halfa (Du Bourguet 1962). During this month-long trip, he visited New Kingdom monuments at Buhen, Serra, Abu Simbel, Toshka, Qasr Ibrim, Aniba, Ellesiya, Derr, Amada, Wadi es-Sebua, Kubban, Gerf Hussein and Kalabsha. Many of the identifications are incorrect — Ramses II is described as Ramses VI-Sesostris — but de Vaucelles was the first traveller to be able to read first-hand the names of the kings carved upon the monuments of Nubia.

Champollion himself travelled through Lower Nubia in late 1828, visiting Abu Simbel, Derr, Qasr Ibrim, Wadi es-Sebua, Gerf Hussein, Amada, Beit el-Wali, Buhen and Semna to copy texts (Champollion 1835; 1844), while Ippolito Rosellini's *Monumenti dell' Egitto e della Nubia* (1832–44) documented many of the same monuments.

George Hoskins, travelling in 1833, described Semna, Sedeinga, Soleb, Tombos, Jebel Dosha and Jebel Barkal, while noting that the region upstream of the Second Cataract — which he termed 'Ethiopia' — 'had been explored by very few Europeans, and two Englishmen; yet it abounds with monuments rivalling those of Egypt, and possessing, in some respects, a superior interest' (Hoskins 1835, vi). Hoskins is also one of the first to provide an outline history of the region, partly based on the accounts of Classical writers (Hoskins 1835, 284–320).

Leading a team that rivalled Napoleon's savants in the scale of its ambition, Karl Richard Lepsius and his Royal Prussian Expedition of 1842–4 travelled as far as Sennar, 280km upstream of Khartoum. The resulting *Denkmäler aus Aegypten und Aethopien* presented architectural drawings and epigraphic records of Beit el-Wali, Ellesiya, Semna, Kumma, Soleb, Gerf Hussein, Wadi es-Sebua, Derr, Philae, Tombos, Jebel Dosha and Jebel Barkal (L*D*). Many of these copies would remain the primary record of important historical inscriptions until the early 21st century. The chronological, rather than topographic, arrangement of the volumes reflects an aim to underpin a reconstruction of ancient history *of Egypt*. It is also noteworthy that 'Aethiopien' is deployed both as a geographical (L*D* I, 2bis) and chronological (L*D* V) designation, encompassing the monuments of the Nubian Dynasty 25, and the later Meroitic era.

The Prussian Expedition also brought Nubia to a wider public, as reliefs from the Meroitic temples, and depictions of the temple of Ramses II at Abu Simbel, were brought back to grace the Neues Museum in Berlin, opened in 1855. This was not the first significant representation of Nubia in one of the major European museums. Somewhat earlier, the two granite lions of Amenhotep III from Soleb, re-inscribed for Tutankhamun and then set up in Meroitic times at Jebel Barkal, were acquired in 1835 by the British Museum from Lord Prudhoe, who had travelled through Nubia in 1827. In 1843, a colourful painted cast of a battle scene from the temple at Beit el-Wali — showing Ramses II vanquishing Nubians — was installed in the galleries at the British Museum (Fig. 11; Moser 2006, 197). Meanwhile in Berlin, objects brought back by the Lepsius expedition, such as the granite ram statue from the reign of Amenhotep III (Priese 1991, 93–4 [58]) — also removed in ancient times from Soleb to Jebel Barkal — were put on display.

The tradition of travelling into Nubia continued into the late 19th and early 20th centuries (e.g. Heinrich Schäfer in 1900: see Gertzen 2014), but more notable were the visits of Wallis Budge, Keeper of Egyptian and Assyrian Antiquities at the British Museum, in 1897 and again in 1898–9, 1900–1, 1902 and 1905 (Budge 1907). These visits were expressly undertaken to purchase and collect antiquities, both for the British Museum and a new museum in Khartoum, but also included explorations at Meroe, Amara West and Uronarti. Budge's five visits to Nubia took place in a period when Sudan was under British rule: officers were involved in the clearance of temples such as Buhen (Fig. 8; Budge 1907, I, 584).

These visits provided the basis for Budge's two-volume history, *The Egyptian Sudan: Its history and*

Fig. 7: Red granite monumental statue of a couchant lion, inscribed for Amenhotep III, with later inscriptions of Tutankhamun and Amanislo. Originally installed at Soleb, and later moved to Jebel Barkal. British Museum EA 2. Donated by Lord Prudhoe, 1835. Photo: Courtesy of the Trustees of the British Museum.

monuments (1907). In his chapter on the New Kingdom (1907, I, 561–651), Budge outlines the history of Pharaonic conquest, followed by a reign-by-reign description of building projects and military campaigns, interspersed with longer descriptions of certain sites. Nubians are rarely mentioned, and typically only in the context of battles, raids and the extraction of tribute. Shortly after Budge, Frederick William Green travelled through Sudan (in 1906 and 1909–10), as did James Henry Breasted on behalf of the Oriental Institute (in 1905–7). The diaries of the former include important records of New Kingdom monuments and inscriptions (Davies 2014a). Breasted undertook two journeys, the first to make photographs of all the pre-Ptolemaic monuments between Aswan and Wadi Halfa, and the second encompassing Meroitic monuments but also the sites of Jebel Barkal, Tombos, Soleb, Sedeinga, Sai, Amara West, Tanjur, Semna, Kumma and Uronarti. The translations of important historical inscriptions (Breasted 1906) were a pendant to the epigraphic copies of the Lepsius expedition, and also remained standard references throughout much of the 20th century.

A more systematic regional approach to the archaeology of Nubia emerged in the first decade of the 20th century, moving beyond the monumental remains, partly prompted by the need for salvage archaeology, a recurring driver for archaeological research in Nubia (Adams 2007). Arthur Weigall, chief inspector of Upper Egypt for the Department of Antiquities, published a report (1907) on sites between Aswan and the Egypt–Sudan border, the first systematic gazetteer of Nubia, and expressed concerns about the state of the monuments. Weigall also notes (1907, vi) the appointment of an inspector with the extensive remit of oversight for all of Lower Nubia. The successive heightenings of the Old Aswan Dam in 1908–10 and 1929 resulted in two complementary approaches at recording the archaeology of Lower Nubia. The documentation of the decorated stone temples — principally of New Kingdom and Graeco-Roman date — was prompted by concerns about their seasonal flooding. The resulting fifteen volumes of *Les temples immergés de la Nubie* (Gauthier 1911–27; 1912; 1913–26; Roeder 1911; Maspero 1911; 1920; Blackman 1913; Zucker 1912),

Fig. 8: Sandstone doorjamb inscribed for Thutmose III 'beloved of Horus lord of Buhen', from Buhen. British Museum EA 1019, presented by Sir Charles Holled Smith (Budge 1907, I, 584). The doorjamb was acquired by Wallis Budge from a British colonial agent. Photo: Courtesy of the Trustees of the British Museum.

combine summaries of early travellers' accounts of the temples, copies of the texts, and photographs, often accomplished by very small teams with limited time. These remain the primary publication of many of the temples, and also include records of rock inscriptions in and around the temples. All the authors were Egyptologists, other than Zucker, a philologist specialising in ancient Greek.

In parallel, the *Archaeological Survey of Nubia* sought to explore archaeological sites beyond the monumental. Led by George Reisner in the first season (in 1907–8: Reisner 1910), the survey was then continued by Cecil Firth (in 1908–9, 1909–10: Firth 1912; 1915). The published volumes are notable for photographs showing the landscape context of each site and the large numbers of images recording grave assemblages *in situ*. The survey was not without its bias, however, focusing on mortuary sites, particularly of the New Kingdom and before (Adams 2007, 49), prompting Reisner to reason that the history of Nubia is 'hardly more than an account of its use or neglect by Egypt' (1910, 348). The cemetery investigations involved excavation of over 8,000 graves in 151 burial grounds, including several of the New Kingdom, and the skeletal remains were analysed in one of the first studies to consider issues of migration and distinct populations (G. E. Smith and Jones 1910). In parallel, the Shellal cemetery enabled Reisner to create the first designations of Nubian cultural periods, three of which — the A-Group, C-Group and X-Group — remain in use today. The wide regional scope of the project also led to the development of interpretative frameworks. Firth noted the absence of late New Kingdom cemeteries in Lower Nubia, and wondered if:

> 'the foreign wars of Ramses II may, through conscription, have reduced the male population of Lower Nubia, but [it] is more probable that the neglected and deserted condition of the country was due to the emigration of the population southwards to Ethiopia and its capital Napata, during the Late New Kingdom and the succeeding period'. (Firth 1912, 29)

Partly prompted by the results of the surveys, two important excavations were instigated that remain central to our understanding of Nubia in the New Kingdom. The University of Pennsylvania project at Buhen represents the first holistic approach to an ancient site of this period in Nubia, combining the excavation of housing areas, temple and burial grounds (Randall-MacIver and Woolley 1911). Further downstream, at Aniba, the fort, housing areas and cemeteries — including A- and C-Group burial grounds — were explored in 1912, 1914 and 1930–31 (Steindorff 1935; 1937).

Kerma, capital of the Kushite state of the mid-3rd to mid-2nd millennium BC, was first excavated by Reisner between 1913 and 1916. The discovery of Pharaonic statuary and artefacts in the monumental tumuli was taken as evidence for an Egyptian outpost of the Middle Kingdom (Reisner 1923), an interpretation later challenged (Säve-Söderbergh 1941, 103–16). Subsequent work by Charles Bonnet would further reveal the grandeur of this city, and the discovery of an Egyptian historical text at Elkab in Egypt — referring to a Nubian alliance looting the city — underlined the ability of the Kushite state to launch raids within Egypt proper, and presumably return with statuary and other objects (Davies 2003, 53–4; 2005, 50; see also Thill 2012). Reisner's work at el-Kurru (in 1918–19: Dunham 1950) is equally important, remaining influential in our understanding of the aftermath of Egyptian control and the rise of an indigenous Napatan state in the 1st millennium BC. Nearby, the temples at Jebel Barkal, also excavated by Reisner, yielded important historical texts of the New Kingdom (Dunham 1970).

Reisner later excavated the Second Cataract forts (already surveyed in 1900: Borchardt 1923). Though principally a reflection of an earlier era of Egyptian control over Nubia in the Middle Kingdom (c. 2040–1640 BC), many of these sites were still inhabited, or re-occupied, in the New Kingdom, with decorated temples at Uronarti (Dunham 1967, 13–17), Semna (Dunham 1960, 8–11, pls 10–34) and Kumma (Dunham 1960, 116–22, pls 48–80). The publication of their decoration (Caminos 1998a; 1998b) would be an outcome of the later campaigns prompted by the construction of the Aswan High Dam. The excavations at Semna and Kumma also yielded important information from cemeteries of New Kingdom date (Dunham 1960, 74–109, 127–8).

A further heightening of the Old Aswan Dam prompted a second *Archaeological Survey of Nubia* between 1929 and 1934, led by Walter Emery and Laurence Kirwan, including excavation of more New Kingdom cemeteries but also the fort at Kubban (Emery and Kirwan 1935). This inter-war era was, however, defined by the large-scale excavation of several important New Kingdom towns and temples. Of particular importance are the temples of the Amarna Period at Sesebi (excavated in 1937–9: Fairman 1938) and Kawa (Macadam 1949, 1–4, 82–6; 1955, 28–44), while

Amara West (1938–9, and continued in 1947–50: P. Spencer 1997; 2002; 2016) featured one of the better-preserved temples of the Ramesside Period outside the Luxor area. Both Sesebi and Amara West, under the direction of Egyptologist Herbert Fairman, also witnessed the excavation of significant parts of their urban fabric, including housing areas, at a time when Egyptology was increasingly interested in urban archaeology, most notably with the excavations at Tell el-Amarna. Exploring ancient living areas was not the primary aim of these excavations: as late as 1947, Fairman professed that the excavation of an area of densely superimposed housing at Amara West was undertaken to generate spoil to rebury a decorated temple vulnerable to the effects of windblown sand (P. Spencer 1997, 99).

The town, temple and cemetery excavations of the first half of the 20th century provided opportunities for international museums to expand their collections. The University of Pennsylvania Museum gained a representative assemblage from the excavations of Buhen town site, the Museum of Fine Arts in Boston acquired significant material from Jebel Barkal and other sites excavated by Reisner, while the practice of distributing finds led to material from Sesebi, Amara West and Kawa being spread across museums in North America and Europe. Meanwhile, a history of Sudan published in 1955 embodies the prevailing interpretation that these Egyptian towns reflected complete Egyptian control and dominance by the Pharaonic state up to and including the Dongola Reach (Arkell 1955, 80–109).

The decision to construct the Aswan High Dam in 1954 would result in a vast reservoir — named Lake Nasser (in Egypt) and Lake Nubia (in Sudan) — that submerged much of Lower Nubia. The resulting International Campaign to Save the Monuments of Nubia (from 1960–80: Säve-Söderbergh 1987) remains iconic through images such as the removal of the rock-cut temples of Ramses II at Abu Simbel, block-by-block, to be reconstructed set into an artificial mountain overlooking the reservoir. Other New Kingdom monuments were also removed within Egyptian Nubia, including the temple of Amada and the tomb of Penniut from Aniba (grouped at Amada), the temples of Beit el-Wali (re-erected on New Kalabsha island with the later monuments from Qertassi and Kalabsha), Wadi es-Sebua (grouped with later temples from Maharraqa and Dakka) and Ellesiya (now in Turin). In Sudan, the temples of Buhen, Kumma, Semna and Aksha, with the tomb of Djehutihotep from Debeira and a selection of hieroglyphic inscriptions, were transferred to the Sudan National Museum (Hinkel 1978).

Alongside the rescue of Egyptian temples, the imminent submersion of Lower Nubia prompted a series of archaeological campaigns (Adams 1992). These were not under a single co-ordinating body, and much of the work was focused in Sudanese Lower Nubia, to balance the earlier survey work in Egypt (Adams 2007, 53–6). Several regional surveys were undertaken: between Faras and Gemai on the east bank by the Scandinavian Joint Expedition (for New Kingdom sites, see Säve-Söderbergh and Troy 1991; see also Donner 1998) and on the west bank by the Sudanese Antiquities Service/UNESCO (for New Kingdom sites see Edwards 2013; Nordström 2014, 121–43, 156–7). Epigraphic surveys documented both rock art and Egyptian inscriptions (Žaba 1974; Hintze and Reineke 1989) while other projects focused on small groups of Pharaonic monuments, such as the Toshka and Arminna tombs and inscriptions (Simpson 1963). Cemeteries and town sites of the New Kingdom also received more focused attention. The former included Italian excavations at Dehmit (Curto et al. 1973, 27–34) and Oriental Institute excavations at Qustul and Adindan (Williams 1992) and Serra East (Williams 1993, 149–228), while the cemetery at Fadrus, excavated as part of the Scandinavian Joint Expedition (Säve-Söderbergh and Troy 1991, 212–93), remains a key dataset for debates around acculturation and Egyptianisation (see Van Pelt 2013). For settlement sites, a French–Argentine expedition explored parts of Aksha (Rosenwasser 1964), a Ramesside foundation with many similarities to Amara West, while the Polish expedition to Faras recorded the Pharaonic reliefs from the site (many probably from Buhen: Karkowski 1981, 30–6), Jean Vercoutter worked at Mirgissa (1962–9: Vercoutter 1975, 335–478; see Knoblauch, this volume), Walter Emery and Harry Smith at Buhen (1957–64: H. S. Smith 1976; Emery, H. S. Smith and Millard 1979) and a UCLA mission led by Alexander Badawy explored the Middle Kingdom fort at Askut, where a substantial New Kingdom occupation was identified (1962–4: S. T. Smith 1995, 137–74).

Adams has noted that there was no discipline of Nubiology at the time of these salvage campaigns, which took place within a framework that dated back to Reisner's early 20th-century excavations (Adams 1992, 26), and this is reflected in the Egyptological emphasis of the first archaeology degrees at the University of Khartoum (Edwards 2003, 138) and the histories of

Sudan written by those involved in the salvage archaeology. Emery describes Nubia as 'a battleground of the ancient world' and foregrounds his history with introductions to the salvage and survey campaigns, but then focuses on the New Kingdom through the military campaigns and tribute lists known from inscriptions (Emery 1965, 172–207). In contrast, William Y. Adams, by training an anthropologist rather than Egyptologist, wrote a history — *Nubia: corridor to Africa* (1977) — cast as 'a continuous narrative of the cultural development of a single people' (Adams 1977, 5), an important step towards seeing the region as a place of cultural continuity despite episodes of foreign rule. In his description of New Kingdom Nubia, Adams considers nucleated settlement patterns and economic models, and emphasises the difference between Middle and New Kingdom occupation, with temple superseding fort as the primary symbol of Egyptian rule (Adams 1977, 220). Somewhat earlier, while the salvage archaeology was still ongoing, Bruce Trigger wrote on Lower Nubia, emphasising cultural continuity and the role of landscape, throughout informed by anthropological models (1965). Nonetheless, his chapter on the New Kingdom describes how Thutmose I 'occupied the whole of the Dongola Reach between Kerma and Karei (modern Kareima)' (Trigger 1965, 107).

The High Dam campaigns had seen the development of archaeological projects not led by those primarily interested in Egypt's role in Nubia; the subsequent four decades of work have transformed our knowledge of the long history of Nubia, particularly the prehistoric, Kerma, Napatan and Meroitic periods, allowing the wider historical and regional context of New Kingdom Nubia to be appreciated (Edwards 2004).[3]

Sudan: Ancient Treasures, an exhibition at the British Museum in 2004 (Welsby and Anderson 2004), presented objects from the Sudan National Museum, with a focus on recent discoveries, to evoke the long history of the country — principally the region of Nubia — from the early Palaeolithic (c. 200,000 BC) to the Mahdiya (AD 1885–98) eras. The New Kingdom section was represented by only twenty-six artefacts (out of 318), reflecting both how these five centuries of Pharaonic rule represent a relatively brief episode within the history of human occupation of northern Sudan, and also how the focus of archaeological work had shifted away from pharaonic sites in the preceding decades.

Regional surveys, such as those along both banks of the Nile for a distance of 64km upstream of Dal (Vila 1975–85), the Third Cataract (Osman and Edwards 2012) and in the Northern (Welsby 2001) and Southern Dongola Reach (Żurawski 2003) were central to this improved understanding of the long history of Nubia, and shifts in settlement patterns. Excavation of important New Kingdom sites, in contrast, was absent from this sustained period of activity, with three notable exceptions.

On the island of Sai, where significant remains of nearly every period of Nubian history survive, Michel Azim undertook important work on the New Kingdom town (1970–3: see Azim 1975), most notably the temple, residence and associated magazines (Azim 1975; 2011–12; little has been published to date), but the cemetery also received attention (Minault-Gout and Thill 2012). Upstream at Soleb and Sedeinga, Michela Schiff Giorgini (on behalf of the University of Pisa, 1957–77: Schiff Giorgini, Robichon and Leclant 1965; 1971; Schiff Giorgini et al. 1998; 2002; 2003) excavated the late Dynasty 18 temples and cemeteries, providing important insights into New Kingdom temple architecture and decoration (see also Bryan 1992, 106–11, figs IV.21–3; Török 2009, 230–6), but also burial practices in Upper Nubia. Soleb remains the best-published cemetery of significant scale dating to the New Kingdom, but the urban context of the temple remains almost completely unknown. The architecture and decoration of Sedeinga temple are still unpublished (Francigny, David and de Voogt 2014, 36–43).

Following excavations at Tabo — revealing New Kingdom settlement remains and inscribed architecture (Bonnet 2011) — Bonnet instigated excavations at Kerma in 1977 (Bonnet 2000; 2004; Bonnet and Valbelle 2014). While most of the urban architecture and cemeteries pre-date the New Kingdom, the site

3 The annual *Sudan & Nubia* journal provides a convenient overview of the focus of ongoing research in the region over the last twenty years.

remains of paramount importance for how we understand Nubia under Pharaonic rule from the mid-16th century BC onwards. Egyptian policy towards Nubia was necessarily shaped as a response to the powerful state centred at Kerma, but the excavations have also revealed important insights into domestic architecture, pottery production and cult areas, allowing those working at New Kingdom sites to consider continuities, or otherwise, in lifeways following the assertion of Pharaonic control in the 15th century BC (Bonnet and Valbelle 2014). North of the historic centre of Kerma, at the site of Dokki Gel, ongoing work by Bonnet is revealing a succession of Egyptian temples and associated architecture, but with the persistence of Nubian architectural forms throughout the New Kingdom and beyond (Bonnet, this volume).

