

TWO SEVENTEENTH CENTURY COFFIN BURIALS AT THE CAPE*

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ABSTRACT

Two skeletons excavated in 1966 during the construction of the Cape Town Post Office Tunnel were re-analysed and described here. Although the specimens were highly fragmentary and in poor condition, it was determined that the two individuals were in their late teens and probably male. By historical inference, the time of death was narrowed down to the period between 1652-1677, but most likely occurring within the year 1652.

INTRODUCTION

In 1966, two coffin burials were discovered while digging the trench for the new Post Office Tunnel, Cape Town (Voigt 1977). The excavation was performed by E. Speed (néé Voigt) as a rescue operation and written up in an unpublished report (Speed 1966). Further inquiry into the matter was made in a publication and several newspaper articles by M. Emms (Emms 1966, 1975; Emms & Speed 1966). In these, he gave brief descriptions of the burials and their context and speculated as to their ages and individual identifications.

Because burials can reveal vital details about the peopling of the early colonial Cape, this study has been undertaken as a further detailed anatomical analysis. The anatomical data have been used in an attempt to decipher these individuals' age at death, sex and time of interment. This analysis, in addition to historical inference, is also intended to help other researchers acquire further information about these early burials (February in press; Sealy in prep.).

ANATOMICAL DESCRIPTION

Introduction

When this project was begun in February 1993, the analysis included only the fragments of two skeletons from the 1966 excavation housed in the University of Cape Town's Department of Anatomy (UCT 255). After cleaning and reconstructing these specimens, it was discovered that two more fragmentary skeletons, said to be from the same excavation, resided at the South African Museum (SAM-AP 5078). The two sets, in fact, represented the remains of the same two individuals, both from the 1966 excavation. While there are no records of such a removal, it is thought that at some point in time

someone from UCT borrowed portions of the skeletons from the SAM with the intention of analysing them more closely but the remains were never returned (A. Morris, pers. comm.). Upon completion of this study the skeletal materials were returned to their original institutions. Since it was impossible to determine which bones belonged to which individual because of similar age and size, this analysis is by element rather than by individual. A list of elements at each institution can be found in Table 1.

Preservation

The remains from the Post Office Tunnel are of two fragmentary individuals. The preservation is very poor and most bones flake upon being handled. Two vaults are represented by a nearly complete calvarium (Fig. 1) and a second, isolated left parietal (Fig. 2). A small piece of zygomatic bone, in the region of the lateral margin of the orbit, is present. One mandible and maxilla with an occluding dentition is represented. The maxilla is incomplete and broken and some teeth were lost post-mortem. The mandible contains a full dentition, but is fractured at the mandibular symphysis and is missing the condylar and gonial regions. The vertebrae and ribs are present, but are highly fragmentary. All long bones exist in incomplete form with the exception of the tibiae and fibulae, which were never recovered (Speed 1966). Both pelvic sets are represented but are very friable. One set is virtually complete and articulates with the sacrum. The other is represented by a nearly complete right innominate, incomplete portions of the left side and the sacrum. Neither set includes a pubic symphysis. Small bones such as hand phalanges, metacarpals, and carpals are represented in addition to two right (Fig. 3) and one left clavicle.

Table 1. Inventory of elements at UCT and SAM 5078.

ELEMENT	SIDE	PRESERVATION	ACCESS
Parietal	Left	Fragmentary	UCT 255
Calvarium		Includes portions of frontal, left and right parietal, and left zygomatic bone	UCT 255
		right zygomatic	SAM 5078
Maxilla	Right & Left	fragmentary alveolar portion with teeth	SAM 5078
Mandible		Broken in two pieces at symphysis. Missing portions are: both gonial regions and a portions to the left of symphysis. Includes teeth.	UCT 255
Teeth	Right	lower I1-M3 upper I1-P3, M1	UCT 255 & SAM 5078
	Left	lower I1-M3 upper -isolated unknown	
Clavicle	Right Left Right	lateral portion lateral portion lateral portion	SAM 5078 SAM 5078 UCT 255
Vertebrae	Cervical, Thoracic, Lumbar	very fragmentary	UCT 255 & SAM 5078
Scapula	Right Right Left	fragmentary fragmentary fragmentary with medial portion	UCT 255 SAM 5078 UCT 255
	Left	fragmentary with medial portion	SAM 5078
Ribs		very fragmentary	UCT 255 & SAM 5078
Humerus	Right Right Left Left	complete, but broken complete shaft only complete, but broken	UCT 255 SAM 5078 SAM 5078
Ulna	Right Right Left Left	missing distal end; broken olecranon midshaft to proximal end broken; missing distal end midshaft to proximal end	UCT 255 SAM 5078 UCT 255 SAM 5078
Radius	Right Right Left Left	shaft only complete shaft only proximal end only	UCT 255 SAM 5078 UCT 255 SAM 5078

