

Chapter 11

North-east Africa and trade at the crossroads of the Nile Valley, the Mediterranean and the Red Sea

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In writing a doctoral dissertation addressing the relationship between the Egyptian empire in Nubia during the New Kingdom (c. 1550–1070 BC) and the emergence of the Kushite state, economic factors were central.¹ At the time of writing (1984–1990), the literature on the Egyptian economy was limited, with many of the older interpretations still accepted; challenge was largely from scholars influenced by the works of Karl Polanyi.² Yet there was consensus that Egypt suffered economic decline in the late New Kingdom. Even those who questioned the interpretation that presented Egyptian activities in Nubia as purely exploitative acknowledged that the “colonial” centres ceased to function, that gold production effectively stopped, and that the Egyptians withdrew from Nubia in the late 20th Dynasty (Trigger 1976). The Egyptian economy during the Third Intermediate Period is almost totally without discussion: an obsession with aspects of material culture (notably coffin development), and with genealogical and prosopographical minutiae has seen broader issues neglected.³ Similarly, the discussions, such as they were, of the emergence of an independent and powerful Kushite state, had little to say on the economic factors that contributed.⁴

The basic problem was an academic failure to treat the period 1100–700 BC as a continuation, development, and metamorphosis from the New Kingdom phase. This occurred for a number of reasons, and *appeared* to be supported by the archaeology. Egyptologists were more concerned with the loss of empire and the Libyan domination, leading to what they regarded as a very long decline throughout the 1st millennium BCE. From the Nubian/Kushite perspective, the “Dark Age” also made a convenient chapter break, or end/start for a book, leaving the questions it raised unanswered.⁵

The accepted characterisation of the “end” of the Late Bronze Age argued for the decline of Egypt’s power and influence internationally, the collapse of its empire, and internal economic crisis (Černý 1965). Certainly the disintegration of the other major power of the region, the Hittite empire, had repercussions for Egypt. These problems

began in the reign of Ramesses II, increasing through those of his successors with the major threats posed by the invasions of Egyptian territory by the Libyans and "Sea Peoples". It was not a process of continuous decline, as both Merneptah and Ramesses III successfully reasserted Egyptian authority in parts of Palestine; but by the reign of Ramesses VI the Egyptian empire in Western Asia was gone. The well-known, and frequently cited, *Report of Wenamun* – whether an actual "report" or a piece of literary fiction – is used to show how far Egypt's prestige and influence had fallen in Byblos, a major trading partner for many hundreds of years (Goedicke 1975). There were economic problems within Egypt, but the view epitomised by Černý (1965), which dominated Egyptology for a long time, generalised from a particularly rich set of documents with economic relevance but only of Upper Egyptian provenance. Although these documents reveal administrative corruption and theft, they also show that the perpetrators were found out and dealt with. Similarly, in cases of grain shortage, the controlling officials brought food supplies from stores elsewhere. The evidence from Middle and Lower Egypt is lacking, so we have no way of comparing the different regions.

This is not the place to examine the complexities of the archaeology or the numerous different, and opposing, theories about the collapse of the Late Bronze Age states.⁶ From the perspective of Egypt and its neighbours in north-east Africa, there is a serious disparity in the textual and archaeological material. The following narrative aims to highlight some of the key issues and questions over the broad period from c. 1300–700 BC. In some areas it is clear that recent excavation is providing new material for understanding this period.

The West: Libya

There is remarkably little evidence for Libya and Libyans in the earlier part of the Egyptian New Kingdom (c. 1550–1070 BC), but by the reign of Amenhotep III (c. 1390–1352 BC) there were close contacts, and the names of "tribal" groups are recorded (notably the Libu and the Meshwesh) replacing the more generalised and "archaic" terms Tjehenu and Tjemeh. There is also archaeological material from sites at Marsa Matruh, and Zawiyet Umm el-Rakham.

The repeated waves of Libyan invasion and migration that began in the reign of Sety I (c. 1294–1279 BC) led to a pragmatic Egyptian accommodation of the situation: settling Libyans in certain parts of Egypt (especially the Delta), and employing significant numbers in the army (Kitchen 1990; O'Connor 1990; Snape 2003). This eventually led to the rise of Libyan rulers as both pharaohs and local "princes". The documentary evidence of the reign of Merneptah (c. 1213–1203 BC) is quite explicit that the movements of Libyans were caused by famine in their own country. Precisely *where* they were coming from is not specified: O'Connor suggested that Cyrenaica was probably the homeland of some groups, and this has generally been favoured. However, the more easterly region of Marmarica might be more likely. Marmarica,

a large region stretching from the Gulf of Bomba in the west almost to Alexandria in the east, is effectively a unit in terms of landscape and environment. It has numerous coastal wadis and potentially could support agriculture and pasturing; but it is also a more fragile ecological system than Cyrenaica, and if there was climatic change and desiccation this may have caused a significant disruption to traditional ways of life (Hulin 2009).

