

Entanglement and the Formation of the Ancient Nubian Napatan State

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ABSTRACT Through the concept of entanglement, archaeological indications of cultural identity and skeletal evidence of biological and geographic interaction are used to explore the development of the Nubian polity who ruled as the 25th Dynasty of Egypt (Napatan period, ca. 750–656 B.C.E.). In this article, we examine the ways in which cultural and biological linkages affect the political, social, and cultural trajectories of the political entities in the ancient Nile Valley. Early studies of political developments in this region have often focused on Egypt, ignoring the aspects of power formation that may have developed independently and the long tradition of established local institutions in Nubia. The present research uses evidence from the site of Tombos, located in Upper Nubia, to investigate the processes of identity formation and population composition during the Egyptian colonial occupation and the subsequent rise of the Nubian Napatan polity. We address the impact of Egyptian and Nubian immigrants on the political developments, finding strongest support for the influence of Nubian-Egyptian communities established in colonial times on the character of the Napatan polity. [*cultural entanglement, Egypt, 25th Dynasty, Tombos, mortuary practices, state formation*]

Questions of identity formation and change have long challenged ethnological theorists. Archaeological studies can contribute to a comparative examination of the wide-ranging ways in which group and individual identities are created and adapted in diverse contexts, deepening our understanding of these processes. The exploration of identities in ancient groups provides a long-term perspective in diverse settings (Hu 2013; Salazar et al. 2014; Weik 2014). However, a challenge for archaeologists investigating social identities is the lack of systematic correspondence between material culture and self-identification (Allaire 1987). Although archaeologists have sometimes made inferences about social, cultural, political, and ethnic boundaries by observing material culture, such as associating the presence of exotic goods with foreigners, the processes that direct the production and use of objects are not always the same as those that guide identity (Hu 2013). Studying material culture from a diachronic perspective can allow us to trace identity transformations in specific sociohistoric circumstances that can aid in our knowledge of these processes. In particular, certain contexts, such as frontier zones where “cultural

mingling” (Frangipane 2015:9182) has occurred, can be locations of transformative social change with regard to how people perceive themselves, particularly concerning ethnic identity. The investigation of such contexts in which elements of material goods are rejected and recombined can offer information regarding the historical and cultural background of ethnogenesis (Goldstein 2015; Manzanilla 2015; Salazar et al. 2014; Stovel 2013).

Understanding how group members may have viewed insiders, classified outsiders, interacted with each other, and generated different identities is difficult for both contemporary observers and archaeologists. Primordial perspectives such as belief of shared common ancestry, religion, and language are not mutually exclusive with instrumental and constructivist paradigms that emphasize political and situational aspects in the creation and destruction of ethnic group identifications (Hu 2013; Weik 2014). A long-term, multidimensional strategy that includes numerous indicators to track ethnic identity and population composition provides the most robust way to study gradations in the processes by which group

identities were historically negotiated (Goldstein 2015; Harrison-Buck 2014; Salazar et al. 2014; Stovel 2013). The paradigm of entanglement (Dietler 2010) provides a useful structure for understanding the cultural and biological linkages that developed during transformative periods.

In this article we use these approaches to investigate population dynamics and cultural transformations in the frontier zone of ancient Nubia and Egypt during a period of rapid governmental transition from Egyptian colony to independent Nubian Napatan state (ca. 1400–650 B.C.E.) based on excavations at the site of Tombos. Mortuary analysis of cultural change is combined with strontium isotope analysis of residential mobility and craniometric analysis of biological relationships to evaluate the circumstances that contributed to the transformations in identity. Our research demonstrates that the pluralistic society developed in the Egyptian colonial period in Nubia likely influenced the characteristics of the subsequent culturally entangled 25th Dynasty Nubian pharaohs of Egypt.

CULTURAL ENTANGLEMENT AND CULTURAL IDENTITY

Although contemporary anthropologists are fully engaged with examining agency, contested culture, and borderlands in their theoretical work, the impossibility of conducting interviews with ancient inhabitants restricts nuanced conceptions of culture. Despite earlier attempts that viewed past ethnic groups as sharing a bounded set of beliefs, many researchers now emphasize the fluid and situational nature of ethnicity, which is often maintained and honed by conflict and contact (Díaz-Andreu 1996; Eriksen 1992; Graves-Brown 1996; Herbert 2003; Jones 1997; Perry and Paynter 1999). Ancient ethnic dynamics can effectively be examined archaeologically by employing a careful contextual approach (Emberling 1997; Hall 1997; Hodder 1982; Lightfoot 2012). For example, cultural entanglement theory considers the agency of both indigenous and intrusive groups (Perry and Paynter 1999); interactions can be traced through a carefully contextualized analysis of material cultural patterning and archaeological residues of practices.

Michael Dietler's materialist, consumption-based model of cultural entanglement (2010) provides a strong theoretical framework that can be used to understand the cultural and biological linkages that affected the economic, political, social, and cultural trajectories. People interact in an active process of intercultural consumption involving appropriation and adaptation but also indifference to and rejection of different objects or practices. Dietler (2010) argues convincingly that through a nuanced analysis of the intersection of the different social and cultural logics of the parties involved, agency is both potentially discernible and historically crucial to understanding larger developments. The participation in the development of new cultural expressions provides a means for community members to demonstrate

that they are “playing the same game” (Blanton 2015 quoting Barth 1969:15).

As with the present study, many examinations of ancient ethnic identity focus on mortuary practices and monuments as a key arena for expression (Blake 1999; Emberling 1997; Hall 1997; Santley et al. 1987) because they provide a materialization of roles played by—or constructed by relatives of—the deceased. They also serve to materialize the primordial attachments that can play a central role in constructions of ethnic identity, inscribing them onto and into the landscape. Adopting a diachronic perspective that traces different cultural threads as they enter into specific social contexts helps to avoid reifying the groups by taking into consideration the process of adoption, adaptation, rejection, or indifference that characterizes intercultural borrowing (Dietler 2010; Silliman 2009). In situations where cultural interaction plays an important role, how an object was used can be more important than the object itself, especially because the meanings of imported and even imitated goods are often adapted to a new cultural setting rather than adopted wholesale (Dietler 2010; Graves-Brown 1996; Higginbotham 2000; Smith 1998). The maintenance of traditional forms and the simple replacement of local by imported objects serving a similar function could indicate cultural continuity in spite of the use of different types (Silliman 2009). The addition of material culture and practices that represent completely new cultural elements and the cultural transformation of new and old features would indicate a significant redefinition of economic, social, and symbolic relations as a result of ongoing interaction.

Although they need not covary, various systems (biological, cultural, linguistic) contribute to ethnogenesis (Sapir 1949), as ethnic groups are the product of their particular context and genetic history. The role of common ancestry in ethnogenesis is debated, although the biological evolutionary history of a group can influence the perception of its ethnic identity (Barth 1969; Emberling 1997; Jones 1997). Interdisciplinary research approaches that integrate multiple indicators can be used to observe how different cultural patterns are produced and reproduced and how biocultural markers differ at various social and spatial levels over time (Goldstein 2015; Salazar et al. 2014; Stovel 2013). Isotopic examination of geographic origin (Ericson 1985) and craniometric analysis of biological affinities (Brace et al. 1993) can provide useful information regarding the population dynamics that may have influenced the process of ethnogenesis.

