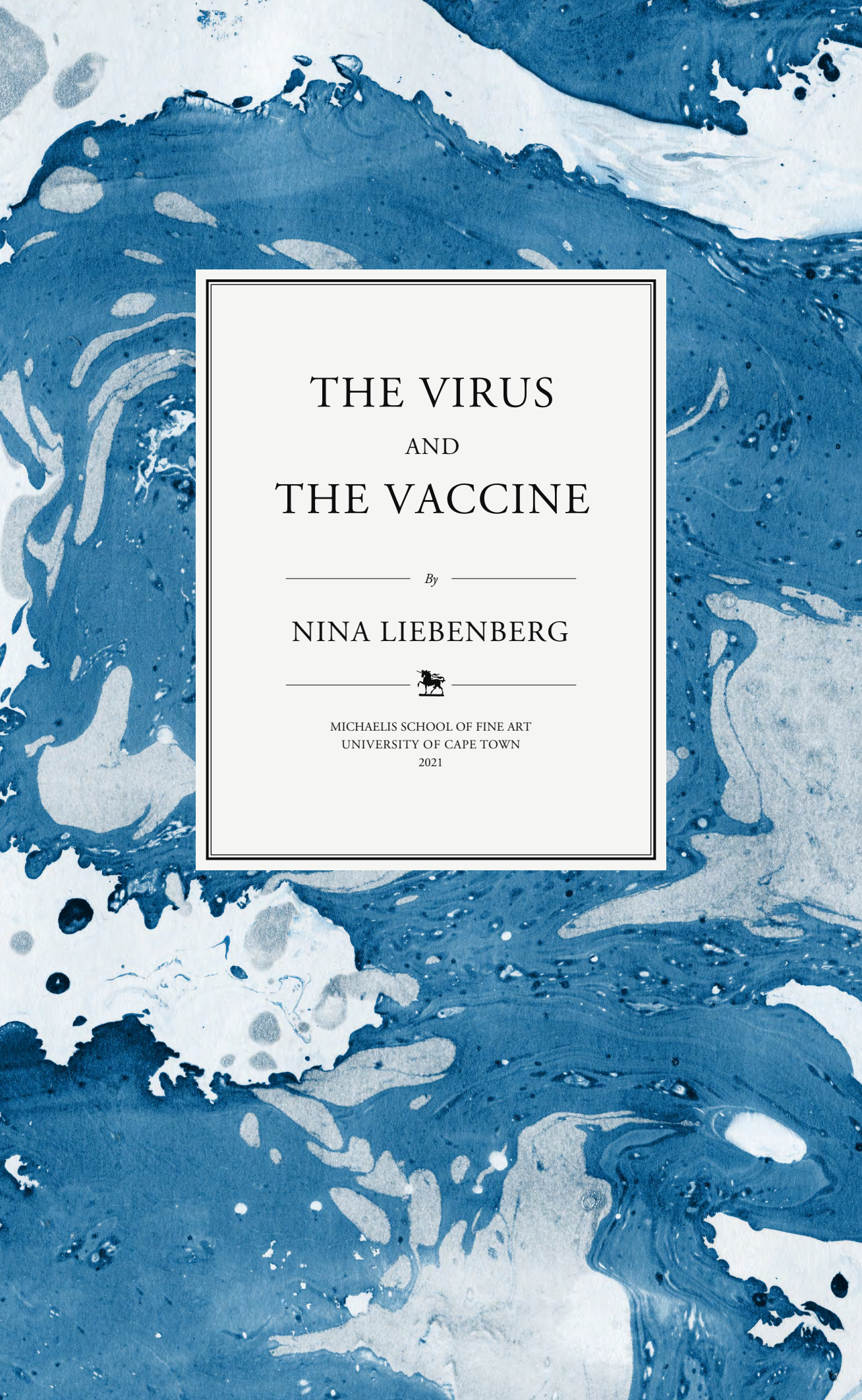


The background of the entire page is a marbled paper with swirling patterns of deep blue, light blue, and white. A white rectangular box with a thin black border is centered on the page, containing the title and author information.

THE VIRUS AND THE VACCINE

By

NINA LIEBENBERG



MICHAELIS SCHOOL OF FINE ART
UNIVERSITY OF CAPE TOWN
2021

The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.

THE VIRUS AND THE VACCINE

Curatorship and the Disciplinary Outsider

By

NINA LIEBENBERG



Thesis submitted for the degree of Doctor of Philosophy
at the Michaelis School of Fine Art, University of Cape Town.
December 2021

DECLARATION

I hereby grant the University of Cape Town free licence to reproduce the thesis that follows, in whole or in part, for the purpose of research. I declare that the thesis is my own unaided work, both in concept and execution, and that apart from the normal guidance from my supervisor, I have received no assistance. Neither the substance nor any part of the thesis has been submitted in the past, or is being, or is to be submitted for a degree at this University, or any other university.

Signed by candidate

16/12/2021

Signature:

Date:

“You will have only one story,” she had said. “You’ll write your one story many ways. Don’t ever worry about story. You have only one.”

- Elizabeth Strout, *My name is Lucy Barton*

Contents

ABSTRACT	p.06
ACKNOWLEDGEMENTS	p.08
LIST OF ABBREVIATIONS	p.09
INTRODUCTION	p.11
The outsider or stranger	p.13
The blind spot	p.22
An object-study	p.25
An artistic and curatorial object-study in UCT.....	p.31
CHAPTER ONE: The medicine chest	p.39
The chest as a donation to the university library	p.42
The chest as product of Burroughs Wellcome & Co.	p.42
The chest as property of Walter Floyd	p.52
The chest as property of the University of Cape Town	p.75
CHAPTER TWO: The disciplinary insider	p.107
Insiders of the University of Cape Town	p.117
M.R. Drennan anatomical collection	p.121
The skeletal repository	p.125
Kirby collection of rare musical instruments	p.132
CHAPTER THREE: The artist-curator as disciplinary outsider	p.151
Sound from the thinking strings	p.153
Face value: Old heads in modern masks	p.159
Miscast: Negotiating the presence of the Bushmen	p.164
Curiosity CLXXV	p.177
Cultivating the disciplinary outsider	p.195
i) The ARC programme and departmental interventions	p.195
ii) Subtle thresholds	p.199
iii) Division of the world	p.204
iv) The Honours in Curatorship programme	p.210
CHAPTER FOUR: Object-as-virus to object-as-vaccine	p.227
Chest: A botanical ecology	p.244
Attenuations	p.284
CONCLUSION	p.293
REFERENCES	p.315
LIST OF FIGURES	p.323

Abstract

In the various departments of a university, researchers, lecturers and students exercise limitations on the objects or subjects they study through the disciplinary categorisations and processes they apply. These methods, taught in the curricula of their undergraduate programmes, promote a particular way of looking and of understanding that privileges certain characteristics over others. As students become assimilated into their respective academic communities, they become naturalised to the resulting biases, habits, norms and conventions and, subsequently, are unaware of lurking blind spots. This process limits the kinds of knowledge these disciplinary ‘insiders’ are exposed to, and I argue that it can lead to the occlusion of ethical considerations, hinder discovery and perpetuate negative aspects of the hegemonic Western foundations of many of these disciplines.

To support these claims, I focus on an object housed in the University of Cape Town (UCT) library, a Tabloid medicine chest. This chest has been rendered invisible in the library because it exhibits characteristics that fall outside of those privileged by the library’s categorisation systems and its search engines. By conducting an object-study that delivers a wide range of findings – most quite separate from the chest’s original intended use – the object becomes a prompt and a provocation to examine where else in the institution knowledge has been rendered invisible by insiders and their methods.

I survey objects and collections resident in the departments of the university and discuss two collections in detail: the M.R. Drennan anatomical collection, actively used in science curricula, and the Kirby collection of indigenous instruments, almost invisible in its host department. These case studies illustrate how limits imposed by their respective insiders curtail the explanatory power of objects, limiting an understanding of the social and political pressures brought to bear on a discipline and that shape its practice. The case studies, particularly of the Drennan collection, also illustrate that outsider perspectives can help expose disciplinary limitations.

The next part of this enquiry considers the outsider perspective as championed by a particular form of curatorship and artmaking introduced by lecturers at the Michaelis School of Fine Art at UCT in the 1990s. The exhibition-making format and curatorial strategies introduced by these individuals are shown to be effective in revealing limitations placed on objects, in surfacing blind spots within the university and its affiliated museums and in opening up collections and their disciplines to outside perspectives. The effects of such exhibitions are traced as they reverberate in the university and culminate in the introduction of an interdisciplinary initiative focused on examining the university’s knowledge archives, the instatement of an honours programme in curatorship and various departmental installations.

Lastly, to elucidate what is at stake when an object is limited by the constraints of its host department and to showcase the potential of artmaking and curatorship in combating these limitations, the invisible chest in the library is subjected to a range of my own artmaking and curatorial strategies. This process is conceptualised as a shift from object-as-virus to object-as-vaccine. The methods I employ celebrate a much wider resonance of the object and extend the results revealed by the object-study at the start of this thesis.

Acknowledgements

To my supervisors, Fritha Langerman and Pippa Skotnes, for their enduring patience, their powerful insights, their generosity and for being the reason I aspire to be a better artist, curator, scholar and person.

To Thomas Cartwright for proofreading and good humour.

To Sanjin Muftic for generous assistance in forging digital connections.

To the staff of Hiddingh Hall Library (Solvej, Kashiefa, Pieter, Roberto and Lise-Marie) for such patient assistance offered over so many years.

To Russell Jones and his team at Scan Shop for translating my ideas into material form.

To the guardians of the chest: Renata, Leslie, Michal and Clive.

To the Humanities Faculty, MacIver, A.W. Mellon, the Oppenheimer Memorial Trust and the University of Cape Town for financial support.

To innumerable researchers, lecturers and support staff of the university (and its affiliated institutions) for taking an outsider into their confidence and sharing with her their passion for the objects and subjects of their study. In particular, I would like to thank Edmund February (the first insider to indulge my methodology back in 2010, and who supported it in all the years that followed) and Jane Yeats and Jurgen Geitner (for conversations and enthusiasm that carried me through difficult times and made the Pathology Learning Centre my home away from home).

To my friends and family for putting up with me. To Lauren, Katherine and Jade for listening and caring. And to my parents for establishing the impetus for this research way back when.

Lastly, to Wernich, who has been my sounding board, my empathetic critic and my patient partner. New beginnings beckon.

List of abbreviations

APC	Archive and Public Cultures
ARC	Archive and Curatorship
BWC	Burroughs Wellcome & Co.
CCA	Centre for Curating the Archive
PFIAO	Percy FitzPatrick Institute of African Ornithology
PLC	Pathology Learning Centre
RGS	Royal Geographic Society
SACM	South African College of Music
SAHRA	South African Heritage Resources Agency
SAM	South African Museum (became the Iziko South African Museum in 1999, when five clusters of established museums in and around Cape Town merged)
SANG	South African National Gallery (became the Iziko South African National Gallery in 1999, when five clusters of established museums in and around Cape Town merged)
SSK	Sociology of Scientific Knowledge
UCT	University of Cape Town
WITS	University of the Witwatersrand

Introduction

In any university, limitations are exercised on the objects and subjects studied by its academic communities, an effect of undergraduate curricula, discipline-specific taxonomies and research processes. The University of Cape Town (UCT) is no different. Divided into six faculties of more than seventy different departments of varying sizes, researchers, lecturers and students engage in their different fields of study. In the biological sciences, students study living organisms – plants, animals and insects – and formulate theories about their development and adaptations over time, while the health sciences study the workings of the human body, the diseases that target it and the ways they can be treated. Materials gathered in the geological sciences consider the age of the Earth and its physical and chemical constitution, while those objects and documents consulted as part of archaeology and historical studies enable the study of archives of the past and the human communities associated with them. Machines in the Engineering faculty are used to manufacture and process materials according to formulae devised in the departments of Mathematics, Physics and Chemistry; and in departments such as Philosophy and Psychology ideas are generated (separately) about the very nature of knowledge, reality and existence. These are, of course, highly simplified descriptions when considering the scope of research that each of these departments oversees, but for the purposes of this thesis, this broad overview serves to establish that in each of these different sections of the university, academic communities train professionals and hone skills that augment (and at times contest) a body of knowledge particular to their discipline about the world around us. To enter any one of them is to experience the world through its community's views – views that are shaped by what the sociologist Eviatar Zerubavel terms their 'attentional subculture'. These subcultures form part of a broader category of 'attentional communities' – those that have their own distinctive traditions, habits and biases



Figure 1.

In *Looking up* (2001), the artist Francis Alÿs stares intently at the sky until he has attracted a group of curious bystanders to do the same (at which point he retires from the scene).

to which they pay attention – and are vividly exemplified by profession-specific attentional traditions:

Every profession [...] has a distinctive sense of relevance and therefore also distinctive concerns. Depending on their profession, one person is thus likely to notice details to which another person is blind. Podiatrists notice feet, chiropractors notice posture and spinal alignment, orthodontists notice jaw alignment, dancers notice leg alignment and so on. Furthermore, professions often vary in the overall style of attending they implicitly and sometimes even explicitly promote. Consider, for example, the way surgeons, while operating, usually focus their attention only on a very small part of the patient's body selectively displayed through a hole in the surgical drape covering it, thereby mentally reducing his or her entire body to that 'visually cut out' part, that specific piece of body below the operating lighting. [...] The contrast between such a pronouncedly decontextualized style of attending and the one prevalent among both landscape and anti-aircraft defence system designers, for instance, could hardly be starker. Nor, for that matter, could the somewhat analogous contrast between mathematicians and social workers' respective levels of context awareness (Zerubavel 2015: 56–57).

Universities are fertile grounds for studying the attentional subcultures particular to the disciplines to which these professions belong. Students share common formative experiences in its lecture halls: 'taking certain classes, doing similar kinds of apprentice work (in the field, the lab, or the wider world) and appreciating a common canon of works by "founding members" of the discipline' (Miller & Boix-Mansilla 2004: 5).¹ Learning the ropes and the rules of practice in these departments also requires a series of encounters with the objects involved in the practice – research materials, tools, furniture, text and symbols, and the categories that apply to all of these (Bowker & Star 1999: 294–295). As Zerubavel observes, a large part of becoming professionally socialised is acquiring not only the ability to notice what is considered relevant by the discipline but also learning how to ignore that which is deemed irrelevant.² Borrowing from anthropology, sociologists Bowker and Star use the term 'naturalisation' to describe this process of focusing only on details relevant to a particular community and becoming blind to anything outside of its scope (Bowker & Star 1999: 294). As they play out in the different departments of the university, these processes cultivate disciplinary 'insiders' – those trained in the various attentional traditions of their respective academic communities and naturalised to its biases, habits, norms and conventions.³ Since 2009, I have encountered many of these insiders in the different departments of the University of Cape Town.

The outsider or stranger

My reasons for engaging with these insiders and their academic communities were initially driven by the research I conducted towards the completion of my MFA (2009– 2011) and later as part of the curatorial programme in which I teach. Departing from my home campus, Hiddingh, a satellite campus where fine art, curatorship, art history and drama are taught, I would journey to the campuses where disciplines such as engineering, medicine, music or physics

were practiced and, as an artist and curator, always enter them as an outsider or a stranger. During the years in which I engaged with these engineers, pathologists, physicians, chemists, musicians, radiographers and archaeologists and their respective researches, I found the position of the stranger and outsider a compelling one for a variety of reasons, not least for the ability it afforded me to notice those communal blind spots and naturalisations that Zerubavel and Bowker and Star refer to. These characteristics became a focus area of this doctoral research and led me to realise that the role of stranger or outsider (as a tool that can surface occluded aspects of a discipline) is not unique to me.