Eastern "Libya" had been a part of the trade network of the Late Bronze Age (LBA), certainly from the time of Amenhotep III and Akhenaten. The sea routes around the eastern Mediterranean would have required ships to sail across from Crete and follow the coast in order to get supplies of fresh water. The evidence from Marsa Matruh shows direct exchange between such traders and the local population (White 2002). The slightly later material from Zawiyet Umm el-Rakham reflects a change, with Egyptian intervention and control, albeit briefly and ultimately unsuccessfully (Snape & Wilson 2007). The presence of "Libyans" at the Egyptian court is particularly well documented from the reign of Akhenaten (c. 1352–1336 BC), which would have increased political and diplomatic contacts with other Western Asiatic powers. The temple scenes depicting the conflicts between Egyptians and Libyan groups (now specified with "tribal" names) from the reigns of Sety I and Ramesses III (c. 1184–1153 BC) show that the Libyans acquired Western Asiatic type swords, and significantly, horses and chariots: they thus became integrated, albeit rather late, into the LBA world. What the Libyans provided in return is less certain. The standard "tribute" depicted comprises ostrich eggs and ostrich feathers: but the Egyptian preference for showing "luxuries" may cloud the actuality (Richardson 1999).

The introduction of chariots and horses to Libya is a typically Late Bronze Age phenomenon, but occurs quite late when compared with Egypt and the wider East Mediterranean worlds. The battle reliefs of Sety I on the exterior north wall of the Hypostyle Hall at Karnak, imply that the king's Libyan campaign was regarded as of equal significance to his Asiatic conflicts. The scenes show that the Libyans were using the imported types of sword, but they are not shown with horses and chariots. The records of the reign of Merneptah state that chariots and horses form part of the Libyan army, although the numbers appear to be small. The Libyan conflicts of the reign of Ramesses III also include chariots and horses.

From Libya itself rock drawings of chariots, some drawn by four horses, are well known. However, as with all rock art they are difficult to date and interpret: some appear in areas in which it would have been nigh impossible to use chariots. By the 5th century BC Herodotus wrote about the Libyan horses and four-horse chariots of the Asbystae inland from Cyrene, and of the Garamantes.

The Merneptah inscriptions indicate famine and presumably therefore some phase of significantly serious desiccation, presumably due to lack of winter rain. There are other changes identifiable within Libya: the seasonal trading of Phoenicians in the west (and perhaps also in Cyrenaica), was followed by the foundation of permanent centres, most notably Utica (traditionally around 1100 BC, although the archaeology is

8th–7th centuries) and Carthage (traditionally around 800 BC). Later Greek settlement in the east (although perhaps following earlier Mycenaean explorations) was the prelude to the foundation of Cyrene in the period around 600 BC (James 2005).

The questions that emerge, and which cannot be answered as there is no evidence, as yet, are:

- Was there an extended period of desiccation? Or was it short-term?
- What were the connections between Libyan pharaohs and Libya? There is no evidence whatsoever from Egyptian sources.
- Phoenician and “Greek” trading and settlement. These certainly have their origins in the period under discussion even if the historical narratives and archaeology are at variance.

The current work of a number of projects should go some way to resolving issues around the emergence of the Garamantes in the west of Libya and how they can be related to events further east.⁷

The South: Kush, Punt, Ethiopia and the Red Sea

The evidence for the economy of “Nubia” during the LBA (Egyptian New Kingdom) is extensive and thoroughly discussed (Morkot 1995a). Within the territories controlled directly by the Egyptians (Wawat and the province of Kush), land holding and internal production appears to have been reorganised along Egyptian lines. This applies not only to agriculture where the evidence shows that temples, statue cults and administrative offices had fields assigned to them, as in Egypt; but also to production of sculpture, funerary goods, and pottery. The decline of indigenous pottery production, once associated with a decline in population, is now generally ascribed to “acculturation” – by which we should perhaps understand economic centralisation. Other indigenous cultural features remained, revealing a complex mixing of Egyptian with “Nubian”.

Egypt was certainly reliant on the region to the south for gold and the other “luxury” commodities with which it maintained its dominant position in the LBA world. The relationship was not, however, purely exploitative. Egypt invested heavily in town and temple building in its Nubian territories and, in addition to the gold exploitation and cross-frontier trade, a range of more “lowly” agricultural products was shipped to Egypt on a significant scale. Large numbers of cattle were imported from the Dongola Reach of Upper Nubia, which probably lay outside direct Egyptian control. Conversely, horses and chariots were introduced into Nubia, and horses appear to have been bred there as early as the late 18th Dynasty (Morkot 2007). The result of this close economic relationship over a period of four centuries was undoubtedly a complex mixture of economic zones and interactions, with a range of systems.