FROM EGYPTIAN COLONY TO THE NAPATAN 25TH DYNASTY OF EGYPT

Egypt's first major physical expansion into Nubia (situated in modern southern Egypt and northern Sudan) was the building of fortresses from its border south to the Second Cataract of the Nile in response to the Kerma polity's increasing strength in Upper Nubia during the earlier Middle Kingdom period (ca. 2040–1690 B.C.E.) (Edwards 2004; O'Connor 1993; Smith 1998, 2003, 2013). The cataracts

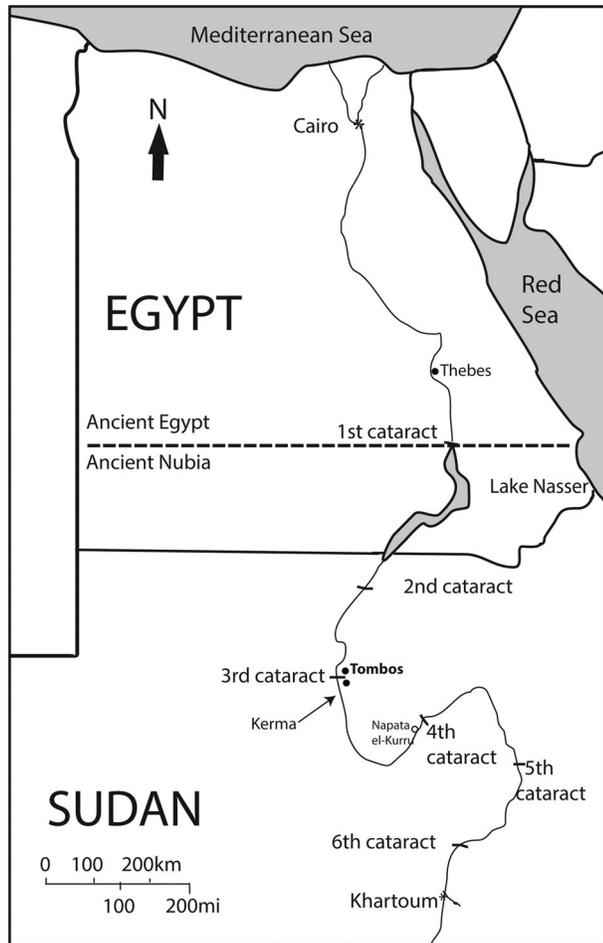


FIGURE 1. Location of Tombos.

consist of beds of granite that cross the course of the river creating rapids that impede boat travel and therefore establishing natural boundaries, the northernmost being Egypt's ancient southern boundary at the First Cataract (see Figure 1). While Kerma recaptured Lower Nubia (ca. 1690 B.C.E.), the kingdom eventually fell to Egyptian aggression (ca. 1502 B.C.E.); the Egyptian frontier extended past the Fourth Cataract, although the Third Cataract continued to be an internal frontier boundary between zones of direct colonial incorporation and more indirect imperial control (Morkot 1995, 2000, 2001; O'Connor 1993; Török 1995). In Lower Nubia, Egyptian fortress-settlements were maintained. Egyptian government and redistribution were centered in new temple towns in Upper Nubia (Kemp 1978; Smith 2003; Török 1995).

The New Kingdom concluded with the decline of Egyptian power at the end of the Ramesside period (ca. 1182–1069 B.C.E.). Some scholars characterize this collapse as an Egyptian withdrawal from Nubia, but the nature of the political transition is unclear. Inscriptions and documents from the period record unsuccessful attempts to reconquer Nubia after the New Kingdom, and data from new excavations like those at Tombos point toward continuity of occupation rather than a withdrawal. During the subsequent

Third Intermediate period, the region entered a so-called dark age with a paucity of historical records and up until now an equivocal archaeological record (Edwards 2004). Powerful leaders emerged at Napata by about 850 B.C.E., and within a hundred years the Napatan leaders of Nubia had conquered Egypt. These rulers borrowed the symbolism of Egyptian kingship to legitimize their taking of the Egyptian throne, representing themselves as saviors of Egyptian civilization, a theme that figures prominently in Pharaoh Piankhi's triumphal account of his Egyptian campaign. After defeating his opponents, Piankhi turned away all but one of his Nile Delta-based rivals, who had come to pay homage to the new rulers, "because they were uncircumcised and fish-eaters, and this is an abomination to the royal residence" (Eide et al. 1994:111). Through this act of political theater, Piankhi defined what it meant to be proper Egyptian rulers, effectively asserting that they were more Egyptian than the contemporary Egyptians even though their origins were Nubian. Along with the selective adoption of Egyptian symbols, Nubian pharaohs also used elements drawn from indigenous practices and merged some aspects of Egyptian and Nubian symbolism into new forms (Smith 1998, 2013; Török 1995, 2009).

Early studies of political changes in the ancient Nile Valley traditionally have focused on Egypt, a perspective that tends to ignore the aspects of power formation that may have developed independently in Nubia. Egypt is often cited as providing the direct impetus for the formation of this Nubian state (David 1988; Emery 1965), disregarding Nubia's long tradition of kings and the already established institutions, both indigenous and colonial, that likely played an important role in the reemergence of power after Egypt lost control over its New Kingdom period colony in Nubia around 1069 B.C.E. Some Egyptologists have framed this reemergence in terms of a natural acculturation toward a more sophisticated and inherently appealing Egyptian culture (Grimal 1992:334). The idea that Nubians might have influenced Egyptian culture, or indeed that Nubian culture could even have survived the colonial experience, tends to be discounted (David 1988; Emery 1965; Van de Mieroop 2011). Barry Kemp articulated a common view of Egyptianization when he concluded that "Egyptian culture must have had a considerable glamour in the eyes of Nubians . . . It is not hard to understand how, in an age innocent of the esoteric delights of 'folk culture', many of the local products, such as the decorated hand-made pottery and mother-of-pearl trinkets, did not survive the flood of cheap mass-produced Egyptian wares" (1978:34–35).

Just as a number of scholars have rejected comparable models of Hellenization and Romanization for a more nuanced view of colonial encounters (Gardner 2007), Lazlo Török takes a similar point of view for the Nubian pharaohs in arguing that "it would be a misleading simplification to describe this process . . . as a direct 'Egyptianization' of indigenous mortuary religion, burial and tomb types" (2009:154). In reality, the process was more comprehensive: indigenous

concepts were continuously amalgamated with rather than replaced by Egyptian ideas. But simply arguing that all changes were adaptive rather than assimilative, resulting in a hybrid, fails to capture the complexities of interaction and intercultural borrowings, which can range from more imitative to selective in nature over time and between sites and even individuals.

Ideas about ethnic and cultural identity are well documented in ancient Egyptian society. Egyptians depicted themselves and people of the surrounding cultures as very distinctive from each other in an early example of an ethnic construct: the tomb of Pharaoh Seti I, ca. 1390 B.C.E. (Rossellini 1832–44; Smith 2003). Additionally, the documented practices of burials in Egypt and Nubia are quite distinct, allowing us to identify characteristics from each culture. Egyptian burials were in an extended position and placed in coffins, with rectilinear tomb chapels for the wealthy that in the New Kingdom period often included small pyramids. Egyptian burials included specialized grave goods designed to aid the deceased in the afterlife, reflecting Egyptian theology (Ikram and Dodson 1998; Smith 2003). In contrast, Nubian burials at Kerma were in a flexed position, placed upon beds and cowhide and buried under tumuli, circular mounds often decorated with stones. Animal sacrifices were often associated with burials, a practice nearly absent in Egyptian burials (Bonnet 1991; Smith 1992; Williams 1991).

