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Are the Bearers of the Pan-Grave Archaeological Culture Identical to the Medjay-People in the Egyptian Textual Record?

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Abstract

Since 1907, scholars have suggested that the Medjay of the Egyptian textual and artistic record may be equated with the Pan-Grave archaeological culture. There are various circumstantial reasons for this connection, but typically it has been argued that they were either both mercenaries during the wars of the Second Intermediate Period, or that they originated in the same area in the Eastern Desert. This article argues against the connection between the Medjay and the Pan-Grave primarily because there is no way to equate these two groups as mercenaries, nor is there reason to believe that the Pan-Grave had any presence in the Eastern Desert. The author asks scholars to reconsider the archaeological evidence behind these received ideas that were established by ethnic categories in Egyptian texts.

Introduction

Since 1907, but especially since 1966, Egyptologists and some other archaeologists have directly associated the textual and artistic evidence for the Medjay with the Pan-Grave archaeological culture. Since that time new contradictory evidence has come to light and the theory behind the methodology used to make the association has been severely criticized. Nevertheless, scholars have reified the association in their work to such an extent that they often use the evidence from one or the other group to write historical narratives about both groups. This paper will 1) review how this connection was originally formed in scholarship, 2) point out problems with this received framework, and 3) briefly suggest the possibility that the Pan-Grave archaeological culture should primarily be associated with the Nile Valley, instead of the Eastern Desert.[1]

Evidence for Medja-land or the Medjay-people of the Egyptian textual and artistic record exists from Dynasty 6 through the end of the New Kingdom, and possibly later.[2] Over that time, the meaning of the word *Medjay* in Egyptian changed. From the Old Kingdom through the Second Intermediate Period, it likely referred to pastoral nomads from the Eastern Desert, east of Lower Nubia. Like other itinerant peoples living in a harsh desert environment, we can assume that these people were symbiotically connected to the sedentary populations of the Nile Valley. They probably often traded with each other, raided their settlements, or received employment—sometimes as soldiers—in the Nile Valley. Ethnographic parallels demonstrate that up to half of any generation of these pastoral nomads may move permanently to nearby sedentary communities and begin to acculturate.[3] This too may have been the case for the people called the Medjay in this early period.

Evidence for the Medjay during the New Kingdom is substantially different from that of the earlier periods. For the textual records that we have of Medjay at this time, the majority of references no longer denotes people from the Eastern Desert. Instead, the word Medjay refers to an elite Egyptian desert patrol who guarded areas of Pharaonic interest, such as capital cities, royal tombs and temples, and the borders of Egypt. The fluid identity of the Medjay will be examined elsewhere.[4] Suffice it to say, scholars have applied several of these analyses of the Medjay to their interpretations of the Pan-Grave archaeological culture.

Unlike the evidence for the Medjay, that for the Pan-Grave archaeological culture primarily exists from contexts dating to the Late Middle Kingdom through the Second Intermediate Period. Although the archaeological sequence at Elephantine may preserve evidence prior to the Late Middle Kingdom,[5] the Pan-Grave seem to have appeared rapidly throughout the rest of Upper Egypt and Lower Nubia only at that time (Figure 1). Similarly, the majority of evidence for the Pan-Grave seems to disappear suddenly at the end of the Second Intermediate Period, when it seems either to have been replaced by evidence for the Kerma archaeological culture[6] or incorporated into changing archaeological traditions in Lower Nubia.[7] In the past, scholars

have suggested that the Pan-Grave appear for reasons of immigration and disappear from the archaeological record for reasons of acculturation.[8] However, other explanations are possible.

In addition to a few denuded settlements or campsites,[9] the Pan-Grave archaeological culture is primarily known from their cemeteries which appear mostly in Upper Egypt and Lower Nubia, but they may have a larger range from possibly Qasr es-Sagha in the North to the Third Cataract in the South (Figure 1).[10] Pan-Grave ceramics have an even larger range appearing from the Fourth Cataract in the south to Tell el-Daba in the north as well as at several locations in the Eastern and Western Deserts.[11] Similarly, Pan-Grave ceramics are integrated in small quantities into almost every locus of a substantial number of contemporary Egyptian settlement sites.[12]

The Pan-Grave archaeological culture is similar to that of the contemporary C-Group and Kerma cultures in terms of much of their mortuary remains and material culture. The C-Group and Kerma both have circular, lined tombs, like the Pan-Grave. All three cultures can use tombs with superstructures.[13] All three cultures incorporate faunal remains, like skulls, in and around their human graves. Some of these faunal remains may also represent a funerary meal.[14] This tendency may indicate that they all practiced a form of pastoralist economy. And all three groups have handmade pottery that exhibit a lot of variation in decoration and fabric. All have vessels decorated with the black and red slip techniques, heavy burnish, sometimes oxidized firing, and often diagonal or geometric incised decoration on the exterior.[15]

Nevertheless, three major differences exist between the Pan-Grave and both the C-Group and Kerma cultures. First, unlike ceramics associated with the Pan-Grave culture, which includes open forms exclusively, both the C-Group and Kerma cultures have closed forms in their pottery corpus.[16] Second, the C-Group and Kerma cultures seem to have a much longer history than the Pan-Grave. We can see them archaeologically from the mid to late Old Kingdom to the early or mid New Kingdom. Moreover, the C-Group and Kerma cultures exhibit several stages of internal phasing and archaeological change during that millennium,[17] while the Pan-Grave archaeological culture is around for a mere 250 years and does not appear to exhibit internal phasing (besides possible intermediate stages of acculturation towards rectangular shaped tombs thought to be Egyptian in style).[18] Third, the Pan-Grave archaeological culture extends further north than the C-Group, whose culture spans primarily from Hierakonpolis to the Third Cataract,[19] and Kerma, from the Semna Gorge to the Fourth or Fifth Cataract.[20]

It is important also to note that the Pan-Grave, C-Group, and Kerma cultures also exhibit substantial internal differences in their architectural form and material culture, even among their own sites. For example, when we look at Pan-Grave ceramics, both the decoration and mixtures of temper differ from those even at sites fairly close to one other.[21] Similarly, some Pan-Grave tombs have various types of superstructures, while others do not include one at all.[22] Aaron de Souza's ongoing work reevaluating the Pan-Grave points to multiple Pan-Grave traditions.[23] These types of internal differences also occur among C-Group and Kerma cultures.[24]

The similarities among these three material cultures and the differences evident within them beg the question: How much are we beholden to our established typologies? The real problem with the divisions among Pan-Grave, C-Group, and Kerma may not be how archaeologists diagnose differences in their individual archaeological cultures, but rather how they have felt compelled to classify their finds (often awkwardly) into one of these three categories.[25] The more generic classification of *Middle Nubian* does help relieve some of these problematic categorizations.[26] Yet *Middle Nubian* does not help explain why there is so much variation within each of these archaeological cultures. The seeming lack of difference among some aspects of these material cultures is exacerbated when we are dealing with individual ceramics, rather than cemeteries or tombs. Sometimes ceramicists get into extensive debates about which cultures individual sherds are from; these types of arguments concerning incised sherds at Tell el-Daba have even spurred on a recent conference designed specifically to address the problematic identification of Nubian ceramics in Egypt.[27] In short, the Pan-Grave seem to be the same and yet different at each site, and they seem to be the same and yet different from the Kerma and C-Group. But where and why do we draw the lines of division in our typologies? And how do these classifications predispose our understanding of Pan-Grave identity? As we will see, the Pan-Grave identity and its association with the Eastern Desert has in this way been intertwined with the Medjay.

Scholarship's Formation of the Connection Between the Medjay and the Pan-Grave

The problem with identifying who is represented by the Pan-Grave archaeological culture has been complicated because of their equation in scholarship with the Medjay of the Egyptian textual record. Flinders Petrie first identified the Pan-Grave as a distinct group in Egypt, when he discovered a cemetery at Hu in 1899.[28] A mere eight years after Petrie's discovery, in 1907, Arthur Weigall made the earliest connection between the Medjay and the Pan-Grave.[29] Although several scholars over the last century have supported the connection, it is important to examine how and when each link in their chain of reasoning was made because the links directly reflect the archaeological and textual knowledge at that time as well as current trends in archaeological thought. Even though scholars have posited almost 30 different reasons for the connection between the Medjay and the Pan-Grave, their arguments vary in quality, and much of the evidence is circumstantial; only the key arguments will be discussed below.[30]

In forging this first link between the Pan-Grave and Medjay, Weigall emphasized that both seem to have been members of "a warlike race" who worked as mercenaries for the Egyptians.[31] In 1907 entire groups of people were considered to be predisposed biologically toward certain physiological and psychological traits.[32] Moreover, Weigall had first been introduced to the Pan-Grave by

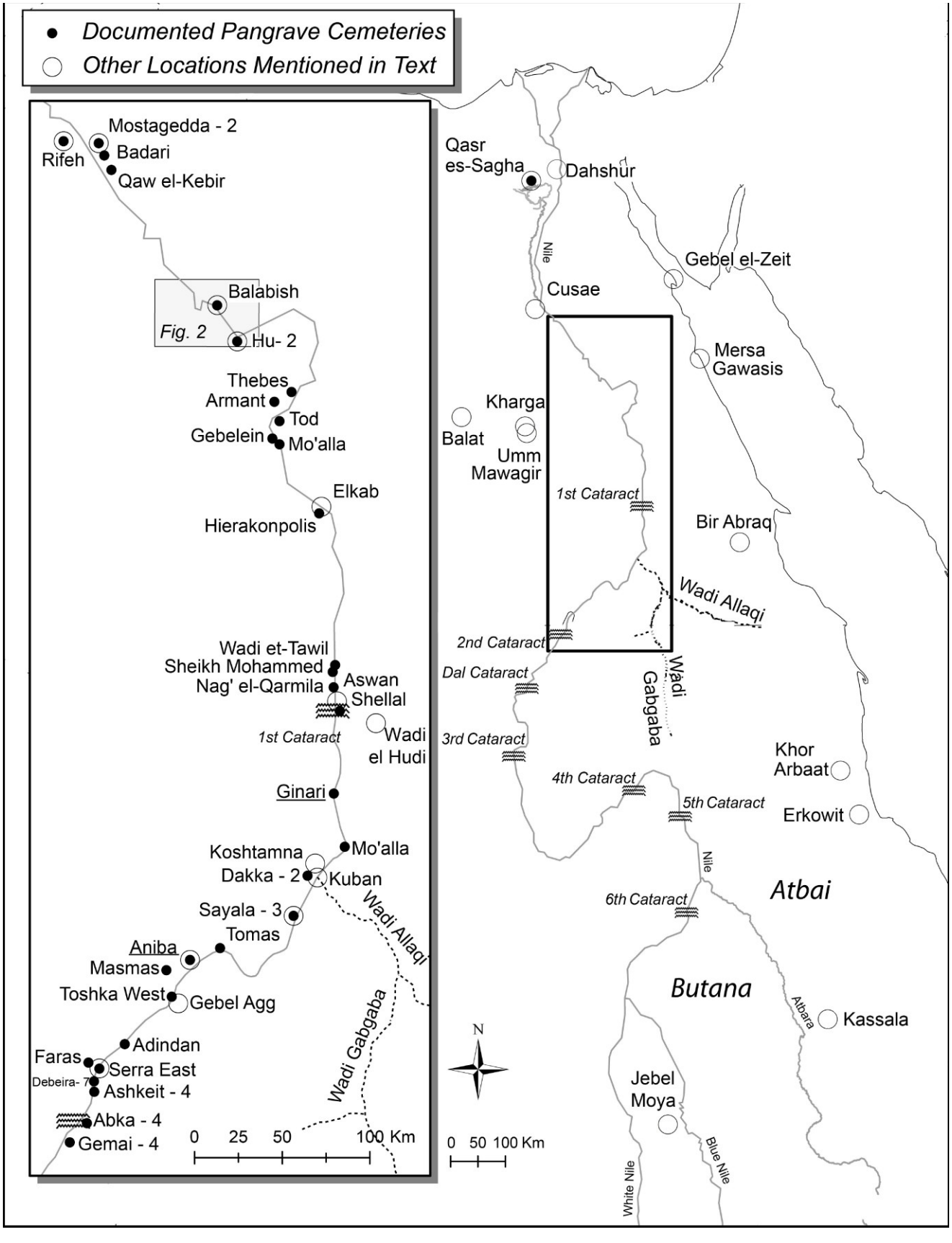

Figure 1: Map of Egypt, Nubia, and the Red Sea showing locations mentioned in the text and known Pan-Grave cemeteries. Map made by Bryan Kraemer.

his teacher, Flinders Petrie, who emphasized their racial characteristics as distinctive from those of the Egyptians.[33]

Weigall observed that the Medjay appeared "warlike" in two texts: the Biography of Weni the Elder from Dynasty 6, in which the Egyptians brought several Nubian groups to help fight the sand-dwellers in Sinai,[34] and the depictions of Medjay troops protecting Akhenaten in the Tomb of Mehu at Amarna.[35] Despite the millennium between these sources and several other non-warlike references to the Medjay that contradict this interpretation, the evidence was enough in 1907 for Weigall to argue that the Medjay were a "warlike race." Weigall argued that the Pan-Grave were "warlike" first because of the presence of Pan-Grave pottery in a fortress at Elkab.[36] Then, in his subsequent survey of "all the great fortresses" of Lower Nubia including Kuban, Aniba, Koshtameh, and others as part of the Archaeological Survey of Nubia, he found what he thought was "Pan-Grave" pottery in all of them.[37] This was sufficient to him to demonstrate the Pan-Grave's "warlike" traits. He seems to have assumed that fortresses were useful only to people who were inherently "warlike." Moreover, another major problem with Weigall's survey of Pan-Grave ceramics was that it occurred before scholars like George Andrew Reisner or Gerald Wainwright had archaeologically defined the C-Group and Kerma cultures.[38] Thus, Weigall's "Pan-Grave" ceramics included sherds from all three archaeological cultures. Because later evidence demonstrated Weigall's miscategorizations of the pottery, most scholars did not accept his equation completely.