The evidence for the process of Egyptian abandonment of its Nubian territories is less clear than in Asia, but “rebellions”, notably by the kingdom of Irem, threatened

the far south of Egyptian control from early in the 19th Dynasty. The old idea of total depopulation of Nubia from the later New Kingdom has now been fairly conclusively disproven, and a far more complex model of change can be assumed – but not yet detailed (Morkot 1994; 2000). The first excavations at Amara West suggested that the town site, which served as the Egyptian administrative centre in Kush, was closed down sometime in the reigns of Ramesses IX–XI (c. 1126–1070 BC). The recent excavations at the site have now shown that there was occupation during the succeeding period. These are not, of course, mutually exclusive: the Egyptian administration may well have abandoned the southern province and the town and redrawn the frontier in the face of expanding indigenous power from further south. This raises the issue of the rise of the indigenous Kushite kingdom that by the mid-eighth century was able to invade and conquer Egypt. There is still limited evidence, and the interpretation of that evidence divides scholarship.⁸

One of the key products of Nubia was gold (Vercoutter 1959). The records from the Theban region recording donations to the temple of Amun show a decline from the reign of Thutmose III (who gave 15 tonnes of gold over a period of about 30 years) to that of Ramesses III. Gold was produced in the Eastern Desert, and also along the Nile Valley south of the Second Cataract. Vercoutter assessed the evidence, and the scenes in the tomb of Tutankhamun's Viceroy Huy show that gold production was directly under the control of the Viceroy. The evidence identified by Spence at Sesebi substantiates Vercoutter's analysis, and suggests a significant production of gold in the Abri-Delgo reach of the Nile during the late 18th dynasty.⁹ Given the technologies and extraction methods of the period, this may have been of short duration. The Egyptian documentary evidence suggests that gold production in the earlier 20th Dynasty was small, and possibly no longer economically viable. Despite this, there appears to have been no abandonment of Nubia, and the withdrawal from the region south of the Second Cataract was only very late in the 20th Dynasty, and may have been as much due to changing power structures in Upper Nubia as to economic factors.

Egyptian economic activities in Nubia appear to show direct involvement with gold production, but there was probably a reliance on local power holders for other "luxuries", particularly those which were the product of longer-distance networks. With the working-out of the gold available allied with rising local power and internal dynastic problems in Egypt, abandonment of the region may have seemed a sensible response. Indeed, the situation and influencing factors may have been parallel to those at the end of the Middle Kingdom.

The agricultural situation is also a controversial subject. It has been argued that Lower Nubia suffered from a decline in productivity caused by a series of low Niles, resulting in emigration.¹⁰ This need not have been the case, as Helen Jacquet-Gordon long ago observed: lower floods in Nubia do not have the same impact as in Egypt, as water remains available, and with increased exposure of land in a narrow flood plain (Jacquet-Gordon 1982). In any case, Egypt during the Third Intermediate Period was a time of high Nile inundations, amply recorded by the Quay inscriptions at Karnak.

One reference from the late 20th Dynasty implying a low inundation with consequent shortages does not indicate a long term problem. In Upper Nubia, the situation may have been different, with increased desiccation: this could have had a serious impact on nomadic or desert populations, causing movements into the river valley. Further east, in Ethiopia, Fattovich has suggested that the recession amongst the Gash cultures was caused by climatic change, and this may have resulted in population movements, but if so they are undocumented (Fattovich 1989; 1990). All of these issues remain somewhat speculative, but should certainly be considered in the broader analysis. Elsewhere, there certainly were agricultural and climatic problems in the later phases of the LBA. However, "climate change" brings a range of different issues in different regions (as we now know, all too well): one region may have drought whilst another has prolonged rain and flood.

However the Kushite state expanded and developed (which is not the direct subject of this paper), its rulers – whether it was one or more chiefdom – must have had control of substantial economic resources. There are enormous problems in trying to understand the economy of Nubia during the "Napatan" period (broadly 1000–300 BC), and the lack of material forces us to supplement the data by comparison with other phases. Lower Nubia, even if not totally depopulated, is unlikely to have been much more than a subsistence economy, with the major productive regions further south in the Abri-Delgo and Dongola Reaches of Upper Nubia, and the savannah of the central Sudan. In Medieval times Nubia was largely self-sufficient in foodstuffs from agriculture and it is likely that local craftsmen supplied most of the manufactured articles (Shinnie 1978). Trade was, therefore, *mainly* luxury orientated. A very similar situation seems to have prevailed in Meroitic times. Under the Viceregal administration a local, largely self-sufficient agricultural economy was established that was very similar to that in Egypt, with exports of a wide-range of locally acquired mineral and agricultural products, exploitation of gold resources both in the Nile Valley and Eastern Desert and export of cattle from the Kerma-Dongola reaches (Morkot 1995a; 2001). Morkot argued that the main luxury trade was carried out between the local rulers of southern Kush and their counterparts further south (Morkot 1991a; 1995a; 2001).