The key to understanding the phenomenon of the Nubian pharaohs lies in adopting a bottom-up, agent-centered approach by replacing Egyptianization with a model of cultural and biological entanglement (Dietler 2010; Hall 1993; Thomas 1991), a coalescence that affects the historical trajectories of the colonial power and the colonized. Entanglement takes into consideration the agency of both indigenous and intrusive groups, in spite of the often-unequal relationship between the two that is characteristic of violent conquest and occupation. Cultures do not interact; instead, exchanges between individuals produce cultural change through a constant dialectic between the constraints of habitus, cultural predispositions to some extent shared by other members of society, and the pressure of individual adaptation and innovation, which is heightened when individuals from different cultures interact, as is the case here (Bourdieu 1977).

The origins of the Napatan rulers and the influences behind their Egyptianization have been hotly contested. Here, we present and test three models.

Model 1: Lazlo Török (1995) posits that the Nubian elite survived the collapse of the Egyptian colonial system and maintained some authority, suggesting that power expanded from the Third and Fourth Cataract region, where the former Nubian capital of Kerma (and Tombos) is located. The Napatan state with its Egyptianized features emerged in this local context, aided by the survival of the old colonial infrastructure, including descendants of the original Egyptian expatriate communities.

Model 2: In contrast, other scholars have posited that an influx of people from the south led to a Nubian revival that completely replaced the old Egyptian colonial system, eventually leading to the formation of the new Nubian state, whose Egyptianized features were borrowed wholesale by the newly emerging rulers. Nubian groups living to the south outside of Egyptian imperial boundaries may have reintroduced Nubian funerary practices, explaining the use of traditional Nubian tumuli and Nubian burial practices like interment on beds and a flexed burial position (Priese 1973; Trigger 1976).

Model 3: Another alternative model, posited by Timothy Kendall (1999), revives the idea that a sudden infusion of Egyptian influences at the royal cemetery of el-Kurru correlates with the appointment of Crown Prince Osorkon as high priest of Amun at Thebes (ca. 839 B.C.E.). His suppression of a series of rebellions forced a number of Theban priestly personnel to flee south, which led to a new wave of Egyptianization. Indigenous alliances with this group and their “conversion” to the worship of Egyptian deities ultimately helped forge a new Egyptianized state.

As a cemetery at a key colonial center with continuity through this still poorly understood transition, the Tombos archaeological site provides an ideal setting in which to address the social factors involved in state formation, in particular, the transformations of identity that led to a new set of cultural constellations in the Napatan period that were neither wholly Egyptian nor wholly Nubian.

TOMBOS

Materials and Methods

Tombos is located on the east bank of the Nile River at the Third Cataract (Figure 1), the southern frontier of Egypt’s territorial empire. Evidence from the University of California, Santa Barbara, excavations between 2000 and 2002 documents the presence of an Egyptian colonial cemetery dating to the New Kingdom (ca. 1400–1069 B.C.E.). The remains of several pyramids built as elite burial monuments were found in addition to a middle-class cemetery consisting of several Egyptian-style mud brick chamber, pit, and shaft tombs (Smith 2003; see Figure 2). The post–New Kingdom graves described here were primarily excavated in 2010 and 2011 by the UCSB–Purdue joint expedition. Dating to the Third Intermediate (3IP) and Napatan periods (ca. 1069–650 B.C.E.), structures included shaft tombs, tumuli, and chamber or pyramid tombs (see Figure 2). Burial features and human remains excavated from 24 units at Tombos are included in this study (see Table 1). Ceramic chronology and inscribed objects were used to date the burial features. The vast majority of New Kingdom remains examined in this study came from the middle-class chamber and pit tombs due to high disturbance in the pyramid tombs. For 3IP/Napatan remains, half were from tumulus graves and the remaining half were found in pyramid or chamber tombs. Burial position could be recorded for 55 New Kingdom and 27 3IP/Napatan in situ burials. In order to verify chronology,

TABLE 1. Description, Chronology, and ⁸⁷Sr/⁸⁶Sr Results of Tombs: Archaeological Units

Artifactual date	Unit	Tomb type	Burial ritual	Radiocarbon dates calibrated 2 σ (sample number) ^a	Minimum number of individuals	⁸⁷ Sr/ ⁸⁶ Sr Egyptian immigrants
Mid-18th Dynasty New Kingdom 1400–1300 B.C.E.	1/4	Pyramid	(Disturbed fill) E & N pottery E cones	Fragment 1391–1021 B.C.E. (AA58191:2980±65 B.P.)	18 commingled (excavation incomplete)	—
NK Amenhotep II–Thutmose IV 1427–1391 B.C.E.	6I	Pyramid Alleyway Chamber	Egyptian Extended, E artifacts		4 19 commingled	1/2 5/12
NK Amenhotep III–Amarna 1391–1290 B.C.E.	6G Loci 41,46,47	Chamber	Extended 2 flexed E artifacts	6-47-3 784–484 B.C.E. ^b (AA58194:2492±50 B.P.)	18 commingled	1/6
	7	Chamber	Extended 2 flexed E artifacts Nubian pot	7-9 2680–1738 B.C.E. ^b (AA58197:3780±180 B.P.) 7–10 1890–1500 B.C.E. ^b (AA58195:3389±81 B.P.)	13	2/8
NK Ramesses II–late Ramesside period 1290–1070 B.C.E.	6H	Chamber Pyramid Chamber	Extended Extended Extended, E artifacts		8 commingled 47 commingled 22 commingled	0/2 7/20
	6H	Chamber entrance		H-3 1212–967 B.C.E. (AA58196:2884±46 B.P.)	5	1/2
NK?	5A, C–E 6 B–F	Pit Pit	Extended Extended		4 6 disturbed	2/3 —

^a

(continued)

TABLE 1. continued

Artifactual date	Unit	Tomb type	Burial ritual	Radiocarbon dates calibrated 2 σ (sample number) ^a	Minimum number of individuals	⁸⁷ Sr/ ⁸⁶ Sr Egyptian immigrants
3IP/Napatan 1068–650 B.C.E.	1/4	Pyramid Alleyway	Extended	N. alley 1264–751 B.C.E. (AA58193:2750±110 B.P.)	1	
	2, 3, 10, 14, 16–20, 22, 24–28, 32–34	Tumulus	Extended, 1 flexed, Nubian bed, coffin	3 1056–828 B.C.E. (AA58198:2795±48 B.P.) 16-1 1305–1054 B.C.E. (AA95544:2964±3 B.P.) 16-2 1046–891 B.C.E. (AA95540:2801±35 B.P.) 17-1 981–907 B.C.E. (AA95543:2794±35 B.P.) 17-2 1216–1008 B.C.E. (AA95541:2916±35 B.P.) 20S1 1313–997 B.C.E. (AA95539:2937±51 B.P.) 20S4 1024–838 B.C.E. (AA95542:792±36 B.P.) 27-1 1116–914 B.C.E. (AA95546:2841±35 B.P.) 27-2 1134–972 B.C.E. (AA95545:2884±36 B.P.) 5B 1135–898 B.C.E. (AA58192:2852±51 B.P.) 9A 800–507 B.C.E. (AA95538:2522±48 B.P.)	30	0/17
	5B	Pit	Extended		1	—
	6A				1	0/1
	9	Pyramid + pit (9a)	Extended E artifacts N bowls, bed		26 commingled 1	0/3 ^c
	15	Shaft/chamber	Extended, N bed		16 commingled	0/11 ^c

^aReimer et al. 2009.

^bDoes not correspond with artifactual date from undisturbed context.

^cOne lower value could be an immigrant from southern Nubia.