Finally, to connect the Pan-Grave to the Medjay, Weigall drew attention to the ledge shrine at Gebel Agg in Lower Nubia. This family shrine, dating to the middle or end of Dynasty 18, depicts a man name Humay who has the title "Medjay of his Majesty."[39] At the base of the ledge of this shrine, Weigall noted that "Pan-Grave" pottery was found. Thus, because the two pieces of evidence were in such close spatial (not necessarily stratigraphic) proximity, he again drew a connection between the Medjay and the Pan-Grave.[40]

The next set of scholars who linked the Medjay to the Pan-Grave archaeological culture also argued that the Pan-Grave and the Medjay were mercenaries, especially during the war of the Second Intermediate Period. However, this group turned to objects in Pan-Grave tombs, rather than pottery finds, to demonstrate their "warlike nature." In 1920, Gerald Wainwright first drew attention to weapons, such as axes, archery wrist guards, and arrows found in their tombs at Balabish and Rifeh;[41] which several other scholars subsequently noted at other sites too. Similarly, in 1961, Anthony Arkell pointed out the ox skull found in a Pan-Grave tomb from Mostagedda that depicts a soldier painted black, holding a shield and axe, and displaying a non-Egyptian name; he argued that this Pan-Grave man was a mercenary for the Egyptian army.[42] Manfred Bietak also noted the axe from Mostagedda Tomb 3135 that was inscribed with the cartouche of the Egyptian king, Nebmaatre.[43] However, Wainwright and others at this time, did not contrast the amount of weapons in Pan-Grave tombs to contemporary C-Group, Kerma, or Egyptian tombs to demonstrate that the Pan-Grave were more "warlike" than the other contemporary cultures.

The most convincing arguments were presented by Torgny Säve-Söderbergh in 1941. He was the first to note the reference to the skilled "Bowmen of the Medjay" in the Kamose stela, who are mentioned as fighting for the Thebans at the end of the Second Intermediate Period.[44] Säve-Söderbergh then mapped the known Pan-Grave cemeteries in Upper Egypt and demonstrated that they inhabited the same area that the Theban Dynasts controlled: Aswan to Cusae.[45] Pan-Grave cemeteries have been found far south of this distribution, with a concentration around the Second and Third Cataracts[46]; one may also lie to the north at Qasr el-Sagha (Figure 1).[47] Säve-Söderbergh also hypothesized that Pan-Grave people must have immigrated to Egypt *en masse* when the Egyptians lost control of Lower Nubia at the end of the Middle Kingdom.[48] As a result, scholars today still use a theory of large-scale migration to explain the appearance of the Pan-Grave material culture within the traditional boundaries of Egypt.[49] Despite anthropological theory demonstrating that migration and conquest are not the only reasons for material culture to appear or disappear,[50] this explanation for the appearance of the Pan-Grave in Egypt has been questioned only in the last few years.[51]

By 1966 many scholars were influenced by the argument that the Pan-Grave was the same as the Medjay because they were both mercenaries. However, the identification was not yet taken as a certainty. Then Manfred Bietak's study of Sayala forged another Medjay-Pan-Grave link. Instead of focusing on their apparent connection as mercenaries, Bietak stressed that they both originated from the same location in the Eastern Desert, east of Lower Nubia.[52] Bietak's work convinced generations of scholars. No one questioned the connection for a long time afterwards, even if individual scholars tweaked his general ideas and added other circumstantial reasons to support his arguments.[53]

Significant to Bietak was the identification of a homeland for the Medjay. By the time of his study in 1966, several scholars working on textual references to Medja-land and the Medjay-people during the Old Kingdom through the Second Intermediate Period had demonstrated fairly conclusively that the Egyptians considered Medja-land to be in the Eastern Desert, in the greater area of Wadi Allaqi and Wadi Gabgaba. They had determined this location principally from evidence in the Semna Dispatches, the location of Ibhet in the Eastern Desert, references to products acquired in the Eastern Desert coming from the Medjay-people, and the location of Serra East, named *ḫsf-Md3yw*, "Repelling-the-Medjay," being on the East Bank of the Nile in Lower Nubia.[54] The conclusions of these scholars are still accepted today.[55] Bietak addressed some of their ideas in his work, but he focused more on his own reasons for the Pan-Grave's coming from the Eastern Desert. Although he presented several arguments, only the most convincing ones will be summarized here.

First, as part of the Nubian Salvage Campaign, Bietak excavated two small Pan-Grave cemeteries and two small C-Group cemeteries at Sayala. From preliminary physical anthropological data of the skeletons, he noted that the Pan-Grave skeletons

seemed to be of a "Negrid Race," while the C-Group were of a "Europid Race." He also pointed out that the Pan-Grave skeletons were significantly taller and more robust than the C-Group skeletons. Other factors for this difference like diet or gene-flow were not considered. Bietak suggested that they would have made excellent mercenaries or security guards (like the Medjay) because of their increased size.[56] Because the C-Group skeletons seemed so different from the Pan-Grave, he suggested that the C-Group were indigenous people of the Nile Valley and that the Pan-Grave came from elsewhere; he assumed the Eastern Desert of Sudan.[57] Despite this being the only substantial osteological study conducted on Pan-Grave skeletons to this day, other scholars have applied these results to Pan-Grave skeletons throughout Egypt and Nubia.[58] Nevertheless, a detailed study of the Sayala skeletons was completed in 1984 that suggested a contrary conclusion, that the Pan-Grave from Sayala originated in the Western Desert and were a mix of the "Negrid Race" and the "Paleoeuropid Race."[59] These results have not been integrated into the received narrative about the Pan-Grave.

Second, Bietak hypothesized that the Pan-Grave people came from the Eastern Desert, in and to the east of Wadi Allaqi, based on evidence visible in the Nile Valley. Noting that there was a substantial concentration of Pan-Grave cemeteries on the low desert near the entrance into the Wadi Allaqi, he assumed that this was the entrance to their homeland.[60] Although there were Pan-Grave cemeteries equally distributed on the East and West Banks of the Nile, Bietak argued that Pan-Grave people crossed over to the West Bank only to acquire other resources like food. His observation was based on a contemporary ethnographic parallel to Eastern Desert pastoral nomads crossing the Nile with their herds.[61] But, even if the bearers of the Pan-Grave culture crossed the Nile to acquire resources, this theory does not explain why they would choose to be buried on that side. Presumably, Pan-Grave people were buried near their homes.[62]

Third, Bietak then sought to find evidence for the Pan-Grave in the Eastern Desert. Unfortunately, by 1966 no one had yet surveyed this region because of the difficulty of access and its extreme climate.[63] Thus, Bietak had to privilege scatters of sherds with Pan-Grave *affinities* that appeared along the Red Sea coast. For instance, he pointed to Arkell's description of sherds that seemed similar to Pan-Grave pottery at the sites of Khor Arbaat and Erkowit. Bietak listed them as evidence among Pan-Grave sites on that side of the Eastern Desert, but he was unable to verify what the sherds looked like since they were not published.[64] Crowfoot also had discovered and published photographs of sherds at Kassala in 1928 that exhibited similar decoration to that found on Pan-Grave sherds.[65] Based on these sherd scatters along the Red Sea coast and the extensive Pan-Grave cemeteries in the Nile Valley near the Wadi Allaqi, Bietak argued that the area in between these two locations, i.e. the Eastern Desert, was their homeland. Their movements throughout the region supposedly reflected the pastoral nomadic migration patterns of the Pan-Grave people.[66]

The theory of mass migration also entered significantly into Bietak's study. To fit his evidence and hypotheses into a larger narrative, Bietak explained that the Pan-Grave must have tried to migrate into the Nile Valley for years, possibly during times of starvation and environmental stress in the Eastern Desert.[67] Only once the Egyptians lost control of Lower Nubia in the mid to late Middle Kingdom, did they move to that region. When the Egyptian government of the Middle Kingdom declined in Egypt, the Pan-Grave moved north *en masse*, supposedly emptying the desert of many inhabitants.[68] Thus, Bietak composed a narrative from his evidence that constituted a "culture-history." This kind of approach was more widely accepted as legitimate in 1966.[69] However, in the last 50 years, newer archaeological theory, including both the "New Archaeology" and Post-Processual movements, has demonstrated the flaws inherent in the culture-history argument.[70]

In addition to changes in the theoretical perspectives since 1966, surveys eventually were made in the Eastern Desert in the area that Bietak identified as the Pan-Grave homeland. Approximately 15 years after Bietak's theories about the origin of the Pan-Grave, a few long-term archaeological projects began along the Red Sea in the Southern Atbai region: the Butana Archaeological Project and the Italian Archaeological Mission, led by Rudolfo Fattovich. These projects uncovered two archaeological cultures known as the Gash Group and the Mokram Group. The Gash Group appears to coincide with the Old Kingdom to the Second Intermediate Period and the Mokram group overlaps with the New Kingdom.[71] Following Bietak, in several studies from 1987-1991, Karim Sadr argues that the decoration and surface treatment of Pan-Grave ceramics in the Nile Valley is very similar to that of Mokram ceramics in the Southern Atbai, 800-1000 kilometers southeast of the Wadi Allaqi along the Red Sea. Based solely on similarities in decoration (rather than fabric, inclusions, or sources of clay), Sadr argued that the Mokram Group was culturally related to the Pan-Grave Group.[72] He suggested that Pan-Grave pastoral nomads of the Eastern Desert conquered the Gash Group in the Southern Atbai, once they were no longer welcome in the Nile Valley, around the beginning of the Egyptian New Kingdom, c. 1500 BCE.[73] It should be noted, however, that Sadr did not compare decoration found on the Kerma or C-Group ceramics to that in the Southern Atbai, nor did he compare the decoration of Pan-Grave ceramics in the Nile Valley to other cultural groups' ceramics like those in Butana or the Jebel Moya culture, both of which exhibit similar decorative techniques.[74]

A century after Weigall had first suggested the connection between the Pan-Grave archaeological culture and the Medjay of the Egyptian textual record, the Medjay-Pan-Grave connection had crystalized largely through the works of Säve-Söderbergh, Bietak, and Sadr. Yet there have been a few dissenting voices. Most significantly in 2009, Hans Barnard reminded us first of the chronological problem that Medjay textual references exist for hundreds of years longer than the Pan-Grave archaeological

culture, which was originally noted by Bruce Williams in 1975.[75] In contradiction to the established model, Barnard doubted that Pan-Grave material culture "went in and out of fashion," because mortuary traditions are part of an ethnic identity, which typically do not change quickly. Second, he noted that the Pan-Grave cemeteries lay on both the East and West Banks of the Nile, that they do not appear in the Eastern Desert, and that the pottery sherds that are similar to Pan-Grave ceramics in the Kassala region belong to the Mokram Group. Third, he did not think that the word *Medjay* could directly correlate to an ethnic, political, or cultural entity. In doing so, he implies that the Pan-Grave archaeological culture would differ. Lastly, he stated that one cannot connect the Pan-Grave with the Medjay, specifically, instead of other nomadic groups like the *ꜣmw*, *ḫryw-šˁ*, *jwntyw*, and more who appear in the Egyptian texts.[76] While Barnard's expressed doubts were not conclusive, subsequent scholarship has not addressed them. In some cases, the connection was still defended despite Barnard's objections.[77]

Problems with the Supposed Connection Between the Medjay and the Pan-Grave

As seen above, three primary reasons for the connection between the Medjay of the Egyptian textual record and the Pan-Grave archaeological culture have been asserted: 1) both groups supposedly worked as mercenaries during the war of the Second Intermediate Period; 2) both groups supposedly originated in the same area of the Eastern Desert, east of Lower Nubia; and 3) a textual reference to a Medjay is found in close proximity to Pan-Grave pottery at Gebel Agg. Many of the reasons for the connection between the Medjay and the Pan-Grave met the standards of historical argument current at the time they originated. Weigall and Säve-Söderbergh argued for biological predispositions of races, a manner of historical reasoning which had much acceptance in the first half of the twentieth century. Additionally, Bietak wrote a narrative along the lines of a "culture-history," a style of argument that was very common during the mid twentieth century.[78] For issues of ethnicity and cultural identity in archaeology, however, these forms of analysis no longer seem reliable,[79] and outmoded methodological approaches aside, several other archaeological reasons exist to question the connection.