The question must arise of why an increasingly centralised political entity with a self-sufficient agricultural base expanded in the way that the Kushite state apparently did (Zibelius-Chen 1989). Was international trade an important factor? Was Kush already involved in international trade?

It has been argued that the collapse of the palace-based states of the LBA saw a change in the main axes of trade in western Asia and the east Mediterranean, although it should be noted that many features of the internal economies of, for example, Egypt and Assyria, appear to have continued functioning in very much the same way as they had in the LBA.¹¹ In this model, the new powers controlling trade were those at the centre, rather than the edges: the Levantine or Phoenician cities, and the states of Syria-Palestine, notably Israel, Judah, and Aram-Damascus. The history

of the tenth to eighth centuries is dominated by the rivalries and expansions of these various states. This period of change saw the fragmentation of the old empires of Egypt and the Hittites and the emergence of the Aramaic and Neo-Hittite successor states in north Syria and along the fringes of the Fertile Crescent and, it is argued, the appearance of nomadic Arab tribes from the south. Israel under Solomon dominated the trade routes for some time, exploiting the Red Sea ports and exacting dues from the Arabian tribes. Later attempts to re-open the Red Sea routes apparently failed. In this characterisation of trade, Egypt's importance is dramatically reduced, and Nubia and the Middle Nile cease to be considered.

Liverani has discussed the economic implications of the "end" of the LBA and argued that the growth of nomadic and semi-nomadic groups may have been a result rather than a cause of the crisis (Liverani 1987; 1990). This was also the period of camel-oasis-desert expansion, which saw the rise of the Aramaean states and of the Arabians (Liverani 1987, 70). Trade was no longer entirely palace-centred and gift exchange gradually gave way to commerce (Liverani 1987, 72). Significantly, there was a shift in the gold routes from the LBA to Iron I (Liverani 1987, 73). The decline, or cessation, of significant gold production meant that Egypt no longer had the monopoly. There was also a change in the trade axis to the east of the Red Sea and an Assyrian desire to control these land routes that had a major impact on the political situation in Syria-Palestine during the 9th-7th centuries. Frankenstein suggested that the problems encountered by Wenamun at Byblos may already reflect this new regional configuration, and the first major expansion of Assyria into western Asia under Tiglathpileser I (c. 1115-1077 BC).¹²

Although it is widely accepted that the north-south trade axis moved from the control of Egypt to the eastern side of the Red Sea, coming under the power of the emergent Arabian states, the development of these Arabian trade routes is still a matter of considerable obscurity. The direct archaeological evidence from south Arabia does not indicate the formation of major states there until the 6th and 5th centuries BC. These centuries were also the time of Arabian activity in Ethiopia which was significant in the emergence of the Aksumite state. There is a little evidence from around 600 BC for Egyptian contacts with Arabia, although it is uncertain whether these were direct or not. Fattovich, in commenting on the Sudanese coastal site of Aqiq, argues for a network of contacts and exchanges during the time of the Gash Group (c. 2700-1400 BC) connecting Egypt and Nubia, the Upper Nile, Horn of Africa and South Arabia (Fattovich 2006-2007). /t

There is evidence for the increased use of the domesticated camel for carriage and transport in the 10th-8th centuries BC (Bulliet 1975), and this would certainly have made the west Arabian routes easier to use. The biblical record has usually been cited as evidence that these routes began to function during the reign of Solomon,¹³ but Groom questioned this, arguing that the biblical Queen of Sheba was not a south, but a north Arabian ruler (Groom 1981, 42-54). As such she would have been leader of another people called Sabaeans who lived in northern Arabia and who are mentioned

in a number of sources. Groom identified It'amra the Sabaeans, of the reign of Sargon II, as ruler of the same people and not of the south Arabian state. Solomon's visitor would thus have been an earlier representative of the Arabian female rulers attested by the Assyrian texts of the late 8th century (Groom 1981, 44–45). Groom points out that the commodities brought by the queen – gold, spices and precious stones – were more typically northern than southern Arabian and contests the assumption that the Arabian incense trade was itself highly developed so early.¹⁴ Incense may have been included in the commodities brought to Solomon, and small quantities exchanged through networks to the south, but there is insufficient evidence to support the idea that it was being exploited on a large scale until the first two centuries AD. Indeed, incense is central to arguments about the trade routes, and the assumption that the region of "Punt" was the major supplier of frankincense and myrrh is actually without solid archaeological evidence. The Egyptian sources certainly indicate importation of the trees and the resin from Punt and through the Middle Nile routes, but quantifying this is impossible. Other sources of aromatic resins were available in Egypt and south-western Asia, and these may have been more significant in the Bronze Age (Serpico 2000).

