



# A German Rifle Casing and Chief Mkwawa of the Wahehe: the Colonial and Post-Colonial Significance of Mlambalasi Rockshelter, Iringa Region, Tanzania

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### **Abstract**

During the 2010 excavations of Mlambalasi rockshelter, Iringa Region, Tanzania, a single rifle bullet casing was recovered. Analysis of this casing found that it was manufactured in 1877 at the munitions factory in Danzig for the German infantry's Mauser 71 rifle. This casing is thus directly linked to the period of German colonization of Tanganyika, during which Iringa was a key centre of anti-colonial resistance. Mlambalasi was the location of the last stand of Chief Mkwawa of the Hehe people, and this bullet casing provides a tangible link to his uprising during the 1890s. In light of this colonial context and our ongoing research at Mlambalasi, this find is used to illustrate that a single artifact can reinforce multiple narratives about the past and the significance of an archaeological site.

#### **Keywords**

Iringa – Uhehe – Mkwawa – historical archaeology

#### Introduction

Archaeologists do not excavate nor analyze nor interpret the past in a void. As we constantly emphasize and reinforce to our students and other audiences, context is

everything. It is not just the context of the find nor of the site but this context must necessarily include the larger historic and cultural fact of the communities in which archaeologists work and increasingly work for (Shepherd 2002). While Mlambalasi rockshelter, located in Iringa Region, Tanzania (Fig. 1) is an important Iron Age and Stone Age archaeological site (Biittner et al. 2017), it also plays a significant place in local and national history. In Tanzania, reflecting a broader trend in African and Africanist archaeologies, research is increasingly devoted to analyzing what archaeologists are doing, for whom they are producing this work, and by whom, the results of this research are being used (Mapunda 1990; Mapunda & Lane 2004). In the 1950s, as sub-Saharan African countries became independent, they turned to archaeology to understand the precolonial history. It has also been shown that historical periods could also benefit from archaeological study, as archaeology can capture those histories that were not written down (Wolf 1982; Posnansky & DeCorse 1986; Robertshaw 1990, 2004; Trigger 1990; Reid & Lane 2004; Schmidt & Walz 2007; Schmidt & Mrozowski 2013), and support narratives of the past that come from oral histories and/or other written and unwritten sources.

The Iringa Region was a key center of anticolonial resistance during the 19th century when Germany ruled mainland Tanganyika and would remain so up until Tanzanian independence in 1964. The Iringa Region Archaeological

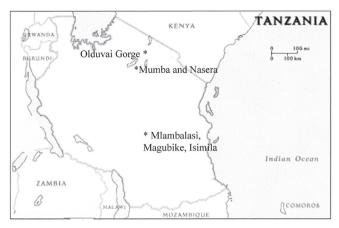


FIGURE 1 Map of Tanzania with sites mentioned in text



FIGURE 2 Mlambalasi Hill, view from centenary monument to Mkwawa

Project (IRAP) began its work in this region focusing not on this colonial period but rather on documenting the Stone Age archaeological record (Biittner et al. 2007; Willoughby 2012). One of the first sites IRAP excavated is Mlambalasi rockshelter, located approximately 38 km northwest of the town of Kalenga (Fig. 2). Historic and oral narratives specifically link Mlambalasi to the Paramount Chief of the Hehe people of Iringa, Mkwawa. He was the 19th century leader of the (Wa)Hehe, and led local resistance to German colonial rule in the 1890s. Chief Mkwawa is said to have used the rockshelter as a hideout, killing himself there in a final act of defiance and in order to avoid capture by the German army in 1898. After Mkwawa's death and subsequent decapitation by the German allies who discovered it, the rest of his body, and that of his servant he killed, were buried at the site, a few meters away from the large rockshelter called Mlambalasi (Bushozi 2014). In 1998, a memorial monument was built at this burial place to commemorate the hundredth anniversary of Mkwawa's death. However, it was not until the 2010 excavations by members of IRAP that an artifact, a single rifle casing,

relating to this significant period in Tanzania's history was uncovered at Mlambalasi. We wish to use this object to begin a discussion of the archaeological signature of Mkwawa and the Hehe. It allows us to address research from not only our own perspective, but that of the people who live in this region today.

During IRAP's 2010 excavations at Mlambalasi rockshelter (see Biittner et al. 2017), a historic rifle bullet casing was recovered. Subsequent analysis demonstrated that this casing was manufactured in Germany in 1877 and was fired from a Mauser 71 rifle. Similar bullet casings are stored at the Kalenga Museum managed today by Mkwawa's descendants. The recovered casing serves as a direct link between the archaeological record of the rockshelter and the narratives of the Hehe uprising relating to Mlambalasi as this is the first historic artifact recovered from the site that can be definitively attributed to the German colonial period and Mkwawa insurgency. This connection is significant for two reasons; first, it highlights the importance of documenting local narratives as they are a vital means of connecting cultural heritage with the archaeological record, and second, because it illustrates that the analysis of a single artifact can provide critical evidence for supporting and reinforcing historic narratives.

This paper begins with a brief summary of the archaeological record in Tanzania, providing a context for our understanding of and approach to the site. Next, a historical overview of the formation of Tanganyika and German colonial rule in East Africa is provided to establish the broader colonial context of Mlambalasi and of the actions and characterization of Chief Mkwawa. The results of our analysis of the bullet casing are presented and its connection to Mkwawa is discussed. Focusing on this single find we demonstrate how a research project originally designed to deal with the evolution of modern *Homo* sapiens has changed to consider not just the more recent (historical/colonial) archaeological record but the larger implications of the results and products of archaeological inquiry to/for local communities. Finally, we conclude with a discussion of our objectives as we consider upcoming work in Iringa, acknowledging that we must not only continue to reject notions of archaeologists working in voids, but also reject the ways archaeologists reinforce colonialism through our practice when we do not listen to the voices around us.

# **Background Information**

#### Archaeology and the History of Tanzania

East Africa contains a wealth of historical, archaeological, and heritage resources with Tanzania being recognized as

an important center for archaeology and palaeoanthropology since the early 1900s. Throughout East Africa, sites present a long cultural sequence from the Early Stone Age (ESA) through to the present. Many fossil hominin finds have also been recovered; these have changed our understanding of human evolution and our relationship to living apes. Examples of the earliest types of artifacts, representing both Oldowan and Acheulian, have been recovered from various sites throughout Tanzania - these are broadly assigned into the ESA dating between approximately 2.5 million and 300,000 years ago. Over the past 30 years, considerable attention has been paid to sites containing Middle Stone Age (MSA) and Later Stone Age (LSA) deposits, which broadly represent the of the evolution of our species, Homo sapiens between approximately 300,000 to around 3,000 years ago (Willoughby 2007). While much emphasis has been placed on the Stone Age record, other work examines the shift away from foraging as the primary mode of subsistence to the evolution of agriculture and/or pastoralism (Neumann 2005). The first sites with domestic animals and ceramics are classified as belonging to the Pastoral Neolithic (Bower 1991; Gifford-Gonzalez 2005; Prendergast et al. 2014). But in parts of East Africa, notably in southern regions such as Iringa, the first domesticated plants and animals, as well as the earliest ceramics, are associated with the Iron Age, the archaeological signature of the first members of the Bantu language family (Eggert 2005).