In 1966, when Bietak posed his theory about how the Pan-Grave had originated in the Eastern Desert of Sudan, no one had yet surveyed that area. However, in the last 25 years, several archaeological surveys have been conducted in this region.[80] In particular, the surveys conducted by Karim Sadr and the Centro Ricerche sul Deserto Orientale (CeRDO) sought out Pan-Grave material specifically.[81] Unfortunately, no survey of this region has found more than a small amount of Pan-Grave sherds on the surface. Moreover, approximately equal amounts of sherds belonging to the C-Group, Kerma culture, Gash Group, and Mokram Group were also found on the surface.[82] None of these sherd scatters can speak to large populations of indigenous pastoral nomads in the Eastern Desert. After the surveys, Karim Sadr stated:

> Also surprising is the enigmatic absence of the Pan-Grave culture. Considered to signify the ancient Beja of the 2nd millennium BC..., the Nubian Desert should have been littered with pan-graves. Their absence was also noted in the Egyptian Eastern Desert..., suggesting that the time may have come to rethink our notions about this archaeological culture.[83]

Additionally, the pottery with Pan-Grave affinities that Bietak used as evidence for their existence in the Eastern Desert actually belongs to the Mokram Group. Crowfoot had even found them with other sherds that belong to the Gash Group.[84] And despite Sadr's previous arguments that the Mokram Group and the Pan-Grave have such similarities that they should be considered the same archaeological culture, that cannot be the case. Incised line-decorations are found in pottery traditions in many parts of the Upper Nile Valley and outlying regions, and through several periods. Numerous archaeological cultures dating from 5000 BCE to 1000 CE, including those at Jebel Moya, Butana, the Atbai, and many other places throughout northeastern Africa, exhibit similar decorations.[85] A Beldados recently reexamined the decorations on ceramics from Agordat to show their diverse connections with many cultures in northeast Africa.[86] As Barry Kemp pointed out:

> The similarity (between Pan-Grave and Mokram sherds at Kassala) is not apparently one of total culture, only of selected individual traits in pottery decoration, and thus not necessarily of immediate relevance in view of the widely dispersed and long-lasting pottery traditions of north-east Africa.[87]

In short, there is no archaeological evidence for the Pan-Grave in the Eastern Desert of Sudan or along the Sudanese Red Sea coast that can demonstrate that this region had a concentration of people from a contemporary period for which it would constitute a homeland.[88]

In fact, there is a greater distribution of Pan-Grave sherds in the Egyptian Eastern Desert and Red Sea coast, far north of what the Egyptians called Medja-land. Small quantities of Pan-Grave sherds were found at Bir Abraq,[89] Mersa Gawasis,[90] and Gebel el-Zeit.[91] The sherds at Mersa Gawasis are of particular interest because they were found throughout this Egyptian site along with a similar small quantity of C-Group and Kerma sherds. Andrea Manzo has argued that the Egyptians running this site employed members of all three Nubian groups to work there, each of whom brought their own cooking ceramics and other supplies.[92] According to this reasoning, Mersa Gawasis was not a homeland of the Pan-Grave. The distribution of Pan-Grave, C-Group, and Kerma ceramics at Mersa Gawasis is substantially different from the distribution of Gash Group and Mokram Group ceramics

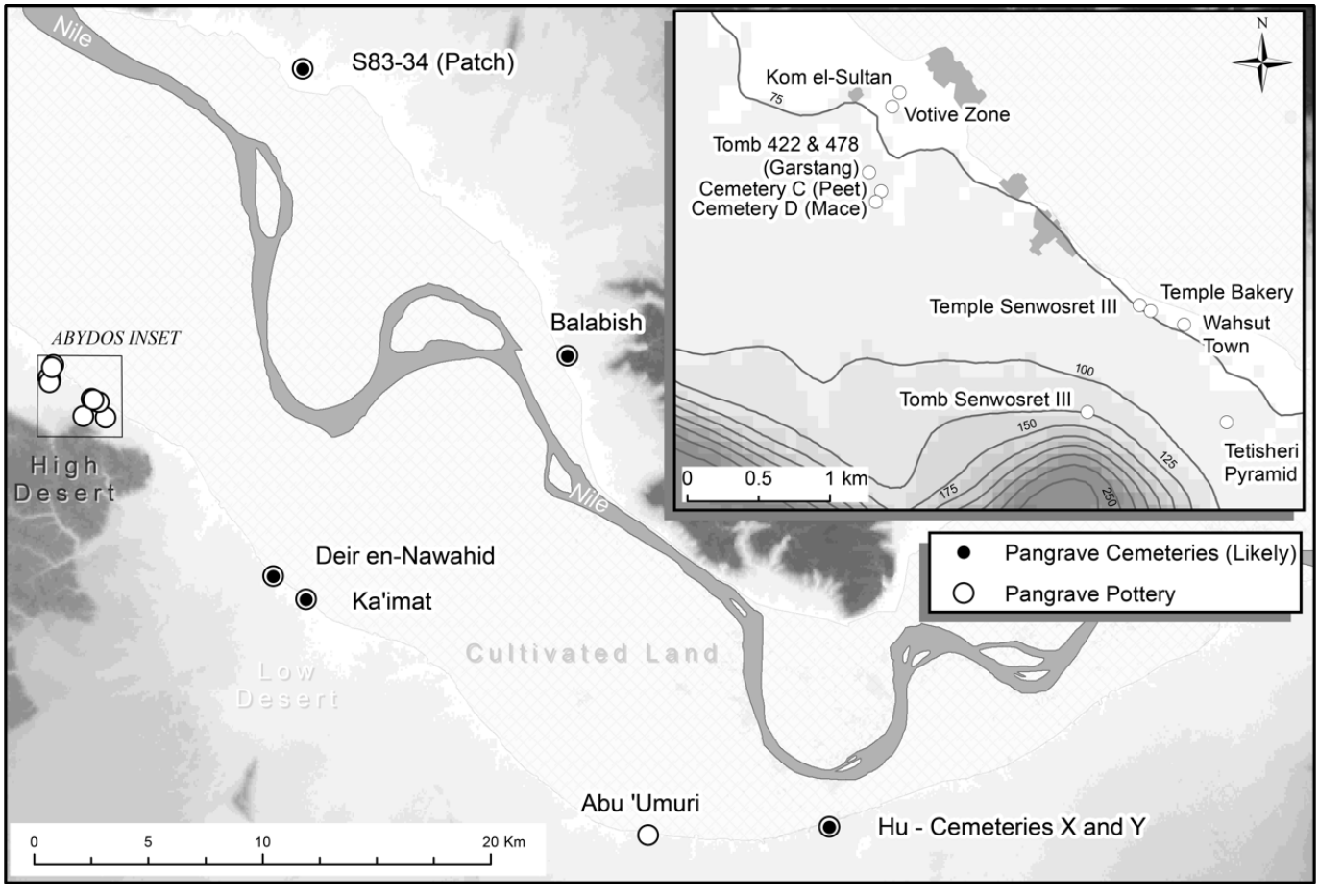

Figure 2: Map of the greater Abydos region marking where Pan-Grave evidence has been found. Map made by Bryan Kraemer.

there, which are relegated to specific areas. The distribution of the latter indicates that they may only be present due to trade.[93]

Moreover, Pan-Grave sherd scatters are not confined to the deserts on the east side of the Nile. There is also a comparable amount of Pan-Grave pottery found in the Egyptian Western Desert at places like Balat,[94] the Kharga Oasis,[95] Umm Mawagir,[96] and Qasr el-Sagha.[97] Excavators working in the Western Desert also explain that this pottery appears in small quantities and may indicate Nubians working for the Egyptians, rather than permanently living in the region.[98] Essentially, there is an approximately equal small amount of Pan-Grave ceramics in both the Eastern and Western Deserts of Egypt. And none of the Pan-Grave ceramics in either location seems to indicate a concentration that might point to an associated indigenous Pan-Grave population. This distribution also reflects the almost equal amount of Pan-Grave cemeteries and ceramics on both the Eastern and Western sides of the Nile in the Nile Valley.[99] The Pan-Grave archaeological culture straddles the Nile equally.

We should not privilege scatters of sherds in either desert over the sherds in the Nile Valley. Pan-Grave pottery is present to a small extent in the majority of Egyptian settlements dating to the Late Middle Kingdom and Second Intermediate Period.[100] Thus, if the Egyptians have a settlement in the deserts or oases, those finds should be treated in the same capacity as finds in the Nile Valley.

Manfred Bietak also argued that the Pan-Grave originated in the Eastern Desert because there seems to be an inordinate number of Pan-Grave cemeteries bunched around the mouth of Wadi Allaqi.[101] However, that apparent concentration is likely an archaeological illusion. There is a similar conglomeration of C-Group cemeteries at the mouth of the Wadi Allaqi,[102] which has never been used to argue for a C-Group homeland in the Eastern Desert. Moreover, by 1966, the area in front of Wadi Allaqi was one of the most densely surveyed archaeological zones in the Nile Valley. It had received several archaeological surveys as well as extensive archaeological work in the nearby region for almost 50 years, ranging from the initial surveys of Arthur Weigall to the early surveys of the UNESCO campaign beginning in 1959.[103] In these surveys, the investigators recorded everything that they encountered, whereas excavators in Egypt in the early 20th century excavated sites at which they wanted to work. Thus, Pan-Grave finds in Egypt proper were not always recorded; only in recent years have archaeologists started recording all of the Pan-Grave material on their sites.[104] Pan-Grave sites are now so numerous in Upper Egypt, that it is no longer worth mapping where individual sherds are found because, in some places, they can be found every

few kilometers. For example, when Bietak mapped Pan-Grave finds at Abydos, he noted their occurrence only in tomb C56 of Peet's north cemetery.[105] However, recent published and unpublished work in the greater Abydos region noted Pan-Grave pottery at a minimum of 10 different locations around the site (Figure 2).[106] Had Bietak known about all these sherds across Abydos, the location would have received at least 10 dots on his map, which could also have seemed like a significant clustering of Pan-Grave material at the mouth of a different wadi. It seems more reasonable now to interpret the clustering of Pan-Grave sites near Wadi Allaqi as indicative of the state of survey in the Nile Valley in 1966 rather than as an indication of a Pan-Grave homeland.

Part of the problem with interpreting Pan-Grave material has been that the analysis and theories used to explain this evidence have been different from those used to interpret similar evidence for the C-Group or the Kerma cultures. For example, all three archaeological cultures often include shells from the Red Sea in their tombs. However, when these shells are in Pan-Grave tombs, excavators explain that they indicate the pastoral nomadic movements of these people,[107] while shells in Kerma and C-Group tombs are explained as evidence of trade.[108] Similarly, scholars have argued that incised diagonal decoration on Pan-Grave ceramics indicates that they are the same cultural group as the Mokram Group,[109] and yet similar decorations on Pre-Kerma pottery and ceramic traditions from the Southern Atbai dating as early as 3000 BCE are explained only as advanced cultural contact and trade.[110] In fact, looking at the Eastern Desert of Sudan again, much more archaeological evidence for the C-Group has been discovered in that region than for the Pan-Grave.[111] Yet no scholar has put forth an alternative hypothesis that the C-Group is the same as the Medjay. The result of this double standard in our interpretation techniques has been to reinforce pre-established categories as culturally significant. Thus, I urge scholars to examine the assumptions behind each interpretation that they make about material from all Nubian archaeological cultures. Rarely should one use different lines of reasoning to explain Pan-Grave material culture from those used to explain the C-Group or Kerma cultures.

A few recent studies have added to the narrative that the Pan-Grave are from the Eastern Desert because they supposedly maintained a pastoral nomadic economy. This argument originally stems from the connection between the Pan-Grave and the Medjay (who were in part pastoral nomads).[112] Yet scholars justify this argument through the Pan-Grave archaeological remains. They point to the Pan-Grave's small cemetery sizes that indicate extended families and the Pan-Grave connection with animals, especially gazelles which come from the desert.[113] Yet pastoral nomadic economies should be distinguished from pastoral economies (not nomadic). In a pastoral nomadic economy, families would herd animals in the desert for approximately half of the year and then move the animals to the Nile Valley or other places with water during the remaining times.[114] On the other hand, pastoral economies would involve moving herds along the Nile Valley, but not include taking their herds deep into the high desert. Many members of the C-Group maintained a pastoralist economy along the Nile Valley.[115] Archaeologists have demonstrated that the C-Group also have a strong connection with animals and that some of their cemeteries are small enough for extended families.[116] It is unclear why we continue to call the bearers of the Pan-Grave culture pastoral nomads, while we call the bearers of the C-Group culture pastoralists. From the evidence that we have, we can say that the Pan-Grave peoples were pastoralists. But were they nomadic? The evidence for this later distinction is still lacking.[117]

Occasionally, the C-Group and the Pan-Grave do seem to be different. That is true of their skeletons from Sayala. Bietak had noted that the Pan-Grave skeletons were larger and more robust than the C-Group skeletons at that site. He used this fact as evidence that the Pan-Grave would have been mercenaries and that the C-Group may have been indigenous to the Nile Valley while the Pan-Grave originated from elsewhere.[118] However, several problems exist with this data. First, Bietak as well as several reviewers of his book noted that the C-Group skeletons have a "very strong local variability" and are not like the C-Group skeletons elsewhere.[119] Second, the sample size for both the C-Group and the Pan-Grave skeletons is extraordinarily small. Only 9 C-Group male skeletons and 6 C-Group female skeletons were complete enough to examine for "racial" characteristics.[120] Similarly, only 7 Pan-Grave male skeletons and no Pan-Grave female skeletons were complete enough to examine.[121] This is not a statistically significant sample from which we can extract large demographic information. Moreover, the differences in these skeletons were attributed to "race," but might have been caused by other factors such as diet or gene-flow. The results from Sayala should not be applied to Pan-Grave or C-Group skeletons across all of Egypt and Sudan. I look forward to physical anthropologists completing other studies of Pan-Grave skeletons in the future.