The most recent synthetic history of Sudan, much of which concerns Nubia, sets the New Kingdom within a chapter on the broader Bronze Age, with equal consideration given to the Kerma polity as to the periods of Pharaonic rule, which thus emerge as episodes, albeit important ones, in a continuous history of the Middle Nile region (Edwards 2004, 75–111). Themes highlighted for Bronze Age Nubia include changing settlement patterns, developments in material culture and the distinctive cultures of Lower Nubia and the deserts. The New Kingdom occupation is presented with caveats, questioning the extent of Egyptian presence south of the Third Cataract, noting the small scale of many settlements and ultimately considering whether Egypt simply never had the capacity for the direct colonial domination of the Middle Nile beyond the Second Cataract.

The integration of Nubian archaeology within a wider African archaeology (Edwards 2004, 8–9) is still somewhat nascent. Small amounts of Egyptian pottery of the Middle Kingdom, Second Intermediate Period and early New Kingdom have been found — alongside C-Group, Pan-Grave and Kerma wares — in the Gash Delta and Mahal Teglinos in Kassala, over 300km from the Nile, perhaps reflecting Nubian groups as intermediaries for trade with Pharaonic Egypt (Manzo 1993; 1997; 2015). An archaeological and environmental framework for understanding the wider world within which Pharaonic Egypt and its Nubian neighbours might have traded has been provided by the work of the ACACIA project at the University of Cologne (Bubenzer, Bolten and Darius 2007), but further fieldwork and research is needed on the Upper Nile Valley and other regions to the south, to understand their relationship to Nubia and Egypt. Meanwhile, the study of Nubia has also been exploited to support Afro-centric approaches to Pharaonic culture (see Edwards 2003; Exell 2011).

Contemporary archaeologies of New Kingdom Nubia

Intensive excavation and survey of sites and regions of other eras, most notably the Fourth Cataract salvage archaeology campaign (for occupation contemporaneous with the New Kingdom in the area, see Kołosowska and el-Tayeb 2012), has continued over the last fifteen years; this period has also seen the renewal of sustained research excavations at New Kingdom sites. New fieldwork has been instigated at Amara West (British Museum, since 2008), Sai (Université de Lille III with the Austrian Academy of Sciences and now University of Munich, since 2009), Sesebi (University of Cambridge and Austrian Archaeological Institute, since 2009), Tombos (Universities of California-Santa Barbara and Purdue, since 2000) and at the rural site of H25 near Kawa (British Museum, since 2013). Work has continued at Jebel Barkal since the excavations of George Reisner, though our knowledge of the New Kingdom era continues to be represented by temples rather than residential areas. Alongside these projects, the long tradition of survey continues in Upper Nubia. Survey of the Third Cataract region (Osman and Edwards 2012; see also S. T. Smith 2003, 73–94), and the Dongola Reach (Welsby 2001) further confirmed the impression that the New Kingdom colonial occupation had less impact than previously thought on existing settlement patterns and ways of life, outside of the main Pharaonic towns. The epigraphy of Egyptian inscriptions was revived, particularly through the work of Vivian Davies at Kurgus (Davies, this volume), Jebel Dosha (Davies 2004b; 2015; Green 2013) and Tombos (Davies 2008; 2009; 2012), with significant new readings of texts previously only available through the copies of Lepsius.

Those projects now focusing on sites with New Kingdom horizons, whether working in housing areas, cult buildings or burial grounds, are characterised by a multi-disciplinary approach, and being informed by research in other areas of the world and periods, whether the archaeology of colonialism (including questions of hybridity and cultural entanglement), household archaeology, studies of climate change or bioarchaeology. Many of the projects are seeking

Fig. 9: Excavation of house D12.7 in the western suburb at Amara West (February 2015).
Photo: Amara West project (British Museum).

high-resolution insights into ancient lived experience,[4] climate or technology and production, with the accompanying scientific analyses made possible through the generous policy of the National Corporation for Antiquities & Museums in allowing the export of sediment, ceramic, osteological and other samples. That the cemeteries, living areas and landscapes of Lower Nubia could not benefit from such modern archaeology leaves significant lacunae in our understanding, in an area that historically saw distinctive cultures develop, but one that also acted as a corridor or buffer between Egypt proper and the heartlands of successive Kushite empires. Alongside Uronarti and Shalfak, only Qasr Ibrim remains accessible among the major sites of Lower Nubia, allowing for modern investigation (Rose 2011; Knoblauch, Bestock and Makovics 2013; C. Näser, pers. comm.). This volume highlights our inability to revisit, through new excavations, the other sites of Lower Nubia with New Kingdom horizons, while illustrating that the reconsideration of earlier excavated assemblages can nonetheless be insightful, most notably through research at Askut (S. T. Smith 2003) or the funerary material from Aniba (Näser, this volume) and Mirgissa (Knoblauch, this volume).

Anthropological and ethnoarchaeological research, alongside community engagement projects, are increasingly part of the fieldwork undertaken at New Kingdom sites in Nubia: the contribution by Dalton (this volume) illustrates one way in which the study of present-day Nubia can inform models for past lived experiences. Challenges and unanswered questions abound. The array of scientific data being produced on

[4] A similar approach is being taken at the Middle Kingdom fort of Uronarti; see Bestock and Knoblauch 2013; Knoblauch, Bestock and Makovics 2013.

everything from ceramic fabrics to isotope signatures, necessarily project-based given current models of funding, will require a consistency of methodology and reporting between sites to unlock regional and intra-site connections and differences. A bigger limitation is the fact that these analyses still stand in relative isolation. While we can explore the micromorphology of sedimentary surfaces at Amara West (Dalton, this volume) or Sai, we cannot compare these with datasets from contemporaneous settlements in Egypt itself, given current restrictions on sample export from Egypt. Of course, assemblages of objects housed in museums allows some scope for such analyses (e.g. Bourriau, L. Smith and Serpico 2001). As a result, the data from Nubian sites cannot yet be fully integrated into the wider environmental and cultural context.

While the study of riverine dynamics and its relationship to settlement patterns has become prominent in Egypt over recent years, restrictions on sampling mean absolute dates (optically stimulated luminescence [OSL], ^{14}C) remain rare. The increasing understanding of the climatic changes in the 2nd and 1st millennia BC and their impact on the Nubian Nile (Woodward et al., this volume) represents only one perspective: comparative research in Egypt proper would provide controls and allow for the testing of assumptions drawn from the Nubian sites.

Conversely, experimental archaeology has been almost entirely absent from the archaeology of New Kingdom Nubia, in contrast to the work at Tell el-Amarna, for example, on baking (Samuel 1989) or pottery and glass production (Nicholson 1989; 1995). Given the generous possibility to export material, there is great potential in such methodologies at sites such as Sai or Amara West. At the latter, the discovery of a kiln (N. Spencer, this volume), but also metal production (or at least re-melting) areas, might provide an opportunity for such approaches. We cannot assume that production methods were entirely consistent with contemporary Egypt, given the different climatic, geological and riverine contexts, but especially the heightened likelihood of cultural interaction and exchange in Nubia. ‘Cross-over’ ceramics — vessels that echo contemporary styles from Egypt but made by hand rather than thrown on a wheel (N. Spencer and Millet 2013, 656–7, fig. 13; Rose, Budka, Stevens and Garnett, this volume) — remind us that such processes were occurring.

Finally, chronology remains problematic. The dates for New Kingdom reigns are well established — though not without discussion of details — but the episodic Pharaonic control of Nubia throughout the 3rd and 2nd millennia BC, followed by a Napatan state that continued the tradition of dating inscriptions by regnal year, has led to the chronology of Nubia being inextricably linked to that of dynastic Egypt. This might seem straightforward for the New Kingdom, but as one moves beyond the Egyptian towns to rural settlements and desert encampments where inscriptions and other Egyptian artefacts are often absent — or problematic given the long periods of circulation of objects such as scarabs — there are challenges in providing reliable chronological frameworks. The hand-made Nubian ceramic cooking pots which abound at these sites feature long-lived forms, techniques of manufacture, decoration and surface treatment. Further ^{14}C dates from secure occupation deposits may help us to better understand the local-level histories for these sites and how they relate to the large towns and shifting approaches to colonial control.

Nubia in the New Kingdom: a historical framework

The following section is intended to provide context for the themes explored later in the introduction and throughout the papers in the volume. For more detail, the reader should consult, in addition to the histories cited above, more recent studies and summaries of the New Kingdom conquest and control of Nubia (e.g. Zibelius-Chen 1988; Säve-Söderbergh and Troy 1991, 1–6; Davies 2005; S. T. Smith 2003, 83–96; Török 2009, 157–69; Kahn 2013, 17–20). The interpretation of ancient toponyms complicates our understanding of conquest and control. From the Middle Kingdom, the term ‘Kush’ was used to denote Nubia, and specifically the powerful kingdom based at Kerma. However, a wide variety of other toponyms pepper the formal records of Egyptian campaigns and administration from around 2300 BC. The location of these toponyms continues to elicit debate. For example Irem has been placed west of the Third Cataract or upstream of the Fifth Cataract (Kahn 2013, 19), while Yam has been interpreted as a reference to the area around Kerma, in the environs of Meroe, the western desert oases or now far west of the Nile (Cooper 2012). Davies (this volume [Kurgus]) underlines that Miu was a region contiguous with the boundary stelae at Kurgus.

By the mid-16th century BC, northern Egypt had been occupied by the Hyksos (after *ḥḳꜣ.w-ḫꜣswt*, literally ‘rulers of foreign lands’) for several generations, based at Avaris (modern Tell el-Dab'a) in the eastern Nile Delta (Aston and Bietak, this volume, with references). To the south, the powerful Kingdom of Kush reached its zenith in the 17th and 16th centuries BC, embodied by the sprawling fortified settlement and cemetery at Kerma (Bonnet and Valbelle 2014), and also the cemetery of monumental tombs on Sai Island (Gratien 1986). The ability of the Kushite Kingdom to conduct raids into Egypt proper, north of the traditional frontier at Elephantine below the First Cataract, is clear from both the Elkab inscription cited above (Davies 2003) and the presence of looted statuary within the royal burials at Kerma itself (see Reisner 1923a; 1923b).

The advance of Pharaonic armies up the Nile Valley in the reign of Kamose (c. 1555–1550 BC) was but the latest episode in the entanglement of Egypt and Nubia that stretched back millennia. This reconquest was no first encounter: the Egyptian armies are likely to have included Nubian and perhaps Levantine mercenaries, advancing through a natural and built landscape inscribed (literally and figuratively) with a partial record of previous encounters, power struggles, cultural and technological change and transmission. The most recent remains would have been particularly visible, and previous campaigns were probably prominent in direct memory, administrative records or the stories and memories handed down through generations. The imposing hilltop fortifications of the Middle Kingdom at Uronarti, Shalfak and elsewhere provided ample reminders of a glorious era of Pharaonic control and dominance (Dunham 1960; 1967; S. T. Smith 2003, 75–8; Vogel 2004; Kemp 2006, 231–41; for desert 'forts' see Harrell and Mittelstaedt 2015) — achievements to be matched and improved upon. The New Kingdom reconquest, however, went significantly further upstream than the formal Middle Kingdom boundary.

Some of the soldiers on the first campaigns may have had less positive memories to draw upon, of Kushite armies advancing down the Nile as far as Elkab, damaging the temple precinct (Davies 2003). Passing through Buhen, recaptured by Year 3 of Kamose (c. 1552 BC: see H. S. Smith 1976, 8–9, pl. II [1]), soldiers may have encountered families of Egyptian descent proclaiming their allegiance to the ruler of Kush (Säve-Söderbergh 1949). Somewhat earlier, Sepedhor, commandant of Buhen, claims to have built, presumably in Pharaonic style, a temple to the god Horus 'in the days of the King of Kush' (H. S. Smith 1976, 55–6, pl. 72 [1]). Other sites in Lower Nubia reflect contact with the south during the period between the Middle and New Kingdom occupation of the area (S. T. Smith 1995, 137–47; Edwards 2004, 97–8; Näser, this volume), while Areika has been interpreted as an Egyptian control post that was occupied by the C-Group (Wegner 1995).

Kamose and his successor Nebpehtira Ahmose, descendants of a line of Theban rulers, faced enemy polities from south and north that sought to collaborate on the conquest of Egypt. These battles are attested in both royal inscriptions — the three Kamose stelae (see Van Siclen 2010, with references) — and those of elite military officials involved in the battle. For example, the biographical text of Ahmose son of Ibana, in his tomb at Elkab (Fig. 10), describes his involvement in both Nubian and Hyksos campaigns, and expounds the virtues of fighting on behalf of pharaoh Nebpehtira Ahmose:

> 'After His Majesty had slain the nomads of Asia, he sailed south to Khent-hen-nefer (the southern limits of Empire), to destroy the Nubian tribesmen. His Majesty made a great slaughter among them, and I brought spoil from there: two living men and three hands. Then I was rewarded with gold once again, and two female slaves were given to me. His Majesty journeyed north, his heart rejoicing in valour and victory. He had conquered southerners and northerners'. (After Lichtheim 1984, 13)

The biography goes on to describe further campaigns under Amenhotep I and Thutmose I, the latter evoking an encounter between pharaoh and Nubian foe(s):

> 'His Majesty shoots, and his first arrow pierced the chest of that foe. Then those [enemies turned to flee], helpless before his Uraeus. A slaughter was made among them; their dependents were carried off as living captives. His Majesty journeyed north, all foreign lands in his grasp, and that wretched Nubian Bowman head downward at the bow of His Majesty's ship *Falcon*. They landed at Ipet-Sut (Karnak)'. (Lichtheim 1984, 14)

A statue of Nebpehtira Ahmose set up at Sai — whether contemporary (Davies 2004a) or installed in the reign of his successor (Gabolde 2012, 117–20) — in all likelihood reflects the success of these early Dynasty 18 campaigns. A cartouche of Ahmose found near the Kajbar rapids may also relate to these advances (Edwards 2006, 58–9, pl. 4). On both frontiers, there was not one defining battle, rather a series of campaigns spread over a number of decades, in the reigns of Kamose, Ahmose, Amenhotep I and Thutmose I. We can now trace the progress of the Egyptian armies

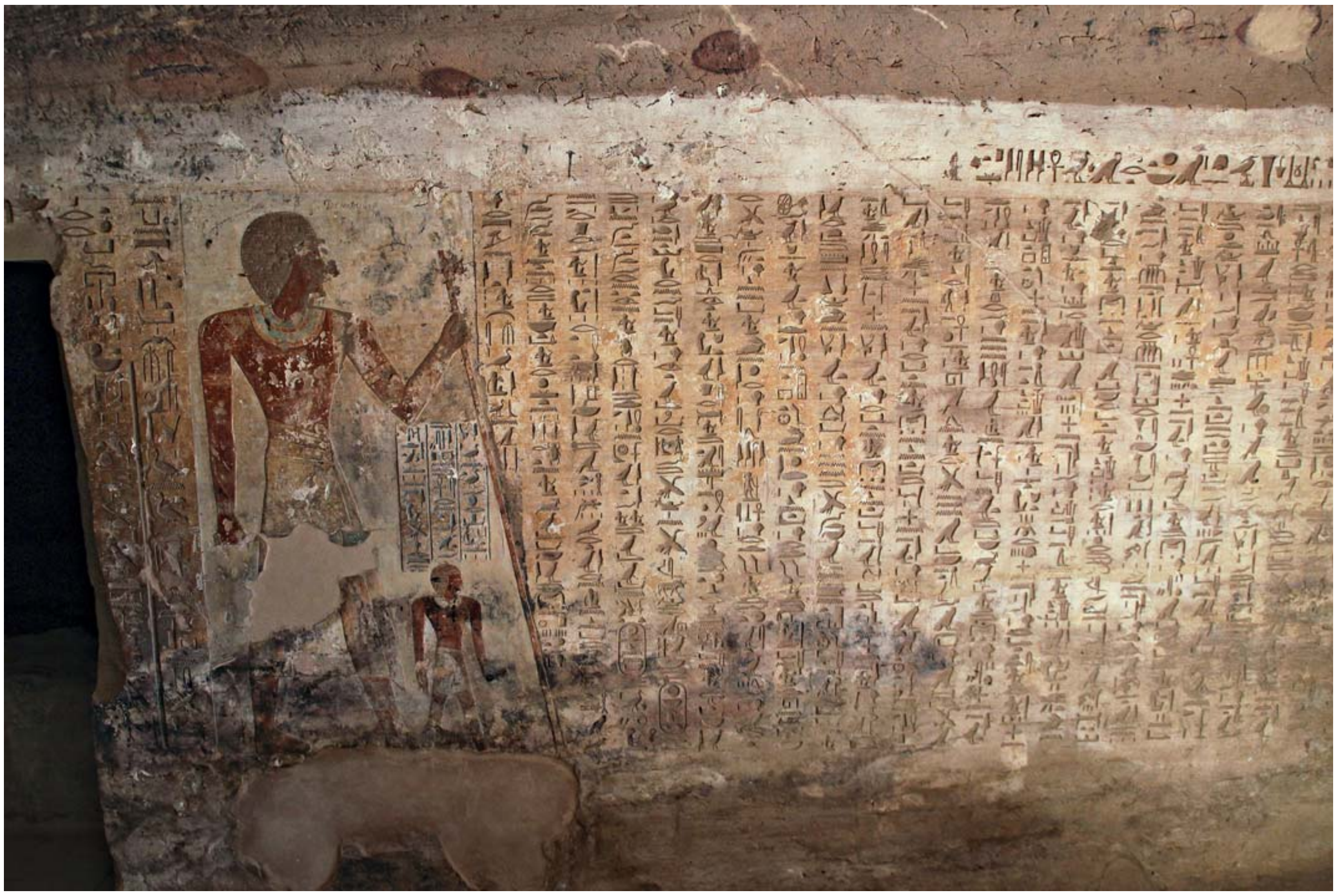

Fig. 10: East wall of the tomb of Ahmose son of Ibana at Elkab, depicting the tomb owner and a biographical text outlining his participation in military campaigns, in the Nile Delta, into Nubia and the Near East. Photo: Neal Spencer.

deep into Nubia, reaching as far upstream as Kurgus under Thutmose I (1504–1492 BC: see Davies, this volume [Kurgus]). The large rock tableaux carved upon the prominent quartz outcrop here — the Hagar el-Merwa — boldly proclaimed Pharaonic control of the area, yet it remains unclear whether any permanent settlement or garrison was ever established here. Davies (this volume [Kurgus]) suggests that the site may have been chosen for its symbolic importance as the southern limit of the (vanquished) Kingdom of Kush, and also posits that the campaign took place during the inundation season, when riverine navigation would have been less challenging. The monumental stela set up by Thutmose I at Tombos (Klug 2002, 71–8) again evokes a crushing Egyptian victory:

> 'The Nubian bowmen fall under terror and are cast aside on their lands; their stench floods their valleys, their blood is like storms of rain, the scavengers are above them, many birds rob and carry away to another place'. (Klug 2002, 71–8, lines 7–9)

The Egyptian conquest of Upper Nubia suffered some setbacks, as evidenced by a rebellion in Year 1 of the reign of Thutmose II that involved a coalition of Nubian polities (c. 1492 BC: Klug 2002, 83–7; Gabolde 2004):

> 'One came to give account to His Majesty of the following: The land of vile Kush, having come to rebel, those who were vassals of the lord of the Two Lands fomented a work of revolt and went to raid the people of Egypt to make off with cattle (which were protected) behind the *mnn.w*-forts which had been constructed, following his victories, by your father the king of Upper and Lower Egypt Aakheperkara [Thutmose I], may he live eternally, to contain the rebel lands, the *Ỉwntyw* of Ta-Sety (Nubia) from Khent-hen-nefer. There was a prince (*wr*) to the north of the land of vile Kush and he started a rebellion, in tandem with two *Ỉwntyw* of Ta-Sety, amongst the children of a prince of vile Kush, who had (previously) fled towards the lord of the Two Lands on the day of massacre of the Good God (Thutmose II), and (thus) this land was divided in three regions, each granted with its own sovereignty'. (Gabolde 2004, 133)

Such coalitions had been witnessed during earlier Nubian raids against Egypt in the Second Intermediate Period (Davies 2003, 52), and the variety of toponyms used in Egyptian inscriptions of early Dynasty 18 might reflect a world of coalitions, alliances and competing interests amongst those conquered by the Pharaonic State (Valbelle 2012). The text continues with a description of the battle, and the co-opting of Nubian leaders within the Egyptian administration, which would become a feature of the Dynasty 18 administration of the newly conquered province.