Carpals	Right & Left		SAM 5078
Metacarpals	Right & Left		SAM 5078
Phalanges	Right & Left		SAM 5078
Hip bones*	Right	missing iliac crest and pubis	UCT 255
	Right	missing pubis	UCT 255
	Left	fragments	UCT 255
	Left	missing anterior iliac crest and pubis	UCT 255
Sacrum	Right Left	nearly complete fragmentary	UCT 255 UCT 255
Patella	Right Left	complete complete	UCT 255 UCT 255
Femur	Right	proximal end with separate shaft	SAM 5078
	Right	missing distal end	SAM 5078
	Left	missing distal end	SAM 5078
	Left	complete	SAM 5078

*SAM 5078 a few fragments

Age

All diagnostic markers, using tooth eruption sequences and epiphyseal fusion stages (Brothwell 1981; Ferembach *et al.* 1980), indicate that both individuals were of roughly the same age, between 17 and 21 years old (see Table 2). One individual consistently showed a slightly younger skeletal age than the other, so that the bones could be tentatively separated into two groups.

The eruption sequence of the mandibular teeth is not fully complete, as the third molars are still partially in their crypts. All epiphyses are in their last stages of closure, except for the iliac crest, which has not yet begun to fuse. This makes the skeletons less than 21 and more than 17 years old. A pattern of fusion emerges revealing a slightly different skeletal age between two sets of elements. The longbones can be tentatively divided into right and left pairs by epiphyseal fusion stages. One set consistently falls a stage behind the other. The radiographs of the proximal femora confirm both the age and the relationship between the two sets of elements.

Sex and Stature

The sex was difficult to determine in this case due to the poor condition of the skeletons. Despite this, two pelvic 'sets' have been formed. One revealed male characters. Its features included an acute angle of the greater sciatic notch and no preauricular sulcus. The other, although a more complete set, revealed only intermediate markings of diagnostic features. It is, however, quite robust.

Additionally, the single frontal bone represented, although subadult, already had quite prominent glabellar and superciliary regions. The overall robusticity of the elements was similar between the two individuals, with



Fig. 1. Calvarium: anterior view (top), lateral view (bottom).

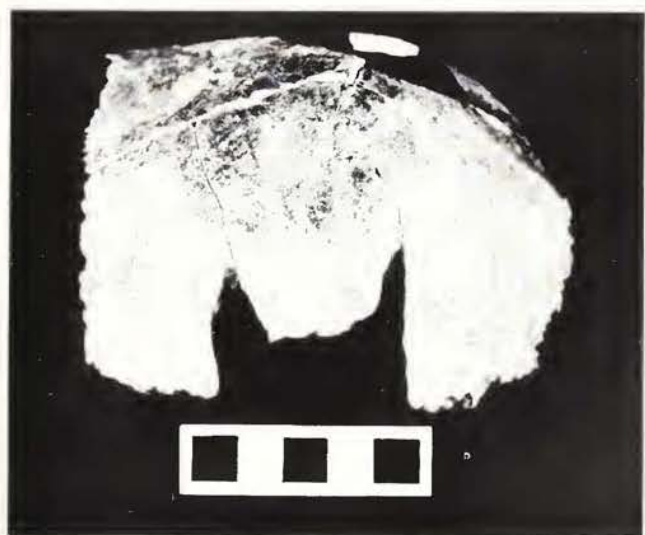


Fig. 2. Isolated left parietal.

one exception. The clavicles were markedly different in size (Fig. 3), but both are strongly angled. This may have been due simply to differential usage of the shoulder girdle region, and not a marker of sex. Muscle markings on longbones were intermediate to well-marked (Table 3)

Thus, one individual was likely a male. The second



Fig. 3. Two right clavicles showing the differences in size and robusticity.