Some practitioners of the research field known as the sociology of scientific knowledge (SSK), which emerged in the late 1970s, adopted the role of the stranger to interrogate the sciences and prove that they are as socially shaped and constructed as the humanities.⁴ A noteworthy example by historians of science Simon Shapin and Simon Schaffer investigated the air pump experiment first formulated by Robert Boyle in the 17th century. By taking on the role of strangers, Shapin and Schaffer enacted a ‘calculated and an informed suspension’ (2011: 6) of the experimental method that even today is taken as largely self-evident. By engaging with lesser-known arguments from this period proposed by Hobbes in opposition to the experimental, Shapin and Schaffer revealed the constructed nature of the technologies that Boyle set in place to ensure consensus, laying bare their artefactual and contextual nature, which, it turned out, had more to do with the politics of the period than with scientific advancement.⁵

The sociologists Bruno Latour and Steve Woolgar also adopted the role of strangers when Latour took up the role of participant-observer in Roger Guillemin’s laboratory in the Salk Institute for Biological Studies (Latour & Woolgar 1986). By adopting the position of an anthropologist describing the daily life of a strange tribe, Latour called into question the scientists’ own explanations of their activities. Because he was a stranger to the objects, tools and processes these individuals engaged with as part of their daily research activities, Latour noticed a variety of taken-for-granted aspects of this scientific environment and was able to expose various deeply embedded social and cultural factors at work within the space. As a sociologist, Latour’s focus was on the human element in the laboratory and how it manifested in an environment that claimed to control and eradicate it through its methods and tools (courtesy of Boyle).

Given that scientific disciplines stake the highest claim on being removed from the influence of social and cultural factors, the development of SSK and the role of strangers has proven extremely enlightening, revealing blind spots to its practitioners.⁶ It is precisely in these truth-claiming environments that the role of the stranger or outsider, as one not conditioned to local attentional subcultures, becomes most pronounced and important. During the development of institutional critique that began in the late 1960s, museums became another space in which the stranger or outsider was able to surface blind spots and naturalisations.

Donning the role of outsider, artists began engaging with these spaces in which objects were framed and viewing processes were controlled to present a tightly woven narrative of progress and ‘an “authentic” mirror of history,



Figure 2.

Pierre Huyghe. 1995. *Or. Intervention*. San Francisco.



Figure 3.

Joseph Wright. 1768. *An experiment on a bird in an air pump*. Oil on canvas. National Gallery, London.



Figure 4.

Miscast (installation detail). 1994. South African National Gallery, Cape Town.

without conflict or contradiction' (Marstine 2006: 5). Artists such as Daniel Buren, Marcel Broodthaers, Hans Haacke, Andrea Fraser, Fred Wilson and Mark Dion infiltrated these spaces, ignoring the many conventions museums deploy to proclaim their authority,⁷ and focused on those areas and objects usually hidden from the public's sight, rummaging through museum storerooms and researching administrative folders and institutional archives. What they found they curated for public display, drawing attention to the many taken-for-granted characteristics of museum environments; these curations included the funding and donations received by institutions, the conditions under which artworks were bought or displayed, the racial and gender biases of their collecting policies and the limitations of the classification systems to which their object collections were subjected.⁸ These artist-curators (as these practitioners became known) engaged with institutions on their own terms,⁹ with many, such as Wilson and Dion, focusing on institutional object collections. They subjected these materials to various artistic and curatorial strategies that allowed the biases and prejudices of the larger institutions to surface and be put on public display.

The artist-curator outsider was not just a foreign phenomenon, however. During the 1990s, museums in South Africa – and particularly in Cape Town, such as the South African Museum (SAM) and the South African National Gallery (SANG), became receptive to outside curators. This coincided with the end of apartheid and an increased scrutiny of how museums had allowed apartheid ideology to govern the sourcing, categorisation, storage and display of its collections.¹⁰ While the novelty of allowing outsiders into museums had become widespread, the strategies these outsiders developed were particular to the local context and progressed along very particular trajectories.

In Cape Town, where my study is focused, the exhibitions *Sound from the thinking strings* (1991), *Face value* (1993) and *Miscast* (1996) were amongst the first exhibitions staged by museum outsiders and illustrate the development of one particular methodology.¹¹ Using either the SAM or the SANG as their venue, the artist-curators Pippa Skotnes and Malcolm Payne individually highlighted spaces of display by exhibiting a diverse selection of disciplinary objects and research (which related to each exhibition's central theme) with text and artworks that served as interpretive tools. As artworks and disciplinary objects were always exhibited in combination, their presence jarred with the space of display and its systems of categorisation for the collections it housed, calling the institution and its taxonomies into question. As one of many newly formulated strategies, it was especially efficient in the context of this period of South African history, highlighting the limits of entrenched classifications in the context of new pressures to redress the legacies of apartheid divisions.

At the time these exhibitions were staged, Skotnes and Payne were both university lecturers at the Michaelis School of Fine Art. Several of the disciplinary collections of the university were featured in these exhibitions, along with objects from SAM collections and, sometimes, from museums further afield. By drawing in objects from various disciplines and subjecting them to a range of artistic and curatorial strategies, these artist-curators were able to surface blind spots and naturalisations (many the products of colonial and apartheid ideologies) within

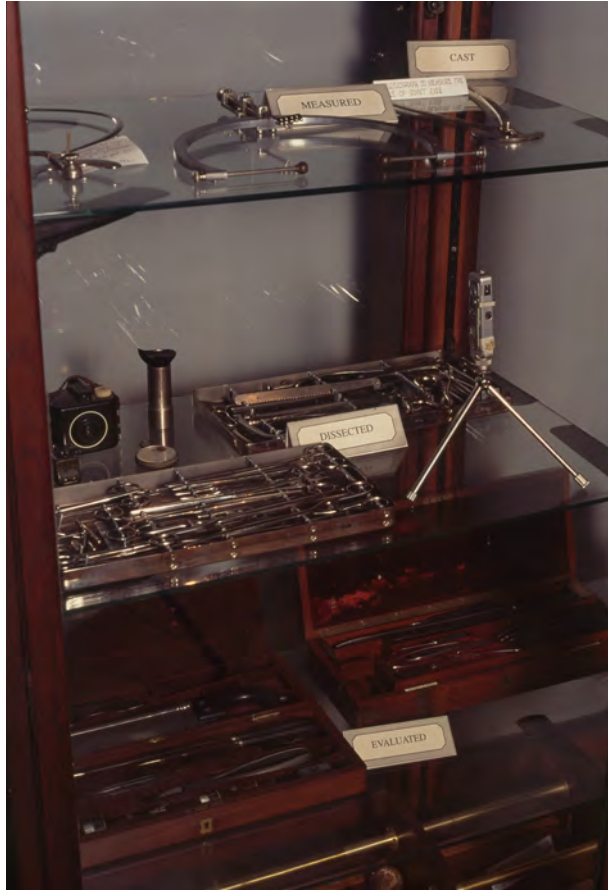


Figure 5.

Miscast (installation detail). 1994. South African National Gallery, Cape Town.

both the institutions and their related disciplines. This enabled the insiders of these disciplines and institutions to view their objects anew, and even as strange, but also to acknowledge the role their communities (many of them scientific, many unwittingly) had played in the country's troubled political and social history.

The strategy of highlighting categories of classification, especially in relation to certain larger institutions and the different collections they housed, also featured in an exhibition staged a few years later at the Michaelis School of Fine Art, which co-opted the original graduation hall of the institution rather than a museum space. The exhibition was staged in celebration of the university's 175th birthday and displayed objects sourced from most of its different departments to celebrate – but also to provide context for – research conducted over the years and to showcase and interrogate the university's identity and history. As the previous exhibitions highlighted the categorising practices of the SAM and the SANG, so *Curiosity CLXXV* (2004) highlighted how UCT departments subjected their objects of research to very particular systems of categorisation, attending to some of these objects' characteristics and ignoring others. Current research material, historical artefacts, obsolete teaching equipment, treasures of bygone days, unique disciplinary objects and academic paraphernalia all represented ways in which research had been visualised. All were gathered by the artist-curators, subjected to their various curatorial strategies and put on display. Many of the materials chosen for display were no longer actively used in the teaching curricula and had been retained more as a product of happenstance than a concerted effort to conserve them.¹² In the catalogue's introduction, one of its curators, Pippa Skotnes, speaks of this sourcing process:

Right from the beginning it was clear that UCT does not have a 'culture' of collecting and curating. While there are some established collections like the Drennan Anatomy Museum, the Bolus Herbarium and, of course, the libraries that are cared for by dedicated curators and librarians, there are uncared collections in almost all departments. Most of these do not have keepers and much has been lost or destroyed over the years for want of proper attention and adequate funding. There were a number of places we arrived at only to be told that the whole storeroom had been cleared out and all the 'old stuff' thrown away. In some, old teaching collections or small museums were shut down and their contents decaying. In the end, it would be true to say that what we worked with in much of this exhibition is the leftover. (Skotnes et al. 2004: 10)

In *Curiosity CLXXV*, leftovers and teaching materials still in use in the departments were put on display in the 175 cabinets of the exhibition. As outsiders to the disciplines represented through this vast collection of material, the artist-curators refrained from simply allocating a cabinet to each department and its objects, choosing instead to re-interpret and re-imagine the materials through their own discipline of fine art. Formulating new and imaginative taxonomies, they grouped materials according to characteristics that fell outside of the attentional subcultures of the disciplines from which they were sourced, which resulted in the surfacing of various novel overlaps between departments and highlighted previously ignored naturalisations and blind spots.



(top) Figure 6.

Hiddingh Hall prior to the installation of *Curiosity CLXXV*. 2004.
Michaelis School of Fine Art, Cape Town.

(bottom) Figure 7.

Hiddingh Hall during the installation of *Curiosity CLXXV*. 2004.
Michaelis School of Fine Art, Cape Town.

The exhibition attracted great public interest, appealed to a wide audience and left an enduring impression on the parent institution – effects which I first encountered in 2009 and that have only grown more pronounced. In this research, I trace the effect of subjecting disciplinary material to outsiders with different attentional subcultures, focusing on the exhibitions that first introduced the method and tracking their specific effect at UCT – where these artist-curators worked and which provided many of the objects displayed in the exhibitions.

Curiosity CLXXV may provide a more pronounced focus than the exhibitions that preceded it, as it worked specifically with UCT collections and introduced me to the concept of the ‘leftover’ as an object so redundant to the disciplinary practitioner that it is either in the process of being thrown away or has become a curiosity to members of its community. When such an object is kept, it is usually to speak to the history of the discipline or for purposes of nostalgia, reasons that fall outside of the research scope of its discipline (especially those situated in the sciences). In paging through the catalogue of *Curiosity CLVXX*,¹³ I realised that many of these leftovers could be seen as the material embodiments of their discipline’s blind spots. I further understood that if I wanted physical examples to investigate how the outsider could surface the limits of a discipline’s attentional subculture, these blind spots could offer answers. Although the catalogue offered many examples from various departments, back in 2015 one object in particular drew my attention.

The blind spot

On page 76 of the *Curiosity CLXXV* catalogue is a photograph of a small medicine chest. Because of my own attentional subculture as an artist and curator interested in the disciplines of science and medicine (and their processes and objects), the chest immediately captured my attention. In the image, the medicine chest is open, with its top inside tray removed and placed next to it on a grey felt surface. In the tray are five small, elongated bottles, their lids covered with what look like small pieces of white leather neatly folded over and tied with pieces of string and labels that are too small to read; two larger, bulkier bottles with cork tops; a single tiny, orange-tinted round bottle nestled in the bottom left-hand corner; and three paper packages of differing sizes printed with text. The tops of thirteen bottles peek out from the bottom layer of the compartmentalised chest. Most of the labels are obscured in the image, but the ones I could make out read as follows: Quinine and Cinnamon, Blaud pills, Chlorate of Potash, Tooth stoppers, Medicine droppers, ‘Hazeline’, Tabloid ‘Pepana’ and Tabloid ‘Tonic Compound’. On the same page of the catalogue are two side inserts, one a close-up of one of the paper packages, with ‘Tooth stopping’ printed on its side, and the other a close-up of two of the bottles standing upright on a table, one label reading (seemingly) ‘B.W. & Co., ‘HAZELINE’, The active principles distilled from WITCH HAZEL, Burrough Wellcome and Co. London’ and the other, ‘POISON, Burroughs Wellcome and Co., SOLOID, Corrosive Sublimate’.



Figure 8.

Pages 76–77 of the *Curiosity CLXXV* catalogue. 2004.

The caption for the image offered further information about the department in which the medicine chest was located, stating: 'Black metal travelling medicine chest, containing bottles and packets of medication belonging to Walter Floyd, given to UCT by the Floyd family (Manuscripts and Archives).'

It seemed strange to me that this three-dimensional object would be housed in the Manuscripts and Archives (M&A) department (also known as 'Special Collections') of UCT Library, as it hosts collections of '*printed* and *audio-visual* materials on African studies and a wide array of other specialised subjects, as well as over 1,300 sub-collections of unique *manuscripts* and personal *papers*' (Special Collections 2015).¹⁴ As my italics emphasise, bulkier three-dimensional objects seemed to have no place here.

I nonetheless thought it worthwhile to type the words 'medicine chest' into the general library search engine, an application called Ex Libris Primo; the search delivered no results. On my second attempt, I submitted 'Floyd'. The first result showed a downloadable document titled 'Guide to the manuscripts in the University Library'. After downloading it, I scrolled through the document (dated 2013), which seemed to comprise an abridged list of all the finding aids available in the department. Each entry listed the centre where the manuscripts were kept, the type of document, the manuscript numbers, the title of each unit of manuscripts (usually derived from the person or persons, family or corporate body associated with the manuscripts) and the terminal dates; a subsequent paragraph referred to the donor, the extent of the item or collection and any accessibility restrictions. A summary of the contents of each entry was also provided, enabling the researcher to gauge the type of information to be expected from the item or collection. An index provided further keywords not necessarily mentioned in the abridged entries but that related to the collections.

Realising the document had 543 pages, I turned to the index, again looking under 'm' for 'medicine chest'; none was listed. Again I turned to 'Floyd' and, locating 'Floyd, W', was directed to a collection numbered 'BC666'. The first collection in the guide was BC1, and I found BC666 on page 108. The entry was as follows:

UCT Libraries
Manuscript
BC666
Floyd Family Papers.
ca.1920s
ca.1970
Donor: H Floyd; ca.5000 items. List.
+ Papers of Walter (1875–1934) and Agnes (d.d. 1977) Floyd, incl. letters, photographs, family financial matters incl. letters and accounts re a Riding School in Cape Town (1936–1962). Relevant to the social history of Cape Town.
+ Also documents re the Medical, Dental and Pharmacy Act of 1928 and the Dental Society of the Cape Province.

No medicine chest was mentioned. At this stage of the search, I realised that the chest must form part of the larger collection of documents that belonged to Walter Floyd, and I sent an email to the Special Collections librarian requesting

the finding aid for the BC666 collection and querying the absence of the medicine chest. I sat down at a table in the Manuscripts and Archives department a week later with the small medicine chest in front of me and myriad folders of documents from the Floyd family around me.

This first encounter with the chest made it evident that the chest presented an interesting case study in how objects that enter the university are classified according to the practices of their host departments and how these categories exercise certain limitations on them and their accessibility. Because of its incongruity in the department in which it was housed, none of the local categories applied to it, and, as such, it had become almost completely invisible. Moreover, the subsequent research I conducted in the weeks that followed that first encounter (discussed in Chapter One), revealed the full extent of how the library's taxonomic system completely disavowed it – a process that led me to regard the medicine chest as the institutional mascot for blind spots.