The archaeological evidence of the Bantu migration, the Early Iron Age in east and southern Africa, is divided into two streams: eastern and western. The eastern stream is composed of a variety of (mainly ceramic) traditions including the distinctive dimple based Urewe pottery (around Lake Victoria, see Gillon 1986: 322), Lelesu (in northern Tanzania), Kwale (in coastal Kenya), and Kalambo (in southwestern Tanzania and northern Zambia, see Phillipson 1977, 1993: 188; Mapunda 1995). It represents the earliest evidence in the south of crop cultivation, domestic herds, settled village life, metallurgy and, in areas of Tanzania without a Pastoral Neolithic, the earliest evidence of ceramic manufacture. In Tanzania outside of the area with pastoralists, Iron Age farmers encountered Later Stone Age hunter-gatherers. The archaeological signatures of these encounters in southern Tanzania, where IRAP conducts field research, have only become of interest recently (Kessy 2005, 2013). The Late Iron Age encompasses the period from around 1,000 AD up to and including the historic period.

Many Iron Age sites can be found in Iringa Region, as well as elsewhere in southern Tanzania. Some are residential sites, in open air contexts and rockshelters, while others are places where iron was smelted and then heated and hammered into finished tools (Lyaya 2012; Lyaya & Mapunda 2016).

The Indian Ocean coast of what became Tanganyika enters the historic record in the Roman era, with the production of an important document, the Periplus of the Erythraean Sea, possibly in the 3rd century CE (Connah 1987: 157). It shows that there were substantial settlements here prior to the emergence of the classic Swahili civilization. There are also a number of 9th and 10th century documentary sources about this region, mainly in Arabic (Connah 1987: 159). They write about the existence of towns and cities with stone structures. The Swahili language evolved at this time, as a way for coastal people to communicate with foreign merchants and traders. Swahili is a Bantu language, but the vocabulary shows numerous words derived from Arabic, and later on from German and English. The Swahili word for civilization is "Ustaarabu" meaning to become like an Arab; "to become like an Arab meant to follow Islam, to live in a stone house in a city, and to be involved with trade" (Connah 1987: 177). But the earliest Swahili sites predate the arrival of Islam on the coast (Sutton 1990: 60; Chami 1992, 1998; Mapunda 2010; Wynne-Jones 2016).

East Africa became part of a global Indian Ocean trading network in the 9th and 10th centuries CE, and this influenced the interior (Pawlowicz 2011). This trading network linked Arabia, the Middle East, India and China in a substantial partnership. It was only broken up when the Portuguese under Vasco da Gama arrived in the late 15th century. This was the beginning of European attempts to control the network for their own purposes. Yet well into recent times caravans continued to travel from the coast to the interior (Biginagwa 2012; Wynne-Jones 2016).

European contact with sub-Saharan Africa culminated with the Berlin Conference of 1884 to 1885, best remembered as the meeting where European powers divided up Africa into spheres of influence, and ultimately colonies. The "Scramble for Africa" resulted in a number of unusual decisions. Mainland Tanganyika and the island of Mafia were both given to Germany (Rushohora 2015), while control over the island of Zanzibar, then a Sultanate, was given to the British. Germany maintained control of Tanganyika until the end of World War I, when it lost all of its overseas colonies as part of war reparations.

The history of German East Africa is only beginning to be written in English and Swahili venues. A remarkable contribution is Moyd's (2014) book *Violent Intermediaries* which discusses the men who became German soldiers during World War I. She uses both German and African (Tanganyikan) sources, offering both etic and emic perspectives on the men who fought the war along the border between modern Kenya and Tanzania. There is also

Pizzo's (2007) dissertation about Mkwawa, as well as Musso's (2011) Swahili language history of the Chief and his times.

# Chief Mkwawa and the Uprising

Chief Mwanamtwa Mkwawa (1855-1898) was the paramount leader of the Hehe community in Iringa Region. He is best known for strongly resisting the German colonial penetration into the Southern Highlands of what is now mainland Tanzania (Iliffe 1979: 57). Chief Mkwawa is generally described the most illustrious leader of the Hehe. Under his leadership, the Uhehe kingdom became the dominant power in Iringa in the 19th century. Mkwawa united and allied the Hehe, and also conquered small kinship-based chiefdoms in the region; which effectively turned the Hehe kingdom into a strong militarized political unit (Crema 2004). Every adult male was a warrior as "Hehe power rested on spears, on the disciplined force of armed citizens" (Iliffe 1979: 57). Mkwawa led the Hehe against German colonialists and is still considered to be among the national heroes of Tanzania. Various institutions in the Iringa Region are named for him, including a college (Mkwawa University College) and an internet service provider. The Mkwawa-led Hehe struggle against the Germans would be costly for both sides but would earn the Hehe much respect for their determination and military prowess (Redmayne 1968). Mkwawa was described as "slender, quick-moving, sharply intelligent, he was autocratic, unpredictable, suspicious and cruel; one of his praise-names was 'the Madness of the Year'" (Redmayne 1968: 433; Iliffe 1979: 110).

Pizzo (2007) makes the case that the German colonial empire in East Africa was emerging at the same time as the Hehe one (between the 1820s and 1870s). The Hehe organized themselves in much the same way as the Zulu of Southern Africa did: most or all of the adult males were warriors, devoting themselves full-time to the conquest of as many neighboring groups as they could handle. The Germans soon realized that the only way to defeat Mkwawa was to form alliances with the various groups the Hehe had subjugated (Iliffe 1979: 111).