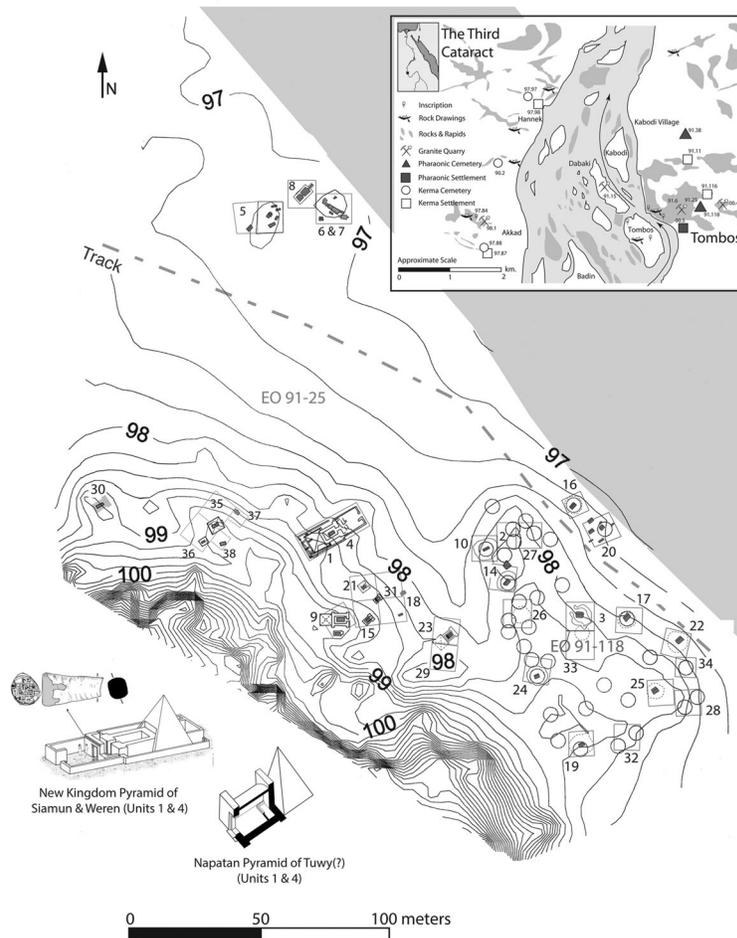


FIGURE 2. Tombos site map.

17 human bone samples were measured for radiocarbon (NSF–Arizona AMS Laboratory; see Table 1).

Strontium (Sr) concentrations and ratios differ according to variations in local geology. The ratio of $^{87}\text{Sr}/^{86}\text{Sr}$ reflects the average $^{87}\text{Sr}/^{86}\text{Sr}$ ratios of the parent rocks in a particular area, which is mainly the function of the composition of the rocks and the time elapsed since formation or deposition (Faure 1986). The biologically available strontium present in soil and groundwater is incorporated into local plants and animals. Thus, the strontium isotope composition of a person's geological locale is reflected in his or her hard tissues, assuming a diet of local resources and minimal chemical contamination from the burial environment (Ericson 1985).

The area where Tombos is located is complex, given that the Nile River approximates the boundary between two major metamorphic and tectonic provinces and the presence of the cataract, an outcrop of granite (Buzon et al. 2007). We have completed the analysis of seven contemporaneous Nile Valley samples and have determined that it is possible to identify nonlocal individuals at Tombos using strontium isotopes; Egyptian $^{87}\text{Sr}/^{86}\text{Sr}$ values (mean/median [0.70777], *SD* [0.00027]) are statistically higher than Nubian values

(mean [0.70762], median [0.70757], *SD* [0.00036]) (Buzon and Simonetti 2013; Buzon et al. 2007). The examination here considers these results within a newly refined chronology over the course of the cemetery's use in order to gain an understanding of how immigration to Tombos changed over time. Dental samples for $^{87}\text{Sr}/^{86}\text{Sr}$ analysis were taken from all individuals with sufficient enamel: 55 New Kingdom and 30 3IP/Napatan individuals.

Researchers have demonstrated morphometric differences in culturally distinct Egyptian and Nubian groups (Brace et al. 1993; Buzon 2006; Carlson and Van Gerven 1979; Irish 2005), although interaction throughout the region is evident (Keita and Boyce 2008; Zakrzewski 2002). Selective pressures may explain clinal differences observed in the Nile Valley samples (Brace et al. 1993; Glanville 1969), and it is hypothesized that population interaction accounts for variations occurring with sociopolitical actions and colonization. While craniofacial shape changes accompanied the transition from hunting-gathering to agriculture, the samples examined here come from similar environmental zones and subsistence strategies, rendering dietary differences insignificant (Carlson and Van Gerven 1979).

Previous morphometric analyses of the New Kingdom Tombos sample indicated a mixed Egyptian–Nubian group in comparison with multiple Egyptian and Nubian samples (Buzon 2006). For this study, we compared the Tombos samples from the New Kingdom through Napatan periods with contemporaneous Egyptian and Nubian samples. The Egyptian samples ($N = 340$) are limited to those from the general area of Thebes, the capital and most likely place of origin for immigrant colonists in Nubia, and include published data collected from the sites of Sheikh Ali and Abydos (Thomson and Randall-MacIver 1905) in addition to data collected from the Qurneh sample at the Duckworth Laboratory at the University of Cambridge. The Nubian comparative sample ($N = 187$) comprises human remains from Kerma (also at Duckworth), the former Upper Nubian capital located about ten kilometers south of Tombos.

We used nine cranial measurements (see Tables 2 and 3) that correspond with the earlier published data from collections no longer available for study (Thomson and Randall-MacIver 1905). While multivariate analyses of cranial measurements are clearly more robust and are used here (principal component analysis with logistic regression, Aguilera et al. 2006), descriptive data on the mean individual measurement values are also presented and evaluated because sample sizes for the multivariate analyses are reduced significantly due to preservation issues. Twenty-eight New Kingdom and 21 3IP/Napatan individuals had sufficiently intact cranial remains for inclusion in the morphometric study; we used Stata SE 13 for all statistical analyses.

New Kingdom Mortuary Practices

The New Kingdom component of Tombos consists of two main burial areas: pyramids and underground chamber and pit tombs (Table 1). The pyramids included in this study are the tomb of Siamun (1/4, partially excavated due to logistical difficulties) and a tomb dedicated to a man named Tiy (30, begun by Edwards and Osman 2001 and finished by our project). We identified and excavated additional pyramid tombs, along with mud brick tomb chapels built along Egyptian lines but without pyramids. The pyramid tombs at Tombos included decorated chapels and were likely the burials of titled bureaucrats (Morkot 2001; Smith 1992). The tomb chapels without pyramids, which would also have been decorated, probably represent a second rank of colonial officials.

Based on the inscriptions from funerary cones (clay cones stamped with the name and title of the deceased) found in the shaft fill and around the complex, Siamun held the title of Scribe Reckoner of the Gold of Kush, placing him just below viceroy and military commander of the Nubian colony (Smith 2003). His tomb included a large Egyptian-style pyramid and chapel with multiple inhumations around the monument, especially within the shaft and underground burial chambers (partially excavated minimum number of individuals, MNI, > 18). The structure of his tomb reflects elite burial traditions from the Egyptian capital, Thebes, in

particular the provision of cones, which appear only once elsewhere in Nubia (on one tomb at Aniba) and in Egypt only rarely outside of Thebes. The T-shaped chapel design and east–west alignment follow typical Egyptian practices associated with solar theology (Assmann 2005:317–324; Kampp-Seyfried 2003; Ryan 1988; Smith 2003). Funerary cones were also found in the pyramid tomb of Tiy, simply stamped with his name. His burial was found largely intact inside the remains of a poorly preserved but high-quality coffin. A finely carved ushabti (a funerary figurine that substituted for the deceased to do work in the afterlife) still lay in situ by his head and was inscribed with his name and the titles scribe and priest.