Although it seems likely that there was an increasing use of the Arabian land routes, there were also sporadic attempts to re-open trade along the Red Sea. The biblical texts name the intended destination as Ophir, which is argued by some to be Oman, India, or even Malaysia. Others, more realistically, prefer to see Ophir as the same as Punt,¹⁵ or possibly somewhere on the Red Sea coast of Arabia that itself had contacts with East Africa. Punt had been a trading partner of Egypt from very early times, and although the geographical region was probably roughly the same (although even that is questionable) it was a variable polity. Current opinion suggests that the "Punt" of the LBA (Egyptian New Kingdom) was in eastern Africa and possibly located in the Gash delta region of Ethiopia.¹⁶

Fattovich relates the end of Egyptian trade contact with Punt to the sudden dryness in North-eastern Africa and the socio-political weakness of Egypt during the Third Intermediate Period (Fattovich 1990, 266). Fattovich notes the disappearance of large villages in the Atbara-Gash region (which he suggests to be the archaeological equivalent of part of LBA Punt) at this time, which is suggestive of a local breakdown. The collapse of the Egyptian trade with Punt also seems to be correlated with the rise of the South Arabian trade routes.¹⁷ Although there is evidence for activity by peoples from south Arabia in Ethiopia during the 6th–5th centuries BC, there are no archaeological indications, so far, that the Arabs of south Arabia were beginning to exploit the resources of the Ethiopian highland at this early date. Fattovich sees a Meroitic expansion toward the highlands in later 1st millennium BC (4th–1st centuries), but is it possible that the emergent Kushite state in the central Sudan was exploiting, directly or indirectly, the resources of east Sudan and the Ethiopian highland and establishing contacts with the western Asiatic powers via the Red Sea avoiding Egypt?

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Whilst the exact nature of Arabia's role in international trade remains unclear, that of the coastal cities of the Levant is much better documented. The Phoenician cities came to specialise in the production of luxury goods, or the acquisition of luxury raw materials.¹⁸ Amongst the tribute of the "Sea Coast" received by Assurnasirpal II (883–859 BC) were large and small monkeys, ebony, and ivory.¹⁹ That received by Tiglathpileser III (745–727 BC) was very similar, specifying in addition iron, ivory and elephant-hides (ANET 282–284). Some of the imports listed, notably the linen, would have originated in Egypt, but others – such as the ebony, ivory, and elephant hides – certainly had an East African origin. The inclusion of iron raises the issue of whether iron working was already being practised in Kush.²⁰

Unfortunately, there is remarkably little evidence to illuminate what the role of Egypt in the international trade of the 9th–7th centuries BC was. There is equally little evidence as to what commodities were imported and exported.

In LBA Egypt the trade in "luxury" raw materials and manufactures was controlled through the palace. Nubian commodities such as ivory, ebony, incense, and gold figured largely in this. If, as is usually accepted, the Nubian "luxury" trade was severed at the end of the 20th Dynasty, Egypt must have been forced to export different commodities – or rely on its own products. One of the problems in discussing Egypt's international economic activity is the documentary evidence (e.g. in the Amarna Letters) for luxuries, many of them from the south. The archaeological evidence, for example from the royal tombs at Byblos and Ugarit, shows the significance of stone vessels (and probably their contents). For the earlier 1st millennium, Egyptian artefacts have been excavated in graves throughout the Mediterranean, from Spain and Carthage, Etruria and the Aegean islands, suggesting that these were goods traded with the Phoenicians and then traded on by them (Culican 1970; Parcerisa 1985). Notable amongst these objects were alabaster vessels and faience amulets. Neither of these manufactures was new in Egypt's international exchange.²¹ Even if there was disruption to the luxury trade, which is doubtful, there were other products which were royal monopolies: fine cloth and papyrus. These are documented as exports at the end of the 20th Dynasty.²²

Based upon assumptions about the relationship between the temples of Amun at Thebes and at Gebel Barkal, it has been assumed by Török and Kendall that such trade contacts as might have existed between Kush and Egypt during the pre-25th Dynasty would have been with Thebes rather than the Delta (Kendall 1999; Török 1995). The presence of Upper Egyptian marl wares at el-Kurru certainly supports a direct contact with Thebes, but this does not exclude connections with the Delta rulers. There are two possibilities raised by the Assyrian record of commodities which must be of Nubian origin: that they were reaching the Phoenician cities either directly via the Red Sea routes, or indirectly through the Egyptian rulers.

The exports of the Pharaonic period – gold, ivory, ebony, skins, feathers, and humans – were also those of later times. The scanty evidence available from the Achaemenid period suggests that ivory, and perhaps ebony, continued to be important.