Table 2. Age determination.

ELEMENT	EXPRESSION	AGE
Mandible	all teeth have erupted except M3's which pass through gingival eruption on Left but still in crypt on Right	15-21
Maxilla	M3 (isolated): roots near complete formation	17-21
Humerus	proximal (all 4) nearly complete fusion	20-25
	distal- Right & Left complete one Right near complete	> 18 14-18
Proximal Ulna	Right & Left fused	< 18
	Right & Left broken at epiphysis	14-18
Distal Radius	one right in process fusing	17-20
Hip Bones	Iliac crest unfused	< 21-24
	Ischium unfused	< 21-24

*ranges given are for males (Ferembach *et al.* 1980)

individual remains more uncertain but has been tentatively identified as a male, based on markers of skeletal (pelvic) robusticity. Stature could not be determined due to the skeletal fragmentation and the mixing of individuals.

Dental Health and Pathologies

As mentioned, only one individual's dentition is represented. The teeth are in relatively good condition, with two exceptions. A case of advanced caries is found on the lower right second molar. The entire center of the occlusal plane of the tooth has been affected, so that a large carious lesion is present. On the left lower second molar, the caries has just penetrated the enamel layer. No

Table 3. Sex determination.

FEATURE	EXPRESSION
Robusticity of longbones (Europeans)	average to heavy
Skull:	
Superciliary eminences	high arc moderate extension
Glabella	moderate (estimate)
Orbital Border	round
Pelvis:	
Praearicular Sulcus	one set with grooves, one set without
Greater sciatic notch	one intermediate, one acute

calculus is present and there is very little wear on any of the teeth. There are no cases of ante-mortem tooth loss, although this cannot be determined for the lost portions of the maxilla.

Two periods of metabolic stress in the form of hypoplasias have left discernible lines on the enamel of the teeth, both maxilla and mandible. According to Schour and Massler (1941), the disturbances occurred around the ages of 5 and 7. It should be noted, however, that the accuracy of this ageing method has been questioned in a recent publication (Goodman and Rose 1990). No other pathologies were noted.

Morphology and population affinity

Unfortunately, most features used to identify population origin are found on the face, and there are, therefore, no adequate biological markers to aid in the determination of population affinity.

TIME OF DEATH OF THE POST OFFICE TUNNEL BURIALS

Though an analysis of the physical remains is the main thesis of this paper, it would be useful to attempt to bracket a time in which their deaths occurred until further studies of the archaeology, chemical analyses and coffin material are undertaken.

A Short History of the Table Bay/ Grand Parade Area

The future Cape Town made its debut in 1652 as a refreshment station for the Dutch-run, East India Company (VOC), which served as the halfway point between Holland and Dutch Batavia (Thompson 1990; Boxer 1979). An earthen fort was built that same year (Abrahams 1993). Though the station was never meant to become a town, it soon developed along these lines (Thompson 1990; Picard 1968). A second more substantial fort, called the Castle, was begun in 1665 and finished in 1674, at which time the walls of the old fort were demolished (Abrahams 1993). Only a few buildings of the original fort, now used for storage, still stood at this point (Abrahams 1993; fig. 5). The Grand Parade, as we know it today, was already referred to as such immediately after the fort was removed (Picard 1968). One could see soldiers training, villagers trading and

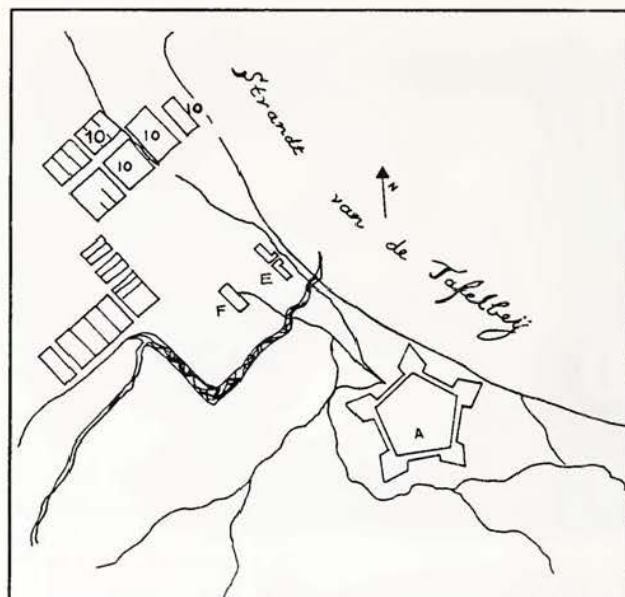


Fig. 4. Map of Cape Town in about 1678/9 showing remaining two buildings of the old fort (E & F) and the Freeburgher's dorp (10, including all the surrounding buildings) Source: adapted from Cape Archives 2/17.