Following my first outsider encounters in 2009 with the blind spots and naturalisations exercised by various departments of the university and my subsequent engagement with the curatorial and artistic activities of members of my own attentional community, this chest became a prompt and a provocation for me to explore where else in the institution knowledge is or has been rendered invisible by insiders and their methods, and to examine how the role of the outsider can help to reveal at least some of these limitations. By directing elevated attention to this mascot of blind spots, I thought I might enable an understanding of how disciplinary blind spots arise, and argue for the value of revealing how this process occurs. I thus subjected the chest to an object-study realised through various strategies that form part of my discipline of fine art.

An object-study

The object-study as an academic activity forms part of many of the disciplines convened in a university. It has long been (and continues to be) utilised within the disciplines of anthropology and philosophy, but it is also popular in fields such as art history, archaeology, film and media studies, critical theory, cultural studies, digital media, design history, disability studies, classical studies, feminism, history, psychoanalysis, social studies of science and technology, religious studies and visual culture.

Since the early 2000s, it has gained even more support within the academy. In their introduction to *The object reader* (2009), Fiona Candlin and Raiford Guins reflect on this proliferation, listing publications such as the 'Objectt' series (published by Reaktion Books from 2001 and featuring volumes on the aircraft, bridge, dam and motorcycle, to name a few) and conferences such as the Pennsylvania State University's 'Objects in/and of visual culture' (19–20 March 2004), in which artists and academics from art education, design and visual studies presented papers and artwork on 'cadavers, souvenirs, flat-screen televisions, books, toys, educational objects and design' (Candlin & Guins 2009: 3). In 2005, the University of California Humanities Research Institute hosted

a research group entitled ‘Object of media studies’, which included researchers working in film, television and media who examined ‘the ephemeral form of the cinema ticket, celebrity tie-in products, mobile phone trees, the hard and software of Ms Pac Man, the storage case of the videocassette, and the screen as a material object’ (Candlin & Guins 2009: 3).¹⁵ Following the digitisation of most curricula in the early 2000s, object-based learning (OBL) programmes focused on reintroducing material objects to their respective disciplines as teaching tools (Chatterjee & Hannan 2016). OBL programmes drew on university museums and archives or, where departments had never had such repositories to start with, forged affiliations with local museums to provide material objects for study in the respective disciplines (Chatterjee & Duhs 2010; Chatterjee 2011; Hannan, Chatterjee & Duhs 2013).¹⁶

The object-studies conducted within these programmes and disciplines are, however, different to the object-study I set out for the medicine chest. While looking at an old cinema ticket stub’s material affordances may offer a film studies student new insights and a different angle from which to approach the history of film, the object-study is conducted by a disciplinary insider and focuses on an object within the scope of their discipline. This discipline-specific object is thus studied in accordance with the discipline’s own archives, interests and discourses, while research gained consulting these materials is largely limited to textual outputs such as journal articles or publications primarily distributed to and consulted by members of the same community. The research fields of visual and material culture studies are noted exceptions here, and objects and images can speak across many disciplines within their scope. However, the general research outputs in these fields remain largely textual.¹⁷

As an artistic or curatorial practice, the object-study has a long history. From Da Vinci’s anatomical drawings of cadavers, the memento mori 16th century Dutch still life, Duchamp’s ready-mades, Warhol’s soup cans to Hirst’s formaldehyde shark and Emin’s bed, artists have paid close attention to objects, representing them in a wide range of media, subjecting them to various processes and simply displaying them as they are found. These artistic object-studies have visually conveyed – through metaphor, visual suggestion, analogy and juxtaposition – many of the ideas written about in object-studies conducted in other disciplines. Questions about ontology raised in philosophy are, for instance, evident in the work of Tom Friedman, who uses quotidian objects – pencils, Styrofoam cups, cereal boxes, soap and pubic hair – and transforms them into works that invite philosophical questions, challenging everyday processes of perception. In Simon Starling’s work, inanimate objects are activated in various ways, especially when their political or economic history is revealed or when their materiality becomes an embodiment of something discovered during his research. His work enables and celebrates diverse interpretations of objects in many instances, as Greenblatt (1991) notes when referring to artistic and curatorial activity, deflecting attention away from the object onto the systems that gave rise to it in the first place. Starling conducts a close inspection of his objects, usually following a web of connections across the globe and across history, which in many of his works lead him back to the starting point; a vintage photograph of

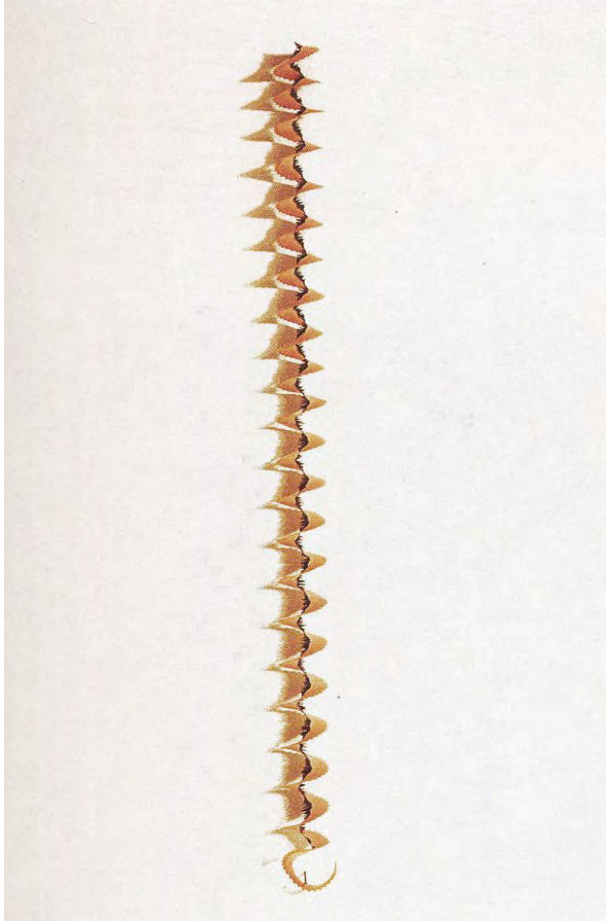


Figure 9.

Tom Friedman. 1992. *Untitled*. A pencil shaved by a pencil sharpener into one long, continuous spiral.

a Henry Moore sculpture leads to the production of a bronze sculpture based on the shape of a single enlarged silver particle that makes up the photograph and which, when converted into a sculpture, resembles the biomorphic shapes that served as inspiration for the Moore sculpture in the original vintage photograph (*Silver particle/bronze (after Henry Moore)*, 2008). The machinations of its history somehow lost in the image when seen in the museum archive come back into play through the translations and reconstructions encountered in the detour and are materialised in the exhibition format.

The documentary film *The forgotten space* (2012), made and directed by artists Allan Sekula and Noël Burch, is about the ocean as a space through which 90% of the world's cargo now passes. The film's focus is on the container box, which, since its invention in the 1950s, has become one of the most important mechanisms for the global spread of capitalism. It uses the box to trace the international supply chain 'from ships to barges, trains, and trucks, mapping the byzantine networks that connect producers to consumers' (e-flux 2021). Using a combination of descriptive documentary, interviews, archive stills and footage and clips from old movies, the work reveals the invisible components of this supply chain, such as the labourers who operate the cargo ships, steer the barges, drive the trucks and migrate to the factories and whose low wages form the foundation of the entire enterprise. In addition to the labour force, it also uncovers a range of individuals marginalised by this system's efficiency: 'the long-time unemployed occupants of a Californian tent city, Dutch farmers whose land is bisected by a new high-speed train line, and the displaced residents of Doel, Belgium, whose city is slated for demolition in order to expand the port of Antwerp' (e-flux 2021).

An object-study of a grain of rice by the artist Elaine Gan similarly shows the intermingling temporalities of humans, nonhumans and machines through an assemblage of images, text and vectors maps. Gan explores four temporalities within this research – the time of technologies, matter, memory and a calendar year – and installs the work as a long horizontal strip that cannot be viewed in full from a fixed position but encourages the viewer to walk 'through time, occupy multiple positions' and in so doing 'trace new connections' (Gan 2021). Time-travelling over two thousand years, *Rice child (Stirrings)* (2011) begins in the Mekong Delta, where the farming of champa rice facilitated the formation of stable settlements. It then follows a selection of rice varieties, revealing how they became technologies that accumulate socio-political formations, and weaves through the 2007/8 food crisis.

Artists have also engaged in object-studies using the objects they encounter in university collections. Cornelia Parker, an artist who has often worked with found objects with very particular histories – such as banned pornographic tape, the guillotine that beheaded Marie Antoinette and worn-out brass band instruments – has engaged extensively with museums and university collections. For Parker, the process and materials are as important as the object, and she is particularly known for the sometimes-destructive processes she applies to her materials – blowing up, steamrolling, or melting objects to produce raw materials that she either poetically exhibits as the aftermath of the event or



Figure 10.

Cornelia Parker. 1977. *Measuring Niagara with a teaspoon*. Georgian silver spoon drawn out to the height of Niagara Falls.



(top) Figure 11.

Simon Starling. 2008. *Silver particle/bronze (after Henry Moore)*. The Modern Institute, Glasgow.

(bottom) Figure 12.

Elaine Gan. 2014. *Rice child (Stirrings)*. Installation. The Digital Arts Research Center, University of California, Santa Cruz.

builds up again. This methodology becomes symbolic of her views of histories as complex, malleable and traumatic and opens up the hidden narratives of objects and the people they belonged to or who used them.

Parker formulated *Breath of a physicist* while engaging with the academic communities of the University of Manchester in 2015. She worked closely with the scientists of the institution, most notably Kostya Novoselov, who, with Andre Geim, was awarded the Nobel Prize for the discovery of graphene – the world's thinnest and strongest material.¹⁸ After being inspired by the discovery of a graphite drawing by William Blake (*The ancient of days*) in the university's art collection, Parker facilitated a collaboration between the gallery staff and Novoselov in which he sourced microscopic samples of graphite from the drawing, as well as graphite from drawings by Turner, Constable and Picasso and from a pencil-written letter by Sir Ernest Rutherford (who split the atom in Manchester), which all formed part of the university's collections. Novoselov produced graphene from these samples, which Parker then used to make her own artwork and a 'Blake-graphene sensor', which was activated by the breath of a physicist (Novoselov) and set off a firework display, returning iron meteorite into the Manchester sky on the opening night.¹⁹

In the process of realising this work, Parker facilitated the collaboration of scientists from the physics department with those from its art gallery. She also drew attention to the scientific qualities of the artwork and, through the performative act of igniting a firework display, the symbolism of scientific discovery.

These artists and many others have contributed to the growing field of practice to which I belong and alongside which my own work has developed. Parker's methodology of inviting different attentional subcultures to engage in the activities that she as outsider formulates is one that I have used for many years, for example, and was one of the main methods I used to conduct an object-study of the medicine chest.

An artistic and curatorial object-study at UCT

I have visited and conversed with many, if not most, of the university's departments since 2009 as an artist and a curator. I have borrowed rotary evaporators from chemical engineers to turn wine into water; built a toy model of a molecule that prevents caterpillars from turning into butterflies with a chemist; consulted the resident dendro-chronologist about a series of tree-ring paintings; charted my ECG graph with a cardiologist; X-rayed indigenous medicinal plant specimens with radiographers; and analysed the flowers on archaeological shards with a botanist and the leaves from the university hospital garden with a dermatologist. I have handled a cast of the 'empty spaces' found in the human brain; rattles given to an ethnomusicologist made from baobab fruit; a discarded kimberlite xenolith from the mining fields of the Northern Cape; a notebook belonging to an oologist found in a cabinet filled with pastel-coloured eggs collected predominantly in Zimbabwe; and a heterotopic heart specimen from an operation performed by a

famous surgeon.

As conveyed by this list, my engagement with these departments, while drawing on their attentional subcultures, did not always follow traditional disciplinary procedures – materials sourced and processes introduced resulted in artworks and exhibitions that shifted what seemed familiar to these insiders in unexpected and strange ways – and raised my awareness of the benefit of an outsider perspective when applied to any disciplinary field, including my own.

When embarking on my object-study of the medicine chest in 2015, my goal was to revisit some of these techniques, first employed during my MFA research, and use them in combination with new ones I formulated for this research. As the medicine chest embodied what I considered the perfect example of a blind spot in the university, belonging to no official collection and disavowed even in the non-official collection in which it was situated,²⁰ I reasoned that subjecting the chest to as many institutional attentional subcultures as possible would offer me maximum information about it and what it means for it to be preserved by the institution. I reasoned that incorporating multi-disciplinary lenses that hone in on different aspects of the chest and expand on the complex trajectory emanating from them could combat its institutional disavowal and speak not only to what it is but to how it came to be and, more specifically, how it came to be where it is. Gaining this information could help me identify where else in the institution knowledge had been rendered invisible by insiders and their methods.

However, one of the main aims of this research has been not only to investigate this blind spot but also to subject it to my own attentional subculture's sensibilities, as this attentional subculture itself is subject to insider limitations. While no detail of an object is viewed as irrelevant in the realm of fine art and limitations of any sort are negotiated as soon as they are identified, the discipline nonetheless has its own entrenched limitations – as demonstrated on the UCT campus in 2016, when a selection of artworks deemed colonial and oppressive by student activists were publicly burned.²¹ Art, especially work in institutional collections, can be a powerful marker of the views held by the governing body (ones not necessarily shared by the originating artist) and thus represent their bias and prejudice like any other material collection.²² Because of these realities, I employ a methodology that is dependent on a relationship between institution, object, artist and viewer and not just between any two of these. Curatorship is still a relatively new branch of fine art and has not yet settled into a discipline with its own entrenched blind spots, and definitions of what curatorial practice entails are still diverse and open-ended, encapsulating a wide spectrum of activities. As such, curatorship offers a more adaptable and responsive approach with which to conduct a practice-based study that investigates what is at stake when an object is limited by the entrenched constraints of its host department. In this thesis, I set out to demonstrate the repercussions of these limitations and the potential of curatorship to combat them in both the discussion of case studies and in the realisation of my ideas in practice.

Chapter One of this research starts with an object-study of the medicine chest, exploring it as a product of Burroughs Wellcome & Co., as the property

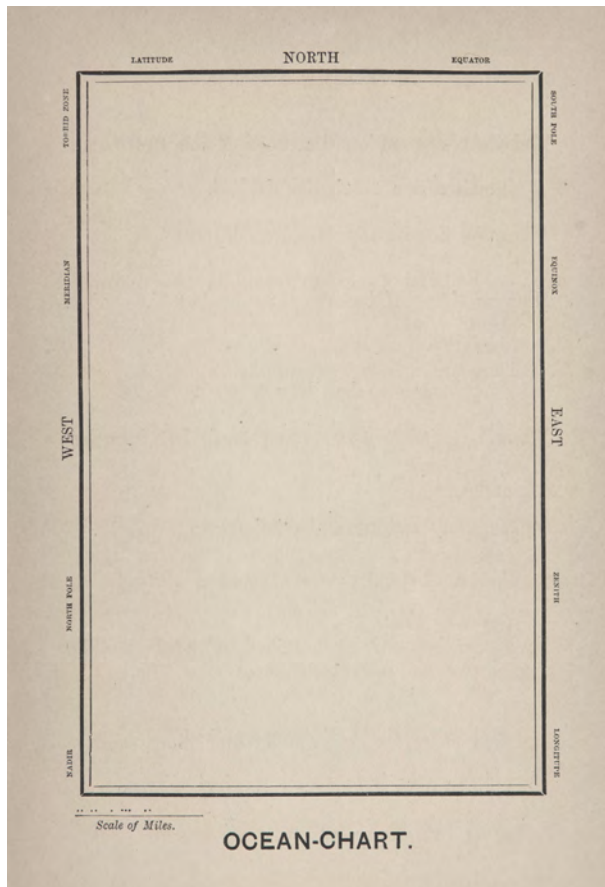


Figure 13.