Further campaigns were necessary in the reign of queen Hatshepsut (Hintze and Reineke 1989, 172 [562], pl. 239; Gasse and Rondot 2007, 135), but a campaign of Thutmose III (c. 1479–1425 BC) across his Years 49–50 (see Davies, this volume [Kurgus]) may represent the defining moment in the Egyptian reconquest of Upper Nubia. Bonnet (this volume) has sought to correlate architectural phases identified at Dokki Gel, north of Kerma, with this sequence of campaigns, though it is now clear that significant earlier architecture underlies the Thutmoside buildings. A major stone-built tomb beneath modern Kerma, evidently intended to house a high-status, possibly royal, burial might represent the last monumental expression of Nubian royal power before the Egyptian conquest was complete (Bonnet 2000, 144–56, figs 103–13).

This campaign of Thutmose III is marked by further inscriptions on the quartz outcrop at Kurgus (Davies, this volume [Kurgus]), and by the foundation of *mnn.w*, commonly understood to be fortified temple-towns (Morris 2005).[5] The *mnn.w* at Jebel Barkal, still not identified in the archaeological record, was named ‘Slaughtering-the-foreign-lands’ (Reisner and Reisner 1933, 26, 1; Klug 2002, 193–208). At Sai, the viceroy Nehy records the construction of a stone temple, in five months, within an existing *mnn.w*-complex (Davies 2014a, 7–9).

The remaining three centuries of Egyptian control of Nubia were not without incident, as rebellions and other incidents are recorded in inscriptions set up in Nubia and Egypt. Campaigns to address interference with gold-mining activity were needed in Year 8 of Thutmose IV (c. 1393 BC, Bryan 1991, 333–6; Klug 2002, 345–52), while Amenhotep II displayed the body of a Syrian prince on the walls of Napata (Jebel Barkal), according to the Amada stela (*Urk* IV, 1295 [15]), a reminder to the local population of Egypt’s larger imperial prowess and the dangers of not co-operating. Amenhotep III claims to have captured 30,000 prisoners during one of two campaigns (Gundlach 1987; Topozada 1988; Klug 2002, 422–30) and Akhenaten conducted a Year 1 or 12 military expedition (1353/1341 BC: H. S. Smith 1976, 124–9, pls 29, 75). In the Ramesside Period, further military operations are attested. An area called Irem was the focus of a Year 8 campaign by Seti I around a series of desert wells (Murnane 1990, 100–2, n. 12; see Darnell 2011), while another campaign was required in Year 10 or 11 (K*RI* I, 75–8). In Year 44 (?) of Ramses II, a battle with Irem and Ikyt saw 2,000 killed and 5,000 captured (K*RI* III, 93, 9–10; Müller 2013, 291 [3]). Davies (this volume [Kurgus]) relates this to the inscriptions of several officials of Ramses II inscribed upon the Hagar el-Merwa. His successor Merenptah refers to a ‘fallen one’ of Lower Nubia rebelling in league with Upper Nubia, commemorated with stelae set up at Amada, Amara West, Aksha and Wadi es-Sebua (Müller 2013, 291–2 [4]; K*RI* IV, 1–2; K*RITA* IV, 1–2).

It remains unclear how sizeable some of these campaigns were, to what extent they were militarily necessary or ideologically motivated, and indeed the location of the events described. Edwards (2004, 20) has noted that supervision of people, and their movements, was presumably more important than control over vast swathes of desert. The practice of echoing the composition of earlier texts provides a further challenge to our interpretation (Gabolde 2004, 146–7). The sense of pageantry accompanying pharaoh in such endeavours must have been striking:

> ‘Proceeding after this by His Majesty in order to overthrow the one who attacked him in Ta-Sety, he being brave in his [golden] ship like Re when he places himself in the night barque. His sails were filled with bright red and green linen, and spans of horses and troops were accompanying him. His army was with him, the champions in two rows, with the elite troops at his sides, and the *ʿḥʿw*-boats being equipped with his retainers’. (Bryan 1991, 333–6)

[5] Many have sought the presence of Egyptians at fortified installations along the Middle Nile, inspired by these texts: Arkell proposed the fort at Kurgus was of New Kingdom date, on the basis of brick sizes (Arkell 1950, 39) while Budge went further, proposing the Medieval centre of Old Dongola was built on the remains of a New Kingdom fort (1907, I, 615). No archaeological evidence has been identified to support these claims.

Fig. 11: Painted plaster cast of a relief from the temple of Ramses II at Beit el-Wali, showing pharaoh triumphant in battle against Nubians. Photo: Courtesy of the Trustees of the British Museum.

Unsurprisingly, there is no record of Pharaonic armies losing battles at the end of the colonial era. The late New Kingdom sees a fall-off in the level of state investment in Nubia, at least as it can be traced through the formal monuments and temple decoration. It is worth emphasising that the same is true in Egypt itself, where economic problems in Dynasty 20 are suggested by the Deir el-Medina strikes and the fall-off in temple construction (Van Dijk 2000, 305–9); Török (2013, 60) proposes that the decline in economic and military input into Nubia resulted in a decline in revenues and tribute from the colony. On the other hand, there is evidence for the ongoing presence of elite individuals representing Pharaonic control in the region. Thus a fanbearer at the right of the king, overseer of bowmen of Kush and overseer of southern lands named Neb-maatra-nakht added an inscription alongside cartouches of Ramses VI (c. 1151–1143 BC) in the temple at Kawa (Macadam 1949, 84–6 [XXIV–XXVII]); shabtis bearing the name of Ramses VII, from the same site, may have been later imports to Nubia (Welsby, this volume). Later still, the temple decoration at Amara West was completed in c. 1125 BC (Year 6 of Ramses IX), when a large dedicatory inscription was carved around the peristyle (P. Spencer 1997, 36, pl. 27d). This remains the latest royal inscription of the New Kingdom in Upper Nubia. A statue of Bak-en-wer, overseer of the treasury in the reign of Ramses IX, might suggest elite officials were still present at Jebel Barkal (Dunham 1970, 29 [11], fig. 26, pl. 28 [c–f]), though it remains possible that the statue was not originally set up at this site (Kahn 2013, 373).

Evidence from Thebes suggests that Nubia played an important role in the power struggles at the end of the New Kingdom (Wente 1990, 171–204; Török 2009, 204–7). Panehsy, the last viceroy of Nubia, appeared in Thebes with Nubian soldiers, ostensibly to restore order, possibly for king Ramses XI — Panehsy is associated with the cartouches of that king in Buhen — before later engaging in conflict with the high priest of Amun, and the *de facto* ruler of Thebes, Amenhotep. Textual sources suggest that Panehsy undertook military campaigns into Middle Egypt, but was eventually ousted by general Piankh, who would in due course become ruler over Upper Egypt. Nubia was no longer under the political control of Pharaonic Egypt, though as discussed below, Pharaonic material culture and religion, and undoubtedly individuals, continued to have a presence in Upper Nubia. Later, in around 730 BC, the tables were turned on Egypt, as the Kushite king Piye conquered the politically fragmented Pharaonic state (Grimal 1981), building on initial territorial gains under his predecessor (Leclant 1964), to usher in seven decades of Nubian rule over both Egypt and Kush.

This survey of key historical events starkly illustrates the lack of written evidence from Kerma or other Nubian polities that were apparently over-run by Egypt. Exceptions, all perhaps pre-dating the New Kingdom, might include a seal inscribed for the 'ruler of Kush', evocative of links between a Nubian polity and Elephantine (Fitzenreiter 2012), or the Korosko Road inscription read as '*Tr-r-h*, beloved of Horus lord of the Desert', interpreted by Davies (2014b, 35–6 [KRP 14]) as a depiction of a Nubian ruler pre-dating Dynasty 18, co-opting Pharaonic iconography. A stela from Buhen is thought to depict an indigenous ruler wearing the white crown (H. S. Smith 1976, 11–12, pls 3 [2], 58 [4]), though Knoblauch (2012) has recently argued against this interpretation. To seek evidence for the indigenous experience of New Kingdom Nubia, we must turn to archaeology. Pharaonic control does not seem to have been as geographically or culturally complete as the inscriptions would lead us to believe.

The Pharaonic towns

Architecture of control

The foundation of a new series of walled towns at key locations through Nubia is the defining signature of New Kingdom Nubia, at least as represented in the archaeological record. These must have been multifaceted in function, ensuring — to varying degrees — the control and exploitation of resources, access to and monitoring of land or river trade routes, the support of military campaigns and mining expeditions, and the promotion of Egyptian propaganda and ideology (S. T. Smith 1997; Kemp et al. 1997; Morris 2005, 342). Imposing mud-brick enclosure walls with decorated stone gateways, once-colourful stone temples and formal residences for leading officials were the key built components of many of these towns: Pharaonic power expressed through architecture and iconography.

Modern archaeology demands explanations of towns that are nuanced, individualised and dynamic in their outlook, taking into account the temporality of settlements, the internal — not just external — agencies that shaped them, and the sense of interconnectedness between sites and across regions. Individualised life histories of settlements are emerging, as is the recognition that there is no overarching explanation for the function of the major towns founded in Nubia by the Pharaonic state. What is now needed are broader regional narratives — of intra-site networks or currents, and the logistics of occupation — that incorporate the revised histories and trajectories of individual sites, their hinterlands and beyond.

There is an obvious — and to a large extent unresolvable — bias towards Upper Nubia in terms of our understanding of New Kingdom towns: those of Lower Nubia are lost under the reservoir of the Aswan High Dam. We lack the environmental, bioarchaeological and (to a lesser extent) artefactual data necessary for a systematic study of how, and to what extent, Lower Nubian settlements — many with an earlier history of Middle Kingdom occupation, and sometimes situated in more difficult terrain — differed from those further south. At the important site of Faras, for example, very little of the New Kingdom town was investigated (Karkowski 1981, 8–9). Substantial Dynasty 18 activity is attested at Buhen (Randall-MacIver and Woolley 1911; H. S. Smith 1976, 206–18; Emery, H. S. Smith and Millard 1979, 13–17, 90–3), Serra East (Williams, this volume), Uronarti (Dunham 1967, 13–17; Knoblauch, Bestock and Makovics 2013, 114–15, figs. 12–13 and 117, fig. 16), Semna (Dunham 1960, 8–11, pls 10–34), Kumma (Dunham 1960, 116–22, pls 48–80) and Aniba (Steindorff 1937, 17–20, Blatt 8). This included the renovation of enclosure walls, the refurbishment of existing buildings and the construction of new cult temples.

One of the successes of recent fieldwork in Upper Nubia has been to look beyond — and in some cases beneath — the standing architecture of the New Kingdom towns. This has seen the rewriting of the foundation dates of Sesebi (Spence, this volume) and Sai (Budka, this volume) to the early part of Dynasty 18, and likewise the recognition of an Egyptian presence at around this time in the hinterland of (later) Amara West (Stevens and Garnett, this volume).

At Sai, archaeological evidence now complements that of inscriptions (Budka 2015b, 67–8), providing support for the idea that the town was founded as a bridgehead into Kush during the Egyptian campaigns of early Dynasty 18 (Davies 2005, 51; Budka 2015c, 43–5; Budka, this volume). The participants in these campaigns were themselves agents in the shaping of the settlement landscape of New Kingdom Nubia, and we need not assume that their choice of specific locales should always be obvious to us now. A sequence of monumental structures appears to have been built at Sesebi throughout Dynasty 18, but it remains unclear what form the town took until the major rebuilding in the reign of Akhenaten (Spence, this volume). A doorjamb inscribed for Amenemipet, vizier under Amenhotep II (Auenmüller 2013, 650–1), perhaps relates to one phase of state investment in Sesebi prior to the extant walled town being constructed.

The positioning of these towns undoubtedly considered strategic needs, including the centres of Kerma power (Sai and Kerma, and possibly Kawa: see Welsby, this volume), distance between successive towns, proximity to resources (whether agricultural land, mineral deposits or otherwise) and suitable locations for building large monuments and mooring ships (see Hein 1991). The presence of a major Kerma settlement on Sai Island, known through its monumental tombs (Gratien 1986), may have influenced the choice of this particular island for an Egyptian outpost; the location of the new Pharaonic town on the eastern edge of the island perhaps informed by its suitability for the landing of ships (Budka 2015c, 42). Kerma burials are also found in the New Kingdom cemetery at Soleb (Schiff Giorgini, Robichon and Leclant 1971, 23–76); Dokki Gel may too sit above a Kerma Moyen occupation horizon (Bonnet, this volume). Maps of Nubia are often misleading, reduced to town locations and cataracts along the winding course of the Nile. Yet inhospitable regions abound, perhaps unsuitable for habitation of any scale. For example, north of Sesebi lies a 45km stretch of very rocky terrain with few traces of New Kingdom activity (Osman and Edwards 2012, 81–3).

Over time, Sai became a major administrative centre, at which royal decrees were erected, elite Egyptian officials were housed, and large storage areas were built. Perhaps its leading role was to organise the flow of 'tribute' from Upper Nubia and further south. As Budka (this volume) notes, however, we must take care not to conflate interpretations of the site temporally. Recent examination of the early Dynasty 18 horizons has produced no evidence of a perimeter wall, for example, making it likely that the *mnn.w* proper was not founded until the reign of Thutmose III, with the early town presumably more modest in scale and function. As mentioned above, the inscription of the viceroy Nehy from Year 23 of that king suggests that the temple constructed by him was set within an already extant *mnn.w* (Davies 2014a, 7–9). Given that the construction of a major walled town may only have occurred under Thutmose III, it may be significant that this correlates with a fall-off in the proportion of Nubian ceramics (Budka 2015c, 50): did a more formal, imposing, Egyptian foundation provide less scope (at least initially) for the integration of indigenous technologies, products and foodways?

As knowledge of some sites develops, there remain many important New Kingdom settlements about which we still know relatively little. Tombos is one; its cemeteries have been extensively explored, but its settlement remains buried beneath modern occupation and is only now beginning to be revealed in excavation, with substantial mud-brick architecture suggestive of formal administrative or storage buildings (S. T. Smith, pers. comm.), including a structure of at least 100m in length dating to mid-to late-Dynasty 18 (Tombos 2016a). The expansion of these urban excavations, though limited by the modern village above and around the ancient site, might answer key questions about the early New Kingdom. This is the most southerly site with large-scale Egyptian-style cemeteries, including the tomb of Siamun who served under Thutmose III (S. T. Smith 2003, 133–66); he held the position of 'scribe of counting the gold of Kush' (Tombos 2016b). The monumental rock-cut stela and tableaux of Thutmose I (Fig. 17) reflect how Tombos was perceived as a strategic location in early Dynasty 18. Would we expect to see here an imposing architecture redolent of Egypt's imperial might, akin to the Second Cataract forts of the Middle Kingdom? Or was a more symbiotic, open, relationship with indigenous groups sought at this outpost? The latter clearly did develop, to some extent, given the evidence for Nubian material culture and burial practices in the cemetery at Tombos, but may not have been an intention of the Pharaonic state at the moment of foundation.

In later Dynasty 18, new towns were founded. The temples of Sedeinga and Soleb are well known, but their urban context is almost entirely unexplored. Moving upstream, the Thutmoside foundation at Sesebi, which included substantial stone monuments and smaller-scale mud-brick buildings (Spence, Rose, this volume), was radically re-imagined. A massive new perimeter wall enclosed vast storage facilities, alongside two temples; the scale of the operation — with over 100,000m³ of alluvial fill used to create a construction surface — reflects its importance to the Pharaonic state. Traces of unfinished enclosures and re-used temple blocks remind us how complex construction sequences might have taken place in relatively short periods. The extensive housing areas are on a scale not yet attested anywhere else in Upper Nubia: was this part of a policy to create sizeable Egyptian communities in Upper Nubia? At Kawa, ancient Gematon, the New Kingdom levels are only known from the temple of Tutankhamun (Macadam 1949; 1955), its associated town buried deep below later occupation and windblown sand (Welsby, this volume). Tabo, near Kerma, perhaps holds potential for further investigation of a New Kingdom settlement (Bonnet 2011).

Amara West was founded in early Dynasty 19, around the same time as Aksha. It remains difficult to access the earliest phase of architecture here, but

Fig. 12: View east over Soleb temple, built in the reign of Amenhotep III. Photo: Neal Spencer.

the evidence available suggests the modest walled town enclosed a cult temple, a formal residence for the Deputy of Kush and a series of large-scale storage facilities (N. Spencer, this volume). Were these early magazines used to stockpile imported goods from Egypt, to support the town as it found its feet and developed a degree of self-sufficiency? Or were the magazines, from the outset, designed to store goods and produce gathered through trade and extraction, and ultimately intended for export back to Egypt? In any case, storage capacity was markedly curtailed early in the settlement's history, with the first phase of architecture levelled, and a larger area of the walled town taken up with dwellings. It may also be significant that at both Amara West and Aksha, there was no ambition to create a facility — and housing areas — on the scale seen at Sesebi in late Dynasty 18, only a generation earlier.

The temples that lay at the heart of these towns were the primary articulation of Egyptian ideology, worldview and religious beliefs. We still know very little about the early Dynasty 18 temples in Nubia (Budka 2015b, 69), but they seem to have been of relatively modest scale, with mud brick a feature of the first temples at Dokki Gel and Jebel Barkal, replaced with stone structures in mid-Dynasty 18 (Bonnet, Valbelle, Kendall et al., this volume). The temple at Sai is representative, the stone structure at its maximum extent being of around 20 × 10.5m, though finely constructed and decorated (Azim 2011–12); this temple may have been a *Ḥwt-kꜣ* for royal cult (Budka 2015b, 69). Further upstream at Dokki Gel, a sequence of Dynasty 18 temples is again of rather modest scale — in comparison to those structures erected at Thebes and elsewhere. Consistent with this reading are the small temples inserted into earlier towns in Lower Nubia in the Thutmoside era, at Buhen (Randall-MacIver and Woolley 1911, 104–7, pls 32–3, plan D), Uronarti (Dunham 1967, 13–17; Knoblauch, Bestock and Makovicz 2013, 114–15, figs 12–13 and 117, fig 16), Semna (Dunham 1960, 8–11, pls 10–34) and Kumma (Dunham 1960, 116–22, pls 48–80). Rock-cut shrines were also created in mid-Dynasty 18: at Ellesiya

(Curto 1999) and Jebel Dosha (Davies 2004b; 2015; Green 2013). The context of these chapels — in terms of any adjacent settlement and/or activities — remains largely unknown, though Davies has highlighted the ritual connection between Soleb and Jebel Dosha (2015). At Askut, a Middle Kingdom fortress continually occupied into Dynasty 18, no stone, 'state-sponsored', temple was ever built (S. T. Smith 2013, 276). The small mud-brick temple built into the Middle Kingdom fort at Mirgissa yielded a wealth of offerings for Hathor Lady of Ibshek, of the late Middle Kingdom through mid-Dynasty 18, indicating less elite cult practices were somewhat consistent with those found, for example, in the Theban region (Karlin 1970; Pinch 1993, 41–8).