We found both Egyptian and Nubian pottery in association with Siamun's pyramid, with the latter appearing mainly in the courtyard, including cooking and serving pots most likely connected with feasting, which played an important role in funerals and later events commemorating the deceased. One radiocarbon date from bone excavated in the pyramid shaft is calibrated to 1391–1021 B.C.E. Diagnostic ceramics point toward the earlier end of that range for primary use of the tomb. We found the burials of one adult woman and four children in an alleyway around the pyramid. Architectural phasing and artifacts from the children's burials place them just before the completion of the pyramid (ca. 1400–1300 B.C.E.). One of the child burials included an amuletic necklace with images of Bes, a popular Egyptian household god who protected the wearer from evil spirits in life and the afterlife (Pinch 1994), and Tawaret, an Egyptian hippo goddess who protected mothers and children (Smith 2003). The adult burial has a calibrated age of 1264–751 B.C.E.; while no artifacts were found, the burial's association with the tomb's architecture suggests a date on the earlier end of this range in the late New Kingdom, when the complex was still in use as a family crypt.

The majority of the human remains recovered from the New Kingdom component of the cemetery were excavated from pit (5 A–G, 6 A–F, J) and underground chamber tombs (6 G–I, 7, 8). Commonly found in Egypt, these underground communal tombs are large and designed for multiple inhumations (6: MNI > 75, 7: MNI > 13, 8: MNI > 8 [badly disturbed]). Based on the grave goods, these tombs are associated with middle-class burials: lower-ranking bureaucrats and other skilled workers (Smith 2003). The burial inclusions are consistent with Egyptian funerary beliefs such as decorated coffins, amulets, and statuary (Grajetzki 2010). Several coffins originally had inscribed hieroglyphic spells to ensure that the deceased became an immortal spirit in the afterlife. Unit 7 included an entire mummiform coffin with some preserved decoration with the name and figure of the god Duamutef, one of the protective sons of Horus. Three ushabti figurines were found in this area of the cemetery.

Scarabs (three in situ), amulets (heart, Bes, and *ujat*—the protective Eye of Horus), and other jewelry indicate Egyptian religious beliefs, and items of personal

TABLE 2. Descriptive Statistics for Cranial Measurements

Measurement	Females			Males		
	Nubian $\bar{x}(n)SD$	Egyptian $\bar{x}(n)SD$	Mann-Whitney ^a	Nubian $\bar{x}(n)SD$	Egyptian $\bar{x}(n)SD$	Mann-Whitney ^a
Nasal height	46.0(105)3.0	48.6(169)2.9	0.000	48.4(68)3.2	51.7(162)3.2	0.000
Upper facial height	66.1(105)3.9	66.8(163)3.8	0.012	66.1(68)4.8	70.1(156)3.9	0.080
Nasal breadth	25.0(102)1.9	24.6(168)2.1	0.066	25.8(67)1.9	25.2(161)1.8	0.023
Bizygomatic breadth	119.9(80)14.4	120.6(151)5.8	0.512	129.5(56)5.9	128.4(148)4.8	0.120
Basi-bregma height	130.5(110)4.9	128.3(175)4.4	0.000	135.6(73)5.0	133.6(162)4.7	0.016
Maximum cranial breadth	131.5(142)4.9	133.9(179)5.2	0.000	134.0(89)5.3	136.6(162)4.7	0.000
Maximum cranial length	179.7(145)6.6	176.9(179)5.9	0.000	187.3(90)6.5	184.4(163)5.7	0.000
Biauricular breadth	112.1(136)4.8	113.3(173)4.3	0.007	118.2(85)5.46	118.1(166)4.7	0.976
Basi-nasion length	98.8(110)4.2	96.3(171)4.0	0.029	102.9(72)4.2	101.7(161)4.3	0.029

^aBolded values are significantly different between Egyptians and Nubians.

TABLE 3. Descriptive Statistics for Tombos Samples

Measurement	Tombos females			Tombos males		
	New Kingdom $\bar{x}(n)SD$	Napatan $\bar{x}(n)SD$	Mann-Whitney ^a (NK-Napatan)	New Kingdom $\bar{x}(n)SD$	Napatan $\bar{x}(n)SD$	Mann-Whitney (NK-Napatan)
Nasal height	47.3(27)2.7 ^b	48.6(21)2.7 ^b	0.013	49.4(23)2.8 ^a	49.4(7)1.8 ^a	0.883
Upper facial height	64.8(27)3.7 ^a	69.4(21)4.8 ^{ab}	0.001	68.4(23)4.7 ^a	66.4(7)2.5 ^a	0.540
Nasal breadth	24.8(29)1.6	25.3(21)1.8	0.485	25.5(23)1.7	25.3(7)1.9	0.750
Bizygomatic breadth	123.4(22)7.7	123.7(18)5.3 ^{ab}	0.384	126.4(18)5.5	129.6(7)6.8	0.332
Basi-bregma height	126.4(24)7.5 ^b	129.6(19)3.6	0.221	136.5(22)6.1 ^a	136.5(7)4.7	0.799
Maximum cranial breadth	130.3(28)6.7 ^a	130.2(19)5.0 ^a	0.957	133.3(23)10.6	130.5(7)9.4	0.248
Maximum cranial length	177.9(31)6.5	180.0(21)6.7 ^a	0.215	187.7(24)8.7 ^a	189.9(7)5.9 ^a	0.705
Biauricular breadth	113.3(25)5.7	114.5(19)4.5 ^b	0.254	117.6(21)6.5	121.9(8)7.7	0.188
Basi-nasion length	98.6(18)3.5 ^a	99.5(19)3.5 ^a	0.412	103.7(20)4.5 ^a	107.0(7)5.9 ^a	0.319

^aSignificantly different from Egyptians ($p \leq 0.05$).

^bSignificantly different from Nubians ($p \leq 0.05$).

^cBolded values are significantly different between New Kingdom and Napatan periods.

adornment and use included those characteristic of Egyptian material culture, like faience beads, as well as ones associated with Nubians, like ivory bracelets and earrings. Many of the scarabs refer to pharaohs, including Thutmose III, Amenhotep III, and Ramesses II. The Egyptian god Amun-Re, a Theban deity who had become one of the most important gods in the Egyptian pantheon, was most often named on scarabs at Tombos (Smith 2003). The most common grave good was pottery, mostly in Egyptian style. While some plates appear, most ceramics were jars, indicating the inclusion of food offerings with the burials. A few Nubian ceramics appear, including both bowls and storage vessels. In addition, imported Mycenaean juglets, which indicate wealth

and the long-distance exchange of luxury goods, were found in Unit 6 (see Figure 3).