Lewis Carroll. 1891. Ocean chart. “He had bought a large map representing the sea, Without the least vestige of land: And the crew were much pleased when they found it to be A map they could all understand” (from *The hunting of the snark* (1876)).

of Walter Floyd and as part of the BC666 collection of papers. I investigate what is known of the circumstances under which it entered the UCT library and also introduce contextual information about Cape Town and Britain at the time the chest entered the country. This chapter demonstrates how the chest was deployed in the world and how it aided the spread of colonial thinking. The methodology of the object-study establishes the wider influence of British imperialism in the world for which the medicine chest stands as metonymy. In stark contrast to the wider resonance of the chest established by these considerations, the chapter then explores the specific circumstances and classification system that led to its current invisibility.

Using the chest in the library as a prompt and a provocation, Chapter Two investigates where else in the university knowledge has been rendered invisible by insiders. It briefly establishes the circumstances that gave rise to the taxonomies of the university and the insider methods practiced within its different departments before exploring UCT's object collections for evidence of blind spots and naturalisations. Two collections are used as case studies to illustrate how certain knowledges are limited by insider methods: the M.R. Drennan anatomical collection, which is actively used in medical science curricula, and the Kirby collection of indigenous musical instruments, which, similar to the chest, occupies an almost invisible status in its host department.

In Chapter Three, I investigate how a form of curatorship introduced through exhibitions in the 1990s by artist-curators at the Michaelis School of Fine Art, UCT, publicly revealed the limitations placed on objects by their insiders, surfaced blind spots within the university and its affiliated museums and opened up these collections and their disciplines to outside audiences. Three exhibitions are discussed: *Sound from the thinking strings* (1991), *Face value* (1993) and *Miscast* (1996), the first shown in the SAM and the latter two in the SANG, which drew on SAM, SANG and UCT institutional collections and staged objects in combination with text and artworks. I then provide an in-depth discussion of *Curiosity CLXXV* (2004), an exhibition at the Michaelis School of Fine Art, which subjected most of the university's collections to the strategies of its team of artist-curators and opened them up to outside perspectives. The chapter then traces the effects of these exhibitions as they reverberated through the university and culminated in the introduction of an interdisciplinary research initiative, the instatement of an honours programme in curatorship and various departmental installations.

In Chapter Four, I return to the object-study first initiated in Chapter One but expand it with artmaking and curatorship. I discuss my methodology as situated within a broader history of the exhibitions staged by the artist-curators affiliated with my department, outsiders who also used objects to surface insider limitations. Drawing on many of the methods initiated by these practitioners, I formulate new ones, some which I first developed in my MFA research and have subsequently honed, to lavish the chest with as much attention as possible by subjecting it to multi-disciplinary engagement. I discuss the exhibition I staged after the chest received this elevated level of attention, visualising its various intersections with other university departments and their respective limitations.

Using artmaking, but ultimately in the service of curatorship (still relatively free from entrenched limitations), I visually demonstrate its wider resonance to show what is at stake when an object remains constrained by its host department. In this way, I go beyond the object-study and present my insights in practice.

This thesis, like curatorship, is about research in the making rather than the expression of it as something conducted in the past. For this reason, its conclusion remains open-ended. After listing all the findings made within the scope of the study, this section adopts the form of a digital component that co-opts the very system that first rendered the chest invisible. This component showcases various ways in which its insider biases can be resisted by formulating novel metadata that amplify the findability of the medicine chest and permeates the boundaries erected by the facility in which it is housed.

This research, initiated in 2015, coincided with two major events that influenced how I have come to understand the chest and its role at UCT. On 9 April 2015, the statue of Cecil John Rhodes on the steps up to the main academic hall of the university was removed, following the initiation of the #RhodesMustFall movement. Debates about the limitations and decolonisation of the Western knowledge foundations of the disciplines practiced within the institution raged in sessions between activists and faculty staff and researchers throughout the year, and these debates continue today. The events of this year and the ones that followed led me to re-evaluate the situational worth of this colonial-era object in the university. I found that understanding the chest as a virus – albeit a dormant one that could be converted into a vaccine through curatorship – helped me move forward with this project. The object-as-virus shift to the object-as-vaccine was visually realised through an exhibition staged in the Iziko South African Museum in 2018 and forms part of the practical component of this research. The evidence of this research is documented in Chapter Four and emphasises the strategies of the practice over its affects or reception. The documentary images serve to visually attest to curatorship's ability to inoculate against insider limitations, and I hope that they will provide sufficient representation to an examiner unable to experience the curation in situ.

The digital component functions as a final chapter for this thesis, albeit an open-ended one, and also builds on the analogy of the vaccine. By co-opting the very tools that rendered the chest invisible and using them to now amplify the chest's findability, the website (built using the platform Omeka) celebrates the object's wider resonance within the institution through the application of metadata that ignore disciplinary limits. As such, it becomes a second representation of the virus-vaccine conversion – and one which will remain as its evidence in perpetuity, or as long as Omeka and its inevitable inheritors survive.

Endnotes

- 1 This characterisation is the conventional and conservative disciplinary study but has been contested in recent years. More integrated and complex approaches have developed, including intra-, cross-, multi-, inter- and trans-disciplinary studies. See, for instance, Alvargonzalez (2011) and Klein (2013, 2017).
- 2 Zerabuvall calls this 'sociomental' control (2015: x).
- 3 According to Peter Weingart, Professor of Sociology and Science Policy at the University of Bielefeld, the development of disciplines from their emergence in the modern sense in the 1800s included the marked development of a more hermetic dispensation due to 'the shift from occasions arising externally for the collection of experience and data, to problems for research generated "within" the disciplines themselves' (Weingart 2010: 6). Respective groups also started exercising judgment and control about what they deemed relevant to their academic fields, and their language became more specialised and removed from that of the disciplinary outsider (Weingart 2010: 6).
- 4 For an extensive overview of the development of SSK, see Shapin (1995).
- 5 Shapin and Schaffer made the case that the experimental method was influenced by the social and political conditions of the period in which it was established and in response to the need for order and consensus in Restoration England. Boyle's proposed method, which used machines like the air pump to generate results that men could witness and agree on, was posited as a solution for order. Hobbes, who preferred the use of logical deduction, viewed experiments as the artificial, unreliable products of an exclusive guild. Shapin and Schaffer analysed each of Boyle's three technologies: material technology (use of a machine – the air pump – to ensure standards and repeatability), social technology (the social community composed of gentlemen of known moral character who legitimated the practice by 'witnessing' it and established its rules) and literary technology (a written record of the experiment documenting every detail of the experimental process: circumstances, failures, misdirections and successes – ensuring that others, further afield, could 'virtually witness' it) (Shapin & Schaffer 2011: 25–26). They then discussed the various flaws these represented as stipulated by Hobbes.
- 6 Since the early 1980s, however, SSK has come under fire for being blind to its own limitations. Latour (1988) has argued that SSK merely replaced the categories of science with those of the social realist and, as such, was contributing to the problem, not the solution. His 'actor-networks' theory and Haraway's 'cyborgs' (1991) – part human, part nonhuman – were offered as more fluid frameworks with which to understand the interplay between science and society (Shapin 1995: 312–313).
- 7 See Hooper-Greenhill (1992), Bennett (1995, 2018), Henning (2006), Preziosi & Farago (2004) and Marstine (2006).
- 8 The work of Mark Dion is perhaps the most noteworthy here. Dion has worked with museums, art galleries and universities, with projects such as the *Tate Thames digs* at the Tate Gallery (1999) and the *New England digs* (2001) questioning and subverting categorisations and processes employed by the discipline of archaeology, amongst others.
- 9 See James Putnam's *Art and artefact: The museum as medium* (2001) for an overview of the methodologies artists have utilised in response to a broad selection of cultural and historical museums.
- 10 See, for example, what has been written by staff members from both the SAM and SANG about this period (Davison 2005: 189–194, Bredekamp 2006: 76–82, Martin 2019: 109–149).
- 11 In 1995, architect Hilton Judin curated an exhibition at the Castle of Good Hope in Cape Town titled *Setting Apart*, which freed the space from its exclusively military identity. The exhibition co-opted an entirely new space rather than inserting an exhibition into a museum or gallery space with a long-established identity, as the exhibitions I will be discussing set out to do.
- 12 In her PhD dissertation 'Between two worlds: The distinct nature and contemporary significance of university museums and collections in Europe', Marta C. Lourenço (2005) provides a range of explanations for why university collections fall out of use. A recent revival and interest in these collections has formed part of object-based learning (OBL) approaches at a range of universities. See Chatterjee (2011), Chatterjee, Jandl & Gold (2012), Chatterjee & Hannan (2016) and Thøgersen et al. (2018).

- ¹³ I did not visit the exhibition, so the catalogue was my first means of engaging with it.
- ¹⁴ See <https://web.archive.org/web/20160319143605/http://www.specialcollections.uct.ac.za/>
- ¹⁵ The proliferation of object-studies across various institutions and disciplines includes director of the British Museum Neil MacGregor's popular BBC Radio series *A history of the world in 100 objects* (2010), which inspired a string of publications, such as *A history of women in 100 objects* (Andrews & Lomas 2018), *A history of intellectual property in 50 objects* (Op den Kamp & Hunter 2019), *A history of sailing in 100 objects* (Pickthall 2016) and *A history of birdwatching in 100 objects* (Callahan 2014).
- ¹⁶ These programmes linked to pedagogies of active and experiential learning, where hands-on engagement is believed to enrich the educational experience, enhance memory ability and facilitate abstract conceptualisation (Kandor, Chatterjee & Hannan 2017: 61–63). Case studies at institutions such as University College London and the University of Melbourne (Andrew Mellon-funded programmes, which sought to fund museum and university collaborations such as the Chicago Object Initiative) have shown how OBL has enhanced and disseminated subject-specific knowledge, facilitated the development of communication skills, encouraged team work and enhanced practical and observational skills, with student surveys reflecting a preference for this teaching model over lecture- and text-based methods. As such, it has become an invaluable methodology that disciplines now draw on to enhance learning.
- ¹⁷ Longstanding journals publishing this research are the *Journal of Material Culture* (since 1996), *The Journal of Visual Culture* (since 2002) and *Visual Studies* (also since 2002).
- ¹⁸ For more information on Novoselov and Geim's prize-winning work, see Nobel Prize 2010.
- ¹⁹ Parker used iron meteorites in a number of her earlier works, such as *Meteorite lands in Tivoli Gardens* (1996), *Shirt burnt by a meteorite* (1996), *Meteorite lands in Epping Forest* (1996), *Meteorite lands in Birmingham Bullring* (2000) and *Hat burned by meteorite* (2000). As graphite is present in iron meteorites, the graphite in *Breath of a physicist* draws associations between Novoselov's discovery and the art collection drawings.
- ²⁰ The collection is comprised of objects that entered the library as part of donations or bequests of personal and organisational papers, records and other ephemera, as well as a small selection assembled by R.F.M. Immelman, the university librarian from 1940 until 1970, to serve as a basis for a university museum that was never brought to fruition (Bloch 2016: 7).
- ²¹ #Shackville protests took place on 15 February 2016, when students erected a shack on campus to protest against a lack of housing for black students. During the protest, artworks belonging to the collection (historical portraits or photographs of subjects connected to the University) and hung on the wall of the residences were burnt. Following these events, an Artwork Task Team was instated, which temporarily removed artworks from campus that were deemed controversial or problematic.
- ²² This is also demonstrated by the redress of the collecting policies of the South African National Gallery following the end of the cultural boycott in 1991 (Martin 2019: 109–150).

Chapter One:
The Medicine Chest

A small medicine chest is housed in the Manuscripts and Archives (M&A) Department of the University of Cape Town (UCT). Roughly 15cm in height and depth and 20cm in width, it is made of metal and painted black, with the words 'Trade Mark', 'Tabloid' and 'Brand' printed under the keyhole on its front. Fitted with a brown leather strap and metal clasps, the case suggests easy portability and containment. Opening it reveals two layers, the top one filled with an assortment of bottles, paper packages and instruments, while the bottom one is more regimented and contains 16 compartments filled with glass bottles of roughly the same size. Labels read 'Chlorate of Potash', 'Quinine and Cinnamon' and 'Opium' to name a few, and each lists a breakdown of the compounds and directions for use. The chest also contains a 'Tabloid' guide, which states on its cover page: 'A brief medical guide for explorers, missionaries, travellers, colonists, planters and others' and lists the different medicine cases manufactured by Burroughs Wellcome & Co. and their applicability to different journeys and destinations, as well as common ailments and their treatments. At the back of the box, inside the lid, an oval copper crest reads 'Burroughs Wellcome & Co, London' and on the front, just above the keyhole, 'BC666' is written on a small sticker in black ink.





Figures 1-4.

The medicine chest (details). BC666. Special Collections, University of Cape Town.

The chest as a donation to the university library

The chest entered the university for the first time on 23 November 1978. Three days prior, as noted in the diary of then head librarian Leonie Twentyman-Jones,¹ one Mary Floyd visited the M&A department and spoke to the head librarian about donating a collection of family documents. Her husband, Hugh Floyd, was a senior lecturer at the UCT School of Architecture at the time, and after the passing of his mother, Agnes Floyd, the previous year, Hugh had thought these documents might be of relevance as historical archives.² The collection consisted of the personal papers of his parents, Walter and Agnes Floyd, and included documents such as school certificates, passports and personal correspondence; papers concerning the financial affairs of the family; a large number of papers on dental matters; and papers relating to Agnes Floyd's business ventures (Hart & Lydall 1981: 4). According to the *Collecting policy of the department*, manuscripts 'relating to the political, social, cultural and economic history of the Cape Province, in particular the Western Cape' should be collected 'to support research needs of the students and the staff of the University of Cape Town' (Hart, Digby & Rapp, 2010: 1). Twentyman-Jones evidently believed the collection met these criteria, as the entry in the diary for 23 November reads: '[Library] van collected Floyd mss [manuscripts]'.

Accompanying this collection of papers was a small medicine chest. Object collections in local and international university libraries are not uncommon,³ though they often pose a problem for the general archival classification system (discussed later in this chapter) and are generally collected by chance or circumstance rather than through acquisitional planning and process (Bierbaum 1990:10). Whatever storage and archival problems this little chest might cause the library in the future, Twentyman-Jones chose to keep it as part of the larger collection. When I examined the collection almost four decades later, traces of the little medicine chest surfaced unexpectedly as part of the larger 'primary' collection of documents. These included a mention in the inventory of goods packed by Walter Floyd for a hunting trip he undertook in 1913, as well as a purchase slip for it from the Burroughs Wellcome & Co. shop premises in Cape Town. This slip led to the first part of my research into this object, its history and the circumstances that led to it being housed in this particular department of the university.

The chest as a product of Burroughs Wellcome and Company

Burroughs Wellcome & Co. (BWC) was first established in 1880 by Henry Wellcome and Silas Burroughs. Burroughs invited Wellcome to join him in business in London in 1879 when modern drug production was still a relatively undeveloped field. The sole agent for the American drug firm John Wyeth and Brother in London, Burroughs had been importing and marketing pharmaceuticals since 1878. The company's compressed pills offered a much safer, standardised dose 'than medicines prepared by pestle and mortar' (Bailey 2008: online), and



Figure 5.

The medicine chest (drawing by the artist James Hutchinson based on an audio description of the object). 2018. *The Landis Museum*, curated by Chapter Thirteen. Glasgow International.