These temples were religious foundations endowed with staff (Müller 2013, 213–44), equipment and land. A stela of Thutmose III refers to the dedication of a cult statue and a sacred barque made of electrum, silver and black copper (Klug 2002, 186–90), and the barque chapel at Jebel Barkal was provided with a colourful green-glazed floor (Kendall et al., this volume). Thutmose III set up divine images at Sai (Klug 2002, 191–2; for temple statuary from Sai, see also Minault-Gout 2007; Gabolde 2012; Davies, this volume [Statues]). Wells, providing a supply of water for ritual activity, are attested at Jebel Barkal (Kendall, this volume) and Dokki Gel (Bonnet, this volume); that at Amara West (P. Spencer 1997, 203) is adjacent to the residence of the Deputy of Kush. As in Egypt, maintenance of the offering cults, and the resulting redistribution of foodstuffs, had considerable logistical implications. An area with high proportions of pottery bread cones at Sesebi may hint at the approximate location of a now-lost temple, while the presence of incense burners in the late Dynasty 18 temple may reflect regular ritual (Rose, this volume).

The reign of Amenhotep III witnessed a new type of cult temple erected in Nubia, as seen at Soleb and Sedeinga. A royal statue first seen by F. W. Green provides a text evoking the grandeur of a temple, presumably Soleb:

> '… surrounded with great fortifications carved with the [great?] name [of His Majesty] and built with a rampart reaching to the sky like great obelisks'. (Davies 2014a, 4–6)

Under Amenhotep IV/Akhenaten, a new temple was built at Sesebi, as part of the expansion of the Pharaonic town. A first epigraphic publication is in preparation, including the important crypt, with its reliefs that feature a representation of Nebmaatra Lord of Nubia — a deified form of king Amenhotep III familiar from Soleb — but also Aten Lord of Nubia, with evidence for recarving perhaps early in the reign of Amenhotep IV/Akhenaten (Spence et al. 2011, 36 pl. 4). As in Egypt, the reign of Akhenaten saw the introduction of *talatat*-architecture, attested at Jebel Barkal (Kendall, this volume) and Dokki Gel (Valbelle, this volume), allowing for the more efficient erection of stone buildings. The designation of Kawa as Gematon suggests further building activity in the reign of Akhenaten at that site (Welsby, this volume).

Beyond the well-preserved temples of Lower Nubia, the Ramesside decorative and architectural programme is not well understood, in contrast to the Dynasty 18 temples. The architecture and epigraphy of the well-preserved temple of Amara West has been published (P. Spencer 1997, 27–51; 2016), while at Jebel Barkal little survives of the New Kingdom architecture or decoration (Kendall, this volume). Both sites seem to feature at least two phases of architecture and/or decoration during the long reign of Ramses II, as found in many temples throughout Egypt itself. The temple recently identified at Usli, 40km downstream from Jebel Barkal, has been interpreted as a temple that may date back to the New Kingdom, and covers an area of up to 50 × 20m (Bárta, Suková and Brůna 2013, 66–7, pls 2–4).

The temples of Nubia followed an architectural idiom familiar to those coming from Egypt, and elements of the decorative programme placed equal weight on Egypt's military achievements in the Near East and on those in Nubia (N. Spencer 2014b, 45–7), but others did seek to reflect the local context (Török 2009, 211–62). This was done in two ways. The first was the promotion of deified royal ancestors. Senwosret III was transformed into a god-king, reflecting his achievements in Nubia that had culminated in the construction of the Second Cataract forts. The deified pharaoh is a focus of the rock-cut shrines of Ellesiya and Jebel Dosha (Davies 2004b) commissioned by Thutmose III; the temples at Semna West (Fig. 13; Caminos 1998a) and Kumma (Caminos 1998b) were also dedicated to Senwosret III. Several Ramesside officials left inscriptions at the former site, presumably aware of the achievements of both Senwosret III and Thutmose III. Further upstream, at Nauri, a small posthumous stela depicts Senwosret III, perhaps also of New Kingdom date (Rondot 2008), suggesting veneration of this king

Fig. 13: The deified pharaoh Senwosret III depicted upon a barque, within the sanctuary of the temple of Semna, constructed in the reign of Thutmose III. Photo: Neal Spencer, courtesy of the Sudan National Museum.

was not limited to formal state-sponsored monuments. At one of the forts constructed under Senwosret III, Serra East, a gateway inscribed for that king was integrated into an early Dynasty 18 refurbishment (Williams, this volume).

Thutmose III is explicitly described as following in the footsteps of his grandfather Thutmose I in penetrating as far upstream as Kurgus (Davies, this volume [Kurgus]), but it would be the later king that became the focus of veneration (see Säve-Söderbergh 1960, 27–30 pl. 15; Radwan 1998, 339), though the monumental stela of Thutmose I at Tombos attracted the attention of later Pharaonic officials, who left inscriptions around the same boulder (e.g. Davies 2012, 29–32). Amenhotep III was also the subject of veneration as a deity, for example at Sesebi (Spence et al. 2011, 36 pl. 4), Soleb (Bryan 1992, 106–11, figs IV.21–3) and Wadi es-Sebua (Ullmann 2013b). This transformation is distinct from the cults of Senwosret III and Thutmose III in that it took place during the king's reign, seemingly associated with a series of jubilee-festivals; Brand has suggested a cult of Seti I may have been installed at Aksha (2000, 287).

The second means by which temple cult referenced the Nubian context was the creation of local forms of familiar gods, particularly the creator god, and embodiment of the reigning pharaoh, Horus. Manifestations of this deity include 'lord of Ta-Sety (Nubia)' and more specifically 'lord of Buhen', 'lord of Miam (Aniba)' and 'lord of Kubban'. As with Hathor 'lady of Ibshek' at Faras (Dewachter 1971, 100–9), these may be Egyptianised forms of local deities. Dedwen may have been an indigenous god, and is already cited in the Pyramid Texts as 'Dedwen lord of Ta-Sety'; he appears in several Nubian temples, and is invoked upon the statue of Amenhotep I set up at Sai (Davies 2004a). As with the histories of the towns themselves, this cult framework is likely to have changed over time. An increased focus on Amun-Ra has been posited for Upper Nubia (Török 2009, 211–62): the temples at Amara West, Aksha and of course Jebel Barkal emphasise this deity over others, while a relief dated to the reign of Thutmose IV references specific forms of Amun: foremost of Karnak (*Ỉpt-Swt*) and Nubia (*tꜢ-Sty*: Valbelle, this volume).

Under Seti I and Ramses II, additions were made to many Nubian temples, and in the latter's reign, a sequence of new temples was constructed in Lower Nubia, combining rock-cut rooms and built architecture: Beit el-Wali, Abu Simbel, Derr, Wadi es-Sebua and Gerf Hussein. The last three of these are explicitly associated with the three 'state gods' — Ra, Amun and Ptah, respectively — and their distribution has led to them being interpreted as projecting a cult topography onto the landscape, mirroring that of Egypt proper (Török 2009, 243–62; Ullmann 2013a). It is possible that some of the last phase of painted decoration in the temple of Amenhotep III at Wadi es-Sebua also dates to the reign of Ramses II (Ullmann 2013b). A stela of Seti I set up at Jebel Barkal invokes forms of Ptah and Atum alongside Amun (Kendall et al., this volume).

The censuring of the monumental record through *damnatio memoriae*, a prevalent phenomenon in Pharaonic history, also played out in Nubia. This included the erasure of the names of Hatshepsut (e.g. Davies 2008, 44–5, figs 11–12), and Akhenaten at Sesebi (Spence, this volume) and Dokki Gel (Valbelle, this volume), but also attacks on the memory of prominent individuals such as the viceroys of Kush, perhaps reflecting their position as the visible projection of Pharaonic power. They would thus have been attractive targets for both Nubians and elite Egyptian officials (whether of Egyptian origin or not) who wished to distance themselves from, or denigrate, another individual who had held power. The name of the viceroy Inebny/Amenem-nekhu was erased from monuments and inscriptions at Sehel, Shalfak, Kumma, Buhen and Tombos, though this forms part of a phenomenon found with other officials who served under Hatshepsut (Davies 2008) and may not have a specific Nubian resonance. In fact, it is remarkable that so few Egyptian inscriptions have been subject to damage (Doyen and Gabolde, this volume).

Ongoing research in the town at Amara West suggests a place that was densely laid out, with none of the processional avenues, routes or open spaces in front of temple pylons that characterised contemporaneous temples in the great cities of Egypt. Yet houses joined temples and monumental gateways as arenas for displaying the Pharaonic rhetoric of cultural dominance and power. A Ramesside door lintel, re-used from an earlier monument, set up within a house at Amara West, invokes forms of Amun-Ra and Horus. In one instance Horus is described as 'the bull, lord of Ta-Sety, the *ka* of king Menkheperra [Thutmose III]' (N. Spencer 2014b, 48, 50, figs 9–10). Other royal ancestors were represented in the town, whether through the use of seals with the name of Hatshepsut or Thutmose III (P. Spencer 1997, pl. 57) or the setting up of a monumental stela of Amenhotep II (c. 1427–1401 BC). There were, of course, smaller-scale ways in which this message of Egyptian cultural superiority was conveyed. S. T. Smith (2003, 177–87) has proposed a variety of manners in which the topos of 'wretched' Nubians was conveyed beyond the elite. The archaeology of urban Amara West echoes this through a profusion of seal impressions — part of the Egyptian administrative apparatus — including examples bearing the iconography of smiting, victorious battles and bound prisoners (for the last motif see N. Spencer 2014b, 53–4, figs 18–19).

The poetical texts of the elite were another vehicle for the Pharaonic worldview. Centuries-old classics such as the *Teaching of Amenemhat* were being copied at Amara West. What was the resonance of such compositions — and others such as *Kemit* attested at Dokki Gel and Kubban — in a colonial context (Parkinson and N. Spencer, this volume)? To Egyptians, were such texts a vivid expression of quintessentially Egyptian culture, appropriate for training? If copied, read or heard by those with Nubian affiliation, the texts could be seen as compositions with references to the subjugation of Nubia, but also ones that relay notions of paranoia, distrust and the challenges of rule at the heart of the Pharaonic state.

In considering the architecture of the New Kingdom towns, it is worth emphasising that these do not seem like military bases. While the walls, towers and bastions — along with the topos of military dominance expounded in the scenes and inscriptions carved upon gateways and temples — convey an impression of fortified strongholds, it is difficult to identify structures that could be termed barracks. This is in contrast to the Middle Kingdom forts, with their rows of small suites of rooms, for example at Buhen and Shalfak (Kemp 2006, 231–41; Vogel 2013, 81). Archaeological preservation and chronology may be partly responsible for this gap. At Sai, very little of the walled town of Thutmose III has been revealed, beyond the southern area with storage magazines, temple, residence and a small number of houses; recent work has identified the eastern wall of the enclosure (Budka 2015b, 65–7, n. 23–4). Not enough is understood about the layout of the early town at Sesebi, and the two *mnn.w* of Thutmose I have yet to be securely identified. The early Dynasty 18 horizons at these towns might also be expected to yield evidence for weaponry, but this is not a noticeable component of the artefact assemblages excavated to date. Flint arrow-heads, stone axe-heads and copper alloy blades do occur, including at later Amara West, but not in significant quantities or proportions.

The later towns of Sesebi — which by late Dynasty 18 had rows of small and large houses, more akin to Middle Kingdom Lahun than a fort garrison — and Amara West may have been constructed when the manning and supply of military campaigns and defences was no longer of paramount concern. Yet military officers were still present in Nubia, according to the inscriptional evidence (Müller 2013, 31–9, 158–75), and a model letter of the Ramesside Period portrays the downside of being stationed in Nubia: 'to be sent to garrison to Syria or Nubia then he leaves his wife and children' (Jäger 2004, 291).

Beyond the temples, the elite cemeteries of the Egyptian towns were another imposing appropriation of the Nubian landscape. Mirroring contemporary practice in Egypt proper, the largest tomb superstructures comprised a pyramid with chapel, both typically of mud brick (Fig. 14). The burial goods also reflected contemporaneous provision in Egypt (see Taylor, this volume), though some of the decorative motifs found at Amara West seem to diverge from those found in Egypt (Binder, this volume). Such cemeteries are now known at Tombos (S. T. Smith and Buzon, this volume), Sesebi (Osman and Edwards 2012, 80–1, figs 3.37–8), Soleb (Schiff Giorgini, Robichon and Leclant 1971), Sai (Thill, this volume), Amara West (Binder, this volume) and Aniba (Steindorff 1937; Näser, this volume). While the scale of such structures was modest, prominent topographic positioning — the largest pyramids at Amara West sit upon a desert escarpment with views over the town — and brightly painted chapels (S. T. Smith and Buzon, this volume) made them important vehicles for the display of Pharaonic iconography.

These cemeteries sometimes appropriated historic burial grounds of local cultures — for example a Middle Kerma burial place at Amara West (Binder and N. Spencer 2014, 127). The zoning of contemporaneous cemeteries at these towns, with burials deploying different architecture, burial assemblages and treatment of the dead, can be traced at Sai, Amara West and Tombos. Several enigmas remain: the large pyramid at Sai is discussed here (Thill, this volume), and we are yet to find the elite tombs of New Kingdom Kerma: were they located inside the *mnn.w*? At a regional level, despite intensive archaeological survey, there are almost no Ramesside burials attested between Amara West and the Second Cataract region (Williams 1992, 142–5), though some tombs were clearly being used across several centuries, for example at Amara West (Binder, this volume), Aniba (re-use of Second Intermediate Period tombs in Dynasty 18: Näser, this volume) and Debeira (re-use of Thutmoside tomb in late Dynasty 18–Ramesside Period: Taylor, this volume). The presence of quite sizeable, but otherwise seemingly isolated, tombs in the Second (Nordström 2014, 134–7, figs 59–61), Dal (Vila 1977a, 145–59) and Third (Osman and Edwards 2012, 73–4, figs 3.22, 3.24) Cataract regions remains difficult to interpret.

Administering the colony

The military campaigns of early Dynasty 18 were considerable logistical undertakings, requiring an array of military officers, soldiers and other support (see Davies, this volume [Kurgus]). Elephantine, the city at Egypt's traditional southern border, must have bustled with activity to support these campaigns. The inscriptions around the city record the return of military expeditions, the maintenance of the First Cataract canal and the quarrying operations to supply construction projects at Thebes and elsewhere, among texts concerned with the local cultic context (Gasse and Rondot 2007). But once control was secured, how was the colony administered?

Inscriptions left throughout the Pharaonic temples and tombs of Nubia have provided a rich, though one-sided, dataset for understanding the administrative organisation (Török 2009, 171–81; Gnirs 2013; Morkot 2013, 911–54; Müller 2013).[6] A relative lack of day-to-day documentary evidence — ostraca, sealings,

[6] Important research remains unpublished, e.g. Dewachter 1978.

Fig. 14: View northwest over pyramid and chapel (G321) in Cemetery D at Amara West. Photo: Amara West project (British Museum).

papyri — limits our understanding of the minutiae of the administration of Nubia (Kemp 1972, 666–7; Bács 2014, 411), and thereafter how these towns were meant to function, or what they were intended for. New excavations at Sai and Amara West, however, have revealed hundreds of seal impressions, many from well-stratified contexts, and their study should provide further insights into the bureaucracy of these towns. At Sai, a number of sealings of Hatshepsut have been identified in building A north of the temple (Budka 2015c, 45), while those from Amara West include seal impressions that pre-date the foundation of the town, including examples from the late Middle Kingdom and Dynasty 18. A small number of ostraca from Amara West include records of commodity deliveries (N. Spencer 2014b, 51–2, fig. 16) and pottery production and/or delivery (N. Spencer, this volume).

The senior official with responsibility for Nubia was, from the reign of Kamose, the 'king's son' (further qualified as 'king's son of Kush' from the reign of Thutmose IV), a title typically rendered as 'viceroy (of Kush)' in Egyptological literature (Müller 2013, 18–31, 101–58; Bács 2014, 412–14; Budka 2015b, 69–73). Many of the individuals who held this office came from a military background (Gnirs 2013, 677–8), left statues (e.g. Davies, this volume [Statues]) and inscriptions across the major sites in Nubia, and also had responsibility as far north as Hierakonpolis and Elkab (Davies 2005, 53 and n. 52). For example, Hekanakht served under Ramses II, and is known from Aswan, Kubban, Amada, Abu Simbel, Aksha, the Serra area and Amara West (Fig. 15; K*RITA* III, 48–51). Setau, another of up to eight viceroys who served in the reign of Ramses II, left a similar range of monuments, including at Aswan,

Fig. 15: Sandstone door lintel depicting the viceroy of Kush, Hekanakht, adoring the cartouches of Ramses II. Found dumped in the shaft of pyramid tomb G321 in Cemetery D at Amara West, but perhaps originally from the town. Photo: Amara West project (British Museum).

Elkab, Hierakonpolis, Luxor, Abydos and in the Memphite area (Raedler 2003). Tombs of viceroys are known at Thebes (see Bács 2014) and at Tell Basta in northern Egypt (Gauthier 1928). Panehsy may have been buried at Aniba in late Dynasty 20 (Näser, this volume). A series of chapels at Qasr Ibrim include depictions of viceroys with their families and supporting officials (e.g. Caminos 1968, pl.14). The prominence of the position was not without its drawbacks: an unusual text inscribed on the walls of Semna temple (Müller 2013, 282–3) hints at the challenges faced by the viceroy:

> 'Do not become entangled with the Nubians — upon disclosure — beware of their citizens and their demagogues (?). Investigate the most servile of dependents whom you summon to appoint as chief, lest such as he be a chief whom you accuse to His Majesty'. (Morschauser 1997)

Several suffered *damnatio memoriae*, particularly those associated with the reign of Hatshepsut (cf. Davies 2008; this volume). That a new viceroy — Nehy — was installed soon after her reign (Davies 2008, 46) might reflect how central this post was to the royal court.

Beneath the viceroy of Kush were two Deputies (*ỉdnw*), for Lower and Upper Nubia (Wawat and Kush respectively), a position introduced late in Dynasty 18 (Darnell 2013, 825, n. 80; Morkot 2013, 924–5; Müller 2013, 197–206). The Deputies of Kush were resident at Soleb (and perhaps Sai?), and from around 1300 BC at Amara West, while their northern counterparts were based at Aniba, and perhaps Faras in the earlier New Kingdom (Minault-Gout and Thill 2012, 418). The circumstances surrounding the emergence of Amara West as the seat of the Deputy of Kush remain elusive. There seems to be a fall-off in activity at other Upper Nubian sites at this time. Monuments of Seti I and Ramses II are known at Sesebi and Sai, with an inscription of Ramses III identified at Dokki Gel (Valbelle, this volume). Nonetheless, while the Deputy of Kush Sebaukhau, serving under Seti I/Ramses II, is attested at Amara West, his successor Hornakht left a pyramidion at Sai, perhaps indicating that he was buried there (Geus 2012, 170–1, fig. 21; Budka 2015a; 2015c, 46–50). If the large pyramid at Sai dates to the early Ramesside Period (Thill, this volume), this further suggests considerable early Dynasty 19 investment and/or activity at the site. The process of transition was evidently not straightforward and need not have seen the abandonment of sites; at Sesebi, the Egypt Exploration Society (EES) excavators noted 'late' constructions, widespread remodelling of houses and the re-use of stonework of Seti I (Blackman 1937; Fairman 1938) suggestive of considerable activity after Dynasty 18. Unlike the viceroys buried in Egypt, a number of the

Deputies were buried in Nubia, for example the tomb of Penniut at Aniba (Fitzenreiter 2004) or the discovery of shabtis of the Deputy Paser at Amara West, and the pyramidion of Hornakht at Sai (Budka 2015c, 46–50). Other burials of deputies are known from Thebes, though they may have had cenotaphs at Aniba (Näser, this volume).