The Hehe would have several key victories against the Germans. On the night of August 17/18, 1891, Hehe warriors bravely fought and defeated the German invaders in the area of Lugalo (also spelled Rugaro), almost 27 km east of Iringa town (Redmayne 1968; Crema 2004). This victory was achieved when armed Hehe warriors ambushed German troops, killing over 300 of them. This was almost the entire German contingent, including their commander, Emil von Zelewski (Monson 2000; Crema 2004; Musso 2011). At the Lugalo clash, the Germans also

lost most of their armaments, including rifles, missiles, and bullets, which were later used against them. This victory also served to increase the confidence of Mkwawa's armed forces, gave them encouragement, and immortalized their king. As a result of this loss, Germany's "military policy in the southern highlands, their relationships with other regional leaders, and the focus of their written records" would all be preoccupied with Mkwawa and the Hehe (Monson 2000: 355). Inspired and equipped by the Lugalo victory, Mkwawa's forces undertook an attempt at Kilosa, where they successfully ambushed and defeated the Germans (Musso 2011). After the Kilosa carnage, German forces regrouped and reorganized, then attacked and defeated Mkwawa at Kilimatende. The battle at Kilimatende restored German confidence to the degree that they felt ready to directly attack Mkwawa's fortified capital at Kalenga, which they did on October 28, 1894. After two days of fire and missile exchange, the German force obliterated Kalenga, forcing Mkwawa to flee to Mlambalasi Village, where he apparently lived at or in the main rockshelter (Redmayne 1968; Musso 2011; Bushozi 2014;). He was forced to revert to guerrilla warfare, leading sporadic clashes between his Hehe and the Germans. This guerrilla warfare dragged on for four years until 1898 when Mkwawa, cornered and, likely starving, shot himself as a means of evading surrender to the Germans (Redmayne 1968; Crema 2004). At the time of his death, few armed Hehe warriors attempted to protect him against German colonialists as the drawn-out conflict led to food and weapon supply insecurity, and weakened, undependable manpower.

In his last moments, on July 19, 1898, Mkwawa murdered his cousin who was serving as one of his servants, cremated the remains, and then turned his weapon on himself (Musso 2011). One of his other servants informed the Germans about Chief Mkwawa's death, and the German troops under the command of Sign Merk, also called Feldwebel or Sergeant Merkl (Redmayne 1970) went to Mlambalasi to confirm the report. Sign Merk found the body of Mkwawa lying close to a fire and shot the remains in the head to ensure that the Chief was dead. A separate story (Redmayne 1970: 102) states that "a German officer was in the patrol which heard the shot and found his body before it became stiff" and this officer's report was given at the Iringa garrison on July 21, 1898. When Mkwawa was found dead, there were a number of items with him; various medicines, a half-filled cartridge belt, a carbine rifle and 117 cartridges (Iliffe 1979: 116).

As a bounty had been placed on Mkwawa, his head was cut-off and given to the Regional Governor of Iringa, Tom Prince (Musso 2011). The head was boiled to remove

the flesh and the skull was displayed as a trophy at the Prince residence (Baer & Schröter 2001; Harrison 2008). Not only would Prince be rewarded for his service with the heredity title "von" and other honours by the German authorities but was also required to move to a new post and region (Harrison 2008: 295). Winans (1994) suggests that this move was directly related to the skull, that "by having Mkwawa killed and taking his skull, von Prince had also acquired something of Mkwawa's identity" (Harrison 2008: 295), and as such could have been viewed as a new incarnation of the dead chief and therefore the rightful ruler of the Hehe. German authorities, concerned that von Prince himself had started to see himself as such, ordered his move. Von Prince would eventually send the skull to the Bremen Anthropological Museum in Germany where it remained until the 1950s.

The British replaced the Germans in 1919 after the First World War (wwi), and claimed to have ruled the Hehe with great respect and consideration. They governed through the traditional authority - they supported the election and crowning of the son of Mkwawa, Sapi Mkwawa, as Chief of the Hehe in 1926 (Crema 2004). Sapi, who as a boy had been taken to Germany for education, was successful in reuniting the Hehe into one political unit, as they had divided following Mkwawa's death (Somerville et al. 1929: 147). In 1940, the nephew of Mkwawa, Adam Sapi Mkwawa was recognized as Chief of the Hehe in the place of his father, and a few years later was elected as speaker of the parliament of the United Republic of Tanzania. When British rule was declining, the last British Governor, Sir Edward Twining, finally heeded the Hehe requests to repatriate the skull of Mkwawa and negotiated for its return (Winans 1994). The request had been made as early as 1919 as part of the Treaty of Versailles (part VII article 246) that ended World War I (Wilson 1939; Redmayne 1968; Bushozi 2014). The authorities had Adam Sapi and four of his subchiefs sign a contract recognizing the returned skull as the genuine article (Bucher 2016: 293).

At the ceremony returning the skull, held at Kalenga on July 19, 1954, Twining gave a speech celebrating the history of the Hehe and Mkwawa. Then he urged the participants to continue in their loyalty to Queen Elizabeth II in exchange for receiving the "benefits of modern civilization and science" (Bucher 2016: 285). There is no record of what the Hehe present thought of this. As part of the repatriation exercise, the British Government made an official gesture of restitution by establishing a memorial museum and mausoleum at Kalenga, where Mkwawa's skull and other materials illustrating Hehe cultural history were deposited and preserved. The collections at the Kalenga Museum include a few bullet casings from the

1894 battle that razed Kalenga. Following the independence of Tanganyika, the government of the Republic of Tanzania decided to accord the memorial museum of Kalenga national status to recognize the contribution of Chief Mkwawa and the ongoing commitment of the Hehe community to serve the nation's interests. His skull, and the Kalenga Museum itself, remain foci for historical ceremonies and reconciliation events to this day (Fischer 2016). In 1998, President Nyerere dedicated an Uhuru (Freedom) monument at Mlambalasi to commemorate the 100th anniversary of the death of Chief Mkwawa and to officially acknowledge the role he played in resisting colonial rule; this memorial monument was placed between the rockshelter, in which Mkwawa died, and the cement tomb, which marks the burial location of his postcranial remains.

# Excavations at Mlambalasi Rockshelter: Connecting IRAP to Mkwawa

In 2005, Pamela Willoughby was taken to Mlambalasi and shown the large rockshelter in the rocky outcrop adjacent to the memorial site. On the surface of the rockshelter were numerous artifacts consisting of historic/Iron Age pottery and iron slag, glass beads, Later Stone Age (LSA) white quartz flaked stone artifacts, a large grindstone, highly fragmented animal bones (see Collins & Willoughby 2010), and charcoal. Also evident on the slope below the shelter were MSA artifacts, produced from a variety of crypto-crystalline raw materials, as well as fossilized faunal remains. Initial test excavations had already been carried out by Paul Msemwa (2002), who identified a cultural sequence of modern and historic artifacts, then an Iron Age deposit, and under it, a Holocene LSA industry dominated by small quartz and chert artifacts. In 2006, members of IRAP excavated two 1 m<sup>2</sup> test pits under the shelter overhang (Biittner et al. 2007; Willoughby 2012). The first test pit produced a similar sequence to that which Msemwa described, and also uncovered LSA deposits that contained human skeletal remains (Sawchuk & Willoughby 2015). Analysis of the cultural materials recovered from the IRAP excavations of this site suggest repeated occupation of the rockshelter from more than 17,000 years ago through to modern times.