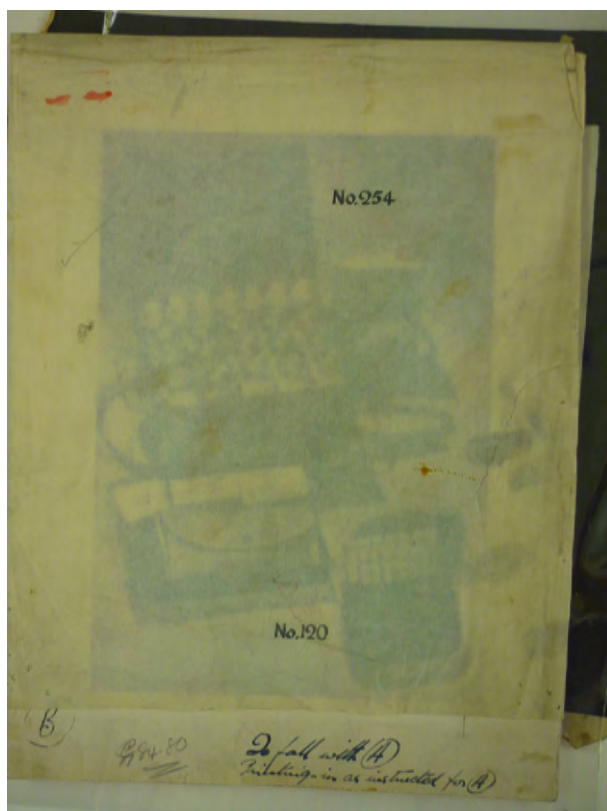


Figure 6.

The cover page of the No. 254 Tabloid chest illustration. WF/M/I/
PR/O01/6. Wellcome Collection.

Burroughs realised that there was a fortune to be made importing and marketing them in England and Europe.⁴ He wrote to Wellcome to join him in this venture and, after drawing up a contract with Wyeth that gave him exclusive rights to sell their products in 'Europe, Asia, Africa, East Indies and Australia' (Bailey 2008a: online), they set up business in London.

Heavy import stamp duty on products from America led to them manufacturing their own pills and improving the design of the production machine, engineering a new version that could produce 600 compressed pills per minute (Larson 2009: 27). When the relatively undeveloped British pharmaceutical market started taking notice of their success and competitors began making imitations of their products, Wellcome registered for trademark one of 'the most famous and powerful brand names in business history, "Tabloid", a word he coined by blending the words "tablet" and "alkaloid" to denote his firm's pills' (Bailey 2008: online). The name quickly became associated with quality and precision and was applied to the full range of the company's products, which was not limited to compressed medicines. BWC also sold dietary supplements, inhalers, dressings, cosmetic creams, soap and, later, chemicals, anti-toxins, vaccines, first aid kits and medicine chests, photographic developer and even tea. The brand name 'Tabloid', however, stayed associated with things 'reduced in size or compressed' (Larson 2009: 86). It is this reduction in size that made the firm's drugs perfect for travel, and the medicine chests in particular were designed to this end.

The BWC chests manufactured in the late 19th and early 20th centuries were improvements on earlier larger and bulkier chests. Though they housed similar patent medicines, dressings and basic surgical equipment, they were lighter and easier to haul because of the compressed versions of the medicines they carried (Johnson 2008b: 250). An excerpt from its accompanying manual highlights the various qualities BWC wanted to portray as unique to a 'Tabloid' medicine chest and which they believed would set them apart from competitors (emphasis mine):

The vital importance of carrying, on protracted journeys, an absolutely *reliable* stock of carefully selected medicinal agents is well-recognised by experienced travellers, while for those who *live at a distance* from professional medical aid, the need for efficient medical equipment is obvious. In the choice of medicines, it is imperative that only those of the *highest quality* should be selected. Drugs of a sort may be obtained at almost any price; a large number of *inferior preparations* being constantly offered for sale. All such crudities should be avoided. The exigencies of travel render the carriage of fluid preparations extremely risky, by reason of the liability of the containers to *breakage*, with the consequent waste of their contents. In tropical climates, moreover, it is practically impossible to *prevent tinctures, fluid extracts, and syrups from evaporating or decomposing*. For travellers, therefore, it is highly desirable that the drugs carried should be not only efficient but *permanent and easily portable*. A further advantage is gained if they are in a condition *ready for immediate administration* without weighting or measuring. (Burroughs Wellcome & Co. (BWC) 1925: 1).

The BWC medicine cases and chests came in a variety of shapes and sizes and could be attached to a horseman's saddle, slid under the seat of a car or

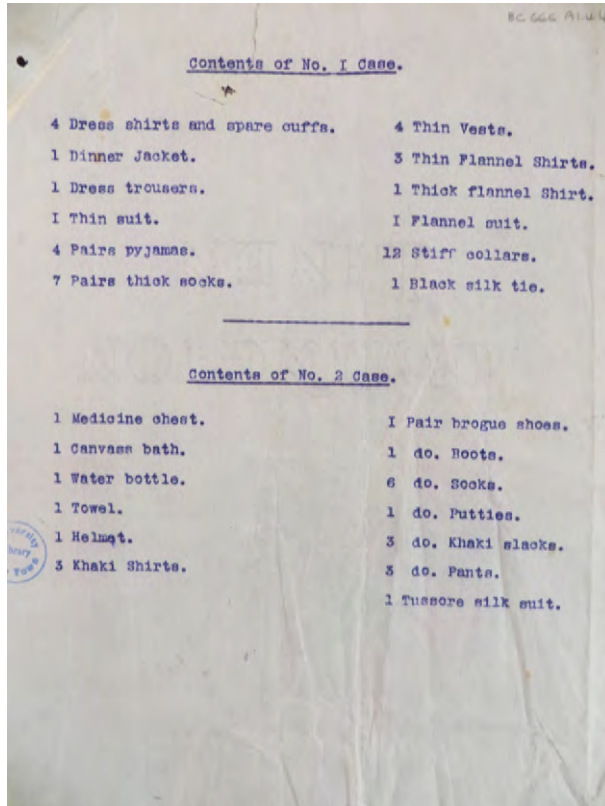
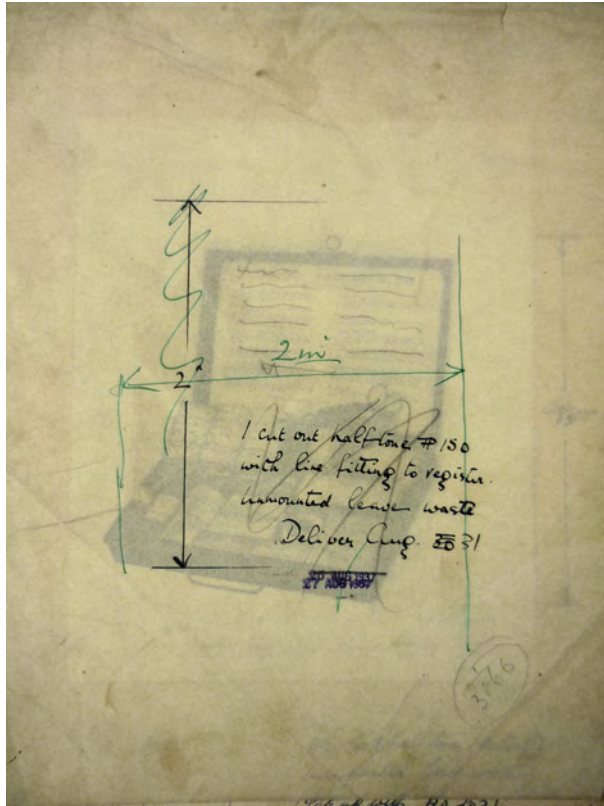
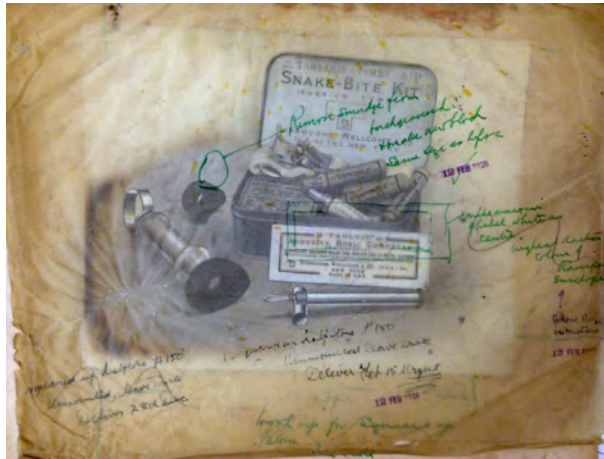


Figure 7.

The contents of Floyd's two travelling cases for his hunting trip.
BC666 A1.44. Special Collections, University of Cape Town.

clipped to the handlebars of a bicycle. They could even be balanced on the tip of a finger.⁵ Others were manufactured specifically for hot climates or distant expeditions, such as *The settler* and *The safari* cases. Seen as attractive objects, they had polished edges and spring-loaded clasp mechanisms and were available with different covers: 'crocodile or seal leather, pigskin, doeskin, japanned black metal' (like Floyd's chest), 'aluminium bronzed, nickel-plated or silver' (Larson 2010: 87). Smaller versions, like the curved 'Mussel shell', were even carried as fashionable personal accessories and fitted into a waistcoat pocket, their expensive coverings hinting at 'the quality of the products within' (Larson 2010: 87). Wellcome committed himself to improving the firm's products, especially these chests, by buying hundreds of the books and prototype specimens he came across in his travels as inspiration for his design team: a pencil tin because it had 'an interesting clasp mechanism' or 'an enamelled casket because of its attractive shape' (Larson 2010: 87), along with a range of objects, such as 'pewter bottle stoppers, rubber corks, glass bottles and metal tubes, embroidery samples showing interesting motifs, books on penmanship and calligraphy, leather samples and travel trunks', all accompanied by memos that explained their relevance to the design and manufacturing process (Larson 2010: 88). Wellcome also added notes and redrew sections of the chest designs submitted to him by his design team, dating these various recommendations and adaptations.⁶ These many dates, notes and scribbles were made on overlays of tracing paper attached to the initial design and are further evidence of Wellcome's relentless search for improvement and perfection. In addition to this attention to detail and Wellcome's high standards, one of the main reasons the 'Tabloid' medicine cases garnered such attention during this period had nothing to do with the actual product and everything to do with the efficient marketing schemes Wellcome implemented.

Recognising early that good publicity would enhance the reputation of BWC products and maximise profits, he drew on his social networks and threw lavish parties with guest lists that included eminent explorers to whom he gave BWC medicine chests as gifts (Hill 2006: 366). Wellcome started his career as a travelling salesman for a New York pharmaceuticals company and, during his 20s, toured the whole of the American continent, from Canada to Peru, before moving to London to join Burroughs (Larson 2010: 112). He also spent long periods of his life travelling in Europe and North Africa – all experiences that gave him an appreciation of a traveller's needs (Larson 2010: 112). Drawing on Wellcome's knowledge of these different terrains enabled the company to develop a wide range of medicine chests that they claimed were suited for 'military and naval purposes, for explorers, missionaries, travelling journalists, war correspondents, aeronauts, motorists, yachtsmen, planters; in fact, equipments for the air, for the earth, for the depths, and for every clime under every condition' (BWC 1912: 43). The contents of each varied according to individual requirements and could be selected by the purchaser's medical advisor. As stated in *'Tabloid': Brief medical guide for explorers, missionaries, travellers, colonists, planters and others*, 'the choice of suitable equipment depends upon the place in which it is to be used, and the persons for whom it is intended' (BWC 1925: 15). The chests were marketed as containing some of the most 'notable agents in all of modern medicine',



Figures 8,9.

Examples of Wellcome's design changes annotated on tracing paper.
1914–1938. WF/M/I/PR/O01/3, 4, 9, 8. Wellcome Collection.

characterised by ‘purity, accuracy, uniformity and reliability’ and overall ‘supreme quality’ – and as products that contributed to ‘the great advances of the times’ (BWC 1912: 27).

Roald Amundsen, Robert Falcon Scott and Ernest Shackleton all took BWC medicine cases with them on their polar expeditions; the African explorer Henry Morton Stanley carried them; as did all those ‘pioneers in the world of flight’, such as the pilots Louis Blériot, Louie Paulhan and Calbraith Rogers, who navigated the earliest transatlantic flights (BWC 1925: 13). BWC were quick to point out that their products had been pivotal to both the Arctic and Antarctic expeditions (BWC 1925: 10) and that ‘in the penetration of Africa, “Tabloid” Medical Equipments have made the way of the explorer and pioneer infinitely less perilous’ (BWC 1934: 8).⁷ It was also ‘by their aid’ that ‘the European explorer was enabled to traverse deadly swamp and fever-ridden forest in safety’ (BWC 1934: 8). Real-life accounts written by travellers and explorers hint at these chests as indestructible, such as the one used in the Bandawe Mission House, Lake Nyassa, British Central Africa, in 1891. The mission building was demolished by lightning, but the medicine chest was later recovered from the ruins and, when examined, it was found that ‘although the lightning had penetrated it and effected a considerable amount of damage, the remaining products had retained their full activity’ (BWC 1925: 2). According to the BWC guide, the chest used during one of Stanley’s travels, ‘which remained in a swamp region for nearly four years, and more than once was actually submerged in the river’, was also ‘found to have fully retained [its] efficacy’ (BWC 1925: 3) when it was brought back to London and tested in a laboratory. These stories built faith in the enduring qualities of the chests and by association conferred this quality on anyone in possession of one. If the explorers who scaled the highest mountains or travelled the furthest stretches by air or sea were enabled by these chests in any way, the everyday person could most certainly put their trust in them as well.

Advertisements designed by the company depicted the chests as the ideal accessory for adventure and danger, making them ‘sign and signifier of imperial spirit’ (Johnson 2008b: 255): ‘whether you were valiantly saving your compatriot in war, traversing a dark African jungle, navigating one of the world’s first flying machines, exploring the most desolate place on earth, ascending the highest mountain in the world, or simply enjoying the wind swept British coast, the chest would be there, ready for any ailment’ (Johnson 2008b: 255). The chests that had taken part in famous expeditions took on an iconic status and functioned as ‘relics of exploration’⁸ and as ‘material markers of the company’s history’ (Hill 2006: 372) and were exhibited as part of trade displays at, for instance, the annual meeting of the British Medical Association in 1886 and the International Medical Congress in 1895.⁹

When Burroughs died of pneumonia in 1895, Wellcome became BWC’s sole owner, and the next 20 years (until the outbreak of World War I) constituted a period of massive expansion for the company (Bailey 2008: online). In 1898, the first overseas branch opened in Sydney and was followed by seven more branches – in New York, Montreal, Buenos Aires, Cape Town, Milan, Shanghai and Bombay – by 1912. The Cape Town branch opened in 1902, seven years after Wellcome



Figure 10.

'Situations in which a Tabloid medicine chest made by BWC might be useful.' 1909. Wellcome Collection.

made his first visit to the city in 1895. Apart from the company's economic and political interest in maintaining and promoting British imperialism, several other factors might have motivated his choice of Cape Town.

The period between Wellcome's first visit and the setting up of the BWC shop was a turbulent one in South African history, with the South African War erupting between the British and the Boers from 1899 to 1902. Tabloid medical equipment was popular during 'British and foreign military campaigns', with the medicine chests demonstrating their 'military purposes' in various circumstances (BWC 1925: 7) – Walter Floyd's medicine chest, *The Indian* (No. 254), especially so. Owned by the 'celebrated British war correspondent' G.W. Stevens, it was used 'throughout the war in Greece, the two Sudan campaigns, and his journey in India' (BWC 1925: 8–9). In South Africa, it 'rendered him good service in the South African Campaign, until his brilliant career was brought to a premature close during the siege of Ladysmith' (BWC 1925: 8–9). These chests would have gained prestige from their marked associations with military and journalist celebrity in the local context, and demand for them would have risen.