Prior to the creation of these roles, mayors may have been the most important individuals in the local Egyptian administration, being attested at Aniba, Buhen, Faras, Sai, Soleb and Kawa (Müller 2013, 206–12; Auenmüller 2013, 696–8, 740–2; see Budka 2015b, 73); the position of 'overseer of towns of Kush' is also known (Morkot 2013, 917). Viziers are referenced in inscriptions at two sites, Buhen and Sesebi (Auenmüller 2013, 650–1), perhaps reflecting official visits to these important colonial centres; the scenes in the tomb of Amenhotep called Huy provide insights into the framework of elite officials who oversaw the Nubian colony (Kawai 2005). Other titles attested evoke the importance of military (troop commander of Kush),[7] resource extraction (director of cattle, scribe of counting gold), cult (overseer of prophets of all the gods of Ta-Sety; first priest of Horus lord of Miam, temple singers) and administrative (scribes) functions; individuals could hold titles across these spheres. The range of functions that could be present in a single town is well reflected by evidence from Buhen (H. S. Smith 1976, 198–205). Fieldwork is introducing us to new individuals, amongst others Henut-aat the mother of the prophet Henes-ba, the lady of the House Aset, the mayors Neby and Ipy, a priest Mermose, a *wab*-priest Ky-iry and a scribe of Sai Horemheb (at Sai; Minault-Gout and Thill 2012, 414), an overseer of the double granary Horhotep and a lady of the house Iytjet, at Amara West (doorjamb found in house E13.5), the scribe of counting gold and overseer of foreign lands Siamun (Tombos 2016b), a Mayu son of Hor-er-hat and his wife Tju (Davies 2008, 47–8, n. 47) at Tombos, while at Dokki Gel we encounter an 'official of southern tens' Ipa, a director of cavalry, and the mansion of a captain of bowmen of Kush Bak-en-setekh (Valbelle, this volume). In some cases, officials referred to themselves as being of one of the Egyptian settlements in Nubia — notably Buhen, Kubban and Aniba (Auenmüller 2013, 378–81).

The senior officials — Deputies of Kush or mayors — were presumably based within the formal residence buildings that are a feature of most New Kingdom towns in Nubia, and also bear resemblance to some of the residences built in the Levant, for example at Beth Shan, Tell es-Sa'idiyeh, Tell Sera' and Tell el-Far'ah (Morris 2005, 740–73; Auenmüller 2013, 740–2). The buildings are characterised by formal reception rooms, private apartments and service rooms, with some rooms embellished with stone columns and doorways: examples are known from Sai, Amara West (N. Spencer, this volume) and Buhen (Emery, H. S. Smith and Millard 1979, 14–15, pl. 18). Narrow corridors and twisting access routes are also a common feature; the building at Buhen was provided with a staircase to access the roof or an upper storey. Perhaps the Deputy moved between important towns, taking up residence for periods of time in these formal buildings. Conversely, the fact that the Deputy of Kush Paser, who served under Ramses III, was referenced on the doors of the residence building while also being buried at Amara West, might suggest that specific towns were perceived and presented as the main residence. The north-aligned 'palace' ouside the fort at Uronarti has often been assumed to be of Middle Kingdom date, but there is currently no archaeological evidence that allows a secure dating (Knoblauch, Bestock and Makovics 2013, 129–30). Could it have been in use during the New Kingdom?

These representatives of the Pharaonic state also held a remit over the deserts that flanked the Nile Valley, important zones of mineral extraction but also regions offering useful alternatives to the river routes. As noted above, these were areas where Egyptian control may have been more vulnerable, necessitating desert patrols. A stela from Kurkur Oasis west of Aswan (Darnell 2003), records the words of the Deputy of Wawat Penniut to a Medja patrolman:

> 'What is the meaning of your not coming to show the way on the western wall of Pharaoh (may he live, be prosperous and healthy) since yesterday? You did not come to take the seal'.

[7] Näser (this volume) notes that two overseers of troops were buried in Theban tombs (TT 156, TT 282).

The Medja responds with:

> 'How great are they, the four *ỉtr.w* of travel which I make daily: five times going up (the *gebel*) five times going down (the *gebel*) so do not let me be replaced by another'.

This remarkable text suggests that the Pharaonic administration invested heavily in patrols and their monitoring, but also reflects the hardships experienced by those involved, if the figure of 42km walked in a day is reliable.

We can assume a number of these officials were directly posted from Egypt (Török posits that few were: 2009, 189–90), though we have no detailed documentary sources to suggest whether certain postings were on a rotating basis. Though he was only in Nubia temporarily, the late Dynasty 20 scribe Djehutymose's plea to the god Amun-Ra sums up one perspective on the colony:

> 'bring me back alive [from] the wilds, the place where I am abandoned in this far-off land (of Nubia)'. (Wente 1990, 191)

The cemeteries make it clear that generations of families lived in the Pharaonic towns, and with centuries of colonial control following the early Dynasty 18 conquests, positions within the administration may often have been drawn from families already based in Nubia, or, as discussed below, from the indigenous elite.

Exploiting resources

The extraction of resources, and their flow back to Egypt, was a key driver for Pharaonic activity in Nubia (S. T. Smith 1997), as evoked in a scene at Qasr Ibrim where Amenhotep II receives the tribute of Nubia from his viceroy Usersatet. The accompanying text states:

> 'Glorious arising of His Majesty in the interior of Thebes upon the great throne-platform in order to proclaim wonders for his army [victorious?] and steady in the fray. The expedition ... every ... that stood in the presence of His Majesty and brought the tribute of the southern foreign lands in front of this perfect god, while the courtiers gave praise and this army revered His Majesty …' (Caminos 1968, pl. 28)

The inscription continues with details of how many men were needed (2,549 in total!) to transport the gold, ebony, chariots, live panthers and cattle. The earlier annals of Thutmose III provide further detail:

> 'Year 33 tribute of wretched Kush this year:
> Gold: 155 deben and 2 kite (just over 14kg)
> Male and female slaves: 134
> *ỉwꜣ* and *wnḏw* cattle: 114
> *kꜣ-n-ỉdr* cattle: 305
> total cattle: 419
> In addition, ships loaded with ivory, ebony, panther skins, all good things of this foreign land, and [likewise grain of this country]'.
>
> (Zibelius-Chen 1988, 341)

Alongside these goods, other sources attest to the shipping of copper, granite and gneiss, amethyst, quartz, feldspar, jasper, carnelian, malachite, galena, aromatics, ostrich feathers and eggs (Fig. 16; Zibelius-Chen 1988, 69–114; Müller 2013, 352–63). A 'chief treasurer, royal scribe in the bureau of correspondence of pharaoh and steward in the domain of Amun' records the collection of tribute in Year 3 of Siptah (K*RI* IV, 368, 7; K*RITA* IV, 266). While some of this material came from Nubia itself, the region was also a conduit through which exotic goods came from further afield. Who was responsible for the presence of three sherds of wheel-made New Kingdom pots at Laqiya 82/77-1 (Lange 2006, 184)? This site lies 2km west of a desert oasis but 300km west of Soleb, the nearest point in the Nile Valley. Was this a caravan station, and one of the places where goods came through on the way to the Nile Valley?

Agricultural produce was of considerable importance, as indicated by the stela of Seti I at Nauri, which records cultivated land, fowl, cattle and livestock as the property of the king's royal memorial temple at Abydos, while also attesting to the presence of beekeepers, winemakers and desert traders (Brand 2000, 294–5). An endowment for a royal cult statue at Aniba records land in the Aniba and Buhen region (Helck 1986). The text reveals rows of modest fields of 2–6 arourae were arranged in a strip between desert and river (K*RI* VI, 350,5–352,1; K*RITA* VI, 276–7). We remain largely ignorant of the layout of agricultural land in and around the other colonial towns, or elsewhere, despite suggestions that 'the small farming settlements surrounding the town did not greatly differ from the less densely settled, narrower parts of the Egyptian river valley' (Török 2009, 190). In addition to the evidence from the tomb of Penniut at Aniba, Arpagus (2015) has brought together evidence relating to fields in the area of Soleb and others associated with the princes of Teh-khet. Documentary evidence on land yields or ownership — such as those that exist for contemporary Egypt (Katary 1989) — have yet to be

Fig. 16: Painted tomb scene showing Nubians bringing tribute to pharaoh, including gold rings, ebony, a giraffe's tail, a leopard skin, and a basket of red material (possibly red jasper). British Museum EA 922, from the tomb of Sobekhotep at Thebes (TT 63), reign of Thutmose IV. Photo: Courtesy of the Trustees of the British Museum.

found. That foodstuffs ended up in Egypt is clear from pottery jars found at Tell el-Amarna, labelled as containing 'meat from Kush' (Kemp 2012, 112).

Human capital, referenced in the annals, was also a desirable by-product of the occupation, with manpower conscripted from villages along the Nile (Zibelius-Chen 1988, 115–25; Gnirs 2013, 679) and prisoners deployed in temple construction projects (K*RI* III, 95) and within temple workshops (Davies 2014a, 4–5). Some of these prisoners came from the other theatre of Egyptian imperialism, the Near East. One letter from pharaoh states:

> 'send me Apiru … concerning which I wrote to you with the following words: 'I will place them in the towns of the land of Kush to dwell in them in the place of those whom I have deported''. (Davies 2014c, 405)

While the houses, storage facilities, enclosure walls and officials' residences in the Pharaonic settlements were constructed mostly of mud brick, temple construction necessitated large-scale expeditions to quarry stone. An inscription upon the façade of Semna temple, commissioned by the viceroy Nehy, describes the transport of stone blocks by water for construction of the temple (Caminos 1998a, 38). The Egyptians recognised the fine-grained 'sandstone of Shaat (Sai)' as of particular quality, but further research is needed upon the identification and study of quarries exploited in the New Kingdom. Some of the quarries at Tombos may have been worked at this time (Harrell 1999; Osman and Edwards 2012, 79–80), and the *talatat* blocks from Jebel Barkal have been ascribed to quarries at Khor el-Harazawein Barkal Foug (yellow sandstone), and el-Kassinger (Ali Mohamed 2012, 6). The red granite quarries at Jebel Kitfooga are typically dated to the Medieval era, on the basis of column shafts similar to the monuments at Old Dongola, but red granite statuary is found in the New Kingdom temples, for example the two monumental lions of Amenhotep III (Fig. 7). The statue group of Usersatet from Sai comprises monuments in a number of hard stones (Davies, this volume [Statues]). In Lower Nubia, the quarries in and around Aswan supplied stone for architecture and statuary across Egypt; the gneiss quarries at Jebel el-Asr, 80km west of Toshka, do not seem to have been used after the Middle Kingdom (Shaw and Bloxham 1999), while sandstone quarry workings, seemingly of New Kingdom date, have been noted opposite Dorginarti (Nordström 2014, 121–3, fig. 56, pl. 26 [a–b]).

Nubia was known for its gold, as evidenced by its primary position in the *Annals* listing quoted above, yet Klemm and Klemm (this volume) highlight how little is known of the social context of mineral extraction in Nubia, but also how the sources and method of extraction changed during the New Kingdom. Sesebi is a site that offers remarkable potential to explore this theme — from the mine-face, through the *mnn.w* and beyond. Located in the heart of the west bank gold-bearing quartz deposits, its role as a gold-mining hub is readily apparent, also attested by the prevalence of grinding stones and crushed quartz at the site (Fairman 1938, 153; Spence et al. 2009; 2011). The EES excavators noted that

> 'one of the rooms in E.4.4 [a house] had been used as a work-room in which quartz had been crushed and the floor was several centimetres deep in minute chips and dust, amidst which were several larger stones which may have been the bases on which the quartz was crushed' (Fairman 1938, 153).

A hint, perhaps, of household-level involvement in, and organisation of, the industry. The unusually large cellars in Sesebi houses may be pertinent to this activity (Blackman 1937, 150). Unfortunately, the rapid clearance of Sesebi in the 1930s, its subsequent degradation and modern-day exploitation of the ancient mines have destroyed much of the potential of the site for this kind of research. Fairman subsequently found a pot full of gold-bearing quartz chips within a house at Amara West (P. Spencer 1997, 106, pl. 81d). While the architecture and object assemblages from this island town do not suggest that gold processing was a major focus of activity, a 'scribe of counting gold, Amenemhat' did dedicate a statue in the temple (P. Spencer 1997, 37–8 [69]); a Thutmoside official Siamun, buried at Tombos, held the same title (Tombos 2016b).

Gold extraction also took place away from the Nile Valley: a cluster of sites was identified in the Batn el-Hagar (Edwards 2013), while inscriptions deep into the desert reveal the great distances covered by such expeditions (Davies 2014b). A stela of Ramses II reflects the immense difficulties associated with gold mining in such regions:

> 'if (even) a few of the gold-washing prospectors went there, it was only half of them that ever arrived there, for they died of thirst on the way, along with the donkeys that went before them in their charge. There (would) not be found for their needs for drinking, (either) going up (or)

> coming back (down), (simply) from water in skins. So no gold was brought from the country through lack of water'. (K*RI* II, 353–60; K*RITA* II, 188–93)

This text indicates that while the Egyptians were operating in these regions — and for some periods, at least, successfully — they were doing so with a fairly basic infrastructure, and in some instances at a considerable human cost.

Inscribing the landscape

Beyond the new, and re-occupied, towns, the domination of Nubia by the Pharaonic state was literally inscribed upon the landscape. This took three forms: (1) large royal tableaux that were unmissable to those passing by (Tombos, Kurgus); (2) rock-cut royal stelae (e.g. Tombos, Nauri, Jebel Billal); and (3) inscriptions left by Egyptian officials on military campaigns, mining expeditions and other business.[8] New Kingdom Nubia has often been characterised by its 'temple-towns' (Kemp 1972), yet as noted in the paper on the foundation of Amara West, temples may not have been such a visible part of these settlements (N. Spencer, this volume) and it is perhaps the rock tableaux that were often more effective in such regards. These inscriptions, of course, reflect the reality of individuals moving through the desert and riverine landscape. The inscribing of the landscape is not restricted to Nubia: rock-cut stelae of Ramses II are found at Nahr el-Kalb north of Beirut (Loffet 2009), for example, while the stela set up by Thutmose III at Nahrin can be seen as a counterpart to that at Kurgus (Davies, this volume [Kurgus]). The shorter inscriptions of officials are of course found throughout Egypt too, near mining sites, along the escarpment at the edge of the valley, along desert routes, and even in cult temples.

Numerous hieroglyphic inscriptions and Pharaonic scenes were superimposed on earlier rock art. At the level of state agency, the large tableaux at Kurgus appropriated a quartz outcrop that had attracted earlier, indigenous, carvings (Davies, this volume [Kurgus]). Individuals echoed this approach, such as the 'scribe of the temple Hatiay' who carved an inscription over bovine representations (of uncertain date) on a boulder north of the pyramid cemetery at Amara West (N. Spencer, Stevens and Binder 2014, 22), a burial ground amongst an Early/Middle Kerma necropolis. This was not a contested area at the time of his inscription, as far as we know, but the location of the boulder — the only suitable outcrop in the area — at the exterior, desert edge of the settlement and cemetery zone, and with the inscription facing the desert, was likely to have been carefully chosen.

The understanding of these inscriptions has considerably advanced in recent years, particularly through the new documentation at sites such as Tombos (Davies 2008; 2009; 2012), in the Third Cataract (Osman and Edwards 2012, 83–7), in the Dal area and along the Korosko Road (Davies 2014b). A comprehensive map showing the distribution of these inscriptions, and how that changed over time, is still needed. Distribution seems very uneven in the Nile Valley (see Edwards 2006, 58) clustering around the Pharaonic towns and in difficult parts of the cataracts (Semna, Tanjur, Dal). Upstream of Sai, inscriptions are less common, other than in and nearby the royal tableaux at Tombos and Kurgus. Exceptions include a small group of inscriptions of several scribes near the rural settlement/watch-post at Habaraab, north of Tombos (HB011: Osman and Edwards 2012, 84–6 figs 3.44–8, 319 fig. 8.20.9–10) and the hieroglyphic inscriptions at Jebel Wahaba (SBU002: Osman and Edwards 2012, 85, fig. 3.48, 364, fig. 8.29.5) and Sabu, the latter among hundreds of rock art panels, many of which might pre-date the Egyptian inscriptions (SBU001: Osman and Edwards 2012, 85, 364). The recent rediscovery of a cartouche of Ahmose at Jebel Noh near the Kajbar rapids (Davies 2014a, 9–10, pl. 8, fig. 12) places early Dynasty 18 activity further up the Nile than previously thought: does this reflect Egyptian forces gaining a foothold, or merely an exploratory sortie by an individual or small group? No Egyptian inscriptions were found during intensive survey of the Fourth Cataract.

The integration of a whole array of inscriptions upon the natural landscape, from Egypt through to the Kurgus area, drawing upon more recent accounts of the challenges of riverine travel through the cataracts, allows a seven-month expedition under Thutmose I, which included pharaoh himself, to be reconstructed in some detail, including the other members of the expedition, comprising royal family members, military staff, scribes, priests and civil administrators (Davies, this

[8] An unusual form of rock inscription is the depiction of a shrine façade, whose iconography reflects Egyptian architecture, inscribed near the monumental stela of Thutmose I at Tombos (Davies 2012, 32–3, fig. 3, pl. 6).

Fig. 17: Boulders by the Nile at Tombos, with royal rock tableaux facing upstream. Photo: Neal Spencer.

volume [Kurgus]). Absence is also relevant: Davies underlines the sense of restricted access — only selected individuals were allowed to leave their mark on the rocky outcrop — and notes the example of one prominent individual who did not make it all the way. The place afforded to royal women in these Kurgus inscriptions is unusual and cautionary: the colonial control of Nubia may not, as is often implicit in discussions, have been a solely male effort. Such an expedition is likely to have been accompanied by much royal fanfare and ceremony: what would the inhabitants of this area have thought? Unlike areas such as the Second Cataract, these southern regions had never been under prior Egyptian control.

The royal stelae at Tombos, Jebel Billal and Nauri are all visible from the river, but not necessarily associated with important Pharaonic towns. We will really only understand the lengthy inscription of Thutmose I at Tombos when its relationship to the town site — where substantial buildings were identified in 2015 (S. T. Smith, pers. comm.) and 2016 (Tombos 2016a) — is understood. At Nauri, no evidence of contemporaneous settlement has been identified nearby, though its position overlooking the river, between Tombos and Sesebi, was perhaps reason enough for its creation (Osman and Edwards 2012, 83–4, pls 54–5). The relatively small scale of the inscription and lunette — in relation to the landscape and its elevated position — would not have made the stela meaningful to those travelling by river, unlike the very large-scale tableaux of Thutmose I near the river at Tombos (Fig. 17; S. T. Smith 2003, 84–5, fig. 4.10). Similarly, the Jebel Billal stela, which describes military activity, perhaps associated with Dynasty 18 campaigns (Davies 2014a, 15–17), sits in apparent isolation, facing upstream like the Tombos panels, some distance from Jebel Barkal.

Moving into the desert, the Umm Nabari area in the desert 150km southeast of Wadi Halfa preserves inscriptions of various Egyptian officials associated with the Buhen and Miam areas, suggesting their close involvement in the extraction of gold (Davies 2014b, 31–7). A priest of Horus, Herunefer, is now attested at three stations along a 170km desert route (Davies 2014b, 39). The caching of amphorae (Ruffieux and Bashir 2014) in Umm Nabari is perhaps suggestive of supply lines and stations, similar to those along the Abu Ballas trail (Förster 2007).

Seeking lived experience

Only recently have the Pharaonic towns of Nubia been researched in terms of their roles as spaces for living, especially through work at sites such as Tombos, Sai, Amara West and Askut. One long-term outcome of this kind of research should be more integration with the study of urbanism in Egypt itself, a topic from which the Nubian towns have remained somewhat divorced, perhaps partly as a result of being designated as forts or 'temple-towns'. Recent work is stressing the dynamic aspect of these towns and their potential for change over time, in population size, make-up and character. That many of the towns have fairly identifiable 'beginnings' and 'endings' — more so than most settlements within Egypt itself — also allows the possibility to plot the changing fortunes of populations relative to foundation and abandonment.

Environment and resources

Lived experience for those in the Pharaonic towns was contingent on the spaces they occupied — natural as much as built. The natural environment represents perhaps the single most important determinant of human behaviour and cultural development; the availability of and access to resources are crucial, and must have been a leading priority when the location of a new town was chosen. Natural environments, however, are dynamic, and can have wide-ranging consequences on the health of communities, their nutrition and eventually the viability of communities. Many of the current research projects based at New Kingdom sites in Upper Nubia are characterised by a desire to elucidate the nature of the ancient environment, and how it shaped the lived experience of their populations. Through the integration of modern scientific methods of analysis — drawn from fields such as physics, chemistry, geology and biology — a more thorough understanding of the environment of Nubia and its impact on lived experience during the New Kingdom is emerging.