If you recall, Weigall, Säve-Söderbergh, and others supposed that the Medjay and the Pan-Grave were the same because they were both mercenaries on the side of the Egyptians during the Second Intermediate Period. This second line of reasoning hinges on two false assumptions: that the Medjay appear *only* as soldiers in Egyptian texts and art and that the appearance of weapons in Pan-Grave cemeteries, the presence of Nubian ceramics in Egyptian fortresses, and the distribution of Pan-Grave cemeteries in the territory controlled by Dynasty 17 can result *only* from military involvement.

The emphasis on the Medjay as soldiers privileges one category of evidence for their role in Egyptian society over others. Several other texts exist in which they did not function as mercenaries, such as the Lahun Papyri,[122] the autobiography from Gebelein,[123] and even the sarcophagus of Ashyit.[124] Notably, in his biography, Weni hired soldiers from several different Nubian and Libyan groups as mercenaries; the Medjay were not the only group who acted as soldiers.[125] The Medjay of the Old Kingdom to Second Intermediate Period carried out many different jobs, only one of which may have been a mercenary. Similarly, the reference

to the Medjay as soldiers in the Tomb of Mehu is not compelling, because by Dynasty 18, the word *Medjay* is an occupational title rather than an ethnic group's name.[126] This definition should not be applied anachronistically. As for the references to Medjay in the Kamose stela, yes it seems that some contingents of Medjay were fighting as mercenaries at that time.[127] Nevertheless, other groups of non-Egyptians must have been fighting as mercenaries during the Second Intermediate Period for the Egyptians.[128] Thus, even if some Medjay were mercenaries and some Pan-Grave were mercenaries, we cannot directly match one textual tradition to one archaeological culture because many of both existed.

The evidence for the Pan-Grave as mercenaries during the Second Intermediate Period suffers from similar problems. First, the concept of "a warlike race" results from a type of historical reasoning about "races" that was lost by the wayside long ago.[129] From Pan-Grave archaeological contexts, we know that several *individuals* probably worked as soldiers. For example, the namesake of the Pan-Grave bucranium with the picture of the man wielding an axe was likely a soldier.[130] The owner of an Egyptian style axe with the name of the king inscribed on it was likely a soldier.[131] However, not every Pan-Grave person, nor even every person with weapons in their tombs can be considered a soldier; several tombs of women and children also had weapons.[132] Weapons appear only in a selection of Pan-Grave cemeteries; typically they are the larger cemeteries in Upper Egypt, like Mostagedda or Balabish, rather than cemeteries in Lower Nubia.[133] Moreover, contemporary C-Group,[134] Kerma,[135] and Egyptian tombs[136] all have weapons in them. So many weapons are known from Kerma tumuli that Henriette Hafsaas-Tsakos recently argued for the appearance of a warrior class at Kerma.[137] Thus, the inclusion of weapons in some tombs is more likely a reflection of contemporary mortuary traditions. If we were to try to link the Medjay of the Egyptian textual record with an archaeological culture through the appearance of weapons, how would we know which one the right group is?

Weigall's reason for the Pan-Grave people to be mercenaries for the Egyptians was discredited shortly after his work was published. His claim that the appearance of "Pan-Grave" ceramics in Egyptian fortresses indicates where the Pan-Grave were employed is incorrect because he was misinterpreting ceramics of the C-Group and Kerma as belonging to the Pan-Grave.[138]

Säve-Söderbergh's alignment of Pan-Grave cemeteries only in the area controlled by the Theban Dynasts is the remaining reason for the Pan-Grave people to be considered mercenaries for the Egyptians (Figure 1). This reason was first discredited by Kemp and later Bourriau who pointed out Pan-Grave sherds and cemeteries (respectively) that appear north of this border.[139] However, this reason has come back in vogue[140] in part because the Pan-Grave cemetery once thought to be at Dahshur, may instead belong to the Kerma culture,[141] and no one has been able to confirm the cemetery at Qasr el-Sagha as belonging to the Pan-Grave. Regardless, the majority of Pan-Grave cemeteries exist south of Aswan (Figure 1), out of the control of the Theban Dynasts. Ryholt tried to explain their anachronistic appearance in Lower Nubia claiming that each of these cemeteries was associated to camps belonging to Pan-Grave mercenaries fighting with Kamose and Ahmose at the very end of the Second Intermediate Period.[142] This suggestion places the youngest Pan-Grave cemeteries in Lower Nubia. However, de Souza supports that the oldest Pan-Grave cemeteries were in Lower Nubia, and they progress northward based on material culture, architectural form, and measures of Egyptianization.[143] Even if some bearers of the Pan-Grave culture worked as mercenaries, the alignment of control as set up by Säve-Söderbergh does not support the specific link between the Medjay and the Pan-Grave.[144]

Only Arthur Weigall and later Bruce Trigger advocated the last main reason to equate the Pan-Grave and the Medjay. They noted an inscription of a man named Humay who held the title "Medjay of his Majesty" at a ledge shrine at Gebel Agg in Lower Nubia.[145] This is a family inscription that also depicts Humay's parents and siblings as well as their titles.[146] At the top of the low desert beneath this inscription, a mixture of Nubian and Egyptian pottery was found, which both Weigall and Trigger called "Pan-Grave,"[147] but is in fact much more diverse. Simpson noted that this deposit included a lot of ash, bone, cooking refuse, and other cooking pots as if it were the debris of watchmen on this ledge.[148] Instead of justifying the connection between the Medjay and the Pan-Grave, it is more likely that the family inscription on the ledge is not contemporary with the waste of the watchmen found below. Or even if they are contemporary, they likely would not have been created by the same people.

In short, there is no substantial justification to identify the bearers of the Pan-Grave culture with the Eastern Desert, nor is there evidence to equate the Medjay and the Pan-Grave. Even if there were overlap between some individual Medjay and individual Pan-Grave people, scholars investigating the Medjay or the Pan-Grave should not generalize their conclusions to all members of both groups. The two words should not be used interchangeably.

Where to Go From Here

Nothing that I have said is meant as a personal attack on the scholarship of any of the researchers mentioned previously. Each theory presented here can be viewed as a product of its time and consistent with the evidence that its author elucidated. I would, however, like to caution people from simply referencing the established theories without being circumspect about the evidence, or the relative lack of evidence, behind them. Overall, I think that, for 110 years, Pan-Grave scholarship has gone down a wrong path. On this path, the Pan-Grave were assumed to be warlike. On this path, they were assumed to have migrated into Egypt from the Eastern Desert to have worked as mercenaries and then assimilated into Egyptian culture. And on this path scholars treated every piece of Pan-Grave evidence as if it were indicative of a specific Pan-Grave *ethnicity*. My main goal has been instead to jump start a dialogue about the identity of the Pan-Grave people that has laid dormant for several years now because of the established Pan-Grave to Medjay equation.

This deconstruction of the Pan-Grave to Medjay equation leads to a new question: Who were the bearers of the Pan-Grave culture, especially if they were not the Medjay? This question will take several monographs written by various scholars before we come to a reliable answer. For now, I only wish to make a few observations and suggestions to point us forward. First we know that there are several cultural affinities between the bearers of the Pan-Grave culture and the bearers of the C-Group and the Kerma cultures. We additionally know that the majority of Pan-Grave cemeteries are found along the Nile Valley in Upper Egypt and Lower Nubia, and only small amounts of Pan-Grave sherds have been found north, south, east, or west of that area. Lastly, we know that there is no basis for the Pan-Grave to have ever been connected with the Eastern Desert in particular.

Moreover, the "appearance" of the Pan-Grave archaeological culture in Upper Egypt and Lower Nubia at the end of the Middle Kingdom still needs to be explained. In the past, scholars suggested that this culture must have come from somewhere else, a theory of migration. Yet there are few Pan-Grave archaeological remains in any direction that predate those in the Nile Valley. Couldn't we consider factors of cultural change in our theories other than simply migration?

Although this theory has not been explored before, I would like to suggest as a possible scenario to explore that the Pan-Grave archaeological culture came from within populations already living in the Nile Valley. Based on their use of animals in their mortuary remains, some may have been pastoralists herding their animals along the Nile, like the C-Group. Egyptologists for the last 100 years have assumed that the Pan-Grave represented a completely separate *ethnicity* from the C-Group or Kerma cultures. However, the lack of internal phasing and the lack of closed vessel forms for the bearers of the Pan-Grave culture, as opposed to those of the C-Group or Kerma cultures, may instead point to a different type of shift in their identity, one that does not represent an isolated group. As opposed to an *ethnic* difference, perhaps the Pan-Grave archaeological remains represent geographic, occupational, demographic, or even religious type of identity, distinct but related to the C-Group or Kerma cultures.

In all likelihood, it is a significant factor that the Pan-Grave culture "appears" in Upper Egypt and Lower Nubia only when the Egyptian government starts to lose power during times of political and economic stress, the Late Middle Kingdom. Anthropologists have convincingly shown that during times of social, environmental, and economic stress or conflict, groups of people sharpen the boundaries between their personal identities. There is a distinct increase in the number of markers used to separate identity by focusing on differences rather than the blending of cultures during those times.[149] Markers of identity also occur more frequently in areas of contact than areas of isolation.[150] They become salient elements of interactions between groups. Is it possible that the Pan-Grave ancestors were always in the Nile Valley, but when the government and economy started to go downhill, those living in areas controlled by the Egyptians reacted by emphasizing their individuality in Pan-Grave type cemeteries?

Alas, the study of Pan-Grave identity needs to begin afresh because they are not connected with the Medjay and they are not connected with the Eastern Desert. I encourage archaeologists to look for previously unseen trends in Pan-Grave data. I urge scholars to apply different theoretical and scientific models to our evidence. And I hope that the field challenges the ideas that I put forth in this article in order to move the dialogue forward rather than just accepting the status quo.

Notes

1 Although an abbreviated argument appears here, for a much more detailed discussion of this material, see Kate Liszka, "'We Have Come to Serve Pharaoh': A Study of the Medjay and Pangrave Culture as an Ethnic Group and as Mercenaries from c. 2300 BCE until c. 1050 BCE" Dissertation, University of Pennsylvania, 2012, 388-523.

2 The majority of references to the Medjay disappear by the beginning of the Third Intermediate Period. However, a handful of references may exist from the Napatan Period and possibly the Ptolemaic Period. See esp. Karola Zibelius, *Afrikanische Orts- und Völkernamen in hieroglyphischen und hieratischen Texten* (Wiesbaden: Dr. Ludwig Reichert, 1972), 63, 133; Adriana Belluccio, "Religione e Cultura: le Statue di Min "Medja" a Coptos," in Charles Bonnet (ed.), *Actes de la VIIIe Conférence Internationale des Études Nubiennes, Lille 11-17 Septembre 1994*, (Lille: Université Charles-de-Gaulle, 1997), 25-45.

3 E.g. the pastoral nomads of the Sinai (Emanuel Marx, "Nomads and Cities: The Development of a Conception," in Stefan Leder and Bernhard Streck (eds.), *Shifts and Drifts in Nomad-Sedentary Relations* (Wiesbaden: Dr. Ludwig Reichert Verlag, 2005), 3-15, esp. 10-11). Also see, Anatoly M. Khazanov, *Nomads and the Outside World, Second Edition* (Madison: The University of Wisconsin Press, 1994), esp. 68-84; Günther Schlee, "Forms of Pastoralism," in Stefan Leder and Bernhard Streck (eds.), *Shifts and Drifts in Nomad-Sedentary Relations* (Wiesbaden: Dr. Ludwig Reichert Verlag, 2005), 28-29.

4 For a detailed reexamination of the data, identity, and duties of the Medjay in the Egyptian textual record, see Kate Liszka, *From Pastoral Nomads to Policemen: The Evolution and Role of the Medjay in Ancient Egypt and Nubia, c. 2300 to 1250 BCE*. Probleme der Ägyptologie (Leiden: Brill, in preparation). Also see Kate Liszka, "'We have come from the Well of Ibhet': Ethnogenesis

of the Medjay," *Journal of Egyptian History* 4, no. 2 (2011): 149-171.

5 Dietrich Raue demonstrated that the Pan-Grave archaeological culture is present at Elephantine from the middle of Dynasty 12, and specific ceramic features may exist in the early Middle Kingdom. Dietrich Raue, "Nubians on Elephantine Island," *Sudan & Nubia* 6 (2002): 22-23; Dietrich Raue, "Medja vs. Kerma at the First Cataract – Terminological Problems," in Irene Forstner-Müller and Pamela Rose (eds.), *Nubian Pottery from Egyptian Cultural Contexts of the Middle Kingdom and Early New Kingdom* (Wien: UAI, 2012), 52-53.