For the intact burials, most displayed an Egyptian extended body position (51/55 total, 15/15 male, 14/18 female, 22/22 indeterminate or juvenile). However, four females within culturally Egyptian middle-class tombs were buried using Nubian practices: their bodies were flexed, oriented with head to the east, on their right side facing north, typical of Kerma burials. The two from Unit 7 were likely placed upon a bed and were associated with a Nubian-style fine ware bowl. All four of these burials were found in the lowest layers of the tombs, although in Unit 6 in the outer chamber. One burial had three Bes amulets still

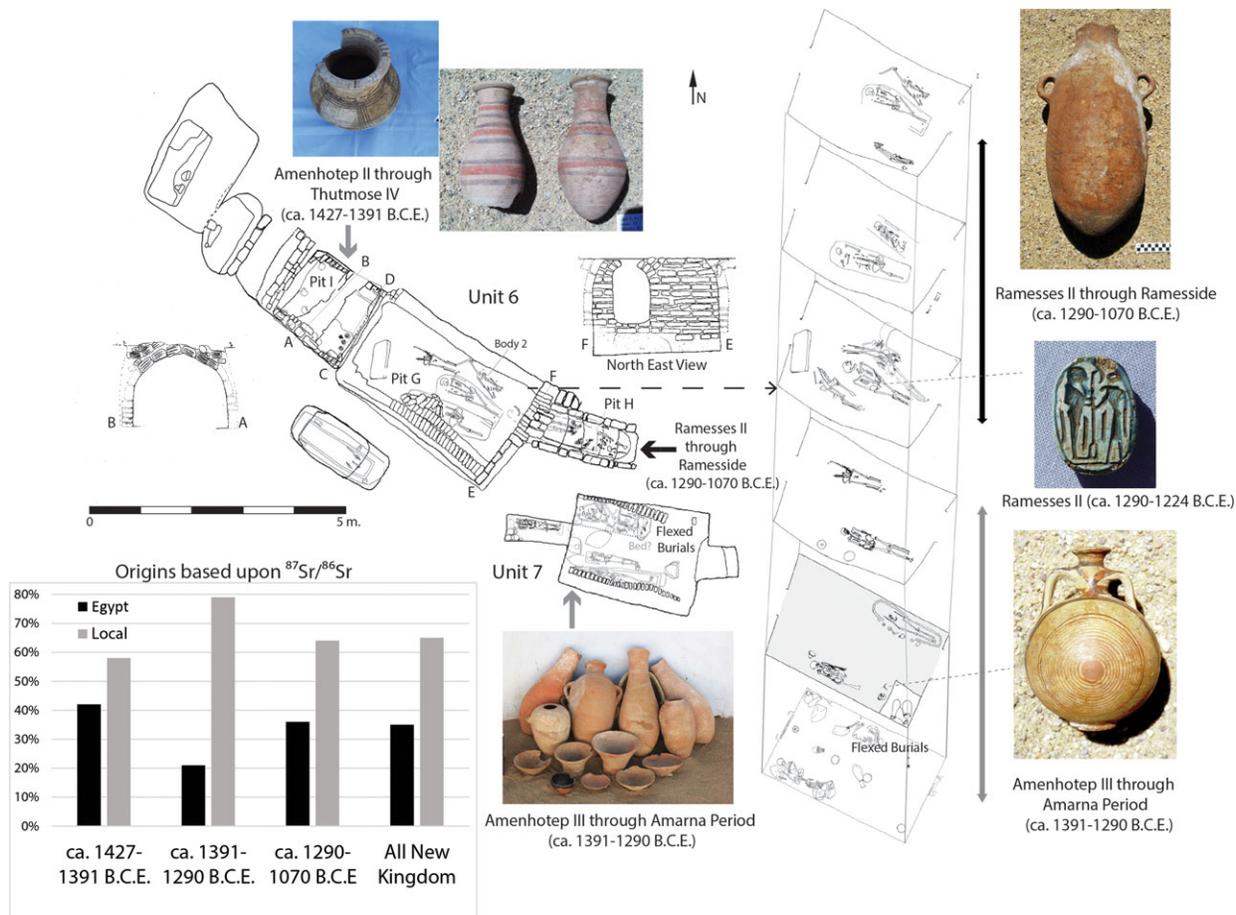


FIGURE 3. Strontium isotope analysis of Tombos New Kingdom samples, Units 6 and 7.

in situ around her neck (Smith 2003). The Unit 6 tomb continued in use down to the end of the New Kingdom. A radiocarbon date from Unit 6H, a staircase leading into the first underground chamber where the last burials were placed, was calibrated to 1212–967 B.C.E., consistent with the Ramesside period, also indicated by a large amphora found in situ there and by a scarab of Ramesses II worn on the hand of an individual from an earlier layer of burials. Archaeological context contradicted three radiocarbon dates from Units 6 and 7, with the incorrect readings possibly resulting from poor collagen preservation (Higham et al. 2006; Schrader 2013).

Third Intermediate and Napatan Period Mortuary Practices

Egyptian-style pyramid and chamber tombs continued to be used and created in the 3IP/Napatan periods. Unit 9 (Smith and Buzon 2014) is a pyramid tomb dating to the 25th Dynasty (Napatan period) with six underground chambers, a unique substructure. MNI is 26, with several intact burials, although bone quality was poor due to water damage. Grave goods include fine bronze bowls, a faience goblet, jewelry, coffins, and pottery. Burial position was extended, although somewhat erratic in orientation. A large

greywacke and mudstone heart scarab found near Unit 9 was dedicated to the scribe Tuwy with a copy of Spell 21 from the Book of the Dead, which compelled the owner's heart to testify to his innocence during the divine judgment. It is similar in style and quality to those found in the royal 25th Dynasty burials at el-Kurru (Smith and Buzon 2014).

We also excavated a subsidiary tomb next to this pyramid (9A, Smith 2006). The male burial was extended, head to the west, and included signs of an Egyptian-style coffin and mummification as well as a Nubian-style bed. Other artifacts include beads, amulets, two scarabs (including one of Pharaoh Shabako, ca. 700 B.C.E.), four bronze bowls (three with incised rows of bulls possibly imported from Syria), iron weapons, and a wooden box with a popular marsh and cow motif associated with the goddess Hathor, evocative of the traditional Nubian iconographic focus on cattle (Edwards 2004; Smith 2006). The calibrated radiocarbon date from the burial is 800–507 B.C.E. The pottery and style of the jewelry point toward the earlier end of the range. Unit 15 represents the reuse of a ruined New Kingdom mud brick chapel with a rectangular shaft that led to two chambers. One in situ burial from the shaft was supine, head to the west, and remains of both coffins and beds were found in addition to jewelry, including gold beads, scarabs

(one naming Piankhi), a copper cup, and fabric suggesting cloth wrapping. MNI is 16.

Also dating to this period is a new separate zone of Nubian-style tumulus grave features ($n = 23$), beginning in the late New Kingdom and continuing into the 3IP/Napatan periods, represented by 16 units (10, 14, 16–20, 22, 24–28, 32–34; see Table 1). In contrast to the communal nature of the Egyptian burials, the tumuli usually included a single individual or infrequently two or three individuals (reuse), which resonates with earlier Nubian burial practices at Kerma. Tumulus burials were consistently oriented east–west and with one exception had a side chamber or niche along the northern side. Almost all the burials were in the Egyptian extended style (26/27 total, 11/12 female, 7/7 male, 8/8 indeterminate or juvenile) with head to the west, sometimes inside coffins and mummified but often also placed on Nubian-style beds. One woman was found in a flexed position on a bed (20-S4). One child was found in an extended position but with head to the east (20-S7). All the pottery associated with these tumuli appears to be 3IP/Napatan. Of the eight radiocarbon dates (Table 1), three fall within the late New Kingdom (16, 20-S1, 17-2), while the remaining overlap with the 3IP/Napatan (ca. 1050–750 B.C.E.). Pottery within other tombs demonstrates that the cemetery continued in use into the 25th Dynasty.