Climate change, particularly falling Nile levels and the effects of considerable volumes of aeolian sand, has long been posited as a factor prompting a proposed decline in population levels, or at least a change in settlement distribution, within Lower Nubia during the later New Kingdom (Firth 1915, n. 82; Trigger 1965, 112–14; Adams 1977, 241–3). The fluvial regime of the Nile is governed by the climatic conditions in the regions of its contributories; thus, characterising its course(s), and any changes therein over time, serves to reconstruct climatic conditions in the wider region. The dynamic nature of this river system, particularly prior to large-scale river management interventions such as barrages and dams from the late 19th century onwards, is now better understood. One recent study has identified wide-scale climatic deterioration in northeastern Africa during the 2nd millennium BC, based on combining strontium isotopes, OSL dates and ^{14}C data from ancient Nile channels in the Northern Dongola Reach and Amara West (Macklin et al. 2013). Combined with the archaeological evidence for changing Kerma settlement patterns, this highlights the dependence of the riparian communities on river dynamics.

The case study of the ancient riverine context of Amara West (Woodward et al., this volume) explores the character of the landscape surrounding the settlement during the New Kingdom and its aftermath. Through the application of independent dating techniques (OSL, ^{14}C) to exposed sections of interleaved aeolian sand and river flood deposits, the research evokes an environment subjected to considerable change due to significant climatic shifts occurring during the later 2nd and early 1st millennia BC, resulting in the failure of a palaeochannel along the northern edge of the town. The wide-ranging consequences of these changes on habitation, subsistence and human health, ultimately leading to the abandonment of the settlement, are further revealed through contributions from the study of house architecture, sedimentary micromorphology and bioarchaeology. Research of this nature has been instigated at Sai (Budka, pers. comm.) and site H25 in the Dongola Reach (Welsby, pers. comm.).

A similar understanding is required at other key sites. What was the riverine context of Soleb and Sedeinga, Tombos or Jebel Barkal? And how did that environmental context change over time, and correlate with periods of activity at the sites? However, it is worth emphasising that aeolian sand was not a problem pertinent to all areas of Upper or Lower Nubia, or at all times at any one site (Munro et al. 2012).

Intrinsically linked to landscape and climate are both the character of the natural habitat and the subsistence patterns that are supported through the botanical and faunal resources available. An analysis of both macro- and micro-remains of plants recovered within the settlement of Amara West (Cartwright and Ryan, this volume) underlines the potential of archaeobotanical studies in providing information about subsistence but also environmental and climatic conditions. Changes in the composition of plant and charcoal assemblages recovered from several houses at Amara West provide evidence about the vegetal cover and plants growing in the nearby area: sycomore fig, tamarisk, doum palm and acacia trees, alongside cultivated emmer wheat and barley. Wild grasses were also exploited, as evidenced through phytolith analyses from occupation deposits in the houses at Amara West. Present-day studies illustrate that erratic blown-in sand can be a major hindrance to agricultural activity, something that must have been true in ancient times (Munro et al. 2012, 143; see Woodward et al., this volume, on aeolian sand accumulations).

Neighbourhoods, communities and individuals

Population figures for the New Kingdom towns are difficult to arrive at — there is no census data. A population of only 200 has been posited for the town of Amara West in its earliest phase (N. Spencer 2014a, 460), while housing areas also seem limited at Sai (Budka 2015c, 42). One trend that is fairly clear at those sites where data are available (Sai, Amara West, and to an extent Sesebi) is a growth in population over time, reflected in the enlargement and increasing density of residential zones. Population shrinkage, in contrast, leaves little direct archaeological correlate, at least not in settlement remains. The high proportion of unoccupied houses in present-day Nubia does not always mirror times of economic hardship or issues with local agricultural potential, but in some cases opportunities elsewhere (e.g. employment in Khartoum or the Gulf). Many of these houses are closed up and vacated, rather than permanently abandoned. Woodward et al. (this volume) offer a model by which the town of Amara West might have been slowly depopulated as aridity in the region increased.

The walled towns are generally seen as representing reasonably ‘elite’ communities, at least during the peak of their occupation, although the task of fine-tuning their social profiles is one that largely awaits: the number of named individuals, and those granted titles and occupations, is low. Archaeological models are also needed. Knoblauch (this volume) highlights some of the complexities of this kind of research in his study of the funerary remains of one colonial town — in this case the Middle Kingdom town at Mirgissa. Two separate burial grounds developed at this site, one slightly more complex than the other, especially as regards grave architecture. Knoblauch posits that these need not reflect the increasing wealth and complexity of the community over time, but could represent a contemporaneous population — the early colonial community — formed of a small number of individuals with more complex and wealthier burials, and a majority with simpler interments. Knoblauch emphasises that Mirgissa, like other sites, housed a unique community. At a later period, the cemeteries at Tombos, Sesebi, Sai and Amara West exhibit similar zoning for contemporaneous burials. Unfortunately, early Dynasty 18 cemeteries have yet to be identified or explored at Sai and Sesebi.

At Askut, another Lower Nubian Middle Kingdom fort occupied into Dynasty 18, S. T. Smith has interpreted architectural changes as reflecting local/individual agency, unforeseen by the state: the diversity of buildings and assemblages evokes a demographic of families (2013, 270; see also S. T. Smith 1995, 160). Organic family- or household-driven growth would have shaped how the town functioned — not just in terms of social relations, but the navigation of its space. Dynasty 18 residents would have experienced significant topographic variation, as one old Middle Kingdom house was maintained while rubbish deposits accumulated around it (S. T. Smith 2013, 271). At Amara West, similarly, inhabitants passing through the West Gate in the later periods of occupation would then have to ascend several metres to the level of the streets and houses of the western suburb. The New Kingdom town at Buhen — a site with a palimpsest of occupation extending back to the Old Kingdom — featured a range of modest brick buildings clustered around the temple, clearly not the product of a single master plan (Randall-MacIver and Woolley 1911, 105–7, pl. 32, plan D). As at Askut and Amara West, the continued occupation and refurbishment of dwellings resulted in varying ground levels, in this case leaving the temple as a partly sunken feature.

In Upper Nubia, Sai and Amara West offer opportunities to create biographies of individual houses and neighbourhoods. At Sai, the formal buildings (temple, residence, large houses and storage facilities) at the southern end of the town contrast with the — partly contemporaneous — modest structures against the inside of the northern enclosure wall (Doyen 2014; Budka, this volume). The latter echo the orientation of the town wall — and an alley was maintained along the inside of the wall — but again embody distinct building episodes (houses, workshops?) rather than a planned living quarter. The remarkably well-preserved sequence of buildings and deposits at Amara West provides further insight into the role of households in shaping the urban environment (N. Spencer 2015). Quite soon after the town was founded in the reign of Seti I, there is an increasing sense of 'urbanisation' here, with the levelling of existing buildings, including substantial magazines, and the somewhat organic construction of houses at least partly in their place (N. Spencer, this volume). This trend would culminate in the fairly extensive colonisation of the ground external to the walled enclosure for housing, around the beginning of Dynasty 20 (N. Spencer 2015). The 'open town' outside the Middle Kingdom fortress at Mirgissa (Vercoutter 1970, 11–13, pls 9–10a) — perhaps occupied into the Second Intermediate Period and early New Kingdom — may have housed a satellite community. Its houses are surrounded by sinusoidal walls, and a large area is dedicated to garden plots.

We are perhaps looking here at examples of 'multifaceted social communities' (Vogel 2013, 81; see also S. T. Smith 2013), though this does not seem to have been envisaged from the outset (N. Spencer, this volume). Complex tombs incorporating multiple interments tend to dominate the cemeteries at these towns (Sai, Amara West, Tombos, Aniba), again suggesting communities with firm social ties, if not generations of the same family remaining resident in the towns (or being returned there for burial). Generational continuity and change — including the possibility of population 'renewals' — were central to the colonial experience in Nubia. The early New Kingdom colonial communities at sites such as Sai and Sesebi are likely to have been different in their make-up and experiences from those of the later New Kingdom. At towns like Amara West, created seven to eight generations after the 'conquest' of Nubia, the first settlers might have come not from Egypt but directly from sites such as Sai, bringing with them several generations of 'Nubia experience'.

Activities, survival and creating new traditions

Recreating the object worlds and local economies of the towns is also an important goal. How long did it take towns to 'find their feet'? They evidently did so, and remained linked into trade networks. Yet something of 'hardship' at the early colonial towns is also hinted at in the material assemblages now emerging through excavation. The earlier levels at Sesebi show an almost total absence of marl clay vessels, and traces of heavy wear on certain vessels — a sign perhaps of having to extend their use-life as long as possible (Rose, this volume), something also noted in the early Dynasty 18 desert sites near Amara West (Stevens and Garnett, this volume).

The question of how self-sufficient individual towns were as regards manufacture and agriculture is only beginning to be explored. Budka proposes that the early Dynasty 18 towns may have been more reliant on supplies from Egypt (2015c, 51); some sites hint at a move towards more localised production, rather than centralised supply, over time (S. T. Smith 2013, 279–83). This must have impacted upon quality of life at the towns, not just in terms of the range and quality of goods available but the effects of industry upon the living environment.

Surprisingly little evidence has yet been found for pottery production at the towns. This might be explained by the fact that kilns were positioned beyond the town limits — as seems to have been the case at the Askut fort (S. T. Smith 2014, 105–6, 116–18, fig. 2). A small kiln of the earliest occupation horizon was discovered at Amara West (N. Spencer, this volume), but must represent only very modest output; nothing similar has been found in later levels within the town, despite extensive excavations. S. T. Smith (2014) has proposed that these towns may have benefited from both production areas of their own, and the services of itinerant craftsmen. Petrographic and chemical analyses are a feature of work at many sites currently under excavation, revealing that Egyptian- and Nubian-style vessels were being produced in or nearby these sites, supplemented by pottery imported from Egypt (Spataro et al. 2014). A similar mixed model of local production and supply from Egypt is posited for the early Ramesside complex at Zawyet Umm el-Rakham on the Mediterranean coast (Nielsen, forthcoming).

Evidence of small-scale metal-working is present at Dokki Gel (Bonnet, this volume), Amara West (N. Spencer, this volume), Buhen (Emery, H. S. Smith and Millard 1979, 94, pl. 25) and Askut (S. T. Smith 2013, 283–4, fig. 11). This takes the form of crucibles with copper alloy residue, tuyères and a variety of metal objects. Perhaps we see here the remnants of re-working and recycling metal, rather than primary production; a project to investigate metallurgy at Amara West, led by Johannes Auenmüller (University of Münster) and Harriet White (British Museum), may shed further light on the extent, methods and purpose of this activity. Meanwhile, the processing and application of pigment at the same site is being investigated by Kate Fulcher (University College London/British Museum), who is focusing upon a dump of materials, perhaps from a workshop or part of a house being used for pigment preparation: palettes, grindstones and lumps of raw material. The use of red and yellow ochres is unsurprising, as ochre is a resource widely available in the region, while Egyptian blue is used sparingly, and was perhaps an imported commodity. This research reminds us that the overwhelmingly drab colour palette of these archaeological sites may be misleading. Some unusual features remain to be explored further. Where was the bitumen, prepared as paint, being sourced? Both green and blue pigments not based on copper have been identified: does this reflect a reliance on local resources, or integration of indigenous practices? Were other luxury items, such as expensive painted coffins, produced locally or imported? The array of wood types and evidence for pigment processing at Amara West suggest at least some were produced locally (see Cartwright and Ryan, this volume; Taylor, this volume).

Stone tools are ubiquitous in the assemblages from the town sites, as in contemporaneous settlements in Egypt. Flint blades and other tools may offer potential to distinguish locally made items from those imported from afar, as suggested by S. T. Smith for Askut (2013, 281–3, fig. 8). Crushed quartz and grinding stones are a feature of several towns, most conspicuously Sesebi. Evidence for textile production is meagre at these town sites — beyond objects interpreted as spindle whorls (see Budka, this volume) — though flax has been identified in the botanical assemblages from Amara West.

One industry that is not yet apparent is the production of faience: there are, at Amara West and Sai (Budka, this volume), few examples of the tell-tale pottery moulds for small faience items that are common at New Kingdom settlements in Egypt proper (Giddy 1999, 243–50). Finished faience products such as vessels, scarabs and jewellery do appear in small numbers, especially in graves (e.g. at Amara West: Binder 2014; this volume), whether produced locally or imported from elsewhere. Other traditions may have been let go: fired clay figures in the shape of females and snakes, common at New Kingdom settlements in Egypt, seem under-represented in the Pharaonic towns of Nubia. At the same time, a tradition of hand-modelling female figures in mud continued (Stevens, this volume).

Distinctive material assemblages seem to have emerged — lacking in some goods and showing a preference for others — that need not be seen as 'deficient' but rather viewed as new local traditions. At Sesebi, Rose (this volume) notes that local preferences for certain pots seem to have emerged over time, the assemblage diverging slightly from those of contemporaneous sites in Egypt. Näser (this volume) engages the idea of 'communities of practice' to reconstruct the burial community at Aniba as one that both harked back to Theban traditions and remained distinctive from both Egypt and neighbouring sites; Binder (this volume) suggests something similar for tomb assemblages at Amara West.

The study of local styles, and relating the palaeography and artistic traits to datasets in Egypt, can inform us about travelling artists and divergent traditions. The coffins from Debeira provide one of the best-preserved groups of decorated wooden coffins, and Taylor (this volume) reminds us that these do not simply represent a deterioration of quality in a colonial backwater, but rather form part of a distinctive tradition of coffin production, also found in contemporaneous Egypt. A series of carved relief blocks found in the shaft of a large pyramid-chapel at Amara West (G320) — which also yielded shabtis of the Deputy of Kush, Paser — hints at the possibility of local re-interpretation of funerary motifs. The panels bear a depiction of a mummified figure, shown frontally (Fig. 18). The date, context and purpose of these panels require further research, but serve as a reminder that further surprises, and dissonance from the norm, are likely to be found as housing areas and burial grounds are further investigated.

The study of plant remains, coupled with careful excavation and targeted sampling strategies, allows the foodways of these communities to be explored, adding further biographical detail to the study of use and function of different rooms within ancient houses, and ultimately more nuance to the changing histories of each site. At Amara West, lentil, watermelon, melon, colocynth, fig, dom-palm and Christ's thorn were all available for use and consumption by inhabitants of the Ramesside town. A recent study has highlighted markedly different patterns of storage and/or consumption between an extramural villa and small houses within

Fig. 18: Sandstone slabs carved with depiction of Osiride figure, shown frontally. Possibly from a built sarcophagus. Found dumped in the shaft of pyramid tomb G320 at Amara West. Scale: 10cm. Photo: Amara West project (British Museum).

the town walls here (Cartwright and Ryan, this volume). Emmer wheat was stored in spikelet form within the houses, thus necessitating another phase of processing. The lack of built storage bins in smaller houses might suggest central provisioning of wheat, to then be stored in containers made from pottery or basketry.

Another key source for understanding community foodways is the faunal record. Beyond the pioneering work of Louis Chaix at Kerma (1990; 1993), part of which includes material contemporary with the early New Kingdom, published faunal data is almost entirely absent for the major settlement sites of the New Kingdom. The small study of a deposit of snakes within pots, discovered in an extramural building at Amara West (P. Spencer 1997, 225–9), is an exception presumably related to ritual rather than consumption.

This gap in our knowledge is set to change, however, with the analyses of faunal material from Dynasty 18 layers at Sai, and from the Ramesside occupation and rubbish deposits at Amara West. Preliminary analyses at Sai suggest faunal assemblages broadly consistent with those in contemporary Egypt (Salieri and Budka, forthcoming), including a significant proportion of pig, in contrast to Kerma. Does this reflect the supply of provisions from Egypt (Budka 2015c, 50)? A pilot study of two houses at Amara West — one within the walled town, the other a large villa in the western suburb — suggests marked differences between their consumption patterns, with hind-limbs of cattle a striking absence from the assemblage of the larger house (Weinstock and Williams 2015). Exploitation of fish resources also offers potential for elucidating the lives of these communities. At Askut, S. T. Smith (2013, 281–3, fig. 9) has noted that large fishing weights are noticeably less common in New Kingdom contexts, as if seine-net fishing was no longer practised; at Sai, it has been suggested that the range of weight-types might reflect centralised provision and control of fishing (Budka, this volume).

A major research gap remains the foodway traditions of the hinterland, whether small villages, seasonal encampments or mining stations in the desert. What role did supply from the major centres, exploitation of desert game and use of seasonal land play in these contexts?

Health and demographics

The relatively well-preserved skeletal remains from the cemeteries associated with Nile Valley settlements in Nubia allow us not only to access the funerary beliefs of ancient inhabitants, but also to examine the physical remains of a subset of the very individuals who made up the population of these towns. In Nubian archaeology, the analysis of skeletal human remains has played a crucial role since the early days of the first *Archaeological Survey of Nubia* (Baker and Judd 2012). However, its full potential — to inform questions not only about ancestry or migration but also a wide range of other aspects of human behaviour such as diet, subsistence strategies, workload, health and disease — has only recently been integrated into archaeological research projects. This is made possible through increasing methodological development and the deployment of analytical techniques at the biomolecular level; bioarchaeological research can now move from broader population-based approaches towards increasingly detailed explorations of individual life histories (Zvelebil and Weber 2013), a complement to urban archaeology foregrounding individual and household agency (Müller 2015). The analysis of isotopes of stable carbon, nitrogen or sulphur in bone and teeth provides information about diet during a lifetime and can establish time of weaning (Brown and Brown 2011); childhood diet can now be revealed on an unparalleled level of detail within a range of several months (Beaumont et al. 2015); and diseases such as plague, typhoid or smallpox can be detected through the isolation of DNA of their pathogenous agents (Roberts and Manchester 2005).

Facilitated by the abundant availability of well-preserved skeletal and mummified human remains, and the permission to export samples for scientific analysis, the last decades have seen a significant increase in the amount of substantial bioarchaeological research projects on Nubian sites, most notably at Kerma (Baker and Judd 2012), Tombos (Buzon 2006a; 2006b; Buzon, Simonetti and Creaser 2007; Schrader 2012; Buzon, S. T. Smith and Simonetti 2016), Amara West (Binder and N. Spencer 2014; Binder 2014a) and Mis Island in the Fourth Cataract (Hurst 2013).

In terms of New Kingdom populations, bioarchaeological enquiry is a notable aspect of research at Tombos (Buzon 2006a; 2006b; Buzon, Simonetti and Creaser 2007; Schrader 2012; Buzon, S. T. Smith and Simonetti 2016) and Amara West (Binder and N. Spencer 2014; Binder 2014a; Binder et al. 2014). Detailed palaeopathological studies can reveal insights into the nature of household life, such as environmental air pollution, and what it was like to live in an ancient settlement at a given time (Woodward et al., this volume; Binder, this volume). At Amara West, a low age-at-death for adults and a high frequency of indicators of infectious diseases attest to a living environment suitable for the transmission and spread of conditions such as respiratory diseases (including tuberculosis), parasitic infections (such as malaria and schistosomiasis) and a host of gastro-intestinal diseases. This may reflect the negative health effects of rubbish dumps between houses, close proximity to animals, or water storage in open containers, all phenomena attested in the archaeological record of the settlement. High levels of degenerative joint diseases, already affecting young adults, indicate a community involved in daily activities requiring hard physical labour, such as those performed in agriculture, household maintenance or metal-working. An unusually high number of fractures of the spine and thorax found in the inhabitants of ancient Amara West may be explained by activities involving the climbing of trees (such as tending of date palms) and/or the handling of large animals. Nonetheless, a high proportion of bone fractures among the Amara West skeletons exhibit evidence of healing — examples are also known from New Kingdom Tombos (S. T. Smith and Buzon, this volume) — suggestive of care in the community. The diachronic comparison of these markers with individuals living in the Amara

West area after the end of the New Kingdom points to a worsening of living conditions with higher frequencies of infectious, nutritional and degenerative joint disease, high childhood mortality and very low mean stature. This conforms to the environmental observations and provides a possible reason for the final abandonment of the site around 800 BC (see Woodward et al., this volume).