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Humans were sent as soldiers and as slaves at all periods, some no-doubt from within Kushite territories, and others captured in cross-frontier expeditions. There was probably an increase in the slave-trade during the Roman period, and later the *Baqt* refers only to slaves, although it is possible that gold and ivory were also exported.²³

One document not usually cited as evidence of Egyptian-Kushite trade contacts is the inscription of Crown Prince Osorkon at Karnak (Caminos 1958; see also Kendall 1999). Prince Osorkon served as High Priest of Amun at Karnak during the reign of his father, Takeloth II, and probably eventually ascended the throne as Osorkon III. In some sections listing Osorkon's benefactions to Amun during the reign of Takeloth II are products specified as Nubian. These include gold, or "fine gold" of Khent-hen-nefer, and dry myrrh "of the best of Nehes-land" (Caminos 1958, 125-126, 166). It may be significant that both geographical designations are "archaic" rather than contemporary political terms. Fresh incense and dry myrrh are listed elsewhere, but not specifically as from Nubia. It is possible that the gold was acquired directly from Lower Nubia, but incense must have been of more southerly origin.

Further indication of the continuance of the "luxury" trade is provided by the Assyrian sources. An Assyrian document records the receipt of elephant hides, rolls of papyrus, and garments made of *byssos* (the finest linen) from Ashdod and another kingdom, probably Gaza or Ashkelon.²⁴ The papyrus and *byssos* were certainly Egyptian manufactures (and probably a royal monopoly) but the elephant hides must be of Kushite origin. If elephant hides were being exported, then it is reasonable to assume that ivory was as well. The ivory working of the 9th-7th centuries BC is one of the most notable productions of western Asia. It is generally accepted that the Syrian elephant was, by this time, extinct, and although some of the ivory worked in Assyria probably came from India via Babylonia, it is certain that some of the ivory excavated at Nimrud was African.²⁵ The origin of many worked pieces in the Phoenician workshops again suggests that the ivory was imported, probably from Africa, and of course, ivory had long been one of the most notable of the Nubian exports. Nubia must be the most likely source of this ivory, the size of some of the pieces indicating that it came from the Bush elephant.²⁶ Although elephants were hunted in north-west Africa, it has been assumed that they were of the Forest type, with smaller tusks. It is unlikely that the Phoenician expansion into the western Mediterranean actually brought large quantities of ivory, at least early enough to coincide with the major periods of Phoenician and Syrian ivory carving.²⁷

Rather surprisingly, ivory working is almost completely unattested in Egypt during the Third Intermediate Period, but this may be due to accident of survival and changes in burial custom. The iconography of the western Asiatic ivories shows strong Egyptian influence, some of which is certainly of the Third Intermediate Period (rather than being a New Kingdom residue), and it seems possible that faience amulets served as the model for some of the designs.²⁸

There are enormous problems in attempting to understand the economy of the Kushite kingdom, but there is sufficient evidence to suggest that "trade" continued.

This would doubtless have been elite controlled and in the form of gift-exchange. Indeed, the evidence from the period following the 25th Dynasty, another phase in which relations between Kush and Egypt are generally suggested to have been severely restricted, show that there was considerable "trade". There were contacts between the rulers buried at el-Kurru and the Red Sea coast, as shells from the cemetery indicate. How direct, or frequent, any contact between the Nile and coast was is much more difficult to assess. Equally, any contact with Arabia or the Phoenicians is undocumented, but perhaps worthy of consideration: probably most exports continued by the Nile route.

The obvious evidence relates to the "luxuries" which had always been Kushite exports, and which can be certainly said to have a Sudanese origin. The possibility of breeding and export of horses has already been discussed. The control of such northward trade would probably have been as it was in the heyday of the Kerma kingdom, based in the Dongola-Napata Reach. Ultimately, the Kurru chiefs came to control this trade, although they were not necessarily the original power. One explanation of the emergence of the Kushite kingdom would be that the Dongola/Kurru chiefs expanded their power southwards into the central Sudan in order to gain control of the source, as well as the transmission of such commodities. Again, the question of iron-working may be significant. It has always been assumed that the Kerma kings acted as middlemen in the trade with Egypt, rather than dominating the central Sudan. This may have been the case, but now, in the 8th century BC, the Kushites created a large kingdom covering both the Butana and the Nubian Nile Valley.

In return for these luxury materials, the Kushites probably received grain and cloth, which are not preserved in the archaeological record. It is more certain that pottery was being imported from Upper Egypt (probably Thebes), presumably for its contents. Likewise the Levantine storage jars from el-Kurru and Hillat el-Arab were probably acquired through Egypt, either for their original contents, or, as more widely assumed, refilled (Heidorn 1994; Vincentelli 2006). In the later, Meroitic, period wine was imported from and through Egypt, and is also documented during the Viceregal period and was doubtless important in all historical phases. The archaeological evidence inevitably emphasises luxury manufactures: jewellery, faience and stone vessels, amulets and the like. However, there is still no firm agreement on the dating of the calcite and faience vessels from el-Kurru, and whether they should be considered as contemporary (requiring a redating of the cemetery's chronology), as "attractive 'antiques' of types no longer produced" in Egypt, or as pillage from New Kingdom burials rather than contemporary imports (Kendall 1999).