During the 2010 field season, six 1 m  $\times$  1 m units were excavated in 50 cm<sup>2</sup> quadrants. These units overlapped with the first test pit from 2006, as well as with Msemwa's excavation from 2002 (Figs. 3, 4). Deposits associated with the first 40 cm below surface contained historic/Iron Age materials including potsherds, slag, *tuyere* fragments, snail shells, animal bones, and stone tools. The rifle casing was recovered from Unit J-10, approximately 20-40 cm

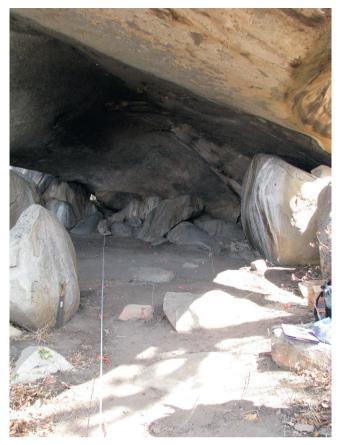


FIGURE 3 Surface of Mlambalasi rockshelter (HwJf-02) prior to 2010 excavations



FIGURE 5 Side view of archaeological rifle casing from Mlambalasi rockshelter. Scale is 1 cm

below surface (Fig. 5). While it has uncertain provenience as it fell from the unexcavated wall profile during cleaning prior to photography and stratigraphic mapping, it did undoubtedly come from a buried deposit. The subsequent analyses presented were undertaken to see if the casing was contemporary to Mkwawa's uprising.

Rifle Casing Analysis: Firing-Pin Marks and Headstamps
As stated by Fox and Scott (1991: 95), "ammunition component signatures provide specific information on the nature of firearms used ... even in the absence of actual firearms". Firearm ammunition has two main components: the cartridge case and the bullet or projectile. Distinguishing signatures or attributes of ammunition include headstamp, firing-pin, extractor, and land-and-groove-marks.

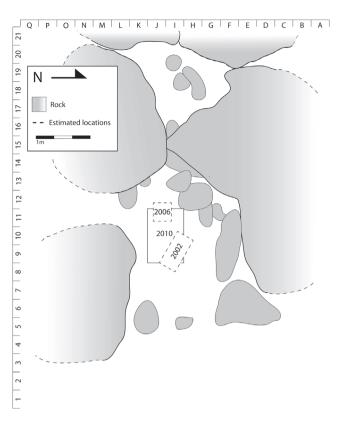


FIGURE 4 Mlambalasi excavation grid (2002 marks Msemwa's excavation location, while 2006 and 2010 mark IRAP's excavations)

Headstamp markings are added to the casing by the production facility to indicate time and location of production, while firing-pin marks are left on the base of the cartridge when the weapon's firing pin mechanism is activated (Fox & Scott 1991). There are three main types of firing-pin mechanisms: rimfire, centerfire-internal, and centerfire-external. Rimfire cartridges, invented in France in 1845, differ from centerfire cartridges in that the "priming compound is obtained in the rim and ignition is obtained by pinching or indenting the rim under the firing pin below" (Barnes 1965: 271). Centerfire cartridges differ in that they have a primer, which is a separate and replaceable component, located in the center of its base. Internal centerfire cartridges were only used for the limited period between 1840 and 1890 (Logan 1959), and "practically all" lack a manufacturer's mark on the base (Berge 1968: 213). External centerfire cartridges have a primer located outside of the head plate and have manufacturing marks located along the rim (Berge 1968). Extractor marks are produced when the firearm's extractor mechanism is used to remove the spent cartridge from the firearm's chamber (Fox & Scott 1991). Land-and-groove marks are "mirrorimage" (Fox & Scott 1991: 95) imprints of the barrel rifling left on the bullet. As no bullet was recovered from



Headstamp of archaeological rifle casing from Mlambalasi

Mlambalasi, this trait was not examined. Measurements of the casing length and width assist in establishing the caliber and the class of the firearm.

The bottom of a cartridge case is often impressed at the time of manufacture with multiple pieces of information – headstamp markings; these might include the date of production, caliber, manufacturer, factory lot number, distributor, or other pertinent information (White & Munhall 1963). All headstamp markings discussed in this article will be described in a clockwise manner starting with the 12 o'clock position. The casing recovered from the Mlambalasi excavation bears four pieces of information on its headstamp: D 77 \* 2 (Fig. 6). The letter *D* refers to the manufacturer and is most likely the former munitions factory at Danzig, a German government arsenal (White & Munhall 1963: 78). The number 77 indicates that the casing was manufactured in a year ending in those digits. With absolute certainty this refers to 1877. The star symbol (\*) is likely reference to the brass composition of the casing, as other contemporary German military munition headstamps indicate brass with S67 or S\* (White & Munhall 1963: 3). The number 2 possibly indicates the month of production (February being the second month of the year) or perhaps represents the second lot from 1877 (White & Munhall 1963: 78).

Also present on the head of the casing are two circular indents. These are a result of the firing pin striking the center of the casing. This indicates that it is centerfire cartridge, which was re-loaded after its initial use and fired again. Further it is a 11.15×60R mm cartridge (Figs. 5, 6),

indicating that it held an 11.15 mm bullet sitting atop a 60 mm rimmed case. All of these cartridge attributes are consistent with the ammunition used with the German Mauser 71 (M71) rifle.

The Mauser Model 1871 was a design invented by Peter Paul Mauser that improved upon elements of contemporary needle rifle mechanisms (Ball 2003). It was adopted by the German army and mass produced for distribution to troops by early 1872 (Westwood 2005: 99). Known to the German army as the Gewehr 71, the M71 was a single shot, breech loaded bolt action rifle. The rifle itself weighed slightly more than 4.6 kilograms, or 10 pounds 4 ounces, and had an overall length of nearly 1.4 metres, or 4 feet 4.7 inches (Smith 1956: 56).

The M71 enjoyed widespread distribution as the Mauser brothers produced it for international sale. According to published records from the Mauser company, 26,000 M71s were sold to China in 1876, and 120,000 were sold to Serbia in 1881 (Smith 1956: 62). The M71 rifles were also used in England, Japan, Korea, South Africa, Honduras, and Uruguay. As elsewhere in their colonial empire, the Mauser was the standard issue to the German East African Army and was produced to fire lead bullets encased in drawn brass cartridges, although later it was adapted to fire a variety of shells (Smith 1956: 56). Once the bullet was fired, drawing the bolt handle back would catch the rim of the casing and eject the emptied cartridge from the firing chamber. The M71 was later converted to hold a multiple fire magazine and became the model M71/84. Some of this information was confirmed in an email to one of the authors (J. Miller) from the Military History Museum (Militärhistorisches Museum) in Dresden, Germany.