Collections of skeletal human remains also exist for other colonial centres of major importance such as Sesebi (Lisowski 1952) and Soleb (Billy and Chamla 2011) but also settlements upstream of the First Cataract area such as Shellal (G. E. Smith and Jones 1910) and some smaller sites excavated by the Scandinavian Joint Expedition in the 1960s (Vagn Nielsen 1970). Renewed excavations in one of the New Kingdom cemeteries at Sai have produced an assemblage of human remains that will undergo bioarchaeological analyses (Budka, pers. comm.), and the skulls collected during excavations at Sesebi in the 1930s (Fairman 1938) have recently been relocated and will also be the subject of osteological re-evaluation and biomolecular analysis (Spence, pers. comm.).

Living and coping with colonialism: Nubians during the New Kingdom

While the 'temple-towns' were originally set up to serve the interests of the Egyptian state, they were concurrently places where people lived, died and — inevitably — interacted. In his history of Sudan, Budge (1907) wrote a passage that moves beyond consideration of kings and monuments towards those living under colonial influence:

> 'Kings of Egypt did not build merely for the glory of their gods temples on the skirts of the desert, or in places where no markets were held, and no caravans passed; travellers rested in the shade of the colonnades, and exposed their wares to those who went in and out of the temple, and, of course, made offerings duly to the gods in return for successful bargaining or lucky business. The temple of Sulb was built by Sûdani labour, and was maintained by the work of Sûdani folk, and it played a very important part in the government, or mis-government, whereby the revenues of Egypt from the Sudan were squeezed out of the wretched natives'. (1907, I, 615)

Infused with the attitudes of the time towards Nubia and Sudan, it is nonetheless notable as an early attempt to evoke day-to-day life and motivation among the inhabitants of a region.

Later, Adams asked 'what became of the Nubians?' and concluded 'neither history nor archaeology supplies a satisfactory answer' (1977, 235). Unsurprisingly, the textual record from the New Kingdom — all of it Egyptian — leaves little space for a nuanced view of those conquered: Kush is almost always qualified as 'vile' or 'wretched' (*ẖs.t*; from the New Kingdom: S. T. Smith 2003, 11–13) and also described as blinded 'by the fame of His Majesty' (S. T. Smith 2003, 84) and a place of 'sorcerers' (Wente 1990, 27–8). The words of a viceroy of Kush, Paser, describe the exotic appearance of one Nubian group:

> 'tall *Terek*-people in their leather (?) garments, with fans of gold, high feathered (?) hairstyles, and their jewellery of ivory, and numerous Nubians of all kind'. (S. T. Smith 2015, 769–70)

This is a more positive exoticising of peoples from the south (and also reflects the more detailed depiction of distinct ethnicities that characterises the New Kingdom; Schneider 2010, 154), albeit of a group presenting valuables within a Pharaonic, ceremonial — and ultimately subservient — context. Nubians could rise close to the top of elite society, as embodied by Maiherpi, depicted as dark-skinned and Nubian in his Book of the Dead, and buried in the Valley of the Kings. His burial assemblage (Reeves 1990, 140–7; Orsenigo 2004; Roehrig 2005) bears no specific allusions to his ethnic origin, other than the Book of the Dead depiction. Nubian words also made their way into the Egyptian language (Zibelius-Chen 2011). Other Egyptian sources provide information on the integration of Nubian elites within the colonial administration, but it is archaeology and scientific analyses that are beginning to offer other routes into identifying Nubian individuals, material culture and practice.

Local elites and 'Egyptianisation'

The bombastic, rhetorical view of Nubians was countered by the realities of sizeable Nubian communities in Egypt itself, but also the pragmatic strategy of co-opting local elites to act as governors of regions within the new colony (Säve-Söderbergh and Troy 1991, 190–211; S. T. Smith 2003, 84–5; Török 2009, 263–84; Morkot 2013, 944–50; Müller 2013, 244–7). The rock-cut stela of Thutmose II at Sehel describes the aftermath of victory against a Nubian coalition:

> 'This army of His Majesty slaughtered these foreigners and did not allow life to (survive) in their males, according to all that His Majesty had ordered, with the exception of one of the children of the prince (*wr*) of vile Kush, brought alive, as prisoner, with his people to the place where His Majesty was, and was placed beneath the feet of the Perfect God (i.e. Thutmose II)'. (Gabolde 2004, 133)

This process, which might have encompassed 'Nubians' from distinct cultural groups (C-Group, Medjay, Kerma and others), is best attested from the region of Debeira in Lower Nubia. There, the princes (*wr.w*) of Teh-khet can be traced across several generations, both through their tombs in the Debeira region and inscriptions at Aswan: Ruiu, Djehutihotep/Pa-itsy and Amenemhat (see also Davies 2005, 54–9). Djehutihotep/Pa-itsy is also attested in the desert at Umm Nabari, east of the Nile, suggesting oversight of gold production in this area (Davies 2014b, 31–2). The 'chiefs of Miam', based at Aniba, held a similar remit; some of them were qualified as *ẖrd n kꜣp*, 'child of the nursery', thought to refer to their education at the court of pharaoh (for an alternative interpretation, see Mathieu 2000). Four 'chiefs of Miam' are known from Dynasty 18: Amenhotep, Rahotep, Hekanefer and Mer (see Davies 2014b, 37 and ns 27–8; see also Minault-Gout 2011–12). Another Ruiu would be appointed Deputy of Wawat, the foremost official in Lower Nubia, and buried in Toshka (Davies 2005, 54, 57 [27]).

Less clear is the meaning of the title 'prince of Medja', which in some cases is held by individuals who had been educated at the Pharaonic court and oversaw aspects of the administration of Lower Nubia (Säve-Söderbergh and Troy 1991, 207–9). Williams (this volume) discusses the sequence of monumental tombs at Serra East in the early New Kingdom; the proposed chronology implies an increasingly Egyptian form of superstructure used to mark the burials. Might these tombs represent other elites co-opted into the Pharaonic administration? The tomb of an *ỉmy-r-pr-wr* named Nakht-menu — an important title here tied to the foundation of a queen — was found at Dehmit, upstream of the First Cataract (Auenmüller 2013, 446–7). Does this reflect an elite individual in the Pharaonic administration choosing to be buried near to a place or region he identified with (Auenmüller 2014)? In Upper Nubia, a rock-cut stela at Tombos has been re-interpreted as marking the formal integration of a Nubian individual, given the Egyptian name (Pa)-Heka-em-sasen, into the colonial administration: he is shown in association with the contemporary viceroy Usersatet (Davies 2009, 29).

The integration of these local rulers may not always have been a happy arrangement, as the letter of Amenhotep II to the viceroy Usersatet, cited above, hints (Morschauser 1997).

Seeking Nubian material signatures in Egyptian Nubia and Egypt

'Egyptianisation' is a phenomenon that has been — and remains — a subject of considerable debate, principally among Egyptologists. The cemetery of Fadrus has acted as one focus of this debate, its data deployed originally to suggest a population replacement (no longer accepted: S. T. Smith 1995, 137–48), a local population abandoning Nubian culture in favour of Pharaonic-style funerary arrangements and grave goods (Williams, this volume) or a population selectively integrating aspects of Egyptian culture into their own cultures and specifically their funerary beliefs (Van Pelt 2013). The degree to which local Nubian populations 'converted' to Egyptian religion — as proposed by Williams (this volume) and S. T. Smith (2015) — will probably never be known. Perhaps the model of a population group, or individuals, choosing (or being forced to adopt) one belief system over another, is rather influenced by more recent history, in particular the adoption of the Abrahamic faiths, notably across parts of Latin America and Africa.

Recently, studies of Egyptian colonisation of Nubia have sought a more nuanced representation of indigenous experience, including engagement with the notion of cultural entanglement (e.g. S. T. Smith 2003; Van Pelt 2013; S. T. Smith and Buzon, this volume) and a recognition that adaptation, indifference to, rejection, appropriation and assimilation of aspects of Egyptian and Nubian culture are all approaches likely to have been deployed, in different times and contexts, by individuals in New Kingdom Nubia (S. T. Smith 2015). Many of the papers included here also deploy that approach. Archaeological evidence features heavily among them, showcasing the scope that renewed fieldwork in Upper Nubia, with modern techniques of excavation and analysis, brings to the study of the social dynamics of colonialism. Considerable barriers remain, however, to the task of writing archaeologies of interaction in New Kingdom Nubia. Foremost among these problems is the relative dearth of knowledge of the indigenous cultural milieu into which these towns were inserted. Questions of who was living in Upper Nubia, how their societies were organised and what shape their (material) culture took remain, to a considerable degree, unanswered.

Increasingly, it is being recognised that the complete obliteration or acculturation of indigenous populations within Nubia itself is likely to be an oversimplification: one which suppresses indigenous voices and is not in keeping with the rise of the second (Napatan) Kingdom of Kush from the 8th century BC. We also need not assume that Upper Nubia during the New Kingdom was home to a single 'Nubian' population; other groups probably existed and interacted differently with Egyptian settlers (Aston and Bietak, this volume; Williams 2014). Contact may have been particularly acute for those living in the river valley itself, and less so for communities on its fringes, including the mobile and semi-mobile groups that have been a feature of Sudan throughout its history (Edwards 2004, 11), but are rarely considered in the context of the New Kingdom. Further work in hinterlands and the desert, particularly on foodways and seasonality, might identify traces of such groups.

The story within the present volume is in large part that of colonialism and contact at the Pharaonic towns, where the overall cultural imprint remains a predominantly Egyptian one. The apparently low-level indigenous signature at the town sites prompts questions of how cultural identity is transmitted into material frameworks. How malleable was architecture in absorbing different traditions, for example, or how desired was an indigenous cultural expression in a day-to-day environment? Was community identity prioritised over individual or ethnic identity? To what extent were local populations actively assimilated into these settlements — perhaps forcibly resettled to service the new towns (Osman and Edwards 2012, 67) — or simply interacting with them while living elsewhere? Though they are earlier than the New Kingdom, the presence of at least twenty-five stone huts 250m outside the Uronarti fort, with ceramics suggesting the two occupation areas were linked (Bestock and Knoblauch 2013, 34, fig. 3; Knoblauch, Bestock and Makovics 2013, 119–28), reminds us that imposing imperialist architecture does not preclude day-to-day contact between distinct groups beyond the town walls. As researchers engage with the issue of Egyptian–Nubian interaction more deeply and the list of research questions grows, the underlying recognition that local cultures were not necessarily subsumed or replaced is itself an important advance.

Several papers in this volume adopt a bottom-up approach that foregrounds non-elite experience (Dalton, S. T. Smith and Buzon; N. Spencer, Stevens), and we can see a move towards more context-specific investigation of cultural expression, reflecting the fact that identity is often tied to circumstance and place. Furthermore, investigating the lived experience of those residing in border, colonised or liminal areas is providing a balance to the formal Egyptian representations of these areas as 'wretched', or earlier scholarship's implicit acceptance that those on the periphery were passive actors (see Schneider 2010, 146). There is an increase, thanks to improvements in stratigraphic recording, in approaches that are more temporally nuanced. And there is a sense of engagement not simply with end products, whether architecture or objects, but with the processes and meanings that underlie their manufacture; of looking beyond 'things' to ways of, and reasons for, doing things. Among the chapters that best encapsulate these directions is Dalton's paper on plastering techniques at Amara West. The analyses prompt questions about individual, family and household division of labour around the construction and plastering of houses, while revealing the limitations of 'traditional' (macro-)excavation and observation: only in micromorphological thin-sections could the twenty-five episodes of re-plastering of one basin be observed. Dalton also highlights the ubiquity of water in the houses, used in construction, splashing from storage vessels and perhaps used to reduce levels of dust. One small mud-brick building which stands out at Amara West for its oval, and not typically Egyptian, ground plan (N. Spencer 2010), is also distinctive in the manner in which it is plastered, further suggesting that it belongs to an indigenous tradition (Fig. 19). In some ways, the uniqueness (to date) of this building at Amara West is surprising. Sitting high up in the stratigraphy of the site, it belongs to a phase in which the town was developing in a more organic manner, though still under Egyptian rule, albeit still with large, well-laid-out housing units of a form broadly familiar from towns in Egypt itself (N. Spencer 2015). Organic growth, we might suppose, brought increased opportunities to construct or adapt buildings according to local cultural preferences, but this is not strongly visible at Amara West or elsewhere. Perhaps we are simply not seeing signatures of Nubian domestic space: there is a pressing need for comparative studies of Egyptian and Nubian domestic and 'vernacular' architecture. The strongest indigenous signature within the

Fig. 19: Oval mud-brick building (E12.11), built in the Nubian architectural tradition, in the western suburb at Amara West. View northeast. Photo: Amara West project (British Museum).

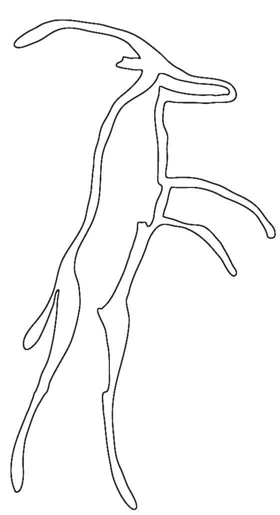

Fig. 20: Pot-mark depicting a wild animal, inscribed upon a storage jar (AW54) found at Amara West. Drawing: Marie Millet, after P. Spencer 2002, pl. 51e.

towns is usually to be found in the ceramic and artefact records, valuable through being locked into stratigraphic sequences in a way that tomb assemblages are often not. Budka (this volume) observes that at Sai Nubian variants of cooking pots become more numerous in later levels, while Rose (this volume) notes in contrast a possible reduction in hand-made pottery at Sesebi from early to late Dynasty 18: did the reconstruction of Sesebi under Akhenaten lead to a suppression of Nubian cultural expression? Rose (this volume) also notes the absence of Nubian hand-made wares in the late Dynasty 18 temple. Just as these towns were not static single-function entities across their histories, nor were Egyptian–Nubian relations: different sites may have had quite distinct histories in this respect.

Female figurines made within a probable indigenous tradition have been found in colonial contexts at sites including Askut (S. T. Smith 2013, 277, 279, fig. 6) and Amara West (Stevens, this volume). At the latter town, figurines with possible indigenous traits appear more often in the later levels than they do in the earlier Ramesside horizons: a hint, perhaps, of the scene being set for the 're-emergence' of indigenous material culture seen in the early 1st-millennium BC burials at Amara West (Binder, this volume) and Tombos (S. T. Smith 2007a). Other aspects of the material assemblages at Amara West, notably the hand-made Nubian cooking pots and the inscribing of wild animal motifs on storage vessels imported from Egypt, prompt us to wonder if a process of 'Nubianisation' might be apparent in some towns (N. Spencer 2014b, 53–7).

Foodways, from resources to subsistence patterns and food consumption, also have great potential to elucidate aspects of cultural entanglement within the settlements, as demonstrated for Askut (S. T. Smith 1995), and the study of plant remains may provide new details about the make-up of communities living in the New Kingdom colonial centres of Upper Nubia, or at least the presence of different traditions of preparation and consumption. The comparison with Kerma data, but also that from H25 — with its occupation sequence from Kerma until Napatan times (Thomas 2014) — may reveal perspectives on the impact, or not, of Egyptian culture on local foodways, and conversely the integration of Nubian foodway practices.

The low-level indigenous signature within the large settlements becomes all the more striking when it is compared with cemetery landscapes: liminal spaces in which individual expression may have been particularly acute, and is easier to identify archaeologically. Binder (this volume) illustrates how the rarefied atmosphere of death and burial seems to have prompted a bubbling to the surface of indigenous cultural traits — individual agency playing a significant role — that otherwise found little expression in materials that survive in the town of Amara West. Tomb G244 is most notable in this regard: a late Dynasty 19/early Dynasty 20 funerary monument with multiple underground chambers furnished with decorated coffins, Egyptian pottery forms, scarabs and headrests, yet marked by a low tumulus on the surface. For those visiting the cemetery, it would have appeared as a Nubian tomb, yet the deceased were furnished with what was needed for the 'Egyptian' afterlife; a tomb at Ginis features a similar combination of Egyptian and Nubian funerary traditions (Vila 1977a, 145–59) and the Tombos cemetery also reflects this phenomenon (Buzon, S. T. Smith and Simonetti 2016, 293–6). Of course, such a distinction based on objects and architecture cannot detect how objects ostensibly of one tradition can be re-interpreted by others.

Binder also notes how the absence of certain elements of traditional Egyptian tomb assemblages may reflect the creation of new burial traditions: shabtis are rare in elite burials in New Kingdom Nubia (Minault-Gout 2011–12, 199). Flexed burials, sometimes associated with funerary beds and Nubian pottery, appear in New Kingdom tombs of Egyptian form at Aniba (Steindorff 1937, pl. 22 [d]), Tombos (S. T. Smith and Buzon, this volume) and Soleb (e.g. Schiff Giorgini, Robichon and Leclant 1965, figs 603, 616).

S. T. Smith and Buzon (this volume) explore the social dynamics that may underlie these trends in funerary practice, foregrounding the generational aspect of the towns, and also the 'visible' and 'invisible' components of funerary culture. They stress the likelihood that marriages took place between Egyptians and Nubians, which would have resulted in children of mixed heritage. Six flexed burials have been found at Tombos — all of women, interpreted as Nubians marrying into the colony. S. T. Smith wonders whether such types of relationship could contribute towards smoothing the transition from Egyptian (Middle Kingdom), to indigenous (Kerma) and back to Egyptian rule in the New Kingdom (see S. T. Smith 2013, 274). Children are absent from nearly all discussions of communities in New Kingdom Nubia, beyond burials: the child burials within the tumulus tomb G244 at Amara West seem to have been particularly richly furnished with objects (Binder, this volume). The identification of objects specifically for children remains difficult in archaeology (as regards the ubiquitous ceramic counters, see S. T. Smith 2013, 274–5, fig. 3). At both Tombos and Amara West, the end of the New Kingdom sees indigenous burial customs re-emerge (funerary beds, niche burials under tumuli), which prompts questions about how these customs were transmitted across the centuries.

Finally, what of Nubian communities in Egypt itself? This volume provides insights into the changing proportions and types of hand-made Nubian ceramics at Elephantine (Raue, this volume), but also at Tell el-Dab'a (Aston and Bietak, this volume), though Nubian ceramics are also found across the Nile Delta, Fayum, and at Memphis and Edfu. Tell el-Dab'a was transformed from Egyptian town to residence of the Levantine

Hyksos kings, before being remodelled as an Egyptian city with palaces, residential area and temples. Aston and Bietak propose that Nubian-style cooking pots were being produced in the Nile Delta, perhaps reflecting the presence of a community based at Tell el-Dab'a (see also Matić 2014). Despite the political alliances sought by the Kerma and Hyksos rulers, it is noteworthy that little of the distinctive high-end material culture from Kerma is found at Tell el-Dab'a, for example mica inlays or ivory furniture fittings (Raue, this volume), though this might reflect conditions of preservation at the latter site. At a period when the decisive campaigns to recapture Nubia were being undertaken in the early part of Dynasty 18, Nubian pottery becomes more prominent in the assemblages at Elephantine (Raue, this volume), underlining the continued transfer of technology, material culture and perhaps groups of people. A notable fall-off in Nubian ceramic percentages occurs in late Dynasty 18, a time when significant construction projects are undertaken in Nubia (Sesebi, Soleb, Sedeinga).

In Upper Egypt, the distinctive Pan-Grave burials are found at cemeteries and encampments in Egypt and Nubia from the late Middle Kingdom through to the early New Kingdom, i.e. c. 1800–1500 BC (Schneider 2010, 151–3; Gatto 2014; for the possible identification of Pan-Grave with the Medja, see Liszka 2015). This migration may have been prompted by climatic change, and their disappearance — at least in terms of discrete, identifiable burial grounds and encampments — partly the result of the emergence of the centralised and powerful New Kingdom state (Gatto 2014, 16). Back in Nubia, Edwards (2004, 99–101) notes that Pan-Grave material at Mirgissa, Serra East and Kubban disappears around 1500 BC, seemingly contemporaneous with the Thutmoside conquests; in parallel, the presence of Kerma pottery increases at Tell el-Dab'a from the reign of Thutmose III (Aston and Bietak, this volume). The distinctive C-Group culture, found throughout Lower Nubia, is attested as far north as Thebes in the late Middle Kingdom, but disappears thereafter (Gatto 2014, 14).