Geographic Origins

Thirty-five percent (19/55) of the New Kingdom $^{87}\text{Sr}/^{86}\text{Sr}$ values are above the established local range ($^{87}\text{Sr}/^{86}\text{Sr} = 0.70710\text{--}0.70783$), values that are associated with Egyptian sites (Buzon and Simonetti 2013). Forty-eight individuals buried in Units 6 and 7 could be placed in the three broad phases within the New Kingdom based on in situ diagnostic pottery as well as scarab and coffin design (see Figure 3): the reign of Amenhotep II to Thutmose IV (AII to TIV, ca. 1427–1391 B.C.E.), the reign of Amenhotep III through the Amarna and post-Amarna periods (AIII to Amarna, ca. 1391–1290 B.C.E.), and the reign of Ramesses II through the late Ramesside period (Ramesside, ca. 1290–1070 B.C.E.).

The greatest proportion (5/12, 42%) of first-generation immigrants appears in the earliest context within these units (Phase 1), the back chamber of Unit 6 (I), presumably representing the founding generation of the colony. For Phase 2, represented by the lower group of burials in the antechamber of Unit 6 (G) and Unit 7, the proportion drops to 21 percent (3/14). For Phase 3, the latest series of burials found in the upper layers of the antechamber and in the staircase (G and H), the proportion is slightly higher at 36 percent (8/22). Similar proportions of males and females ($\sim 40\%$) were first-generation immigrants.

None (0/30) of the 3IP/Napatan period samples can be associated with Egyptian $^{87}\text{Sr}/^{86}\text{Sr}$ values. Two are lower than the local range. Based on very preliminary data from the Fourth Cataract region where Napata was located, it is

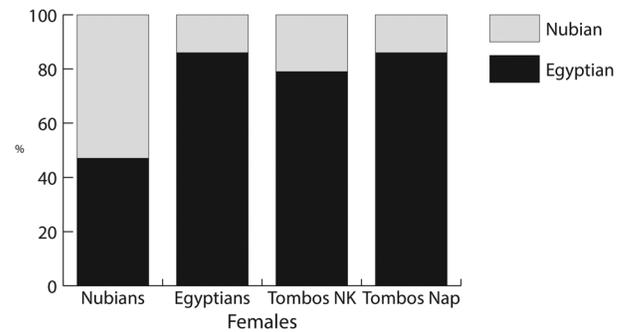


FIGURE 4. Logistic regression group prediction for females.

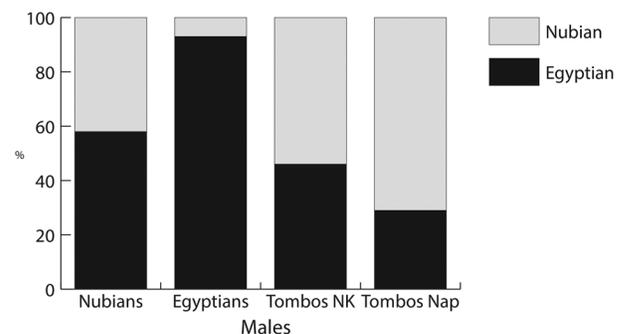


FIGURE 5. Logistic regression group prediction for males.

possible that these lower values could reflect origins from that area (Buzon and Simonetti 2013).

Biological Relationships

The millennia of contact and admixture between the Nubians and Egyptians complicate the ability to distinguish individuals from these groups. However, the examination of both individual measurements as well as multivariate analyses provides important data regarding the contribution of these groups to the Tombos sample. Differences between Nubians and Egyptians for both males and females are apparent (Table 2, $p \leq 0.05$). Few differences are found between the New Kingdom and Napatan samples at Tombos (Table 3).

We used nine measurements in principal components analysis. For both sexes, the first three components had eigenvalues above 1.0 (accounting for 64% [females] and 66% [males] of the total variance). When used in a logistic regression equation (Aguilera et al. 2006), it is evident that only Component 2 contributes significantly to the Egyptian–Nubian distinction (odds ratios and 95% confidence intervals do not include the value of 1.0). Component 2 represents nasal height, upper facial height, and basi-bregma height (although it should be noted that basi-bregma height may be more reflective of health status than of genetics, Angel 1982). The results of the logistic regression indicate some differences between the groups (see Figures 4 and 5). Nubian crania are predicted to be Nubian for 53 percent (36/68) of females and 42 percent (19/45) of males; Egyptian crania are predicted to be Egyptian for 86 percent (122/142) of females and 93 percent (125/135) of males. As suggested in

an earlier study (Buzon 2006), these percentages of correct predictions may indicate that Egyptians are a more distinctive group who are morphometrically more homogeneous while Nubians appear more heterogeneous. For the Tombos females, there appears to be a large percentage of individuals with a more Egyptian morphometric shape in the New Kingdom (79%, 11/14) that continues into the Napatan sample (86%, 12/14). Egyptian morphometric shape is found less frequently for Tombos males in the New Kingdom (46%, 6/13) and 3IP/Napatan (29%, 2/7) periods. The difference in the number of individuals displaying Egyptian morphology between the sexes in the 3IP/Napatan sample is statistically significant ($p < 0.05$).

Overlap in samples between the mortuary, geographic, and craniometric datasets is low due to looting that caused disturbance in burial position, extreme tooth wear that prohibited isotope analysis for some specimens, and preservation issues that prevented the inclusion of incomplete crania. The results in the comparisons among these datasets should be interpreted with caution due to these factors, which produced very low sample sizes. None of the differences are statistically significant, although it is notable that none of the Nubian-style burials have immigrant strontium values.

CULTURAL AND BIOLOGICAL ENTANGLEMENT AND STATE FORMATION

The integration of these cultural, geographic, and biological data from Tombos paints an interesting and alternative picture of the people who contributed to sociopolitical changes from Egyptian imperial expansion in the New Kingdom to Nubian ascendance as the 25th Dynasty. As an Egyptian colonial community, Tombos was the site of multicultural interaction and the building of a new heterogeneous community through a complex process of cultural and biological entanglement. People once considered foreign to one another became central participants in a new pluralistic society (Lightfoot 2012) through a synthesis of different cultural features in a multicultural setting rather than a unidirectional assimilative acculturation or Egyptianization (Deagan 1998; Smith 1998, 2013). Despite the overwhelmingly Egyptian nature of the cemetery, not all signs of Nubian culture were avoided. The five (5/85: 4/55 NK, 1/30 3IP/Napatan) women buried using Nubian traditions and the presence of some Nubian pottery reveal the continuance of local traditions in an especially public way, because funerals and feasts would have been events that engaged the entire community (Assmann 2005; Smith 2003, 2013). Behaviors and rituals follow proper public protocol and ethnically specific material culture as a way of showing commitment to the community (Blanton 2015) or, in the case of the women buried in Nubian style, providing an ethnic counterpoint to the overwhelmingly Egyptian character of the cemetery during the New Kingdom.