# Identifying Headstamps at the Kalenga Museum

As previously mentioned, the Kalenga Museum was established as part of the British Government's restitution to Tanzania. Included in the Museum's displays are historic Hehe items, military paraphernalia, and the purported skull of Mkwawa himself. One of the museum displays holds rifle casings that were reported to have been collected from Kalenga after the massacre in 1894 (Kalenga Museum officials, personal communication). Five of these six casings had headstamps, and yielded some important information

Cartridge 1, as shown in Figure 7, was virtually identical to our archaeological find, with a headstamp of D 84 \* 2. The only notable difference is in the year of production, 1884. Since this piece also bears a 2, it makes the month of production theory less likely. If it was accepted as representing February, then the 1877 and 1884 casings we recovered were both coincidentally produced in February,

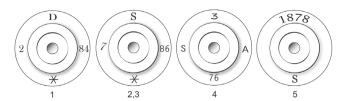


FIGURE 7 Headstamps from rifle casings at the Kalenga Museum

but four years apart. It seems more likely to represent the second production lot of the year.

Cartridges 2 and 3 bear the same headstamp (S 86 \* 7). These are both products from the former royal munitions factory of Spandau, near Berlin, Germany (White & Munhall 1963: 179). Like the others, these are 11.15 $\times$ 60R Mauser cartridges. In these examples, the 7 does indicate the month of manufacture at the factory in Spandau, meaning they were both produced in July of 1886.

Cartridges 4 to 6 yielded less information. Cartridge 4 is stamped 3 A 76 S. This information could not be identified to a country of origin but recognized in White and Munhall (1963: 180) as being for 11.15x60R casing for a Mauser rifle. The headstamp on cartridge 5 is partially obscured, but 1878 and S can be made out. The number undoubtedly indicates production in the year 1878; however, that is all the information we can glean from this piece. No matching headstamps were found in the reference guide. The sixth cartridge did not have a headstamp, although it does appear to be from a centerfire casing. It is of a significantly different style than the other casings and may be for a different style of gun.

When comparing the Kalenga Museum rifle casings to the excavated one from Mlambalasi, there are many similarities. The five museum casings with visible headstamps were centrefire, rimmed cartridges for an M71 rifle, produced between 1876 and 1886. Three of these are linked to German munition factories. These are identical to the excavated casing and strongly suggest a link between the archaeological material and the Hehe uprising.

#### More Bullet Casings

Frank Masele of the University of Dar es Salaam led an archaeological field school at the Lugalo battle site in August 2018. The same month, he reported the discovery of 5 more bullet casings, three of which have headstamps visible (Masele, personal communication). Further details will be provided in his own publications.

## Hehe and Other Responses to Mkwawa

During field research, members of IRAP documented a few sites that had cultural or historic significance to the local people. Most of these are associated with the 19th century Hehe armies and Chief Mkwawa. For example, one is a concealed site, Mafifi Rockshelter (HxJg-118). It is located near the top of a boulder strewn mountain, and is purposefully difficult to access as it was said to be a hideout for Mkwawa's soldiers. The closely spaced boulders create an extensive system of winding passageways that lead up the mountain. The route to the shelter is difficult and dangerous, even with a guide. It would have effectively hidden Mkwawa's soldiers from German forces, and without the knowledge of local people it would also have been hidden from us.

Another place we were shown in 2008 is Kikongoma (HwJg-101), also known as the Black Stones (or *Mawe Maeusi* in Swahili), is a cultural site along the Little Ruaha River. Local oral tradition states that Mkwawa's mother, Sengima, died by suicide at this location, although there are varying stories about why. Some informants believe she killed herself upon hearing that her son had been captured by the Germans, and others suggest she was fleeing from conflict during the Hehe uprising when Mkwawa seized power. Other sources say that she laid down and cried when she heard he had died. Local people still leave offerings at this location.

In late 2018, the Government of Tanzania had an international trade and tourism fair in Iringa city. The goal was to promote tourism initiatives in the south. While there are remarkable National Parks with wild animals throughout this area, such as the Selous, Mikumi and Ruaha, the government has not taken initiatives in the past to promote cultural and historical sites. They planned to correct this with a trade show titled *Utalii Karibu Kusini* Festival and Exhibit (literally, Welcome to the Southern Tourism Festival and Exhibit). Members of IRAP were invited to participate. Given the time of year, our Tanzanian colleagues, P. Bushozi and F. Masele, represented our research group. While IRAP members have worked on all periods of Iringa history, what the organizers wanted us to present was our findings related to Mkwawa, and that is what we did. Masele talked about his Lugalo fieldwork, and the bullet casing from Mlambalasi was discussed in its various contexts (for instance, as a single object, as a direct link to a known historical past, and as an archaeological object).

# Discussion: Reconsidering Mkwawa and Doing Archaeology in Iringa

Mkwawa is sometimes credited as being the first Tanganyikan leader to try to create an alliance against the European colonial authorities (Pizzo 2007: 120). Less

than a decade after his death, a general uprising happened, which became known as the Majimaji rebellion (from AD 1905 to 1907). It has been described by historians such as Iliffe (1979) as the final attempt to destroy the colonial order by force. First centred on the coast at Lindi, it quickly spread to many inland groups (Iliffe 1979: 168; Rushohora 2015, 2019). Interestingly, the Hehe stayed loyal to and supported the Germans against the Majimaji rebels (Pizzo 2007: 40). After World War I ended, Germany was forced to give up its overseas colonies. Tanganyika was transferred to British control, which it maintained until independence in 1961.

In the newly independent Tanzania of the 1960s, Mkwawa became a national hero. He was a leader who had never submitted to a European colonial power and became a powerful symbol to the new nation. His burial site at Mlambalasi, the Kalenga Museum, which houses his cranium, and other locations associated with his family, became places of pilgrimage and of ritual for the Hehe (Fischer 2016). Mlambalasi rockshelter represents a holy ground where some Hehe go to pray, to sacrifice, and to perform rituals. They believe that Mkwawa retreated there because of its magical properties (Bushozi 2014; Redmayne 1968). During IRAP's 2008 archaeological survey, we recorded a number of these locations as cultural heritage sites; this is a process that we will formalize in upcoming fieldwork. A recent full-length feature film also celebrates Mkwawa's story and his legacy (Shamte 2011), such as his grandson, Chief Adam Sapi Mkwawa, who became a Member of Parliament and the first Speaker of the Tanzanian Parliament after independence from the United Kingdom.