6 As at Edfu, see Natasha Ayers and Nadine Moeller, "Nubian Pottery Traditions during the 2nd Millennium BC at Tell Edfu," in Irene Forstner-Müller and Pamela Rose (eds.), *Nubian Pottery from Egyptian Cultural Contexts of the Middle Kingdom and Early New Kingdom* (Wien: UAI, 2012), 109-111.

7 This evolution in Nubian archaeological cultures during the early New Kingdom used to be referred to as the Transitional phase (esp. Torgny Säve-Söderbergh, *Middle Nubian Sites*. The Scandinavian Joint Expedition to Sudanese Nubia 4:1 (Uddevalla: Bohuslaeningens, 1989), esp. 8, 10-11, 23-25; Manfred Bietak, *Ausgrabungen in Sayala-Nubien 1961-1965: Denkmäler der C-Gruppe und der Pan-Gräber-Kultur* (Wien: Hermann Böhlaus Nachf., 1966), 61-63, 67; Manfred Bietak, *Studien zur Chronologie der nubischen C-Gruppe: Ein Beitrag zur Frühgeschichte Unternubiens zwischen 2200 und 1550 vor Chr.* (Wien: Hermann Böhlaus Nachf., 1968), 113-117). However, recent archaeological excavations in Lower Nubia, like those at Tombos and Amara, demonstrate that these archaeological cultures continue in an evolved state during the Ramesside Period (e.g. Stuart Tyson Smith, "Tombos and the transition from the New Kingdom to the Napatan Period in Upper Nubia," in Wlodzimierz Godlewski and Adam Lajtar (eds) *Between the Cataracts: Proceedings of the 11th Conference for Nubian studies, Warsaw University* (Warsaw: Warsaw University Press, 2008), 95-115; Neal Spencer, "Creating and Re-Shaping Egypt in Kush: Responses at Amara West," *Journal of Ancient Egyptian Interconnections* 6:1 (2014): 42-61).

8 E.g. Bietak 1966, 71-72; Torgny Säve-Söderbergh, *Ägypten und Nubien* (Lund: Häkan Ohlssons Boktryckeri, 1941), 135-140; Janine Bourriau, "Nubians in Egypt during the Second Intermediate Period: An Interpretation based on the Egyptian Ceramic Evidence," in Dorothea Arnold (ed.) *Studien zur altägyptischen Keramik* (Mainz am Rhein: Verlag Philipp von Zabern, 1981), 25-42. Yet recently more scholars have seen this process of acculturation as an active individual process, see Aaron de Souza "The Egyptianisation of the Pan-Grave Culture: A new Look at an Old Idea," *The Bulletin of the Australian Centre for Egyptology* 24(2013): 109-126; Näser 2012, 87; Eric Scott Cohen, "Egyptianization and the Acculturation Hypothesis: An Investigation of the Pan-Grave, Kerman and C-Group Material Cultures in Egypt and Sudan during the Second Intermediate Period and Eighteenth Dynasty" Dissertation, Yale University, 1992, esp. 33-62.

9 A few Pan-Grave settlements or campsites exist. However, sometimes they are considered to be habitation sites of the C-Group. There does not seem to be a clear definition of what a Pan-Grave settlement is, with the exception of its proximity to a Pan-Grave cemetery. Some such Pan-Grave settlements include: Badari (Guy Brunton, *Qau and Badari III* (London: Bernard Quaritch, 1930), 3-4), Mostagedda (Guy Brunton, *Mostagedda and the Tasian Culture* (London: Bernard Quaritch Ltd., 1937), 121-122), Nag el-Qarmila (Maria Carmela Gatto, *et al.*, "Archaeological Investigation in the Aswan-Kom Ombo Region (2007-2008)," *Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo* 65 (2009): 26-27), and Maharraqa (Bietak 1966, 67). For a general discussion, also see Bietak 1966, 31-42, 49; Bietak 1968, 87-92; Säve-Söderbergh 1989, 9-10; Bruce G. Trigger, *History and Settlement in Lower Nubia* (New Haven: Department of Anthropology Yale University, 1965), esp. 85-101.

10 Some major works on Pan-Grave cemeteries include: Bietak 1966, 43-78; Säve-Söderbergh 1989, esp. 15-20; Georg Meurer, *Nubier in Ägypten bis zum Beginn des Neuen Reiches: zur Bedeutung der Stele Berlin 14753.* (Berlin: Achet Verlag, 1996), 70-73, 83-86; Brunton 1937, 114-134; Gerald Wainwright, *Balabish* (London: George Allen & Unwin, Ltd, 1920), 1-53. Also see Näser 2012, 81-89; de Souza 2013, 109.

11 See below for a discussion of Pan-Grave ceramics in the Eastern and Western Deserts. For Tell el-Daba (Aston lists further bibliography and corrects the classification of some sherds, see David Aston, "From the Deep South to the Far North: Nubian Sherds from Khatan'a and 'Ezbet Helmi (Tell el-Dab'a)," in Irene Forstner-Müller and Pamela Rose (eds.), *Nubian Pottery from Egyptian Cultural Contexts of the Middle and Early New Kingdom* (Wien: UAI, 2012), 164). For areas around the Fourth cataract, see Derek Welsby, "The Merowe Dam Archaeological Salvage Project," in W. Godlewski and A. Lajtar (eds.), *Between the Cataracts: Proceedings of the 11th Conference for Nubian Studies. Part One: Main Papers* (Warsaw, 2008), 37; Geoff Emberling, Bruce Williams, *et al.,* "Peripheral Vision: Identity at the margins of the Early Kingdom of Kush," in *The Fourth Cataract and Beyond: Proceedings of the 12th International Conference for Nubian Studies* (Leuven: Peeters, 2014), 329-336; Geoff Emberling and Bruce Williams, "The Kingdom of Kush in the 4th Cataract: Archaeological salvage of the Oriental Institute Nubian Expedition 2007 season (part I). Preliminary report on the sites of Hosh el-Guruf and El-Widay," *Gdańsk Archaeological Museum and Heritage Protection Fund African Reports* 7 (2010): 33-34; Andrea Manzo, "From the Sea to the Deserts and Back: New Research in

Eastern Sudan," *British Museum Studies in Ancient Egypt and Sudan* 18, no. 18 (2012a): 80; Derek Welsby, "The Amri to Kirbekan Survey 1999," *Sudan & Nubia* 4 (2000): 57; Derek Welsby, "Der Amri - Kirbekan Survey (1999),"*Der Antike Sudan Mitteilungen der Sudanarchäologischen Gesellschaft zu Berlin e.V* 12 (2001): 119; Henryk Paner, "The Hamdab Dam Project: Preliminary Report of Results from Work in the Fourth Cataract Region, 1996-1997," *Gdańsk Archaeological Museum African Reports* 1 (1998): 116, 122; Henryk Paner, "Archaeological Survey on the Right Bank of the Nile between Kareima and Abu Hamed: a Brief Overview," *Sudan & Nubia* 7 (2003): 17.

12 For a recent discussion of several Egyptian settlements that incorporate Pan-Grave ceramics, see all of the articles in Irene Forstner-Müller and Pamela Rose (eds.), *Nubian Pottery from Egyptian Cultural Contexts of the Middle and Early New Kingdom* (Wien: UAI, 2012). Also for the site of Abydos, see endnote 106.

13 For major works on the C-Group, Kerma, and Pan-Grave tombs, see among others: Bietak 1966; Bietak 1968; Säve-Söderbergh 1989; Manfred Bietak, "The C-Group and Pan-Grave Culture in Nubia," in Tomas Hägg (ed.), *Nubian Culture Past and Present: Main Papers Presented at the Sixth International Conference for Nubian Studies in Uppsala 11-16 August, 1986* (Stockholm: Almqvist & Wiksell International, 1987), 113-128; Henriette Hafsaas, *Cattle Pastoralists in a Multicultural Setting. The C-Group People in Lower Nubia 2500-1500 BCE* (Bergen: University of Bergen, 2006); David N. Edwards, *The Nubian Past: An Archaeology of the Sudan* (London: Routledge, 2004), 75-111; Laszlo Török, *Between Two Worlds: The Frontier Region between Ancient Nubia and Egypt 3700BC - 500 AD* (Leiden: Brill Academic Publishers, 2009), 92-118.

14 In addition to the references from endnote 13, for faunal remains as an indication of cultic activities, see Pernille Bangsgaard, "Animal deposits at H29, a *Kerma Ancien* cemetery in the Northern Dongola Reach," *Sudan & Nubia* 18 (2014): 20-25; Pernille Bangsgaard, "Nubian Faunal Practices – Exploring the C-Group 'Pastoral Ideal' at Nine Cemeteries," in *The Fourth Cataract and Beyond: Proceedings of the 12th International Conference for Nubian Studies* (Leuven: Peeters, 2014), 348-355; Gatto, *et al.* 2009, 32-33.

15 For basic references to these ceramics, see the references in endnote 13, as well as Serena Giuliani, "Defining Pan-Grave Pottery," in Karla Kroeper *et al.* (eds.), *Archaeology of Early Northeastern Africa: In Memory of Lech Krzyżaniak*, (Poznań: Poznań Archaeological Museum, 2006), 647-658; Brigitte Gratien, *Les Cultures Kerma: Essai de Classification* (Lille: Publications de l'Universite de Lille III, 1978); Gatto, *et al.* 2009, 39-42.

16 Giuliani 2006, 648; de Souza 2013, 114. For references to closed forms in C-Group and Kerma ceramics, see endnote 15.

17 See among others Bietak 1968; Gratien 1978.

18 Both Janine Bourriau (1981, 25-42) and Bruce Williams ("Archaeology and Historical Problems of the Second Intermediate Period," Dissertation, University of Chicago, 1975, esp. 194-199) first attempted to figure out the internal chronology of Pan-Grave tombs based on the rate of acculturation. However, Eric Cohen (1992, esp. 33-62) and Claudia Näser (2012, 87) argued that acculturation was not constant and more closely related to the choices of the individual. More recently Aaron de Souza (2013, esp. 114-115) reintroduced the idea that the rectangular shaped tomb with supine burial relates to a later chronological phase of Pan-Grave culture but now specific to Middle Egypt.

19 William Y. Adams, *Nubia: Corridor to Africa* (London: Penguin Books Ltd, 1977), 142-162; Trigger 1965. For the northern most C-Group site, see Renée Friedman, "The Nubian Cemetery at Hierakonpolis, Egypt. Results of the 2003 Season: Excavation of the C-Group Cemetery at HK27C," *Sudan & Nubia* 8 (2004): 46-52; Renée Friedman, "The Nubian Cemetery at Hierakonpolis, Egypt. Results of the 2007 Season: The C-Group Cemetery at Locality HK27C," *Sudan & Nubia* 11 (2007): 57-71.

20 Adams 1977, 196-214; Edwards 2004, 75-78. For an example of a Kerma cemetery between the Fourth and Fifth Cataracts, see Claudia Näser, "Die *Humboldt University Nubian Expedition 2006* Arbeiten auf Us und Mograt," *Antike Sudan* 17 (2006): 90-91, 102-104.

21 For example, some Pan-Grave ceramics at Nag el-Qarmila have straw, sand, and sometimes dung as temper, while others only a few kilometers away at Sheikh Mohamed contained straw, sand, mica, ash, and inclusions of white clay. Regionalism in fabrics was common (Gatto, *et al.* 2009, 39; Maria Carmela Gatto, *et al.*, "Pan-Grave Pottery from Nag el-Qarmila and Sheikh Mohamed Cemeteries in Gharb Aswan," in Irene Forstner-Müller and Pamela Rose (eds.), *Nubian Pottery from Egyptian Cultural Contexts of the Middle Kingdom and Early New Kingdom* (Wien: UAI, 2012), 96-100).

22 de Souza 3013, 111-112. In general, Pan-Grave tombs in Lower Nubia have superstructures, while those in Egypt do not (Näser 2012, 88-89). Some exceptions do exist; for example Hierakonpolis in Egypt does display superstructures (Renée Friedman, "Nubians at Hierakonpolis: Excavations in the Nubian Cemeteries," *Sudan & Nubia* 5 (2001): 34-36) and Dakka in Lower Nubia do not have superstructures (Bietak 1966, 67).

23 Aaron de Souza, personal communication. Also see de Souza 2013, 109-126.

24 For an overview of C-Group cemeteries that mentions differences between them, see Hafsaas 2006, esp. 24-34; Bietak 1968. For the Kerma, compare contemporary cemeteries at Sai Island (Brigitte Gratien, *Saï I: La nécropole Kerma* (Paris: Presses du CNRS, 1986)) with those in the capital of Kerma (George A Reisner, *Excavations at Kerma Part 1* (Cambridge: Harvard University Press, 1923), esp. 61-102) and elsewhere.

25 For example, in an overview of C-Group cemeteries in Lower Nubia, Bietak often found "Pan-Grave" type elements in an otherwise C-Group cemetery that he needed to explain. E.g. cemetery 118, Qurta has "Pan-Grave" spacers (Bietak 1968, 65-66) and cemetery 189 at Tumas has Pan-Grave cooking vessels (Bietak 1968, 69-73).