later, social functions and activities performed in this open plaza (*Ibid*). Also, starting in 1659 (Abrahams 1993), the Freeburghers dorp had developed. This is most important because of the town's location in relation later to the Castle, which made the area of the old Fort a major thoroughfare.

Archaeology

The two coffin burials lay relatively undisturbed until 1966 when, by accident, they were uncovered during the excavation of the Cape Town Post Office Tunnel, a portion of which fell within the bounds of the modern-day northeast corner of the Grand Parade (Fig. 5 & 6). A summary of the report of the excavation (Speed 1966) reveals some evidence for cultural affiliation. According to it, two skeletons were found, each within their own wooden coffin. The first skeleton was nearly complete, with an associated skull (which was damaged during construction). The second skeleton was headless and most of the left shoulder region and legs below the knees were missing. Both skeletons were in an extended position with their heads to the west (Speed 1966). The graves were probably associated with a fine black soil layer, which was covered by rubble fill, associated with cultural material mostly from the early 17th century (Abrahams 1993) a human femur and piece of skull (Speed 1966; Emms 1975). This was postulated by Speed (1966) to be associated with the leveling of the Parade, 1697-1707. Although no individual matches could be made of the skeletal fragments from the overlying rubble layer, similar elements were missing in the Coffin 2 skeleton. Speed assumed that when the Parade was leveled, the coffin was disturbed, leaving it to ante-date the leveling of the Parade. She further speculated that no burials took place on the Grand Parade after the fort (walls) were demolished in 1674.