Strontium isotope evidence of nonlocals offers a glimpse at immigration and how it intersected with the cultural transformations taking place over the life of the community

(Buzon and Simonetti 2013). Although in more recent colonial contexts immigrants tended to be male, immigrants of both sexes arrived at Tombos from Egypt (~ 40%). The largest proportion of settlers arrived during the earliest phase of the cemetery, in the founding years of the colony (42%); numbers drop during the second phase (21%) and then rise again during the final colonial phase (36%) in the Ramesside period. While these percentages are not statistically different, the rise in the latest phase may perhaps be related to renewed Egyptian interest in Upper Nubia as evidenced by activities at the newly established Upper Nubian administrative capital Amara West (Binder 2011), indicating that this region was still a focus for colonization late in the New Kingdom. The culturally Nubian female burials found in the chamber tombs date to about 1450–1325 B.C.E., attesting to the early interaction between the immigrant Egyptians and local Nubians. Neither immigration from Egypt nor Nubian influences disappeared in the later history of the colony, with evidence for continuing immigration from Egypt and at least one Nubian-style bed burial appearing in the Ramesside period. While sample sizes for the multivariate analyses of crania are small and interpretation should be accordingly cautious, the analyses suggest that the Tombos population included both biologically Egyptian and Nubian individuals, providing additional support for the mixed community that included Egyptians and Nubians buried as Egyptians (Buzon 2006; Smith 2003).

In the postcolonial 3IP/Napatan periods, Egyptian immigration ceased (Buzon and Simonetti 2013), and it appears that additional local Nubians were incorporated into the community, as there is an increase in individuals displaying more Nubian features, at least for males. Analyses of paleopathological indicators (Buzon 2014) and signs of activity patterns (Schrader 2013) provide skeletal data that reveal relative consistency in health over time at Tombos and an increase in activity levels that may suggest the incorporation of additional agricultural and quarrying undertakings necessitated by changes in the political and economic role of Tombos. This postcolonial sample likely represents the descendants of the mixed Egyptian–Nubian colonial population.

In a similar way, cultural expressions in funerary practices clearly reflect a long history of cultural entanglements, but these interactions resulted not in an evenly blended hybrid but rather in a complex mosaic of practices and consumption of material culture that includes both strong local Nubian traditions and a continuity in Egyptian features lasting long after the fall of the empire. The construction of tumuli already in the late New Kingdom created a more dramatic and public inscription of an older Nubian culture onto the cemetery's landscape that continued through the 3IP/Napatan periods. At the same time, new tombs were built and older tombs reused in the older Egyptian part of the cemetery, evoking a more recent colonial past (Smith and Buzon 2014). In spite of Nubian-style superstructures, burial practices in this section of the cemetery reflect an

entangled blending of Nubian and Egyptian customs. Body position tapped into the Egyptian solar theology that linked the sun's daily dawning symbolically and magically to rebirth (Assmann 2005). There is also sporadic evidence for the use of coffins and wrapping in linen bandages, probably indicating some form of mummification. Amulets of a selective set of Egyptian deities also appear, including the dwarf gods Bes and Pataikos and the goddesses Isis and Hathor, all popular in Nubia. At the same time, the deceased were often placed upon beds in a long-standing Nubian practice. Nubian burial position, while rare, was still present in the burial of a woman in flexed position on a bed. The use of pyramids and chapels with unique substructure arrangements and somewhat erratic burial orientation in the older part of the cemetery also indicates the blending of ideas.

In addition to providing new data about the cultural dynamics of the empire and its aftermath, the results of excavations at Tombos bear directly on the models proposed for the political, cultural, and population dynamics that lay behind the emergence of the Napatan state in Upper Nubia. There is little evidence for immigration either from Egypt in the north or from Nubia farther south during the post–New Kingdom. There is no need to posit a new influx of Egyptians (Model 3) to explain the presence of Egyptian features, because these practices continue to appear at Tombos and at other former colonial sites like Amara West (Binder 2011) during the 3IP. Similarly, a wave of immigration from the south is not necessary to account for Nubian features (Model 2), which in fact had never completely disappeared under Egyptian colonial rule. Instead, Egyptians and their descendants clearly had long-standing ties to the local populations in Nubia (Model 1). Morphometric and isotopic indications of origin at Tombos reflect intermarriage, and corresponding cultural entanglements are displayed in their burial rituals.

The Napatan pharaohs of the 25th Dynasty used a multicultural mosaic of features to represent themselves. For example, they commissioned small steep-sided pyramids imitating colonial era monuments while retaining the use of funeral beds from Nubian burial practices, as well as innovations like the cap-crown worn in different variants by kings and queens and the ram imagery associated with Amun-Re, which likely represents Nubian influence on Egyptian theology (Török 2009). Through these funerary and religious practices, Napatan leaders did not merely imitate but revitalized the Egyptian *ma'at* (order, rightness) theology, legitimating their rule against the “foreign” Libyan-influenced kings of the 3IP (Smith 1998, 2013). Their entangled identities could have been based in part on dynamic Egyptian–Nubian societies such as Tombos, where different combinations of Egyptian- and Nubian-style burial practices are found in the New Kingdom and continue after the empire during the period before the first Napatan royal burials at el-Kurru. Other features culled from contemporary Egyptian burial practices need not have been brought by refugees but are more likely to have been sought out by the emerging Nubian dynasty in order to help legitimate and consolidate

their conquest of Egypt, as well as enhancing their prestige at home.

The presence of Napatan pyramids indicates that Tombos remained a key administrative center during the period; the multicultural ties established centuries earlier might have enabled Tombos and other communities to serve as ideal liaisons between the Napatan leaders and Egypt. As a model for the cultural reconfiguration of Egyptian and Nubian features, these types of societies may have facilitated and advised the character of the new Napatan dynasty (Smith 2013). The material remains of the cultural expressions found at Tombos and other sites trace the development of a new entangled identity that no longer simply incorporated elements of local and foreign ideas but integrated features that over time became internalized (Silliman 2009), such as Egyptian gods and pyramids. The documentation of these changes over time in the use and meaning of objects and burial practices—along with the evidence for interaction between groups—provides a more nuanced understanding of the ways in which cultural and biological linkages and the accumulation of individual choices affect the economic, political, social, and cultural trajectories of political entities.

CONCLUSION

Through the use of entanglement theory and multiple lines of evidence, our research offers a useful example of the ways in which a long-term examination of changes in ethnic practices and group composition in past populations can contribute to our understanding of these processes. By examining the process of adoption, adaptation, rejection, or indifference in intercultural borrowing (Dietler 2010; Silliman 2009) in conjunction with isotopic and biological lines of evidence, we present a more detailed picture of how these cultural and biological entanglements contributed to sociopolitical developments in the region. The data documenting population composition at Tombos provide no support for the suggestion that Egyptian or southern Nubian immigrants played a large role in the development of the Napatan polity. Rather, these data suggest that Egyptian colonists settled there during the New Kingdom (ca. 1400 B.C.E.) and worked together with local Nubians to create a multicultural and biologically heterogeneous community that continued to thrive long after the fall of the Egyptian empire and the end of colonial government. At Tombos, ties built during the New Kingdom between local Nubians and immigrant Egyptians resulted in a strong community that continued to play a role in the aftermath of the empire, when Nubia coalesced into a unified state that extended from southern Nubia to the Mediterranean. This pluralistic society at Tombos, and probably others like it, may have played an important role in the development of the culturally entangled character of the Napatan state and the 25th Dynasty of Egypt. The combination of Egyptian features and Nubian traditions as well as the integrated Nubian–Egyptian governmental structure may have been influenced by the

already existing mixed communities established centuries earlier.

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NOTES

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Supporting Information

Additional supporting information may be found in the online version of this article at the publisher's website:

Table 4. Principal component analysis and logistic regression statistics.

Table 5. Strontium Isotope ($^{87}\text{Sr}/^{86}\text{Sr}$) Values for Tombos Samples.

Table 6. Comparisons of Burial Position, Cranial Morphology and $^{87}\text{Sr}/^{86}\text{Sr}$