However, there are several areas of concern when it comes to discussing the role and prominence of Chief Mkwawa in history of Iringa and the Hehe. First, the colonial narrative persists even within Iringa; emphasis is placed on his proud role as a freedom fighter against the colonial regime and his controversial leadership of the Hehe is rarely mentioned. Missing is a discussion on not just the contemporary significance of Mkwawa in terms of Hehe identity but importantly there has been a serious lack of scholarship on Hehe history and culture outside of the Mkwawa mythology. Our project will attempt to address this in upcoming research as we will be talking with communities throughout our study area about Mkwawa specifically in regard to their narratives about him and Hehe identity.

Second, the appropriation of the colonial narrative of Mkwawa has occurred outside of Tanzania. In 1991, a Jennifer Jones comic called "Le Crane de Mkwawa" was published (Heuvel & Lodewijk 1991). The comic begins with the fall of Mkwawa to the Germans, his decapitation, the transportation of his cranium outside of Tanzania for research in Germany, the subsequent loss of his cranium, and the inclusion of the repatriation of his skull in the Treaty of Versailles - most of which follows, with some creative speculation, the historical narrative. However, while the focus is on the skull, Tanzanians are featured rarely and as colonial racial stereotypes, and the narrative itself rapidly degrades into a fantastical adventure incorporating other appropriated colonial narratives about the African past including King Solomon's mines. Some may find it easy to argue that the medium (comic book) allows for its dismissal, this is certainly not the case. The continuation of colonial narratives in a readily accessible and heavily consumed popular culture reinforces them; it allows for the perpetuation of racial stereotypes and of a Eurocentric take on the African past. Sadly, this focus until quite recently has also been true for archaeologists.

Finally, we must consider our own role(s) in the perpetuation of colonial narratives and ideologies in the practice of archaeological research. While the first generation of African archaeologists chose to focus on historic, protohistoric, and post-colonial research, foreign research teams continued to concentrate on the archaeology of human origins, a topic for which East Africa has an inarguably valuable record. This division resulted in a privileging of some kinds of archaeological research (human origins) over others (post-colonial sites). But this broad characterization is admittedly unfair as there are archaeologists in Tanzania and Africa more widely who have been striving towards a more equitable, post-colonial, community-based practice of archaeology (see Mapunda & Msemwa 2005; Schmidt & Pikirayi 2016). These kinds of archaeological projects are addressing one of the biggest concerns in Tanzanian archaeology – the documentation and preservation of sites and of cultural heritage. In Iringa Region, anything associated with Mkwawa has been marked as particularly worthy of preservation and documentation – both by the government and by us, the main archaeological team working in the region. However, our focus and that of several officials representing various levels of local and regional government has shifted to considering other archaeological, cultural, and historical sites in the region. While the purpose of IRAP was to study archaeological sites associated with the earliest modern humans in the region, our project has expanded to record, document, and protect the long and significant history of this region from a more inclusive perspective (Biittner & Willoughby 2012). This inclusive perspective strives to incorporate not just a consideration of sites within a broader temporal framework, but also the kinds of ways

the results of our archaeological work has been received by local communities, how narratives about the past in Tanzania (and other former colonies) have been appropriated, and how local voices have gone unheard in archaeological research in the region.

In our past work with local communities, we discussed the importance of local history as it encompasses not just the history known and passed down through oral and written records but also that of our species (Biittner & Willoughby 2012). All Tanzanians are taught in school about significant anthropological sites like Olduvai; our research demonstrates that Iringa has an archaeological record just as important to ongoing scholarly research. While we argued that our research was also important to the cultural heritage of Iringa and its peoples, these voices are not represented in our work. What do local individuals think about Mkwawa? Does it matter to them that we have identified a bullet casing that we can link with narratives about Mkwawa? Is Mkwawa only/still important to the Hehe or to his descendants? Who is talking about Mkwawa? Who controls the narrative(s) about Mkwawa today? These, and other questions about the significance of our research and of Mkwawa as a larger-than-life figure of resistance are just beginning to be asked of local informants.

#### Conclusions

This formal recognition that we are not archaeologists undertaking research of our own interest and design in a void has been growing as we have increasingly engaged with local communities and questioned what form(s) this engagement should and could take. Our future research, with funded field work planned for 2018 and 2019, will explicitly ask those questions posited above and many more about the significance of the archaeological record of Iringa and of Mkwawa as one of Tanzania's national heroes. It is our intention to further document what we could call the "archaeological signature" of Mkwawa and the narratives about who he is and what he means. This will serve the larger purpose of our research project to document the archaeological record of Iringa Region; it will also frame the results of our research from a local perspective acknowledging the authority of local voices instead of just our own. This approach and these goals will complement the rise of other local-based initiatives to promote and protect cultural heritage in Iringa. One example of an Iringa-based initiative is Fahari yetu ("Our pride"), a cultural heritage organization whose members

are composed of both locals and expatriates. It is directed by Jan Küver, a PhD student in cultural anthropology in the International Graduate School in Heritage Studies at Brandenburg Technical University Cottbus-Senftenberg in Germany who is also a faculty member at the University of Iringa. Fahari yetu have already created a museum in the former German administrative centre in Iringa ("the boma"), and this team are actively taking measures to protected places such as the Igeleke rock art locality. They have worked with local communities, who economically benefit from showing tourists important sites, and in turn, are more willing to participate in initiatives to protect what they increasingly recognize as their own cultural heritage. While Fahari yetu has mainly focused to date on the contemporary culture and historical record of Iringa, our participation will allow them to extend their project into the more remote past by highlighting other parts of the archaeological record that can act as a tangible part of cultural heritage.

Today, the commemorative monument and the archaeological site are under the custody of the Antiquities Division, Ministry of Natural Resources and Tourism, a government agency responsible for cultural heritage management and conservation in Tanzania.

Several specific questions have come out of the recovery of this bullet casing, in the light of the known association of the rockshelter with Chief Mkwawa. Why did one of Mkwawa's servants, who joined Mkwawa in guerrilla warfare for over four years, decide to inform the Germans and not Mkwawa's relatives, about his death? Did Mkwawa kill himself inside or outside the Mlambalasi rockshelter? If it was outside, as has been suggested by several authors, including Redmayne (1968) and Musso (2011) among others, was there any kind of fire exchange with Germans prior to his death that would explain the presence of a bullet casing inside the rockshelter? While we do not have answers to these specific questions, our evidence and research does suggest we do have a bullet casing that we can directly link to Mkwawa's insurgency. The significance of this association has several implications in terms of cultural heritage and site preservation in Iringa. Visitors to the Kalenga Museum can now see a direct physical link between the artifacts in that center with the rockshelter. The newly constructed Mlambalasi visitor center can contain displays that link the historical narrative presented at Kalenga, emphasizing Mkwawa, with the archaeological record at Mlambalasi which stretches back into the Middle Stone Age. In our future initiatives, we will continue prepare reports to the government and to local communities to be used for cultural heritage management, arguing that it is not just the sites

and artifacts that need to be protected, but also the words and the narratives about them spoken by the people whose cultural heritage they represent. To conclude, while we have argued that the bullet casing is an important archaeological find because of its association to Mkwawa, our consideration of this argument has led us to conclude that it is only important if the Hehe and other local peoples say it is so.