Another factor that might have motivated Wellcome to open shop in Cape Town was the outbreak of the bubonic plague. With the influx of about twenty-five thousand refugees from the war, overcrowding and poverty beset Cape Town at the start of the 20th century. Aid to suffering was said to 'know no distinction of race, colour or creed', though in practice distinctions were made from the start: 'between men and women, black and white, deserving and undeserving' (Bickford-Smith et al. 1999: 13). Coloured men, for one, received no help, although the women and children did. Along with African refugees, these men disappeared into the ranks of the Cape Town poor. Indians fared only slightly better and were installed in tents in Dock Road on arrival (Bickford-Smith et al. 1999: 13). These conditions bred poverty and discontent and, when the pandemic started to sweep the world, the government was anxious that a potential outbreak would be exacerbated by the overcrowded conditions. As an entry point for the British into South Africa, Cape Town was extremely susceptible to infection spread by military activity. After spreading from China to Sydney, Glasgow and Argentina by 1900, Capetonians knew the pandemic was on its way.

To prepare for its arrival, the government consulted Professor W.J. Simpson, the previous medical officer of Calcutta and now plague adviser to the Cape Town government. Next to Bombay, Simpson considered Cape Town one of the most vulnerable towns to a plague epidemic. In a report, he equated the slums in India with the recently developed slums in Cape Town that housed a 'heterogeneous population' (Van Heyningen 1989: 470). According to Simpson, race and culture were as much responsible for disease as poverty. He saw Africans as 'unfit for urban life', the coloured community 'even dirtier in their habits', while 'the Malays and Indians possessed habits of the Asiatic' and 'the poorer-class Portuguese, Italians, Levantines and Jews almost as filthy as the others' (Van Heyningen 1989: 470). 'Living in the same insanitary areas, often living in the same houses, the different races and nationalities are inextricably mixed up, so whatever disease affects the one is sure to affect the other' (Simpson in Bickford-

Smith et al. 1999: 20). When the plague broke out in the docks in 1901, brought in forage from Argentina by the army, thousands of Africans were moved from central Cape Town to temporary accommodation at Ndabeni (then Uitvlugt forest station) and their houses were hosed down with disinfectant.

The epidemic started slowly and reached its peak in the middle of March, when 81 cases were admitted to the hospital in one week. In all, 766 people fell ill and 371 died (Bickford-Smith et al. 1999: 19).

When Wellcome returned to Cape Town in 1902 to set up a local BWC branch, the city would only recently have recovered from the plague, and its population would have been more susceptible to a range of BWC products promoting health and cleanliness. Moreover, the racial images and stereotypes employed by the company (discussed in the next section) would have been effective within the climate of a segregated Cape Town – feeding a social Darwinist belief that British culture was somehow more developed and functioned at a higher level than ‘other’ cultures in its empire (Johnson 2008b: 259). In 1903, the sculpted words ‘Burroughs Wellcome & Co.’ appeared on the facade of the building situated at 5 Loop Street – and it is from here that Walter Floyd purchased his No. 254 chest ten years later.

The chest as property of Walter Floyd

The BWC shop was located a short walk from Walter Floyd’s dental practice, which he bought in 1904 (for £2,404 16s 8d) and shared with his partner, William Johnston. It is uncertain when Floyd first came to South Africa, ‘but records prove that he was living here by January 1902’ (Hart & Lydall 1981: 1).

The large quantity of papers in the BC666 collection pertaining to dental matters – which includes ‘legal and financial papers of the dental practice, papers of the various dental societies to which Walter belonged from 1905 to 1934’ and letters on various dental matters, as well as a large section devoted to correspondence, memoranda and notes on the Medical, Dental and Pharmacy Act of 1928 – shows he was ‘very active in dental politics’ (Hart & Lydall 1981: 1). As an

office-bearing member of the Dental Society of the Cape Province, and a member of the South African Dental Association, he was the key figure in formulating and presenting the dentists’ case against unqualified dental mechanics in the proposed new medical bill, which was passed in 1928 as the Medical, Dental and Pharmacy Act. (Hart & Lydall 1981: 1)

This act was considered a milestone in the development of organised medical, dental and pharmaceutical practices in South Africa, establishing a single set of regulations for these professions across the country (Ryan 1986: 149–151). It was also, however, one of a series of laws passed in South Africa that have regulated indigenous medical practices since the 19th century. Legislation passed in 1862 prevented sangomas from practicing (Paarl in Bishop 2010: 14), and the 1928 act barred inyangas from practicing in all parts of the country except



Figure 11.

The swamp of sadness. Film still from the *Neverending Story* (1981), directed by Michael Ende.



Figure 12.

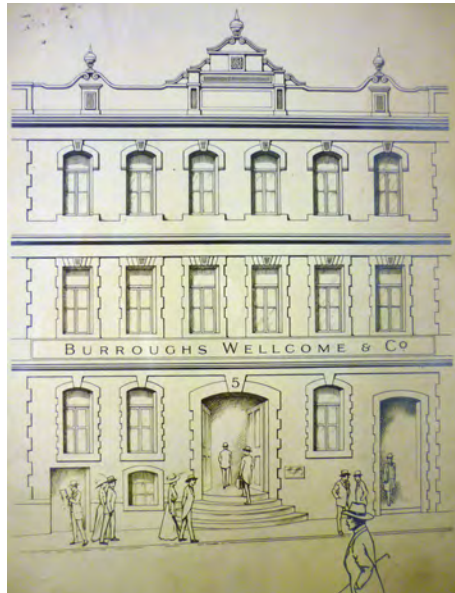
'Tabloid medicine chest issued to the Scott Polar Expedition, found with their bodies.' N.d. Wellcome Collection.

Natal, where they could continue to practice if granted a license (Flint in Bishop 2010: 14–15).¹⁰ The act also banned the indigenous use of ‘European’ methods of diagnosis and treatment, for example forbidding the use of stethoscopes by inyangas (Bishop 2010: 16). When applied to medical practices during this period, however, the term ‘indigenous’ as opposed to ‘western’ was not as clearly demarcated as the law that Floyd helped draw up.

Disembarking from his ship at the start of the century, Floyd would have encountered a diverse Cape population consisting of indigenous Africans; slaves (mainly from the East Indies) and their descendants; Dutch-Afrikaners descended from Dutch and German settlers; French Huguenots; and British settlers (Deacon 2001: 193) – a diverse community all practicing their own healing rituals and producing or sourcing their own cures for various ailments (Digby 2006: 373–410). In recent years, particular interest has been directed at the resulting cross-pollinations and hybridities in the treatment of illness and disease that developed during the colonial and precolonial period from this heterogenous mix of cultures. Karen Flint’s *Healing traditions* (2008) and Digby’s *Diversity and division in medicine* (2006) suggest that a complex structure of complementarity existed in which overlapping forms of healthcare had permeable and shifting boundaries, illustrated perhaps most succinctly in the particularly porous field of botanical medicine, utilised to some extent by almost all cultures (Digby 2006: 346).¹¹

The 1928 act served to render this hybridity irrelevant, however, and drew a clear demarcation between ‘advanced’ and institutionally validated Western biomedicine and all the other healing varieties.¹² Borrowing from Herbert Read’s art historical discussion on looking, Digby posits that the biomedical practitioner’s generally critical attitudes were shaped in part by their limited recognition of indigenous medicine during this period – ‘what we see is inseparable from how we see; the eye is not innocent, and vision is partial’ (Digby 2006: 356) and, quoting Read, ‘we see what we learn to see, and vision becomes a habit, a convention, a partial selection of all there is to see’ (in Digby 2006: 356). Accordingly, Digby argues that the Western practitioners would have had, at best, only a partial view of the different medical systems in South Africa during this period (Digby 2006: 357) and probably only to the extent that it was a threat to their own livelihood and authority – as evidenced in the 1928 Medical, Dental and Pharmacy Act that Floyd helped instate.

As a practicing dentist, he was much loved and respected, and his daughter-in-law, Mary Floyd, recounts how chance meetings with previous patients often resulted in praise for his gentle manner and expertise.¹³ In 1913, he undertook a hunting trip with a few of his friends to then Northern Rhodesia, and he purchased the No. 254 medicine chest in the Burroughs Wellcome & Co. shop in Cape Town prior to embarking on this trip. As a British citizen, a dentist and a hunter, many expectations about what he would encounter during the trip would have been influenced by broader British views about the empire and its colony and, as the Burroughs Wellcome & Co. advertisements for their medical chests fed into popular tropes of the medical missionary, explorer and hunter (Johnson 2008a,b; Hill 2006), it is perhaps not surprising that Floyd selected this



(top) Figure 13.

Line drawing of the Burroughs Wellcome & Co. offices, Cape Town.
N.d. Wellcome Collection.

(bottom) Figure 14.

A photograph of the Burroughs Wellcome & Co. offices, Cape Town.
N.d. WF/M/I/PR/S02. Wellcome Collection.

particular chest on 17 June in preparation for the trip.

With the exception of an occasional Portuguese explorer, the area that became known as Rhodesia lay largely untouched by Western intervention until the mid-19th century. It was only after 1851, when the Scottish missionary and explorer David Livingstone entered this terrain, that accounts of it spread to London and further afield (Taylor 2006: 11). However, a significant number of explorers, missionaries and traders began to arrive in the region after the Berlin Conference (1884–1885) (Simson 1985: 7), and in 1890 Cecil John Rhodes, spearheading British imperial interests in the area, secured, through trickery and deception, exclusive mining concessions from the local chiefs for the British South Africa Company (Taylor 2006: 11). By 1895, the area, now renamed Northern and Southern Rhodesia after Rhodes, was proclaimed a British sphere of influence. Up to the time that Floyd would have visited in 1913, Rhodesia's history formed part of what historians call the 'Scramble for Africa' – the period from about 1870 to the outbreak of world war in 1914, when the major European powers 'partitioned the continent between themselves, set up the machinery of trade and rule and strove to establish effective dominion over Africans' (Tilley 2011: 32). Britain's focus was to first secure Egypt and South Africa to ensure that its lines of communication with India would remain open. Once their rule in these territories was firmly established, however, Britain set about acquiring more territory. As part of this process, the role of the explorer – as an agent gathering knowledge about potential areas for expansion – assumed a privileged status.

The figure of the explorer was a popular one in the 19th century. During the late 18th and early 19th centuries, several museums, learned societies and scientific institutions were launched and supplied much of the financial support and intellectual rationale for these expeditions (Kennedy 2007: 1887). Because botany, geology, geography, zoology and other scientific disciplines were placing new emphasis on observation and evidence acquired in the field during this period (Kennedy 2013: 34), these museums, societies and institutions benefited from the data and specimens gathered by explorers.¹⁴ As they provided financial backing for most of these expeditions, they also defined its objectives and could insist on the protocols to be followed in the field (Kennedy 2007: 1886), such as 'maintaining a daily journal, recording latitude and longitude, measuring rainfall and wind direction, collecting botanical specimens and geological samples, and gathering word lists and ethnographic artifacts from indigenous peoples' (Kennedy 2007: 1887). Many of these tasks required precision instruments such as barometers, sextants, chronometers, pedometers, thermometers and artificial horizons, all instruments that symbolised a new 'regime of knowledge' grounded in empiricism (Bourguet et al. 2002: 3). Historians of science have noted that the key purpose of these instruments was to combat the subjective responses of an individual encountering a strange new environment by establishing a system of 'standardisation and accountability' that provided 'forms of equivalence and modes of comparison' for the information they brought back to Britain (Bourguet et al. 2002: 3, 8).

The Royal Geographical Society (RGS), founded in 1830, became the

leading institutional advocate of British exploration during this period and remained so for the remainder of the 19th century. Functioning as both ‘a sober scientific institution and a shrewd promoter of the explorer as national hero’ (Kennedy 2007: 1886), it was the main ‘validating agency’ for British exploration, awarding gold medals to those explorers whose accomplishments it deemed especially noteworthy (Kennedy 2013: 38). On their return, such explorers were honoured by having newly discovered species named after them, having their work recognised in publications and exhibitions and receiving recommendations for colonial posts (Kennedy 2013: 38). The data and specimens collected by them were assimilated into the various sponsoring societies, institutions and museums to be subjected to a range of ‘scientific nomenclatures, taxonomic categories, and preservation methodologies’, all integral to the ‘collecting, classifying, and cataloguing’ of these materials (Kennedy 2013: 38) and resulting in the development of many of the disciplines still being practiced today.

These expeditions both collected natural resources and established new routes and new markets – all tying into imperial ambitions. Scholars such as Edward Said have argued that the epistemology of exploration was inherently imperial, creating an ‘imaginative geography’ of distant lands inhabited by alien and savage peoples in need of civilising (Said 1979: 58–71). This has been discussed by many scholars (Arnold 1996, 2000; Driver & Martins 2005; Stepan 2001), with particular attention being paid to how the category of the ‘tropical’ was applied to certain regions of the world – which would have included Central Africa and Rhodesia. Drawing on Said, David Arnold (1996, 2000) has discussed how this category applied to both a geographical location and also a conceptual space that signified that which was culturally and politically alien and environmentally distinctive from the West (in Johnson 2008b: 258). Arnold’s discussion of the tropics also highlights their duality in the popular imagination of Europeans at the time as a space that was ‘as much pestilential as paradisiacal’ (Arnold 2000: 7). Considered through its pestilential perspective, it was represented as primitive, violent and destructive – an environment in which ‘the speed and fatality of tropical diseases, the destructiveness of tropical storms, the ferocity of tigers and other carnivorous beasts prowling in malarious jungles’ (Arnold 2000: 8) posed an endless array of dangers to the civilised and cultured British citizen.

In *Tabloid brand medicine chests: Selling health and hygiene for the British tropical colonies*, historian Ryan Johnson describes how BWC actively promoted imagery of the tropics in journals such as *Tropical life*, *Medical missionary*, *Journal of tropical medicine* and *Climate* to promote their products, and the medicine cases in particular, as the ‘ideal antidote against a tropical landscape’ (Johnson 2008b: 258). Seemingly at the forefront of human exploration and colonisation, BWC focused on the medical and surgical requirements for expeditions to tropical regions and conducted research throughout the empire using its own laboratories and those of the state and colonial facilities (D’Arcy, 1999; Church & Tansey 2007). Alongside the explorer, the missionary doctor also exercised a powerful hold over the Western imagination, feeding into ideas of ‘tropicality’ of the colonial period.



Figure 15.

Walter Floyd (middle) arrives by boat. N.d. BC666, G1.1–G1.133.
Special Collections, University of Cape Town.



(top) Figure 16.

The label of this display in the Hunterian Museum, Glasgow (2017), reads: ‘This is a slice of the tree under which the Scottish explorer and missionary David Livingstone’s heart was buried, near Chitambo in Zambia. He died there in 1873. The rest of his body was brought back to Britain for burial in Westminster Abbey. The tree died around 1900, and a piece of it was given to his grandson, Hubert Wilson. He donated it to Anderson College where Livingstone studied medicine. In 1922 it was transferred to the Hunterian Museum.’

(bottom) Figure 17.

Part of the ‘Useful plants’ section at Kirstenbosch National Botanical Garden. 2018. Cape Town.



(top) **Figure 18.**

A section of the Chelsea Physics Garden. 2017.

(bottom) **Figure 19.**

A close-up of a leaf from the Groote Schuur Hospital garden. 2018.
Cape Town.



Figure 20.

Flightpaths in the sky observed from a bus returning from Oxford.
2017.