26 For a brief discussion of *Middle Nubian* and the use of that categorization instead of choosing between the three Nubian cultures, see Säve-Söderbergh 1989, esp. 1, 17.

27 Irene Forstner-Müller, "Introduction," in Irene Forstner-Müller and Pamela Rose (eds.), *Nubian Pottery from Egyptian Cultural Contexts of the Middle Kingdom and Early New Kingdom* (Wien: UAI, 2012), 7.

28 Petrie's discovery was the first of the Nubian cultures to be established, and his finding was so unexpected that he initially considered the Pan-Grave culture to indicate Libyan peoples. See W. M. F. Petrie, *Diospolis Parva: The Cemeteries of Abadiyeh and Hu 1898-9* (London: The Egypt Exploration Fund, 1901), 45-49, esp. 48.

29 Arthur E.P. Weigall, *A Report on the Antiquities of Lower Nubia (The First Cataract to the Sudan Frontier) and their Condition in 1906-7* (Oxford: Oxford University Press, 1907), 8-9, 25-32.

30 For a full discussion of the merits of all of these arguments, see Liszka 2012, 388-523.

31 Weigall 1907, 8, 27.

32 Bruce G. Trigger, *A History of Archaeological Thought* (Cambridge: Cambridge University, 1989), 110-145.

33 Petrie 1901, 48; Weigall 1907, 25-27.

34 Weigall 1907, 5, 27.

35 Weigall 1907, 27.

36 Weigall 1907, 26-27.

37 Weigall 1907, 26-31.

38 George A. Reisner, *The Archaeological Survey of Nubia, Report for 1907-1908, Volume 1: Archaeological Report* (Cairo: National Printing Department, 1910), 313-345; Wainwright 1920, 42-52.

39 William Kelly Simpson, *Heka-Nefer and the Dynastic Material from Toshka and Arminna* (New Haven: Peabody Museum of Natural History of Yale University 1963), 36-44, fig. 32, plates 19-22; Charles Van Siclen III, "Remarks on the Gebel Agg Inscription," in Joanna Aksamit and Andrzej Niwiński (eds.), *Essays in honour of Prof. Dr. Jadwiga Lipińska* (Warsaw: Warsaw National Museum, 1997), 412.

40 Weigall 1907, 27.

41 Wainwright 1920, 6n3.

42 Anthony J. Arkell, *A History of the Sudan: from the Earliest Times to 1821* (London: Athlone Press, 1961), 78-79.

43 Bietak 1966, 76-77; Brunton 1937, 117; Vivian Davies, *Catalogue of Egyptian Antiquities in the British Museum: VII Tools and Weapons I Axes* (London: British Museum Publications, 1987), 43n102, plate 18.

44 Säve-Söderbergh 1941, 138-139.

45 Säve-Söderbergh 1941, 135-140.

46 de Souza 2013, 109.

47 See endnote 97.

48 Säve-Söderbergh 1941, 135.

49 E.g. Bietak 1966, 70-75; Bietak 1987, 124-125; Meurer 1996, 105-107, 123; Säve-Söderbergh 1989, 10-11, 18; Cohen 1992, 181-183.

50 E.g. Sam Lucy, "Ethnic and Cultural Identities," in Margarita Díaz-Andreu *et al.* (eds.), *The Archaeology of Identity: Approaches to Gender, Age, Status, Ethnicity and Religion* (London: Routledge, 2005), 86, 88, 91; Siân Jones, *The Archaeology of Ethnicity: Constructing identities in the past and present* (London: Routledge, 1997), 5-6, 26-29.

51 Näser 2012, esp. 85-87; Claudia Näser, "Structures and Realities of Egyptian-Nubian Interactions from the Late Old Kingdom to the Early New Kingdom," in Dietrich Raue *et al.* (eds.), *The First Cataract of the Nile: One Region - Diverse Perspectives* (Berlin: De Gruyter, 2013), 139-142.

52 Bietak 1966, 61-78.

53 E.g. David O'Connor, "Nubian Archaeological Material of the First to the Second Intermediate Period: An Analytical Study" Dissertation, Cambridge, 1969, 200-206; Bruce G. Trigger, *Nubia under the Pharaohs* (Boulder Colorado: Westview Press, 1976), 104-106; Karim Sadr, "The Territorial Expanse of the Pan-Grave Culture," *Archeologie du Nil Moyen* 2 (1987): 265-291; Karim Sadr, "The Medjay in Southern Atbai," *Archeologie du Nil Moyen* 4 (1990): 63-86. Even more recently, Claudia Näser defended the Medjay and the Pan-Grave connection despite the fact that no evidence exists in the Eastern Desert (2012, 81-89); this type of article demonstrates that Bietak's ideas are not questioned by many scholars.

54 Georges Posener, "  et  ," *Zeitschrift für ägptische Sprache und Altertumskunde* 83 (1958): 38-43; Elmar Edel, "Zur Lesung und Bedeutung einiger Stellen in der biographischen Inschrift *S3-rnpwt* s I.," *Zeitschrift für ägyptische Sprache und Altertumskunde* 87 (1962): 100-102; Karola Zibelius-Chen, "Die Kubanstele Ramses' II. und die nubischen Goldregionen," in Catherine Berger *et al.* (eds.), *Hommages à Jean Leclant* (Cairo: IFAO, 1994), 411-417. Also see Liszka, in preparation, *From Pastoral Nomads to Policemen.*

55 Zibelius 1972, 133-137; Karola Zibelius-Chen, "Die Medja in altägyptischen Quellen," *Studien zur altägyptischen Kultur* 36 (2007): 391-405.

56 Several physical anthropologists worked on the preliminary and more extensive results of this material. See Wilhelm Ehgartner and Johann Jungwirth, "Anthropologische Angaben über die Skelette der C-Gruppen- und Pan-Gräber aus dem Bezirk Sayala, Ägyptisch-Nubien," in *Ausgrabungen in Sayala-Nubien 1961-1965: Denkmäler der C-Gruppe und der Pan-Gräber-Kultur* (Wein: Hermann Böhlaus Nachf.,

1966), 83-88; Eugen Strouhal and Johann Jungwirth, *Die anthropologische Untersuchung der C-Gruppen- und Pan-Gräber-Skelette aus Sayala, Ägyptisch-Nubien* (Wein: Verlag der Osterreichischen Akademie der Wissenschaften, 1984), esp. 188-191; Bietak 1987, 123.

57 Ehgartner and Jungwirth 1966, 87-88; Bietak 1987, 123.

58 The most substantial comparison was to Pan-Grave skeletons at Mostagedda (Eugen Strouhal, "Anthropological Analysis of the Pan-Grave Culture of Nubia and Egypt," in Jan Jelinek (ed.), *Man and His Origins* (Prague: Anthropological Institute of the Charles University, 1982), 324), but the results were never published. Also see Friedman 2001, 37-38; Säve-Söderbergh 1989, 15, 18, 168; Mindy Pitre, *et al*., "Nag el-Qarmila, Aswan (Egypt), Season 2007," *Bioarchaeology of the Near East* 1 (2007): 60-71; Some scholars apply the insights from Sayala to all Pan-Grave skeletons, such as Meurer 1996, 127, 134; Maria Gatto, "Peripatetic Nomads along the Nile: Unfolding the Nubian Pan-Grave Culture of the Second Intermediate Period," *Journal of Ancient Egyptian Interconnections* 6 no. 1 (2014): 13.

59 Strouhal and Jungwirth 1984, esp. 185-187, 190-191.

60 Bietak 1966, 71.

61 Bietak 1966, 71.

62 In the instances where we know of Pan-Grave settlements, they are always very close to Pan-Grave cemeteries (See endnote 9).

63 Although Bietak did not mention this lack of knowledge, other contemporary authors did, e.g. O'Connor 1969, 22-23.

64 Bietak 1966, 70.

65 Bietak 1966, 70; J.W. Crowfoot, "Some Potsherds from Kassala," *Journal of Egyptian Archaeology* 14 (1928): 112-116.

66 Bietak 1966, 70-71.

67 The only piece of evidence for environmental stress at this time comes from Semna Dispatch 3, that states that the "desert is dying of hunger" (Bietak 1966, 74; Bietak 1987, 125; Meurer 1996, 105-107, 123; Gatto 2014, 14). However, no other evidence for this environmental stress exists from this time, and it is more likely that this line from Dispatch 3 does not reflect the actual circumstances (Barry Kemp, "Old Kingdom, Middle Kingdom and Second Intermediate Period c. 2686-1552 BC," in Bruce G. Trigger (ed.), *Ancient Egypt: A Social History* (Cambridge: Cambridge University Press, 1983), 179-181, Näser 2012, 81-89; Näser 2013, esp. 139-140; Liszka, in preparation, *From Pastoral Nomads to Policemen*).

68 Bietak 1966, 74. For a counter argument, see Näser 2013, esp. 139-140.

69 Trigger 1989, 148-206.

70 E.g. Jones 1997, 24, 106-110; Ian Hodder, "Introduction: A Review of Contemporary Theoretical Debates in Archaeology," in Ian Hodder (ed.), *Archaeological Theory Today* (Cambridge: Polity, 2001), 1-13; Michael Shanks, "Culture/Archaeology: The Dispersion of a Discipline and its Objects," in Ian Hodder (ed.), *Archaeological Theory Today* (Cambridge: Polity, 2001), 284-304.

71 See several works by Fattovich, such as: Rodolfo Fattovich, "Punt: The Archaeological Perspective," *Beiträge zur Sudanforschung* 6 (1996): 20-22.

72 Sadr 1987, esp. 270-279. Also see Sadr 1990, 63-87.

73 Sadr 1987, 283-286.

74 Similar decorative techniques are found throughout northeast Africa. See Frank Raymond Winchell, "The Butana Group Ceramics and their Place in the Neolithic and Post-Neolithic Eras of Northeast Africa" PhD Dissertation, Southern Methodist University, 1992; Rudolf Gerharz, *Jebel Moya* (Berlin: Akademie Verlag, 1994), 140, 330-331; Inge Hofmann, "Beitrag zur Herkunft der Pfannengräber-Leute," in Wolfgang Voigt (ed.), *Zeitschrift der Deutschen Morgenländischen Gesellschaft: Supplementa I: XVII. Deutscher Orientalistentag* (Wiesbaden: Franz Steiner Verlag GMBH, 1969), 1117-1118; Manzo 2012a, 77-78, 81-82; Andrea Manzo, "Typological, Chronological and Functional Remarks on the Ceramic Materials of Nubian Type from the Middle Kingdom Harbour of Mersa/Wadi Gawasis, Red Sea, Egypt," in Irene Forstner-Müller and Pamela Rose (eds.), *Nubian Pottery from Egyptian Cultural Contexts of the Middle Kingdom and Early New Kingdom* (Wien: UAI, 2012b), esp. 224; Andrea Manzo, *Italian Archaeological Expedition to the Sudan of the University of Naples "L'Orientale": 2010 Field Season*, 2010a), 4-5; A Beldados, "An Analysis of the Regional Dimensions of the Agordat Pottery Based on Decoration Techniques and Patterns," *Nyame Akuma* 73 (2010): 92-102.

75 Williams 1975, 635. Recently Näser tried to answer this problem of chronology by pointing out that the term *Medja-land* is prevalent in the Old Kingdom and the ethnonym, Medjay-people, only rises in the late 12th Dynasty as in the Semna Dispatches (2012, 84). Thus she connects the rise of the ethnonym with the appearance of Pan-Grave pottery. However, people of Medja-land were referred to in Old Kingdom and the ethnonym becomes prevalent in the early Middle Kingdom (Liszka, in preparation, *From Pastoral Nomads to Policemen*). This occurrence is more likely a coincidence.

76 Hans Barnard, "The Archaeology of Pastoral Nomads between the Nile and the Red Sea," in Jeffrey Szuchman (ed.), *Nomads, Tribes, and the State in the Ancient Near East: Cross-Disciplinary Perspectives* (Chicago: The Oriental Institute, 2009), 15-19.

77 Näser 2012, 80-89.

78 See endnote 70.

79 Several scholars have examined the role of archaeology, material culture, and ethnicity, see esp. Jones 1997; Lucy 2005, 86-109.