Inherently connected to any attempts to shed light onto an assumed 'Egyptianisation' of Nubia is, of course, the question whether and, if so, to what extent this involved movement of Egyptians to the colonial centres of the new provinces. Analysis of stable strontium and, to a lesser degree, oxygen and lead isotopes from teeth, as well as ancient DNA preserved in the human skeleton, can provide information on place of origin and migrations on a broader scale, but also inform us about patterns of kinship. Buzon addressed this question through application of scientific bioarchaeological methods, including the analysis of strontium and oxygen isotope data, in a study of the skeletal remains from the Dynasty 18 cemetery at Tombos (Buzon, Simonetti and Creaser 2007), prompting the suggestion that around a third of the community at that site originated in Egypt proper, with particular links to the Theban area (S. T. Smith and Buzon, this volume). More recently, this work was extended to include samples from other New Kingdom sites in Nubia and Egypt proper such as Amara West, Memphis or Thebes (Buzon and Simonetti 2013), with the suggestion that mid-Dynasty 18 and the Ramesside era represented spikes in immigration from Egypt, but also that individuals of Egyptian origin could be ascertained amongst the post-New Kingdom burials (Buzon, S. T. Smith and Simonetti 2016).

Unfortunately, the Nile's complex fluvial regime together with the underlying geology of the Nile Valley and the source regions of the river are posing significant problems for the application of isotopic studies of place of origin (Macklin et al. 2013; Macklin et al. 2015; Woodward et al. 2015). Until these problems are resolved, attempts to identify Egyptian migrants through strontium isotope data will remain inconclusive. A second major issue significantly limiting the potential of Nubian human remains to inform research into migration and ancestry, but also hindering the investigation of ancient diet and diseases, lies in the poor preservation of collagen due to the heat and dry, sandy, soil. The organic portion of human bone and teeth which provides the matrix for both DNA and also stable carbon and nitrogen isotopes (Grupe 1995), rarely survives in this climate. This problem is exacerbated with older samples. As a consequence, most attempts to study ancient biomolecules in skeletal remains from the New Kingdom and earlier periods have had little success (Binder 2014a). Future improvements in analytical techniques may resolve this problem.

Beyond the Pharaonic towns

The military campaigns that dominate the written records from New Kingdom Nubia would have been accompanied by considerable levels of violence and suffering, particularly for the indigenous peoples of the region. An early Middle Kingdom inscription describes the progress of a royal campaign:

Fig. 21: View of reconstructed buildings in the city of Kerma, with temple (Western *Deffufa*) in background. Photo: Neal Spencer.

> 'I sailed victoriously upstream, slaughtering the Nubians on the river-bank. It was burning their houses that I sailed downstream, plucking corn and cutting down their remaining trees'. (Wegner 1995, 154)

A similar approach must have taken place in the early New Kingdom: to what extent such activity focused on perceived centres of Kushite power (Sai, Kerma), rather than smaller villages, is unknown. Relevant here is the evocation of a rural environment with houses, villages and trees, albeit in a context where a distinction was being drawn between 'wretched' Nubians and 'civilised' Egyptians.

The task of writing independent indigenous histories has, of course, been hampered by the lack of Nubian textual evidence, but also the fact that it is the Egyptian colonial towns that leave the dominant archaeological footprint in the region, and have attracted the most attention to date. As early as 1955, Arkell posited that the 'villages no doubt remained entirely native' (1955, 101), ahead of any of the surveys of Sudanese Lower Nubia or Upper Nubia. The surveys prompted by the Aswan High Dam construction, complemented by subsequent work upstream of the Batn el-Hagar, in the Third and Fourth Cataracts and around the Dongola Reach, remain our best window into life beyond the large towns intended to be centres of control. These surveys provide a quite consistent picture: there is little evidently 'Egyptian' archaeological signature outside the major towns and clusters of inscriptions. The uncertainties around dating Nubian coarseware pottery, prevalent at some of these sites, remain problematic (Osman and Edwards 2012, 68).

Unfortunately, settlement scatters of the New Kingdom were not targeted by the *Archaeological Survey of Nubia*, but near the southern limits of Lower Nubia, a number of sites feature clusters of rounded structures, perhaps huts, storage facilities or animal pens, often preserved only as dry-stone foundations. Such structures are common throughout Nubia at various periods (e.g. Bietak 1966, 31–42, pls 12–18; Wegner 1995), and indeed in the desert regions of Egypt itself, but what makes these sites significant is the presence of considerable amounts of wheel-made Egyptian-style pottery. Site 15 (equivalent to site Mills 11-D-5), on the east bank near Gemai, features small storage pits and shallow pits understood as hut foundations (Donner 1998, 123–7). In other places, orthogonal building plans are evident, often at sites in the vicinity of the major towns, for example site 5-S-16 near Mirgissa (Nordström 2014, 124 pl. 26d). 'Sentinel huts' — natural grottoes, circular and semi-circular huts — are a characteristic feature in the Mirgissa area and have been interpreted as associated with observing riverine and desert traffic (Nordström 2014, 138–40).

South of the Batn el-Hagar, the survey by Vila portrayed a landscape in which settlement patterns in the Kerma Period and the New Kingdom seem broadly consistent (Osman and Edwards 2012, 67). New work in the desert hinterland of Amara West, based upon Vila's survey (1977b), has refined the dating of several sites — Egyptian 'encampments' — to early Dynasty 18 (Stevens and Garnett, this volume). This would associate them with the emerging settlement at Sai and reflects, perhaps, early mineral prospection or the securing of transport routes. An early Dynasty 18 low-level occupation area adjacent to a now dried-up water channel, 2km north of the later town of Amara West (2-R-65/2-R-18) featured scant remains of architecture — probably modest mud-brick and perhaps post-hole structures, with later stone structures of less certain date — and a prevalence of 'Egyptian' wheel-made pottery rather than hand-made wares. The site probably fell under an Egyptian administrative framework, but there is nothing to say that the people who used it were not also Nubian. Rural or peripheral sites of this kind are likely to offer us the next major step forward in understanding the cross-cultural milieu of New Kingdom Nubia. Systematic survey in Sinai led Oren to suggest that New Kingdom installations ('forts') were each surrounded by a cluster of 'camp sites', some perhaps seasonal (Oren 1987, 76–9, fig. 4): is this what we should envisage for the Nubian Pharaonic towns, rather than continuous occupation?

While Osman and Edwards (2012, 68–74), in surveying the Third Cataract area, note that there is a fairly low-level 'Egyptian' footprint beyond the walled towns, much work remains to understand the relationship between the colonial infrastructure of New Kingdom Nubia and the broader archaeological record. Some activities that represented quite considerable influence may have left low-level archaeological signatures, such as miners' encampments or watchposts: a possible look-out has been identified on Dabaki island (TMB016: Osman and Edwards 2012, 68, 86–7).

In all these regions, isolated 'Egyptian'-style graves are encountered, for example around Faras and between Mirgissa and Buhen (Nordström 2014, 125–38). More perplexing are the sizeable multi-chambered tombs, often rock-cut, that conform to funerary traditions in the large towns, yet seem far from any settlement. Examples are known 3km north of Mirgissa (5-T-32: Nordström 2014, 134–7, figs 59–61), at Ginis downstream from Amara West (Vila 1977a, 145–59) and Difoi opposite Sabu in the Third Cataract area (DFF012: Osman and Edwards 2012, 73–4 figs 3.22, 3.24; 252, fig. 8.5.14; 319–20, figs 8.20.12–14). Who was buried here, where did they live and from where was labour drawn for the tombs' construction?

Moving into the Dongola Reach, the pattern remains familiar, with Kerma habitation and cemetery sites continuing into the New Kingdom, yielding occasional items of Egyptian wheel-made pottery or scarabs; yet no Egyptian-style burials are encountered in this region outside of Tombos (Welsby 2001, 589–91). A number of scatters of Egyptian-style pottery, not associated with architecture, prompted a tentative suggestion of timber buildings, perhaps for marketplaces or butchery (Welsby and Welsby Sjöström 2007, 385). Further upstream, beyond Jebel Barkal, settlement sites and cemeteries contemporaneous with the New Kingdom were identified (Welsby and Welsby Sjöström 2007, 390; Kołosowska and el-Tayeb 2012), but the few Egyptian vessels suggest that these are imports from other areas downstream.

The 'rural' settlements of Gism el-Arba (Gratien 2003–8; Gratien et al. 2002) and H25 near Kerma (Thomas 2014), both of which have long occupation histories that continue through the Kerma period and into the New Kingdom, are currently our best window on the rural impact of Egyptian control. Their New Kingdom horizons present fairly modest orthogonal mud-brick buildings, some of which find parallels at Kerma (Bonnet and Valbelle 2014), along with stone-built structures (Gism el-Arba) and probable wooden huts (H25). The large amount of storage provision at H25 might suggest it was servicing the state rather than the community itself. Hand-made pottery attributed to an indigenous tradition is prevalent at both sites, but wheel-made material is common, and artefacts such as scarabs also appear. A site with potential to shed further light on Egyptian–

Nubian interaction is HBB017, a settlement on the east bank at Habaraab, between Tombos and Nauri (Osman and Edwards 2012, 71–2, figs 3.19–20, pls 52–3). Covering an area of 80 × 110m — not much smaller than the original area of Amara West — the site comprises sub-circular stone structures, perhaps huts and yards, and without an enclosing wall. Surprising, perhaps, is the almost complete dominance of wheel-made pottery, including marls imported from Egypt, and the lack of Kerma Ware. Are we dealing with a control post, or an encampment relating to resource extraction, perhaps gold? A nearby cluster of inscriptions includes the names of several scribes (HB011: Osman and Edwards 2012, 84–6, figs 3.44–8; 319 figs 8.20.9–10).

The dominance of hand-made pottery at Gism el-Arba and H25, their long pre-Egyptian occupation histories, and to some extent their architectural signatures, might perhaps compel us to characterise these sites as 'Nubian' (cf. Gratien et al. 2002 for Gism el-Arba). But the considerably mixed cultural landscapes at sites such as Gism el-Arba, H25 and potentially HBB017 raise the question of how far the distinction between 'Egyptian' and 'Nubian' was made by the ancient inhabitants of these settlements, and how far it is, rather, a modern scholarly preoccupation. Even less well elucidated is the Egyptian 'footprint' beyond the Nile Valley and its immediate hinterland (i.e. within comfortable walking distance of the major towns), especially beyond gold-mining (see above) and rock-art sites (Davies, this volume [Kurgus]).

Persistence and renaissance: the re-emergence of Nubian traditions

In his description of the aftermath of Pharaonic rule, Budge reflects the predominant interpretation of the time, of Nubians almost grateful for the civilising influence of Egypt: the princes of Napata sparing

> '… no pains in trying to turn the fertile Dongola province into a copy of Upper Egypt, which, indeed, in many particulars it closely resembled … the population of this part of the Nile Valley ... was ready and willing to be ruled according to the laws of Egypt, with the civilisation and manner and customs of which they had been familiar for about 15 centuries'. (Budge 1907, II, 1–2)

Trigger painted a different picture:

> 'The prosperity of Nubia, while notable, had been built around its relationship with Egypt. Slowly the government officials, the native princes, and the priests probably moved to Egypt, taking some of their servants and farm workers with them'. (1965, 114)

In fact, the opposite seems to have been true: Nubian traditions not only survived the conquest, but were deployed under the nose of the conquerors — as illustrated by the flexed burials at Tombos, or the Dynasty 20 tumulus at Amara West — and then flourished following the Egyptian loss of control of Nubia. The Middle Nile remained inhabited throughout this transition.

Recent fieldwork has yielded examples of Nubian cultural markers being deployed in the immediate aftermath of the New Kingdom — and indeed within the period of Egyptian control itself (see Welsby and Welsby Sjöström 2007; Binder 2014b; this volume). Increasingly, evidence is emerging of continued use of sites in the two centuries following the New Kingdom: the 'dark age' of Nubia is beginning to be illuminated. Alas, few of the settlements have provided much evidence, though architecture at Kawa pre-dating Dynasty 25 (Welsby, this volume) might be relevant here. At Amara West, a surface scatter of post-New Kingdom pottery, including Dynasty 25 imports from Egypt, was noted during a surface survey by Marie Millet across the south of the town mound in 2010, but it has not yet been possible to associate this with contemporaneous architecture. In Lower Nubia, the hilltop site of Qasr Ibrim remained in use throughout the centuries following the New Kingdom, with occupation deposits yielding late New Kingdom and early Third Intermediate Period ^{14}C dates (Rose 2011). Survey in the Southern Dongola Reach identified a hand-made ceramic tradition that seems to create a continuum from the Kerma through Napatan eras (Kilmaszeska-Drabot 2003).

Cemeteries provide further evidence for continuous occupation of these sites. The necropoleis at Aniba (Näser, this volume), Sai (Thill 2007) and Amara West (Binder, this volume) feature extensive re-use of New Kingdom tombs for burials of the 10th through 8th centuries BC. The almost continuous use of some of the Sai tombs from Dynasty 18 into the post-New Kingdom prompts an interesting possibility: are we witnessing family groups who re-used the same tombs across many generations and political change? Unfortunately, the disturbed nature of archaeology within such long-used contexts makes it unlikely that we will ever know. Tombos provides a fascinating picture of continuity: the aftermath of the New Kingdom witnessed ongoing building and use of pyramid-chapels, alongside tumuli, for burials (S. T. Smith 2007a; 2007b; Buzon, S. T. Smith and Simonetti 2016, 291–6).

Despite the lack of known settlement sites in the Jebel Barkal area, two important cemeteries exhibit continued use through the late New Kingdom and the following centuries: Sanam (Lohwasser 2010, 91–6) and Hillat el-Arab (Vicentelli 2006). At the latter site, rock-cut chambers and aspects of the painted decoration evoked aspects of Pharaonic funerary culture, integrated with other — local? — cultural markers (Vincentelli 2006); disentangling New Kingdom and later burials is very difficult at this site. S. T. Smith has posited that Upper Nubia may have been a region where more cultural entanglement and hybridisation took place, in contrast to Lower Nubia, noting the introduction of tumuli tomb superstructures at Amara West and Tombos in the Ramesside Period (S. T. Smith 2015).

The persistence of traditions — both long-held Nubian ones and more recently acquired/adopted/re-interpreted aspects of Pharaonic culture — would culminate in the creation of the Napatan state, with its selective re-use of aspects of Pharaonic culture (Welsby and Welsby Sjöström 2007, 396). Much remains unclear about its genesis, with debate largely centred around the funerary monuments at el-Kurru (Morkot 2003, 161–7; Edwards 2004, 118–20; Török 2009, 298–309). The familiar reversion to Egypt when explaining the history and cultural development of Nubia looms large here. The new Napatan state has been explained as the result of resident Egyptian priests maintaining pharaonic culture at Napata, a new influx of Egyptian priests following a rebellion at Thebes, or immigration from further to the south that re-introduced Nubian traditions (see Buzon, S. T. Smith and Simonetti 2016, 287). The inhabitants of Upper Nubian towns beyond Jebel Barkal/Napata — including individuals that projected Egyptian, Nubian or mixed identities — may have been important actors in creating the context in which the Napatan state could develop and expand.

Inscriptional evidence indicates that the title of viceroy outlasted the end of the New Kingdom, though there is no proof that these individuals had any authority outside Egypt (Török 2009, 288–90; Morkot 2013, 952–3). The inscription of Queen Katimala/Karimala in Semna temple continues to perplex: it is clearly post-New Kingdom in date, and it has been argued that the queen belongs to a nascent Napatan state gradually extending its power northwards (Török 2009, 294–8), or may date to as early as Dynasty 21, i.e. just after Egyptian control of Nubia was lost (Darnell 2006; see also Collombert 2008). It is also noteworthy that there is little evidence for Kushite/Napatan desecration or usurpation of the abundant number of Pharaonic inscriptions of the Middle and New Kingdoms (Doyen and Gabolde, this volume).

That control of strategic corridors of trade, access and security were of concern to some group(s) is clear from the creation and maintenance of fortified complexes at Dorginarti (Heidorn 2013), and Jebel Sahaba (Säve-Söderbergh and Troy 1991, 319–23; Török 2009, 60–1) on the Nile, and at Gala Abu Ahmed in the Wadi Howar (Jesse 2013). This *wadi* acts as a corridor from the Nile, near the ed-Debba bend, towards Darfur, and the construction and maintenance of a large stone-built fort (180 × 120m), 110km from the Nile Valley, reflects the importance of that route. ^{14}C dates range from the 13th through until the 7th centuries BC, indicating that the fort was in use during the later part of Pharaonic control of Nubia, in the ensuing centuries, and through the emergence of the Napatan state (Jesse 2013). Did the Pharaonic state ever control this fort? There is no explicit evidence for this; rather the presence of Egyptian marl pottery indicates that it was integrated into trade networks that involved Egypt and, presumably, areas to the south and west.

Ultimately, the new Napatan state[9] would conquer Egypt — a line of Nubian rulers to be designated as ‘Dynasty 25’ by Egyptologists — and have a considerable influence on the development of architecture, art and religion of the ensuing Late Period in Egypt (see Pischikova, Budka and Griffin 2014).

* * *

[9] For discussions on various aspects of the origins of the Napatan state in the early 1st millennium BC, see Wenig 1999, 3–176.

The 2013 colloquium

This edited volume comprises the proceedings of a colloquium held at the British Museum, London, on 11 and 12 July 2013, also entitled *Nubia in the New Kingdom: Lived experience, Pharaonic control and indigenous traditions*. This formed part of a series of Annual Egyptological Colloquia, held since 1992 and always accompanied by the keynote *Raymond and Beverly Sackler Distinguished Lecture in Egyptology*. On this occasion, the keynote presentation was delivered by W. V. Davies, 'Nubia in the New Kingdom: the Egyptians at Kurgus' (this volume). Several additional papers, not delivered at the conference, were commissioned for this volume (Stevens, Stevens and Garnett, Thill, Vandenbeusch, Williams), while other contributions differ markedly from the papers at the conference. Two workshops were held on the day before the conference, 10 July, allowing sustained discussions around two research themes. The first concerned *The mechanics of founding Egyptian settlements*, and the themes from those presentations and discussions are apparent in several papers published here (Bonnet, Budka, Rose, Spence, N. Spencer). The second workshop focused upon *Ceramics in New Kingdom Nubia*, particularly around fabric typologies. Again, several papers published here echo some of the subjects discussed (Budka, Rose, Stevens and Garnett).

The conference not only reflected the surge in research on New Kingdom Nubia, and particularly its settlements, environment and bioarchaeology, but also came at a moment when the landscape of archaeological research was about to be transformed, through the instigation of the Qatar–Sudan Archaeological Project (2013–18). This large-scale investment in archaeological research, site presentation and management is further enhancing our understanding of prehistoric, ancient, Medieval and pre-modern Nubia, including at several important New Kingdom settlements (Amara West, Sai, Kawa/H25 and Jebel Barkal).

Setting this conference in the British Museum also reflected both the focus on the histories, archaeology and cultures of the Middle Nile Valley, and the fact that objects from Nubia have long formed part of the collection. The foundation of the Sudan Archaeological Research Society in 1991 led to important work relating to the New Kingdom at Kawa (directed by Derek Welsby) and the epigraphic work of Vivian Davies at Kurgus, Jebel Billal, Tombos, Jebel Dosha and more recently in the Dal and Korosko Road regions. Since 2008, a research project focused on Amara West has been led by Neal Spencer.

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Abbreviations

K*RI* = Kitchen, K. A. 1969–90. *Ramesside inscriptions, historical and biographical*. Oxford.

K*RITA* = Kitchen, K. A. 1993–99. *Ramesside inscriptions, translated and annotated: Translations*. Oxford.

L*D* = Lepsius, R. 1849–1859. *Denkmaeler aus Aegypten und Aethiopien*. Berlin.

Urk. = Sethe, K., W. Helck, H. Schäfer, H. Grapow and O. Firchow. 1903–57. *Urkunden des ägyptischen Altertums*. Leipzig and Berlin.

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