It has often been assumed that the trade in luxury commodities ended with the collapse of the viceregal administration, and the apparent breaking of contacts with the Middle Nile in the Libyan period. Since most of the commodities originated in the central Sudan, it is reasonable to ask whether the controllers of the source would have attempted to establish contact with Egypt, to ensure the continuing supply of Egyptian commodities. The Egyptians themselves would have still required, or desired,

many of the products. If, as argued here, a successor-state immediately appeared in Lower Nubia, the continuance of trade is even more likely, if on a much-reduced scale.

The consensus is that the "end" of the LBA saw changes in the control of trade and trade-routes: Egypt was far less important than it had been, whilst the Western Asiatic powers – the Phoenician cities, Israel and Damascus – became dominant. The increasing use of the camel opened up the Arabian land routes, although there was some continued use (or attempted use) of the Red Sea routes by Israel, at times in alliance with Tyre. There is some evidence for the continued transmission of commodities from Nubia to Egypt, and it is unlikely that it would have completely ceased, even if there was political hostility. It is unclear what effect the rise of the Arabian trade routes may have had on the trade in prestige commodities from Nubia. It is possible, although there is no supporting evidence, that much of the ivory used in western Asia at this time came from the eastern Sudan, but via the Red Sea/Arabian routes rather than the Nile Valley.

Within the broader context, the rise of Kush should be examined against the background of the collapse of the LBA states and the eventual ascendancy of the Assyrian empire in the mid-8th century BC. Other factors in the region of North-eastern Africa, the Red Sea and Arabia may have been significant but are currently undocumented. It is also uncertain when the Arabians began to cross the Red Sea; although the middle of the 1st millennium has been suggested, it may have been as early as the 8th century BC and there is some evidence for trade across the Red Sea in the 2nd millennium. Jacqueline Pirenne proposed that the earliest wave of Arabian migration was caused by the Assyrians in the 8th–7th centuries. Fattovich suggested that the Gash Delta cultures ceased about the same time as the end of the Egyptian New Kingdom. He has also suggested the possible influence of Nubia on the pre-Aksumite cultures and detailed finds of Kushite material in pre-Aksumite contexts. While our knowledge of the archaeology of western Arabia, Ethiopia and the Eastern Sudan is still limited for this period, knowledge has considerably increased in recent years, and it is important to consider the *possibilities* of contact and influence, insubstantial though the evidence may be.

There is some evidence that the commodities of Kush continued to pass to western Asia, either through Egypt, or by the Red Sea-Arabian routes. In addition to the more usual products, the Assyrian evidence suggests that horses may have been brought from Kush and that there were Kushites in Assyria from the mid-8th century (Dalley 1985; Heidorn 1997; Morkot 1995a, 237–238; 1999, 144). Although not in itself necessarily indicative of Kushite political expansion, it shows that Kush was not entirely cut off from the western Asiatic world and that individuals were still going to Egypt and farther afield. Even if the Kushite state was the result of the coalescence of already existing political units, there must have been political, economic, or other factors which caused this.

Population movement has been noted as a prime factor in the process of state formation elsewhere. It is possible that some movement took place following the

end of the Viceregal period, but there is no indication that, for example, there were large numbers of people forced into the Nile Valley or central Sudan by climatic changes. There is evidence for populations continuing in the Eastern Desert through the 1st millennium into Roman times. There *may* have been political events elsewhere – the Ethiopian highlands, Darfur-Kordofan, southern Sudan – which forced people into the Butana and Dongola Reach. Climatic change may have caused the recession amongst the Gash cultures, as Fattovich has suggested, and may have caused population movements. While population movements *may* have been a factor in state formation, they are without evidence, and other factors might have been more important. Since it has been argued here that states already existed throughout the region, the emergence of a more centralised and coherent power may have been the result of conflict within Kush itself. All of these factors are significant in considering the changing economic situation of the early 1st millennium.

The exhaustion of the gold supply by the later 20th Dynasty (c. 1150–1070 BC) is probably something about which we can be reasonably confident. The use, reuse, and possible decline in supply of other metals at the end of the LBA, and the increasing use of silver and iron are certainly significant economic factors (Sherratt 2000; 2003). The control of long distance trade in the nascent Kushite “state” is doubtless another major issue. The southern contacts of the rulers are shown by material naming Shabaqo and Taharqo from Gebel Moya.²⁹ Whether direct or indirect, this traded material travelled a considerable distance. Recent survey and excavation in the Wadi Howar have revealed the existence of a 25th Dynasty fortress, raising questions about Kushite activities westward, and potential trade links, population movements, and neighbouring polities (Lange 2005; Jesse 2004; Jesse *et al.* 2006).