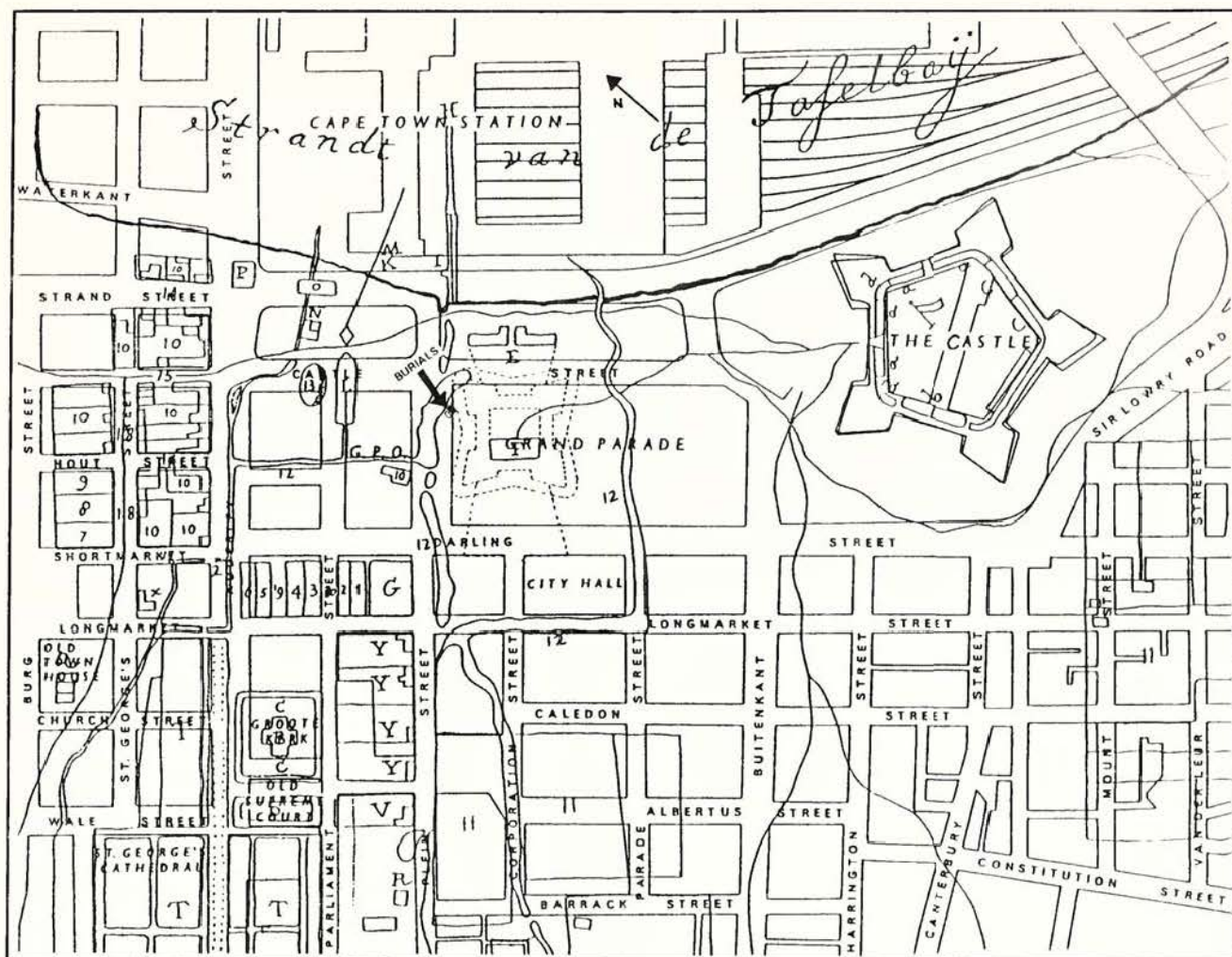


Fig. 5. Location of the old Fort with an overlay of Cape Town in 1968. Source: adapted from Picard 1968.

In 1975 M. Emms published an article about the location of the old Fort of Good Hope; the location of which is in general agreement with Abrahams (1993, pers. comm.). In it he recounted and added information about the two coffin burials. He concluded that the burials were those of the Dutch type due to structural and elemental details of the coffins. Emms postulated that the two men must have been: (1) sailors before Van Riebeeck, (2) early burials during Van Riebeeck's time or (3) the burial of executed criminals. Execution has been ruled out by Emms and by the absence of any evidence in the skeletal material during this analysis. That these were burials before Van Riebeeck's tenure is possible but not probable. As Emms states, the burials seem to be interred with "precognition to the existence of the fort" (1975:23, fig. 6). The burials were found in what was once a narrow peninsula between the fort's moat and the Amstel River (Fig. 6). It seems less parsimonious to assume that the burials were interred before the existence of the Fort in 1652, remaining undisturbed during the construction of the Fort and its surrounding moat.

A recent analysis of the coffin wood (February, in press) may resolve the time of burial. Towards the end of

1652, the supply of wood brought by the settlers from Holland began to run out. After that, only indigenous Cape woods were used (Emms 1975; February in press) and in 1677 a resolution was passed that there were to be no more burials on the parade (Picard 1968). February found that the coffin wood was a species of *Pinus* which could only have come from Holland. He therefore places the date of the burials within the first year of European settlement, 1652, the same conclusion which Emms (1975) postulated.

Thus, for the lower end of the time period, 1652 will be posited because the burials seem to take place with some preconceived knowledge of the fort's perimeters. Additionally, the use of *Pinus* in the composition of the wooden coffins is strongly indicative of burial in the first year of Cape occupation. The year 1677 is suggested as the upper end of the range. A resolution, announced in this year prohibiting burials on the Parade and the nature of the square as a high traffic activity area are given as evidence for this date. However, the burials were less likely to have taken place after 1653 due to shortage of imported wood. The conclusion, then, based on certain historical facts, is that the burials most likely took place in 1652.