Livingstone paved the way for this trope with his celebrity status, his saintly persona and his success in communicating a moral rationale for exploration: 'the redemptive power of commerce and Christianity for Africa's slave-ridden peoples' (Kennedy 2007: 1889). In *Healing bodies, saving souls*, David Hardiman writes that 'During the colonial era, mission doctors [...] worked with sick people in remote parts of the globe, treating maladies that were seen to be as much social as physical. They laboured not only to restore health to the bodies of "natives", but also to save their souls' (Hardiman 2006: 5). In *Curing their ills*, Megan Vaughan (1991) explores how colonial Europeans were captivated by the image of the white doctor working in the tropical regions. In the 19th century, this encounter was often:

Framed in a jungle-like setting, as in many pictorial depictions of David Livingstone. The white doctor stands confronting both the 'nature' and the 'culture' of the dark continent, the boundaries between which are disturbingly ill-defined. Armed only with his faith and his medicine, he is stalked both by the animals of the bush and by men in animal skins. (Vaughan 1991: 1)

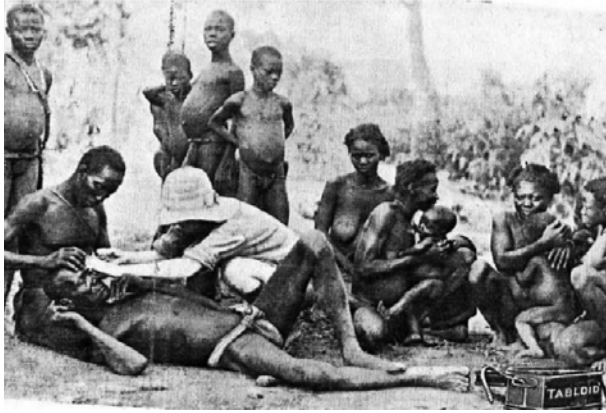
These Western medical interventions were often portrayed as an important 'first contact' point between Europeans and locals, and BWC medicine chests were again promoted as pivotal objects in these interactions. Often depicted alongside white Europeans, BWC promoted the Tabloid brand medicine chest as going 'hand in hand with the advance of civilisation, the conquest against disease and the battle against ignorance and superstition' (BWC 1934: 27).

According to BWC (1934: 29):

'Tabloid' medical equipments have been the choice of famous missionaries and of the foremost missionary organisations throughout the world, because it is recognised that not only do they enable effective medical treatment to be given in the most remote places, but they are a valuable asset in securing the attention and goodwill of the natives to religious teaching.

Walter's No. 254 was an especial favourite, particularly amongst these missionaries, with those from Livingstone College referring to it as the 'Livingstone College Medicine Chest' and treating it as much they might a college mascot (Battersby 1900: 27). The No. 254 duplicated the iconic No. 250 chest that Stanley took with him on his journeys into central Africa but was lightweight and could thus be kept 'close to a European body' (Johnson 2008b: 256). Made of teak, it was 'not easily attacked by white ants' and was lined with 'japanned' metal to keep the contents safe from the tropical elements (Johnson 2008b: 256). The chest held the usual assortment of medicines but in fewer amounts: '16 13 4 oz glass stoppered bottles, six four-dram phials, and lacked bulky items such as 7 lbs of Vaseline, 10 lbs of Epsom salt, and 10 lbs of boric acid' (Johnson 2008b: 256).

In a BWC publication titled *The romance of exploration* (1934), the No. 254 (or a chest that appears very similar) features in an image that emphasises its role – and that of Western medicine and expansion – in the treatment of local illness. The figure of 'Mrs Glover', kneeling and treating what appears to be a very



(top) Figure 21.

‘Mrs Glover attending to an ill African chief.’ 1934. Wellcome Collection.

(bottom) Figure 22.

A display featuring, amongst many other objects, a stethoscope owned by René Laennec. 2017. Ninewells Hospital & Medical School. Dundee.

ill man, exudes not only the authority of Western medicine within the local context but conveys her as the self-sacrificing and caring European ‘civilizer’ in service of expanding the empire, ‘the medicine chest conveniently by her side’ (Johnson 2008b: 259). In another representation, Harold Copping’s 1916 oil painting *The healer*, a medicine chest (again very similar to the No. 254) is included in a scene in which a missionary doctor attends to an apparently suffering young boy. Christ is shown standing close by, with his hand outstretched in guidance, ‘emanating light in approving benevolence’ (Johnson 2008b: 259) and combatting the darkness of the jungle in the background. These representations illustrate the contents of the 1928 act, with biomedicine depicted as the epitome of progress and civilisation, in stark contrast to the indigenous practices represented by the cupping horn (used in African and Asian practices) carelessly tossed aside in *The healer*, and through visual manipulation in the *Romance of exploration* image, where the medicine box’s placement seems superimposed onto the image or, at the very least, enhanced afterwards.

Contrary to their assertion of medical and scientific superiority, most of the contents of BWC medicine chests were far from modern, however, and were derived from outside Europe and had been in use for decades (Johnson 2008b: 261).¹⁵ BWC acknowledged that they frequently found inspiration ‘observing locals’ but that the plants and remedies used in the various colonial outposts could only really be trusted once they were brought back home, tested and ‘recast through Western science’ (Johnson 2008b: 261). The historian Mary Louise Pratt has argued that ‘discovery’ in this period was usually a retrospective act involving ‘a journey to a far-flung region, asking the local inhabitants if they know of a nearby river, lake or waterfall, paying them to take one there, then “discovering” the site, usually by the passive act of seeing it’ (in McClintock 1995: 29–30). Pratt marks these acts as moments in which imperial men reinvented a moment of pure (male) origin and marked it visibly with one of Europe’s fetishes: a flag, a name on a map and, later, perhaps a monument (in McClintock 1995: 29–30) or, in the case of the medicine chest, brought back the local medicinal ingredients to be ‘purified’ in the laboratory and marketed anew. As such, the only truly Western and modern aspects of the chests were their mass production and the expertly honed marketing campaigns (Johnson 2008b: 261). Considering these characteristics, these chests could be grouped with a series of similar commodities manufactured in the empire during this period, all of which carried covert imperial ideologies with them into colonial outposts.

Everyday products such as sugar, tobacco, tea, coffee and soap were powerful carriers of British ideas of superiority and progress. These products were especially potent because, similar to the chests, they were mass manufactured and were tied to marketing campaigns that enforced imperial ideologies to be consumed by the broader public (Richards 1990; Pieterse 1992; McClintock 1995). Anne McClintock (1995: 223), for example, considers how soap became a symbol of British superiority through its associations with hygiene and its symbolism of progress, and she illustrates how these types of objects carried covert messages that supported the agendas of scientific racism as propounded in the anthropological, scientific and medical journals, as well as in the travel writing

and novels produced in the period. Because these materials were disseminated to diverse publics that extended beyond the scientific community, they spread these ideas on an unimagined scale (McClintock 1995: 209), both in the colonial outposts and back home. Colonial heroes and colonial scenes were ‘emblazoned on a host of domestic commodities, from milk cartons to sauce bottles, tobacco tins to whiskey bottles, assorted biscuits to toothpaste, toffee boxes to baking powder’ (McClintock 1995: 219). The marketing campaigns for these products, similar to the BWC narrative of the medicine chests as the property of Stanley, Shackleton and Scott, represented the Western belief in a hierarchy of civilisations, with the West – and Britain in particular – positioned at its summit.

As a product of empire infiltrating the colonial outpost, Floyd’s No. 254 medicine chest also offers an interesting insight into the medical politics of the period. On examining its contents, the medicines it contains are found to be derived from either chemical preparations or botanical sources. The botanically derived medicines in the chest, compiled by me, are as follows:

Medicine	Botanical source
Quinine bisulphate	An alkaloid made from the bark of the cinchona tree endemic to forests in the Andes and the Amazon basin in South America.
Ginger essence	The rhizome, ginger root or simply ginger of the <i>Zingiber officinale</i> originating on the continent of India.
Hazeline	A preparation made from the fresh young twigs of <i>Hamamelis virginiana</i> – a shrub or small tree which grows throughout northeast and southeast North America.
Dover powder	A powder consisting of a combination of ipecacuanha (made from the dried root of <i>Cephaelis ipecacuanha</i> , a plant from Brazil), opium (seedpods of the <i>Papaver somniferum</i> poppy, which grows wild in eastern and southern Asia and south-eastern Europe), saltpetre and cream of tartar.
Quinine and rhubarb compound (Livingstone Rouser)	A compound of quinine, which derives from the bark of a cinchona tree endemic to the tropical Andean forests of western South America, and rhubarb (<i>Rheum rhabarbaru</i>), a species of plant in the family Polygonaceae, originating in Asia.
Laxative vegetable	The active ingredient is purified senna, which is derived from the senna plant endemic to Equador.
Opium	Made from the dried latex obtained from the <i>Papaver somniferum</i> poppy, which grows wild in eastern and southern Asia and south-eastern Europe.

Tonic compound	A compound made from the bark of the cinchona tree endemic to the tropical Andean forests of western South America.
Chloroform and morphine	A substance which consists of chloroform, found in spearmint (a plant native to Europe and southern temperate Asia, extending from Ireland in the west to southern China in the east), and morphine, which is produced by shallowly scoring the unripe seedpods of the <i>Papaver somniferum</i> poppy, which grows wild in eastern and southern Asia and south-eastern Europe.
Quinine and cinnamon	Quinine derives from the bark of a cinchona tree endemic to the tropical Andean forests of western South America, while cinnamon is obtained from the inner bark of several tree species from the genus <i>Cinnamomum</i> native to Sri Lanka.
Ipecacuanha	Made from the dried root of <i>Cephaelis ipecacuanha</i> , a plant from Brazil.

The botanical origins of most of these medicines (particularly in the period they would have been sourced for BWC products) were from outside of Africa – especially strange when considering the long history of the Cape as a point on the trade routes where ill sailors regularly disembarked and drew on the knowledge of Khoekhoe traditional healers for treatment and herbal cures (Laidler & Gelfand 1971: 44). The Cape flora offered a plenitude of medicinal resources, and these healers (who were skilled in botany, surgery and medicine) used them in a variety of healing practices.¹⁶ The exclusion of local botanical remedies in the BWC No. 254 medicine chest can be attributed to many factors.

In the same period that Floyd purchased the medicine box, the introduction of biomedicine (of which BWC would have been one of the main proponents) changed the medical landscape of the Cape Colony. Prior to this, as previously mentioned, the diverse population of the Cape Colony had resulted in cross-pollination and the formulation of hybrid medical practices that drew on the wide variety of different medical perspectives and practices present in the colony (Digby 2005; Ernst 2002; Flint 2008). However, with the advent of biomedicine, a clear demarcation was drawn between ‘indigenous’ medicine, rendered as ‘primitive’ and ‘unscientific’, and Western medicine (despite many ‘biomedical’ products being sourced from indigenous communities across the world). A local branch of the British Medical Association was formed in Cape Town towards the end of the 19th century, offering institutional support to the generally held belief that the profession had a special function to perform within colonial society and that doctors were ‘agents of empire’ at the forefront of the civilising mission, responsible for the upholding of Christian moral values through their practices of healing (Van Heyningen 1989: 450).

It seems likely that BWC’s explorer and medical narratives may both



Figure 23.

Harold Copping. 1916. *The healer*. Oil canvas. 127 x 101.5 cm.
Wellcome Collection.

have influenced Floyd's purchase of the No. 254 chest. Another narrative could have been that of the hunter in Africa, which also fed contemporary desires for stories of 'exotic adventures, manly enterprise and colonial conquest' (Thompson 2015: 5) in the 19th century. The historian Angela Thompson argues that because of the depletion of game along Africa's coastlines, hunting took place within as well as beyond colonial borders – areas where imperial powers were present but where the 'tentacles of civilization', as the British understood it, did not completely 'constrain the actions of white gentlemen' (Thompson 2015: 7). In addition to the depletion of animal populations along the coast, elephants and other game retreated further into the interior because of the avid demand for ivory during this period. In these districts, the tsetse fly was the vector for trypanosomiasis (known as sleeping sickness in humans or nagana in animals) and was especially prevalent in areas of East and Central Africa. These areas were also known for malaria, and while hunters did not yet know that the disease was carried by mosquitoes, they knew to avoid regions where 'the fever' was found. By the end of the 19th century, travelling north to the areas where animals could now be found required abandoning the horses and oxen-pulled carts that had previously been used for hunting and transporting goods (Thompson 2015: 6–8) and navigating terrain on foot.

Floyd, travelling to Northern Rhodesia in 1913, would have been aware of many of these issues, and a full itinerary drawn up by an acquaintance who had undertaken the same expedition a few years earlier alludes to many of the logistical problems described by Thompson.¹⁷ The contents of the No. 254 medicine cases included three medicines known for treating malaria – 'Quinine and Rhubarb Compound (Livingstone Rouser)', 'Quinine and Cinnamon' and 'Tonic Compound' – and suggests Floyd's cognisance of the prevalence of this disease in the areas he would traverse during his trip.

He married Agnes Chamberlain on his return in 1914, and they had four children: Eleanor, Hugh, Katherine and Godfrey. When war broke out, Walter was stationed in German East Africa in 1915 and 1916 as part of the South African Medical Corps, and many letters and photos in the collection are from this time. While there is no proof, it is entirely possible that the medical chest accompanied him.

Floyd died in 1934. A newspaper article, possibly from the *Cape Times*, notes his death ('Sudden death of city dentist'):

Mr. Floyd and his wife attended the performance of Galsworthy's play, 'The roof,' at the Little Theatre on Thursday night. After the performance they walked down Government Avenue, and caught a train to Rondebosch, where they reside. In the train Mr Floyd had a heart attack and collapsed, not recovering again. (BC666 A1.562, newspaper article, Manuscripts and Archive Department)

After his death, the medicine chest was stored in the family home in Rondebosch and moved to a new house with Agnes when she relocated, until her death in 1977, when her son and daughter-in-law decided to donate the family papers, along with the chest, to the University of Cape Town's Manuscript and Archives department.



Figure 24.

A teeth mould guide in the Cape Medical Museum, Cape Town. 2018.

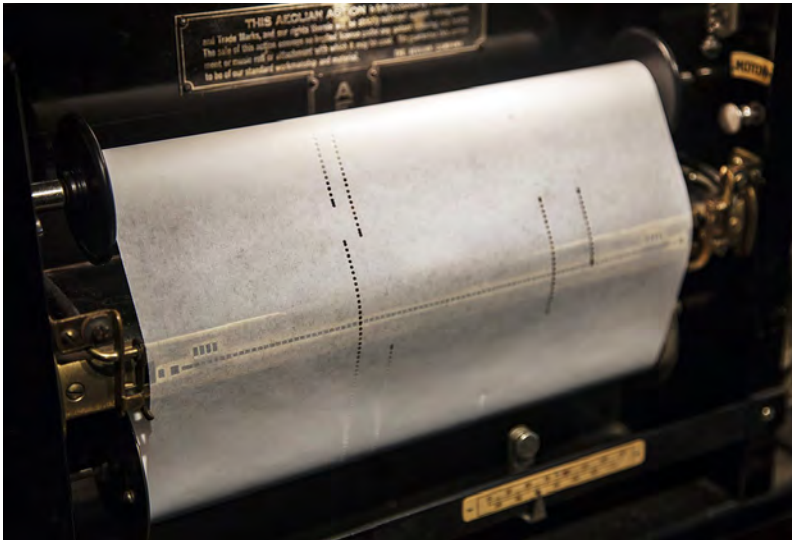


Figure 25.

Jenny Kendler. 2016–2017. *Music for elephants*. Kendler translated data predicting the poaching of African elephants into a score for a vintage ivory-keyed player piano.



Figure 26.

Insects in the Natural History Museum, Oxford. 2017.



Figure 27.

An old glass slide from the Pathology Learning Centre, University of Cape Town. 2018.