### Acknowledgements

We thank COSTECH (the Tanzanian Commission on Science and Technology) for research clearance and the Division of Antiquities, Ministry of Natural Resources and Tourism, Government of Tanzania, for the excavation permit. Funding for IRAP has come from two Standard Research Grants and an Insight Grant from SSHRC, the Social Sciences and Humanities Research Council of Canada, from a Post-PhD Research grant from the Wenner-Gren Foundation for Anthropological Research, and from the SAS and Killam Funds at the University of Alberta. All of these were awarded to Pamela Willoughby as Principal Investigator. We would also like to thank the Kalenga Museum for access to the other bullet casings, the German Military History Museum for their assistance, and Dr. Paul Msemwa, the former Director of the National Museum of Tanzania, for information about his 2002 excavations at Mlambalasi.

#### References

- Baer, M. & Schröter, O. 2001. *Eine Kopflägd: Deutsche in Östafrika*. Ch Links Verlag, Berlin.
- Ball, R.W.D. 2003. *Mauser Military Rifles of the World*. Krause Publications, Iola.
- Barnes, F.C. 1965. *Cartridges of the World.* Follett Publishing Company, Chicago.
- Berge, D.L. 1968. The Gila Bend Stage Station. *Kiva*, 33 (4), 169-243.
- Biginagwa, T. J. 2012. Historical archaeology of the 19th century caravan trade in north-eastern Tanzania: a zooarchaeological perspective. Unpublished PhD thesis, University of York.
- Biittner, K.M., Sawchuk, E.A., Miller, J.M., Werner, J.J., Bushozi, P.G.M. & Willoughby, P.R. 2017. Excavations at Mlambalasi Rockshelter: A Terminal Pleistocene to recent Iron Age record in southern Tanzania. *African Archaeological Review*, 34 (2), 275-295.

- Biittner, K.M. & P.R. Willoughby 2012. Working with Local Communities and Managing Cultural Heritage in Iringa Region, Tanzania. *The SAA Archaeological Record*, 12(4): 36-39.
- Biittner, K.M., Bushozi, P.G.M. & Willoughby, P.R. 2007. The Middle Stone Age of Iringa Region, Tanzania. *Nyame Akuma*, 68, 62-73.
- Bower, J.R.F. 1991. The Pastoral Neolithic of East Africa. *Journal of World Prehistory*, 5 (1): 49-82.
- Bucher, J. 2016. The skull of Mkwawa and the politics of indirect rule in Tanganyika. *Journal of East African Studies*, 10 (2), 284-302.
- Bushozi, P.G.M. 2014. Towards sustainable cultural heritage management in Tanzania: a case study of Kalenga and Mlambalasi sites in Iringa, southern Tanzania. *South African Archaeological Bulletin*, 69 (200), 136-141.
- Chami, F. 1992. Limbo: Early iron-working in south-eastern Tanzania. *Azania*, 27: 45-52.
- Chami, F. 1998. A review of Swahili archaeology. *African Archaeological Review*, 15 (3), 199-218.
- Collins, B. & Willoughby, P.R. 2010. The Faunal Analysis of Magubike and Mlambalasi, Two MSA-LSA Archaeological Sites from Iringa District, Tanzania. *Journal of Taphonomy*, 8 (1), 33-68.
- Connah, G. 1987. *African Civilizations*. Cambridge University Press, Cambridge.
- Crema, E. 2004. *Wahehe a Bantu People*. Grafiche Sedram, San Vito al Tagliamento.
- Eggert, M. 2005. The Bantu Problem and African Archaeology. In: Stahl, A.B. (ed.), *African Archaeology: A Critical Introduction*. Blackwell Press, Oxford, pp. 301-326.
- Fischer, G. 2016. Talking to Chief Mkwawa: Multivocality and negotiation in an ancestral offering in Tanzania's Southern Highlands. *Ethnography*, 17 (2), 278-293.
- Fox, R.A. & Scott, D.D. 1991. The Post-Civil War Battlefield Pattern: An Example from the Custer Battlefield. *Historical Archaeology*, 25 (2), 92-103.
- Gifford-Gonzalez, D. 2005. Pastoralism and its Consequences. In: Stahl, A.B. (ed.), *African Archaeology: A Critical Introduction*. Blackwell Press, Oxford, pp. 187-224.
- Gillon, W. 1986. *A Short History of African Art*. Penguin Books, London.
- Harrison, S.J. 2008. Skulls and Scientific Collecting in the Victorian Military: Keeping the Enemy Dead in British Frontier Warfare. *Comparative Studies in Society and History* 50(1): 285-303. http://www.jstor.org/stable/27563663.
- Heuvel, E. & Lodewijk, M. 1991. *Les Adventures De Jennifer Jones* #2: *Le Crane de Mkwawa*. Glenat Editions HC.
- Iliffe, J. 1979. *A modern history of Tanganyika*. Cambridge University Press, Cambridge.

Kessy, E.T. 2005. *The Relationship between the Later Stone Age* and *Iron Age Cultures of Central Tanzania*. Unpublished PhD thesis, Simon Fraser University.