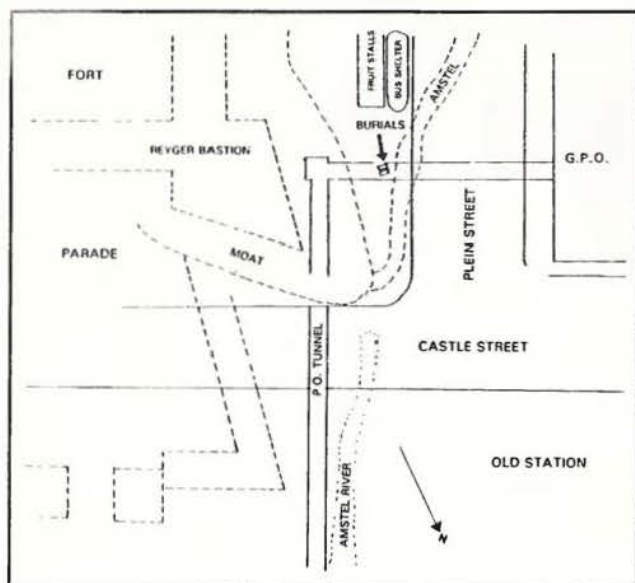


Fig. 6. Emm's position of the Post Office Tunnel burials in relation to the old Fort. Note that the burials are in the position of an islet between the Fort's moat and the Amstel River. Source: adapted from Emm 1975.

CONCLUSION

The number of archaeological skeletons from colonial Cape Town is sparse. For this reason the information about the Post Office Tunnel skeletons, although fragmentary, is vital. Current studies, such as chemical dietary analysis of the bones (Sealy, in prep.) may determine whether or not the two purported young men survived on Cape, northern European or tropical grain foods and an analysis of the coffin wood (February, in press) gives resolution to the period in which the burials took place. An investigation of the material from the rubble stratum above the coffins could reveal further evidence of time of death and a comparison to contemporary burials (Abrahams & Fourshé 1995) may produce interesting information about the early settlement of the Cape Peninsula.

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REFERENCES

- Abrahams, G. 1993. The Grand Parade, Cape Town: Archaeological excavations of the seventeenth century Fort de Goede Hoop. *South African Archaeological Bulletin* 48:3-15.
- Abrahams, G. & Fourshé, K.Z. 1995. Burial from the seventeenth century Dutch Fort de Goede Hope at the Cape. *Southern African Field Archaeology* 4:95-102.
- Böeseken, A.J. 1977. Slaves and free blacks at the Cape 1658-1700. Cape Town: Tafelberg Publishers.
- Boucher, M. 1981. French speakers at the Cape. Pretoria: University of South Africa.
- Boxer, C.R. 1979. Jan Compagnie in war and peace 1602-1799. Hong Kong: Heinemann.
- Brothwell, D.R. 1981. Digging up bones. New York: Cornell University Press.
- Emms, M. 1966. Where the first Fort stood. Cape Argus, 10 December 1966.
- Emms, M. 1975. Archaeological aspects of the post office tunnel. Cape Town: Africana Society Yearbook 1:19-26.
- Emms, M. & E. Speed 1966. Treasures and coffins found in P.O. tunnel. Argus (Weekend magazine), 3 December 1966.
- February, E.C. in press. Coffin wood, dating and provenancing of two seventeenth century burials. *South African Archaeological Bulletin*.
- Ferembach, D. *et al.* 1980. Workshop of physical anthropologists: recommendations for age and sex diagnoses of skeletons. *Journal of Human Evolution* 9:517-549.
- Goodman, A.H. & Rose, J.C. 1990. Assessment of systematic physiological perturbations from dental enamel hypoplasias and associated histological structures. *Yearbook of Physical Anthropology* 33:59-110.
- Ogot, B.A. 1992. General history of Africa, V: Africa from the sixteenth to the eighteenth century. Berkeley: University of California Press.
- Picard, H.W.J. 1968. Gentleman's walk. Cape Town: C. Struik. Cape Town.
- Schour, I. & M. Massler 1941. The development of the human dentition. *Journal of American Dental Association*. 28:1153-1160.
- Schrire, C. 1988. The historical archaeology of the impact of colonialism in 17th century South Africa. *Antiquity* 62:214-225.
- Speed, E. 1966. Human remains recovered from Grand Parade, Cape Town. Unpublished report, 28th March 1966.
- Thom, H.B. (ed.) 1952. *Journal of Jan van Riebeeck*. Vol. 1: 1651-1655. Cape Town A.A. Balkema.
- Thompson, L. 1990. A history of South Africa. Vol. 1. Cape Town: A.A. Balkema.
- Voigt, E. 1977. The destruction of archaeological evidence in South Africa. *South African Archaeological Bulletin* 28:73-77.