80 In addition to the work in endnote 81, see Manzo 2012a, 80-81 (see his references); Ian Shaw, "Life on the Edge: Gemstones, Politics and Stress in the Desert of Egypt and Nubia," in Renée Friedman (ed.), *Egypt and Nubia:*

Gifts of the Desert (London: The British Museum Press, 2002), 247; Ian Shaw and Robert Jameson, "Amethyst Mining in the Eastern Desert: A Preliminary Survey at Wadi el-Hudi," *Journal of Egyptian Archaeology* 79 (1993): 81-97; Kate Liszka, "Gems in the Desert: Recent Work at Wadi el-Hudi," *Egyptian Archaeology* 46 (2015): 37-40; B.B. Piotrovsky, *Wadi Allaqi: The Road to the Nubian Gold Mines, Hieroglyphic and Hieratic Rock Inscriptions* (Moscow, 1983); Lisa Giddy, "The 1998 Survey of the Wadi Allaqi and its Tributaries," *Bulletin of the Australian Centre for Egyptology* 9 (1998): 35-41; François Paris, "Wadi Allaqi Archaeological Mission 1999 Season Report," *Annales du Service des Antiquités de l'Égypte* 77 (2003): 169-173; François Paris *et al.*, "Les Sépultures du Wadi Gabgaba et du Wadi Seiga dans la Région du Wadi Allaqi. Premiers Résultats," in Isabella Caneva and Alessandro Roccati (eds.), *Acta Nubica: Proceedings of the X International Conference of Nubian Studies Rome 9-14 September 2002* (Libreria dello stato, 2006), 189-196; G.W. Murray, "Graves of Oxen in the Eastern Desert of Egypt," *Journal of Egyptian Archaeology* 12, no. 3/4 (1926): 248-249.

81 Karim Sadr, *et al.*, "Nubian Desert Archaeology: A Preliminary View," *Archeologie du Nil Moyen* 7 (1995): 203-235; Karim Sadr, *et al.*, "Archaeology in the Nubian Desert," *Sahara* 6 (1994): 69-75; Karim Sadr, *et al.*, "The Archaeological Sequence in the Nubian Desert: CeRDO's Explorations 1989-1994," in Steffen Wenig (ed.), *Neueste Feldforschungen im Sudan und in Eritrea: Akten des Symposiums vom 13. bis 14. Oktober 1999 im Berlin* (Wiesbaden: Harrassowitz Verlag, 2004), 191-204. Also see Alfredo Castiglioni and Angelo Castiglioni, "Pharaonic Inscriptions along the Eastern Desert Routes in Sudan," *Sudan & Nubia* 7 (2003): 47-51; W. Vivian Davies, "The Korosko Road Project: Recording Egyptian Inscriptions in the Eastern Desert and Elsewhere," *Sudan & Nubia* 18 (2014): 30-44; Karim Sadr, *et al.*, "CeRDO in the Nubian Desert: the 1993 Season," *Nubian Letters* 21 (1994): 4-6; Karim Sadr, "Preliminary Report on the Archaeological Reconnaissance in the Eastern Desert, Southeast Egypt," in Charles Bonnet (ed.), *Études Nubiennes Conférence de Genève: Actes du VIIe Congrès International d'Études Nubiennes 3-8 Septembre 1990* (Maquette: J.G. Cecconi, 1992), 7-11.

82 Sadr *et al.* 2004, 197; Manzo 2012a, 80-81; Manzo 2012b, 224.

83 Sadr 1995, 204.

84 Crowfoot 1928, 112-116; Barnard 2009, 18-19; Sadr 1987, esp. 270-279; Sadr 1990, 63-87.

85 See endnote 74.

86 Beldados 2010, 92-102.

87 Kemp 1983, 170.

88 Recently, Claudia Näser has tried to explain how the Pan-Grave people might still have originated from the Eastern Desert, despite the fact that there is no evidence for them in that area (2012, 81-89). However, all of the evidence that she uses to rectify this "paradox" (2012, 81) are Egyptian textual references to the Medjay. If the Pan-Grave people are not the same as the Medjay, none of those references should be used to make this argument. When one examines her evidence that is expressly from the Pan-Grave culture, we see that their tombs contain shells from the Red Sea (2012, 82-83), their tombs attest to mostly the use of sheep/goat instead of cattle (2012, 85), and the cemetery at Mostagedda reflects a complete population of people from a similar social status (2012, 87-89). All of those features simply point to the Pan-Grave people as pastoralists, like the C-Group people or some of the Kerma people.

89 Sadr 1992, 7-11.

90 Manzo 2012b, esp. 224, 229; Andrea Manzo, "Exotic Ceramic Materials from Mersa Gawasis Red Sea, Egypt," in Włodzimierz Godlewski and Adam Łajtar (eds.), *Between the Cataracts: Proceedings of the 11th Conference of Nubian Studies: Warsaw University, 27 August - 2 September 2006* (Warsaw: Polish Archaeology in the Mediterranean, 2010b), 439-453.

91 Georges Castel, *et al.*, "Gebel Zeit: Pharaonische Bergwerke an den Ufern des Roten Meeres," *Antike Welt* 16, no. 3 (1985): 28; Isabella Régen and Georges Soukiassian, *Gebel el-Zeit II. Le materiel inscrit Moyen Empire – Nouvel empire* (Cairo: IFAO, 2008), 3. Ian Shaw and Robert Jameson also noted Pan-Grave sherds at Wadi el-Hudi (Shaw 2002, 247; Shaw and Jameson 1993, 81-97). However, I recently conducted an archaeological survey of Wadi el-Hudi, and the Nubian ceramics there more likely belong to the C-Group, although a detailed study of this material still needs to take place. This evidence contradicts the idea that the Pan-Grave are associated with the Eastern Desert because of their use of amethyst (Petra Weschenfelder, "Linking the Eastern Desert and the Nile Valley: Pan-Grave People from the Late Middle Kingdom to the Early New Kingdom," in *The Fourth Cataract and Beyond: Proceedings of the 12th International Conference for Nubian Studies* (Leuven: Peeters, 2014), 357-366.

92 Manzo 2012a, 77; Manzo 2012b, 213-232, esp. 225-226; Andrea Manzo, "Nubians and the Others on the Red Sea. An Update on the Exotic Ceramic Materials from the Middle Kingdom Harbour of Mersa/Wadi Gawasis, Red Sea, Egypt," in Dionisius A. Agius, *et al.* (eds.), *Navigated Spaces, Connected Places: Proceedings of Red Sea Project V held at the University of Exeter, 16-19 September 2010* (Oxford: Archaeopress, 2012c), esp. 54-55; Manzo 2010b, esp. 446-448.

93 Manzo 2012c, 52.

94 A.k.a. Ayn Asil: The original researcher considered this material to be Kerma ware. However, Manassa and Raue believe that it is Pan-Grave. See Sylvie Marchand and Georges Soukiassian, *Balat VIII: De la XIIIe Dynastie - 2e Période Intermédiaire à Ayn Asil* (Cairo: IFAO, 2010), 206-207; Colleen Manassa, "Middle Nubian Ceramics from Umm Mawagir, Kharga Oasis," in Irene

Forstner-Müller and Pamela Rose (eds.), *Nubian Pottery from Egyptian Cultural Contexts of the Middle and Early New Kingdom* (Wien: UAI, 2012b), esp. 132-134, 143-144; Raue 2012, 52.

95 Deborah Darnell, "Gravel of the Desert and Broken Pots in the Road: Ceramic Evidence from the Routes between the Nile and Kharga Oasis," in Renée Friedman (ed.), *Egypt and Nubia: Gifts of the Desert* (London: The British Museum Press, 2002), 172-173.

96 Manassa 2012b, esp. 132-139.

97 Bourriau 1981, 27-28; Dieter Arnold and Dorothea Arnold, *Der Tempel Qasr el-Sagha* (Mainz am Rhein: Verlag Philipp Von Zabern, 1979), 36, plate 21; Joachim Śliwa, "Siedlung des Mittleren Reiches bei Qasr el-Sagha," in *Sesto Congresso Internazionale de Egittologia: Atti* (Torino: International Association of Egyptologists, 1992), 565-571; Joachim Śliwa, "Die Siedlung des Mittleren Reiches bei Qasr el-Sagha," *Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo* 42 (1986): 179.

98 E.g. Manassa 2012b, 143-144.

99 See (Figure 1), also Barnard 2009, 15-19; Barnard 2012, 19; Näser 2012, 84.

100 See endnote 12.

101 Bietak 1966, 71.

102 Näser 2013, 146.

103 For a full list and discussion, see Adams 1977, 71-88. These surveys and excavations include, but are not limited to: Weigall's survey of Lower Nubia, the First Archaeological Survey of Nubia, the Second Archaeological Survey of Nubia, excavations of the second cataract forts, excavations at Aniba, and the UNESCO Aswan High Dam project.

104 E.g. Gatto *et al.* 2009, 32-46; Gatto *et al.* 2012, 83-102; Gatto 2014, 12-28; Friedman 2001, 29-38; Serena Giuliani, "Pottery from the Nubian Cemeteries," *Sudan & Nubia* 5 (2001): 40-45; Colleen Manassa, "Preliminary Report for the 2008-2009 Season of the Mo'alla Survey Project," *Journal of the American Research Center in Egypt* 45 (2009): 66-68; Colleen Manassa, "Nubians in the Third Upper Egyptian Nome: A View from Moalla," in Irene Forstner-Müller and Pamela Rose (eds.), *Nubian Pottery from Egyptian Cultural Contexts of the Middle and Early New Kingdom* (Wien: UAI, 2012a), 117-128; Bryan Kraemer, "The Petries' Unpublished Archaeological Survey between Hu and Abydos," *Mitteilungen des Deutschen Archäologishen Instituts Abteilung Kairo* 69 (2013): 157-159, (forthcoming, 2015).

105 Bietak 1966, 64n4; T. Eric Peet, *The Cemeteries of Abydos: Part II - 1911-1912* (London: Egypt Exploration Fund, 1914), 59, plate15/12.

106 North Cemetery, Tomb 422 A'07 and possibly Tomb 478 A'08: Steven Snape, "Mortuary Assemblages from Abydos" PhD Dissertation, University of Liverpool, 1986, 131 (later shown to be Kerma); Cemetery D: Meurer 1996, 85n2 (later shown to be Kerma); D. Randall-Maciver and Arthur C. Mace, *El Amrah and Abydos 1899-1901* (London: Egypt Exploration Fund, 1903), 67-69; Kom el-Sultan Town Site: Kemp 1977, 290n9; East Bank across from Abydos: Diana Craig Patch, "Preliminary Report on the 1983 Field Season of the Pennsylvania-Yale Expedition to Abydos," *Newsletter for the American Research Center in Egypt* 126 (1984): 14-20; South of Abydos: Patch 1984, 14-20; At three sites between Abydos and Hu: Abu 'Umuri, Deir en-Nawahid, and Ka'iamat: Kraemer, 2013. 257-259; Tetisheri Pyramid: Julia Budka, "The Oriental Institute Ahmose and Tetisheri Project at Abydos 2002-2004: The New Kingdom Pottery," *Ägypten und Levante* 16 (2006): 109n153; Wahsut, elite houses: Josef Wegner, "Excavations at the Town of Enduring-are-the-Places-of-Khakaure-Maa-Kheru-in-Abydos: A Preliminary Report on the 1994 and 1997 Seasons," *Journal of the American Research Center in Egypt* 35 (1998): 28n61; Joshua Trampier, "Reconstructing the Desert and Sown Landscape of Abydos," *Journal of the American Research Center in Egypt* 42 (2005/2006): 73-80; Wahsut, mayor's house: Josef Wegner, personal communication, October 12, 2011; Mortuary Temple of Senwosret III: Josef Wegner, *The Mortuary Temple of Senwosret III at Abydos* (New Haven: The Peabody Museum of Natural History of Yale University, 2007), 241, fig. 101; Wahsut's industrial bakery: Vanessa E. Smith, "Modeling the Mechanics of Temple Production in the Middle Kingdom: An Investigation of the *Shena* of Divine Offerings Adjacent to the Mortuary Temple of Senwosret III at Abydos, Egypt" PhD Dissertation, University of Pennsylvania, 2010, 153; Royal tombs of the Late Middle Kingdom: E.R. Ayrton, *et al.*, *Abydos III* (London: Egyptian Exploration Fund, 1904), 23-24, plate 40; Dawn Landua-McCormack, "Dynasty XIII Kingship in Ancient Egypt: A Study of Political Power and Administration through an Investigation of the Royal Tombs of the Late Middle Kingdom" PhD Dissertation, University of Pennsylvania, 2008, 344.

107 Weschenfelder 2014, 358-359; Bietak 1966, 71; Bietak 1968, 124; Säve-Söderbergh 1989, 138; Hofmann 1969, 1115.

108 Hafsaas 2006, 98; Adams 1977, 152; Säve-Söderbergh 1989, 83, 137-138; Friedman 2004, 51; Brigitte Gratien, "Kerma People in Egypt (Middle and Classic Kerma)," in Karla Kroeper, *et al.* (eds.), *Archaeology of Early Northeastern Africa: In Memory of Lech Krzyżaniak* (Poznań: Poznań Archaeological Museum, 2006), 130; Török 2009, 116-117; Fattovich 1996, 21, 23; Serena Giuliani, "I Medja del Deserto Orientale: Stato della Ricerca e Nuove Prospettive di Studio," in Luisa Bongrani and Serena Giuliani (eds.), *Atti della Prima Giornata de Studi Nubiani* (Rome: Istituto Italiano per l'Africa e l'Oriente, 2001), 69; Charles Bonnet and Dominique Valbelle, "The Classic Kerma Period and the Beginning of the New Kingdom," in Marcel Marée (ed.), *The Second Intermediate Period (Thirteenth-Seventeenth Dynasties) Current Research, Future Prospects* (Leuven: Uitgeverij Peeters, 2010), 359.

[109] E.g. Sadr 1987, 265-291; Sadr 1990, 63-87; Manzo 2012a, 80-81.