- Kessy, E.T. 2013. The Transition from the Later Stone Age to Iron Age in Kondoa, Central Tanzania. African Archaeological Review, 30 (3), 225-252.
- Logan, H.C. 1959. Cartridges. Bonanza Books, New York.
- Lyaya, E.C. 2012. Archaeology of Hehe iron smelting technology at Kalenga, Southern Tanzania. *The Journal of African Archaeology Network*, 10, 80-106.
- Lyaya, E.C. & Mapunda, B.B. 2016. Metallurgy in Tanzania.
  In: Selin, H. (ed.), Encyclopaedia of the History of Science,
  Technology, and Medicine in Non-Western Cultures. Springer
  Science & Business Media: Berlin, 3164-71.
- Mapunda, B. B. 1990. The role of archaeology in development. *Transafrican Journal of History* 20, 19-34.
- Mapunda, B.B. 1995. Iron Age archaeology in the south-eastern Lake Tanganyika region, southwestern Tanzania. *Nyame Akuma* 43, 46-57.
- Mapunda, B.B. 2010. The archaeology of Tanzanian coastal landscapes in the 6th to 15th centuries AD (the Middle Iron Age of the region). *Azania*, 45 (3), 335-337.
- Mapunda, B. & Lane, P.J. 2004. Archaeology for whose interest
   archaeologists or the locals? In: Merriman, N. (eds.), *Public Archaeology*. Routledge, London, pp. 211-222.
- Mapunda, B.B. and Msemwa, P. 2005. *Salvaging Tanzania's cultural heritage*. Dar es Salaam University Press, Dar es Salaam.
- Monson, J. 2000. Memory, Migration and the Authority of History in Southern Tanzania, 1860-1960. *The Journal of African History*, 41 (3), 347-372.
- Moyd, M. 2014. Violent Intermediaries: African soldiers, Conquest, and Everyday colonialism in German East Africa. Ohio University Press, Athens.
- Msemwa, P. 2002. Archaeology of the Ruaha Valley, Iringa District. Unpublished report presented to the Department of Antiquities, Government of Tanzania.
- Musso, M. 2011. *Mukwavinyika Mwamuyinga na kabila lake la Hehe.* Dar es Salaam University Press, Dar es Salaam, 2nd edition.
- Neumann, K. 2005. The romance of farming: Plant cultivation and domestication in Africa. In Stahl, A.B. (ed.), *African Archaeology: A Critical Introduction*. Blackwell Press, Oxford, pp. 249-275.
- Pawlowicz, M. 2011. Finding Their Place in the Swahili World:

  An Archaeological Exploration of Southern Tanzania.

  Unpublished PhD thesis, University of Virginia.
- Phillipson, D.W. 1977. *The later prehistory of Eastern and Southern Africa*. Heinemann, London.
- Phillipson, D.W. 1993. *African Archaeology*. 2nd edition. Cambridge University Press, Cambridge.

Pizzo, D. 2007. "To devour the land of Mkwawa": Colonial violence and the German-Hehe war in East Africa c. 1884-1914. Unpublished PhD thesis, University of North Carolina.

- Posnansky, M. & DeCorse, C.R. 1986. Historical Archaeology in Sub-Saharan Africa A Review. *Historical Archaeology*, 20 (1), 1-14.
- Prendergast, M.E., Grillo, K.M., Mabulla, A.Z.P. & Wang, H. 2014. New dates for Kansyore and Pastoral Neolithic ceramics in the Eyasi Basin, Tanzania. *Journal of African Archaeology* 12 (1), 89-98.
- Redmayne, A. 1968. Mkwawa and the Hehe Wars. *Journal of African History*, 9 (3), 409-436.
- Redmayne, A. 1970. The War Trumpets and Other Mistakes in the History of the Hehe. *Anthropos*, 65, 98-109.
- Reid, A.M. & Lane, P.J. 2004. African historical archaeologies: an introductory consideration of scope and potential. In: Reid, A.M. & Lane, P.J. (eds.), *African Historical Archaeologies*. Kluwer Academic / Plenum Publishers, New York, pp. 1-32.
- Robertshaw, P. 1990. The development of archaeology in East Africa. In: Robertshaw, P. (ed.), *A History of African Archaeology*. James Currey, London, pp. 78-94.
- Robertshaw, P. 2004. African historical archaeologies: past, present and a possible future. In Reid, A.M. & Lane, P.J. (eds.), *African Historical Archaeologies*. Kluwer Academic / Plenum Publishers, New York, pp. 375-391.
- Rushohora, N.A. 2015. An Archaeological Identity of the Majimaji: Toward an Historical Archaeology of Resistance to German Colonization in Southern Tanzania. *Archaeologies: Journal of the World Archaeological Congress*, 11 (2), 246-271.
- Rushohora, N.A. 2019. Facts and fictions of the Majimaji war graves in southern Tanzania. *African Archaeological Review*, 36 (1), 145-159.
- Sawchuk, E.S. & Willoughby, P.R. 2015. Terminal Pleistocene Later Stone Age Human Remains from the Mlambalasi Rock Shelter, Iringa Region, Southern Tanzania. *International Journal of Osteoarchaeology*, 25 (5), 593-607.
- Schmidt, P.R. & Mrozowski, S.A. 2013. The Death of prehistory: reforming the past, looking to the future. In: Schmidt, P.R. & Mrozowski, S.A. (eds), *The Death of Prehistory*. Oxford University Press, Oxford, pp. 1-28.
- Schmidt, P.R. & Pikirayi, I. (eds.). 2016. *Community Archaeology* and *Heritage in Africa: Decolonizing Practice*. Routledge, London.
- Schmidt, P.R. & Walz, J.R. 2007. Re-representing African pasts through historical archaeology. *American Antiquity*, 72 (1), 53-70.
- Shamte, S. 2011. *Mkwawa* (Film). ITV Tanzania: Alkemist Media. Shepherd, N. 2002. The politics of archaeology in Africa. *Annual Review of Anthropology* 31, 189-209.
- Smith, W.H.B. 1956. *Mauser Rifles and Pistols*, 3rd edition. Military Service Publishing Company, Harrisburg.

- Somerville, A.A., Ramsden, E., Paling, W. & Hopkin Morris. R. 1929. The Parliamentary Visit to Tanganyika, 1928. *Journal of the Royal African Society*, 28 (110), 122-148.
- Sutton, J.E.G. 1990. *A Thousand Years of East Africa*. British Institute in Eastern Africa, Nairobi.
- Trigger, B.G. 1990. Alternative Archaeologies: Nationalist, Colonialist, Imperialist. *Man*, 19 (3), 355-370.
- Westwood, D. 2005. *Rifles: An Illustrated History of Their Impact*. ABC-CLIO, Santa Barbara.
- White, H.P. & Munhall, B.D. 1963. *Cartridge Headstamp Guide*. H.P. White Laboratory, Maryland.
- Willoughby, P.R. 2007. *The Evolution of modern humans in Africa:* A comprehensive guide. Altamira Press, Lanham.

- Willoughby, P.R. 2012. The Middle and Later Stone Age in the Iringa Region of southern Tanzania. *Quaternary International*, 270, 103-118.
- Wilson, G.G. 1939. Change Field of International Law. *The American Journal of International Law* 33 (2), 337-338.
- Winans, E.V. 1994. The Head of the King: Museums and the Path to Resistance. *Comparative Studies in Society and History*, 36 (2), 221-241.
- Wolf, E. 1982. *Europe and the People without History*. University of California Press, Berkeley.
- Wynne-Jones, S. 2016. A Material Culture: Consumption and Materiality on the Coast of Precolonial East Africa. Oxford University Press, Oxford.