In conclusion: there are many complex issues around the internal and external economies of Libya, Egypt, Nubia-Kush and the Red Sea region from the late New Kingdom through the Third Intermediate Period to around 600 BC. Broadly, we can say that the emerging Kushite state(s) engaged in trading activities with the states of south-western Asia, and that that trade began (directly or indirectly) before it came to dominate Egypt as the “25th Dynasty” (c. 750–656 BC). How, or whether, trade was a determining factor in Kushite expansion remains speculative. There do seem to be connections between the Kushite state and the Red Sea, but there is no substantial evidence that the older Nile route for export of African commodities was replaced by the Red Sea routes until later, perhaps not even until the Ptolemaic or Roman periods: the more important factor may have been who controlled the Nile routes. Some commodities (such as incense) *may* have been sourced more directly from southern Arabia, and East African supplies may have been affected by climatic change – but this is impossible to assess at present. There are no indications that hunting had a major effect on elephant populations, either in numbers or location, although a gradual eastward movement can perhaps be noted later, leading to Aksumite domination of the ivory trade in 3rd–4th centuries AD.

Notes

1. Morkot 1994. An outline of Part 1 appeared as Morkot 1987; other elements (some revised) as Morkot 1991a; 1995a; 1995b; 1999 and 2001.
2. Janssen 1975; for Nubia, Kemp 1972a; 1972b; 1978; Frandsen 1979.
3. See most recently, for example, Dodson 2012, a fine example of the genre: the index contains no reference to the economy or to trade.
4. An exception being Zibelius-Chen 1989.
5. For example Adams 1977; Shinnie 1967; Trigger 1976.
6. Drews 1993; cf. the radical proposals of James *et al.* 1991.
7. On the Garamantes see also Liverani 2000.
8. For the alternative discussions at the Meroitic Conference Berlin-Gösen 1992 and the Nubian Conference at Lille 1994; Kendall 1999; Morkot 1999; Török 1995.
9. Spence & Rose 2009; Spence *et al.* 2011; and the recent work of Klemm & Klemm 2013.
10. Adams 1977, 244 following the interpretation of Cecil Firth.
11. Postgate 1979. The gradual move towards a silver and eventually coinage-based economy was discussed by other contributors.
12. Frankenstein 1979, 266. See Fletcher 2012 for a critique.
13. Kitchen 1993, 606 suggests the possibility that the rise of the Levantine and Arabian incense routes were important for the decline of Punt: one could also argue that any climatic or political changes in the region of East Africa understood to be Punt, may have stimulated a search for other sources.
14. Groom 1981, 52–53, in contrast to Mitchell 1982, 494 and 495.
15. See discussion of Groom 1981, 48–54, Mitchell 1982, 480.
16. Kitchen 1971; 1993; 1999 for the extensive discussions on the location, and the evidence. Fattovich 1990 for archaeological possibilities, also Fattovich 1982; 1989; 1991.
17. A possibility also noted by Kitchen 1993, 606; Fattovich 1998.
18. Frankenstein 1979, 268 with critique of Fletcher 2012.
19. Annals from the temple of Ninurta at Nimrud: ANET 275–76. The translation by Oppenheim gives “ivory from walrus tusk” which is clearly impossible.
20. Trigger 1969 dispelled the older myths around Kushite iron working and lists examples of iron from the royal cemeteries. Current projects are re-examining iron working at Meroe itself.
21. However one should note differing interpretations of the 6th Dynasty alabaster vessels from Byblos and Kerma – whether contemporary imports or later reuse: Lacovara 1991 and Kemp in Trigger *et al.* 1983, 129. Kendall 1999 similarly regards all later New Kingdom stone vessels from el-Kurru as reuse. Ramesside alabaster vessels, certainly near contemporary, were excavated at Ugarit. See also Sparks 2003; Bevan 2003.
22. On the *Report of Wenamun* see discussion of varying translations in Goedicke 1975.
23. Morkot 1991b, 325. The rock inscription of Shorkaror (1st century AD) at Gebel Qeili clearly indicates such a cross-frontier capture. For the *Baqt* see Shinnie 1978.
24. Postgate 1974, 283–284; 111.1.1 a letter of Sennacherib as Crown Prince to Sargon II listing contributions received from Azu[ri] of Ashdod and another nearby city-state, by the palace at Nineveh.
25. On the ivories generally see Barnett 1975, and the detailed volumes of Georgina Herrmann. The size of some furniture elements and unworked tusks from the Nimrud excavations are suggestive of African rather than Indian origin.
26. There has been considerable confusion in the literature caused by assumptions over the type of elephant see Morkot 1998; Krzyszkowska & Morkot 2000.
27. As suggested by Barnett 1975, 166–168) who also postulated Phoenico-Israelite trade with India, which he identified as Ophir.
28. The designs and techniques are reminiscent of faience amulets, which would have been easy to transport.
29. Gerharz 1994: some of Gerharz’s re-assessment is now being challenged, but it remains the only significant published re-examination of the original excavations.

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