[110] For example, Manzo argues that similarities between the decoration of ceramic types in the Gash and Mokram Groups with the Pre-Kerma culture is due to extensive cultural contact and exchange of goods that led to imitation of style (Manzo 2012a, 78-79); yet he does not argue that they are the same cultural group. He also highlights the similarities in decoration between ceramics of the later Gash Group and Mokram Group with those of Butana and argues that Kerma's ceramic decoration was the intermediary (Manzo 2012a, 81-82). Again he attributed the reasons to trade and contact rather than the merging those of archaeological cultures.

[111] Manzo 2012a, 78; Fattovich 1996, 22; Sadr *et al*. 2004, 197; Paris 2003, 170; Murray 1926, 248-249; Kemp 1983, 117-118; Sadr *et al*., 212-221.

[112] Liszka 2011, 149-171. Also see Näser (2012, 80-89) who reviews this argument in regards to modern scholarship.

[113] E.g. Näser 2012, 80-89; Gatto 2014, 11-28; Weschenfelder 2014, 361. Also see Näser's compelling argument for the use of sheep/goat over cattle (2012, 85). And note that Pan-Grave cemeteries of the SJE assemblage "consist mainly of goat (74%) with some sheep (23%), a few cattle (2%) and not a single gazelle" (Bangsgaard 2014, 353). The cultural connection between the Pan-Grave peoples and the gazelle with the desert may need to be reevaluated.

[114] Khazanov 1994, 17-21; Joseph J. Hobbs, *Bedouin Life in the Egyptian Wilderness* (Cairo: The American University in Cairo Press, 2003), esp. 45-46; Anders Hjort af Ornäs and Gudrun Dahl, *Responsible Man: The Atmaan Beja of North-Eastern Sudan* (Stockholm: Stockholm Studies in Social Anthropology, 1991), esp. 112-122.

[115] Hafsaas 2006, esp. 12-23.

[116] Hafsaas 2006, 67-71. An example of a small C-Group cemetery which probably belonged to an extended family is Sayala, see Bietak 1966, esp. 10-29.

[117] Only two tenuous reasons have been put forth for the bearers of the Pan-Grave culture to be nomadic, rather than just pastoralists. First, because Pan-Grave culture only exhibits open bowl forms in their corpus, scholars have used the lack of other native forms to indicate their possible semi-nomadic nature (e.g. de Souza 2013, 114). However, no one has explored other explanations for this ceramic anomaly. Second, because the sex-ratio of animals used in Pan-Grave cemeteries of the Scandinavian Joint Expedition favors females (as measured by their skulls), the Pan-Grave people focused on milk production. As Weschenfelder points out, this is a pastoralist practice (2014, 259), but it does not have to be a nomadic practice (Hafsaas 2006, 12-13).

[118] Bietak 1966, 70; Bietak 1987, 123; Strouhal and Jungwirth 1984, 188-191.

[119] Bietak 1987, 123; Jean Leclant, "Review of: Manfred Bietak Ausgrabungen in Sayala-Nubien 1961-1965," *Orientalia* 37 (1968): 158; Kemp 1983, 170; Bruce G. Trigger, "Review of: Manfred Bietak, Ausgrabungen in Sayala-Nubien 1961-1965," *Bibliotheca Orientalis* 25 (1968): 192.

[120] Strouhal and Jungwirth 1984, 49-56: C-Group male skeletons from graves A1, A3/1, A3/3, A17, A19, A26, A29, A48, and D7. C-Group female skeletons from graves A4, A7, A11, A15, A29, A40/1.

[121] Strouhal and Jungwirth 1984, 56-60: Pan-Grave male skeletons from graves B1, B3, B6, B8, B9, B12, and B13. Pan-Grave female skeletons from graves B5, G6, and G7. The "race" of all three female Pan-Grave skeletons is unknown.

[122] E.g. UC32191 in which the Medjay are dancers at a festival, see Mark Collier and Stephen Quirke, *The UCL Lahun Papyri: Accounts* (Oxford: Archaeopress, 2006), 92-95; Francis L. Griffith, *Hieratic Papyri from Kahun and Gurob* (London: Bernard Quaritch, 1898), 59-62, table 2, plates 24-25; Ulrich Luft, *Die chronologische Fixierung des ägyptischen Mittleren Reiches nach dem Tempelarchiv von Illahun* (Wien: Verlag der österreichischen Akademie der Wissenchaften, 1992), 138-142. Also see Liszka, in preparation, *From Pastoral Nomads to Policemen.*

[123] Pascal Vernus, "Études de Philologie et de Linguistique (V)," *Revue d'Égyptologie* 37 (1986): 141-144. Also see Liszka, in preparation, *From Pastoral Nomads to Policemen.*

[124] J.J. Clère and Jacques Vandier, *Textes de la Première Période Intermédiaire et de la XIème Dynastie* (Brussels: Édition de la Fondation Égyptologique, 1948), 28, no. 6-7. Winlock published only a cursory photograph of this sarcophagus; see Herbert E. Winlock, *Excavations at Deir el Bahri 1911-1931* (New York: The Macmillan Company, 1942), plate 10. However, his original watercolor facsimile is in the collection of the Metropolitan Museum of Art accession number 48.105.32, March 15, 2014, and available online at http://www.metmuseum.org/Collections/search-the-collections/100000833?rpp=20&pg=1&ft=deir+el+bahari%2c+egypt&when=8000-2000+B.C.&what=Coffins&pos=10; Also see Liszka, in preparation, *From Pastoral Nomads to Policemen.*

[125] Urk I 98-110, *Biography of Weni*, lines 13-16, 18, Nigel Strudwick, *Texts from the Pyramid Age* (Atlanta: Society of Biblical Literature, 2005), 352-357.

[126] E.g. Alan Gardiner, *Ancient Egyptian Onomastica* (Oxford: Oxford University Press, 1947), *73-*89; Kate Liszka, "'Medjay' (no. 188) in the Onomasticon of Amenemope," in Zahi Hawass and Jennifer Houser Wegner (eds.), *Millions of Jubilees: Studies in Honor of David P. Silverman* (Cairo: Publications du Conseil Suprême des Antiquités de L'Égyptie, 2010), 315-331. Also see Liszka, in preparation, *From Pastoral Nomads to Policemen.*

[127] *The Kamose Stela,* lines 10-15 and 28-30, H.S. Smith and Alexandrina Smith, "A Reconsideration of the

Kamose Texts," *Zeitschrift für ägyptische Sprache and Altertumskunde* 103 (1976): 48-78; Labib Habachi, *The Second Stela of Kamose and His Struggle against the Hyksos Ruler and his Capital* (Blückstadt: J.J. Augustin, 1972).

128 Various titles of soldiers and regiments are noted on personal monuments. For example Ahmose Son of Ibana was a *ḥry ḫny.t,* Commander of a Crew (Kurt Sethe, *Urkunden der 18. Dynastie* (Leipzig: J.C. Hinrisch'sche Buchhandlung, 1906) IV 1. Also, the Biography of Sobeknakht mentions a coalition of peoples fighting for the Kushites. See Vivian Davies, "Sobeknakht of Elkab and the Coming of Kush," *Egyptian Archaeology* 23 (2003): 3-6. The same is likely true for the Egyptians. Also note that the Third Kamose Stela mentions the Nehesy and the Aamu multiple times, but the purpose of these troops is uncertain because of the fragmentary nature of the text. See Charles van Siclen III, "The Third Stela of Kamose," in Marcel Marée (ed.), *The Second Intermediate Period (Thirteenth-Seventeenth Dynasties) Current Research, Future Prospects* (Leuven: Uitgeverij Peeters, 2010), 356-358.

129 A martial race is a construction of colonial and Victorian concepts. See Heather Streets, *Martial Races: The military, race and masculinity in British imperial culture, 1857-1914* (Oxford: Manchester University Press, 2004), esp. 3-4, 93-94.

130 Brunton 1937, plate 54; Thomas Schneider, *Ausländer in Ägypten währen des Mittleren Reiches und der Hyksoszeit: Teil 2 Die ausländische Bevölkerung* (Wiesbaden: Harrassowitz Verlag, 2003), 187-188.

131 Bietak 1966, 76-77; Brunton 1937, 117; Davies 1987 43n102, plate 18.

132 Pan-Grave tombs with weapons that belong to women and children include: Mostagedda 3128, 3132, 3156, 3170, 3241 (Brunton 1937, 116-121) and Qau and Badari 5462 (Brunton 1930, 5). Also see Näser 2012, 87.

133 The majority of weapons come from Mostagedda, Hu, Qau and Badari, and Balabish. Only one Pan-Grave weapon was found in the Scandinavian Joint Expedition's site 47 (Säve-Söderbergh 1989, 128-129, 169). Moreover, a number of Pan-Grave cemeteries exist that do not include weapons, despite their good preservation, such as Cemetery X at Hu, Cemetery 1300 at Qau, Sayala, and Adindan, and possibly Cemetery Y at Hu. See Petrie 1901; Brunton 1930; Bietak 1966, 43-56; Bourriau 1981, 30-31; Bruce Williams, *New Kingdom Remains from Cemeteries R, V, S, and W at Qustul and Cemetery K at Adindan* (Chicago: Oriental Institute of the University of Chicago, 1992).

134 Although C-Group tombs rarely contain weapons during Phases I-IIa, by Phases IIb-III (the Second Intermediate Period), they are more common. See Hafsaas 2006, 109; Säve-Söderbergh 1989, 128; Bietak 1968, 105-117; Trigger 1976, 99-100; Williams 1992, 117; Davies 1987, 48.

135 Bietak 1968, 126; Edwards 2004, 87, 90; Davies 1987, 48; Eva Kühnert-Eggebrecht, *Die Axt als Waffe und Werkzeug im alten Ägypten* (Berlin: Verlag Bruno Hessling, 1969), 34-35.

136 Tombs 7163, 7594, and 7498 at Qau, see Brunton 1930, esp. 13. Tombs 22, 1277, 1288 at Sedment, see W.M.F. Petrie and Guy Brunton, *Sedment I* (London: Bernard Quaritch, 1924), 17-19.

137 Henriette, Hafsaas-Tsakos, "Edges of bronze and expression of masculinity: the emergence of a warrior class at Kerma in Sudan," *Antiquity* 87 (2013): 79-91.

138 See endnote 38.

139 Barry Kemp noted Pan-Grave sherds at Lisht and other locations north of Cusae (Barry Kemp, "An Incised Sherd from Kahun, Egypt," *Journal of Near Eastern Studies* 36, no. 4 (1977): 292). Later Janine Bourriau referenced an unpublished Pan-Grave cemetery at Dahshur (Bourriau 1981, 27-28). This finding was particularly important because it would have demonstrated a Pan-Grave population living north of Cusae.

140 Näser notes this reason as compelling evidence for the connection between the Pan-Grave and the Medjay (2012, 84; Weschenfelder 2014, 360). De Souza uses this reason to suggest that bearers of the Pan-Grave culture, especially those in Middle Egypt, fought as mercenaries (2013, esp. 112).

141 Recently, a few unpublished photographs of the pottery from these tombs have surfaced to reveal that they are instead Kerma ceramics (personal communication, Maria Gatto and Aaron de Souza); thus, this cemetery is no longer relevant to the Pan-Grave. I would like to extend a special thanks to Janine Bourriau for taking and sharing these photographs.

142 K. S. B. Ryholt, *The Political Situation in Egypt during the Second Intermediate Period, c. 1800-1550 B.C.* (Copenhagen: Museum Tusculanum Press, 1997), 178-179.

143 de Souza 2013, 109-126.

144 One should also note that according to the inscription of Sobeknakht at Elkab some Medjay fought on the side of Kush, along with soldiers from several other locations (Davies 2003, 3-6). Regardless, the few Medjay and the few bearers of Pan-Grave culture who fought for both the Thebans and the Kushites were not the only mercenaries utilized by both armies. This cannot be considered a one-to-one collation.

145 Weigall 1907, 27; Trigger 1976, 104-106, 117.

146 Simpson 1963, 36-44, fig. 32, plates 19-22; Van Siclen 1997, 412.

147 Simpson 1963, 44, plate 22; Weigall 1907, 27; Trigger 1976, 117.

148 Simpson 1963, 44. Watchmen would have been stationed on similar ledges throughout Lower Nubia (William Y. Adams and Hans-Åke Nordström, "The archaeological survey on the west bank of the Nile: third season, 1961-1962," *Kush* 11 (1963): 23; Fritz Hintze, "Preliminary Note on the Epigraphie Expedition to

Sudanese Nubia, 1963," *Kush* 12 (1964): 40-41; Adams 1977, 183).

149 Jones 1997, 109-110, 113, 124-125; Ian Hodder, "Economic and Social Stress and Material Culture Patterning," *American Antiquity* 44, no. 3 (1979): 446-454; Ian Hodder, *Symbols in Action: Ethnoarchaeological Studies of Material Culture* (Cambridge: Cambridge University Press, 1982).

150 Lucy 2005, 105; Stuart Tyson Smith, "Ethnicity and Culture," in Toby Wilkinson (ed.), *The Egyptian World* (London: Routledge, 2007), 221.