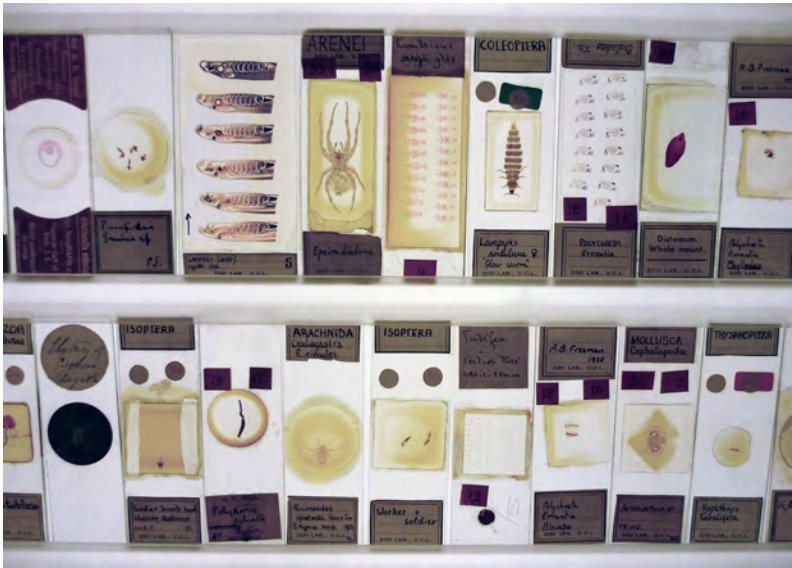


Figure 28.

The micrarium. 2017. Grant Museum, University College London.

Natural history museums mostly display large animals, despite 95% of known animal species being smaller than an adult human thumb. This sub-museum shows the legs of a flea, highlighting its muscles; a whole squid only a couple of millimetres long; beetles sliced 1/10th of a millimetre thick along their entire length, through the antennae, head, legs and body; and the wings of a *Chrysopa perla*, a fearsome predator in the insect world.

The chest as property of the University of Cape Town

On its arrival on 23 November 1978, the collection of which the medicine chest formed part was given an accession number and was placed in fumigation until 20 December – a standard archival preservation procedure¹⁸ – after which then librarian Lesley Hart started processing it. When Hart took maternity leave in December 1980, Sue Lydall took over. From December 1978 until May 1981, both librarians organised the collection according to standard archival procedures. The document compiled by Twentyman-Jones and used by UCT librarians and archivists at the time, *Sorting collections of manuscripts*, provided a formula for breaking down collections into different sub-sections:

- A. Personal Papers (diaries, personal certificates, other personal documents),
- B. Correspondence (If this is large it can be divided into Family & General correspondence. Correspondence is usually arranged alphabetically by the name of the writer of the letter, and then chronologically, if there are several letters written by the same person),
- C. Interests (These may be divided into several sections, depending on the interests of the person),
- D. Articles & Pamphlets,
- E. Newspaper clippings,
- F. Photographs and
- G. Miscellaneous (only use for documents which will not fit into any other categories). (Twentyman-Jones 1981: 1)

The document also states that ‘if the collection has been sorted into a particular order by the originator of the documents, do not alter this’, as this order can ‘indicate the way in which the papers were used’ (Twentyman-Jones 1981: 1). The arrangement could inform the researcher about the originator’s ‘interests, the way he worked, as well as providing information on specific topics’ (Twentyman-Jones 1981: 1).

The taxonomy in the Floyd finding aid takes on a slightly different formula than the one stipulated in the guide, so it would seem that these papers were indeed ordered to some extent by a family member or members (most likely Agnes Floyd).¹⁹ The collection, which consists of 6,979 items, was divided into: A. Personal papers; B. Correspondence; C. Family financial papers; D. Walter Floyd: Dental matters; E. Riding school; F. ‘The Mews’; G. Photographs; and H. Miscellaneous. In May 1981 the finding aid was completed for what is now known as BC666, and a letter was sent to Mary and Hugh Floyd to notify them and to thank them for their contribution.

As part of the vast array of documents, certificates, letters, photographs and notebooks that were categorised, divided and subdivided, the medicine chest stands somewhat apart from the rest, as it is the only object in the collection. It is, however, one of a number of objects in the library that are tied to donations or bequests of personal and organisational papers. As already noted, objects are not readily accepted into library departments, as they offer a challenge in terms of storage and taxonomic systems (Bierbaum 1990: 10). Because of this, the objects that do enter a library end up, in some sense, getting ‘buried’ within the department due to standard archival processes, which do not accommodate their inclusion. All these objects should, however, acquire a designated position within the collection’s finding aid, usually under the category ‘Miscellaneous’, unless the object is of relevance to one of the other sub-divisions established. In many cases,

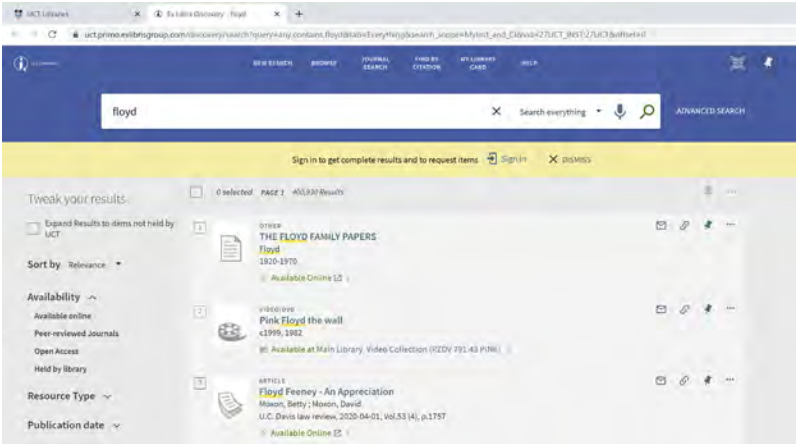


Figure 29.

Searching for ‘Floyd’ in the Special Collections online database.

such a sub-division would be written on a sticker and attached to the object.

However, the medicine chest is curiously absent in any division or sub-division of the BC666 finding aid and, on studying the object itself, its peeling sticker simply reads 'BC666', with no further designation.

Following speculation by Hart that the number allocation could have fallen off through handling,²⁰ the BC666 Miscellaneous grouping (H) was investigated along with a grouping of items under Family papers (A) that related to Floyd's hunting trip. Hart recommended these two categories as the most logical ones in which the medicine chest would have been recorded in light of the overall taxonomic structure of BC666.²¹ Because the descriptions provided for items in the finding aid can at times be vague or general, physically investigating these groupings is the best way to engage with and cross-reference the contents. According to the finding aid, the Miscellaneous category consists of 31 items: a copy of the 'The Livingstone Mail, No.44, Vol.2 26.1.1907' (H1.1), an 'unidentified letter' (H1.2), a 'publication called 'Tidings News of Tomorrow' Vol.1, No.2. November, 1941' (H1.3), 'miscellaneous items including postcards' (H1.4–H1.30) and a 'newspaper cutting' (H.1.31) (1981: 14), while the Family papers subdivision comprises: 'A1.35–A1.43: Papers re hunting trip by Walter Floyd in Northern Rhodesia in 1913' (Hart & Lydall 1981: 1). Floyd bought the chest for this trip, and the slip of its purchase at the Burroughs Wellcome & Co. shop in Cape Town is part of this subsection (listed as A1.39) as well. The chest could therefore have been allocated to section H1.4–H1.30 or A1.35–A1.4, but a physical tally of the items in these sections matched the 27 and 9 items stipulated in the finding aid categories.

After a thorough investigation of the whole collection, the only mention of the medicine chest appeared to be in the collection note – a narrative overview of the collection – situated at the beginning of the finding aid. In it, Hart and Lydall wrote: 'There is some very interesting material relating to a hunting trip he made in (then) Northern Rhodesia in 1913, including his safari diary, photographs and a medicine case acquired for the trip. His letters to Agnes at this time also describe the holiday in vivid detail' (Hart & Lydall 1981: 3). As what is included in these narrative notes is subject to the preferences of the librarian, the chest's mention is somewhat incidental and does not guarantee that an outsider, unaware of its existence, would be able to locate it.

When I embarked on this research in 2015, the only document available for searching the collections in the M&A department was *Guide to the manuscripts in the University of Cape Town libraries* (2013) – compiled from the printed guide and first supplement entitled *Handlist of manuscripts in the University of Cape Town Libraries* (1968) – and three typewritten accession lists. The guide consists of an abridged list of all the finding aids available in the department but excludes 'museum objects, photographs, autograph albums, paintings, press cuttings and similar material' (University of Cape Town Libraries 2013: vi) unless they formed part of a particular group of manuscripts. As discussed in the introduction to this thesis, typing 'medicine chest' into the general library search engine, an application called Ex Libris Primo, delivered no results. Typing 'Floyd' however, produced the guide that listed the abridged entry for BC666 on page 108:

UCT Libraries

Manuscript

BC666

Floyd Family Papers.

ca.1920s

ca.1970

Donor: H Floyd; ca.5000 items. List.

+ Papers of Walter (1875-1934) and Agnes (d.d. 1977) Floyd, incl. letters, photographs, family financial matters incl. letters and accounts re a Riding School in Cape Town (1936-1962). Relevant to the social history of Cape Town. + Also documents re the Medical, Dental and Pharmacy Act of 1928 and the Dental Society of the Cape Province.

In addition to this entry, a fine combing of the guide's index reveals that BC666 is only listed as a reference in connection with 'Cape Town Riding School'; 'Cape Town social history'; 'Dental Society of the Cape Province'; 'Floyd, A'; 'Floyd, W'; and 'Medical Dental Pharmacy Act 1928' (and not with the term 'medical case,' which does not appear in the index at all). Thus, without requesting the complete finding aid for BC666 and reading about the 'medicine case' in the narrative note, an outsider to the collection would remain unaware of its existence, and it would remain as a blind spot in this facility.

In 2017, Special Collections launched AtoM@UCT, an electronic database of its finding aids.²² Accessible on the UCT Special Collections webpage, it allows users to search these aids by inputting words and phrases mentioned in the aid. According to the librarians, AtoM@UCT is still very much a work in progress, and testing the engine with 'medicine chest' (or 'medicine case' as it is described in the narrative note) still did not draw up the Floyd papers.²³ Some finding aids (such as the BC666 aid) have only been processed at the 'collection-level' stage (meaning they are only searchable using the particular phrases selected by the archivist who input the collection), while other aids have been embedded so thoroughly that each word mentioned in the aid is now searchable (even using Google).

Inputting the 'top-level' phrases selected for the BC666 collection ('BC666', 'Walter Floyd', 'Agnes Floyd' and 'dental society', to name a few) leads one to a Fonds BC666 - THE FLOYD FAMILY PAPERS page, which displays the standard synopsis of the collection according to the AtoM archival standards: the unique reference code for the collection; the title of the finding aid; the beginning and end dates of creation for most of the documents that make up the collection; its level description within the categories searchable by AtoM@UCT; the name of the creator and their biographical information; the repository in which it is housed; the source of acquisition; its scope and content (a short synopsis);²⁴ a downloadable link for a pdf file of the finding aid; and its name and access point (which lists its AtoM@UCT searchable subject matter). Considering the potential presented by this software, the medicine chest should be more searchable soon, as it exists as a word on the page of the finding aid. However, 'finding' it will only lead to the narrative note in the aid – still a far cry from viewing the object locked up in Strongroom 3 of the library, or the other

objects that entered the institution in a similar manner.²⁵

Rendered through the library's archival system, the idiosyncratic circumstances and chance workings that have denied the medicine chest even an individual placement or designation within the BC666 fond breakdown (as similar objects would have been allocated) seem to suggest it as the *most* invisible object within this marginalised stratum of objects. Moreover, the chest's 'invisible' status is compounded because the library's categorisation systems enable access to all discipline-specific holdings by mimicking the taxonomies of their respective insiders. The chest appears to have dodged all the classification systems to which it should or could have been subjected and owes its only proof of existence to the individual who thought it warranted a special mention as part of the narrative note of the finding aid because it was such an anomaly within the larger collection and the department.

This mention set the tone for its subsequent status in the archive, and in the years that followed, Hart frequently brought the chest out from the strong rooms for visitors as a surprise glimpse into the collections housed in the department.²⁶ Other objects presented were hairbrushes owned by struggle veteran Ray Alexander; swords dating back to the Peninsular Wars (1807–1814); the putative death mask of Cecil John Rhodes; a moonstone bracelet once owned by Olive Schreiner; and a travelling microscope believed to have been used by F.G. Percy when he accompanied Darwin on the HMS Beagle (1831–1836). The chest became part of an elite group of objects that represented the Manuscripts and Archives department of the university even as it was rendered invisible by its finding aids.

This would have been the situation when Michaelis lecturers Pippa Skotnes and Fritha Langerman and curator Gwen van Embden approached the library in 2004 for an exhibition in celebration of UCT's 175th anniversary titled *Curiosity CLXXV*. Drawing together collections of objects housed within the university, the curators wanted to 'represent the university in all its diversity', 'subject the process of collecting and exhibiting to scrutiny' and 'force collections of objects from different disciplines into dialogue with each other', encouraging spaces of intersection.²⁷

In the accompanying catalogue, the curators wrote about the process of sourcing these objects, noting that the university did not have a 'culture' of collecting objects (Skotnes et al. 2004: 10). They drew on established collections such as the Kirby musical instrument collection, the Bolus Herbarium and the M.R. Drennan anatomical collection and on the libraries, but many objects in the exhibition were from the unofficial teaching collections in most of the university departments. Because such objects do not form part of an official collection and therefore have no official caretakers, many were in danger of being permanently disposed of, particularly as teaching programmes became increasingly digitised. *Curiosity CLXXV* rescued these objects and used them to reveal the potential that objects and collections have to represent the historical development of knowledge and teaching at the university.

According to Skotnes, the chest was one of a selection of objects for the exhibition that Hart chose to show the curatorial team on their visit to



Figure 30.

Njabulo Ndebele on page 81 of the *Curiosity CLXXV* catalogue, 2004.

the Manuscripts and Archives department.²⁸ The curators chose the chest and many other objects and manuscripts, and from October 2004 until April 2005 it was displayed in a wood and glass cabinet in Hiddingh Hall, the venue on the Michaelis School of Fine Art campus chosen to house the exhibition. It also features on page 77 of the publication, *Curiosity CLXXV: a paper cabinet*, as part of the subsections 'Heritage' and 'Historicism (new)' that span pages 75 to 82. These two headings are part of the curious taxonomy of the publication, which is neither a book nor a catalogue but, in the words of the curators, an additional 'paper cabinet' (Skotnes et al. 2004: 9). Evocative headings such as 'Astonishment', 'Lustre' and 'Quadrivium', to name only a few, describe the different groupings of this 'cabinet', which 'depends less on the linear readability of its sequence of pages, and more on the visual delights of its layout and the play between the various taxonomies that both govern display and describe the disciplines and curiosities' (Skotnes et al. 2004: 9).

The chest features on pages 75 to 82 along with a wooden box displaying two juxtaposed photos of Prof. Njabulo Ndebele, the then Vice-Chancellor of the University of Cape Town – the first as a two-year-old sitting on his mother's lap and the second a more recent photograph. In addition to the photos, the box includes a selection of dolls collected by the Vice-Chancellor when growing up and two of his books translated into French and Mandarin. Also featured on these pages are a combination of anatomical wax moulages (forearm, hand, penis) depicting various skin conditions and a Von Luschan skin chart from the M.R. Drennan anatomical collection; divining disks; a manual for phrenology; scales belonging to a Professor of Medical Microbiology weighing a Professor of Public Law's 1994 voting memorabilia; a small bronze sculpture by the late sculptor David Brown of a woman steering a boat; a photograph of UCT Centre for African Studies staff member Brenda Cooper and political activist and author Phyllis Jordan; a UCT Student Representative Council statement from 13 May 1966; and springbok ear rattles made for the philologist Lucy Lloyd in the 1870s. There are many ways to read this combination of objects and the medicine chest's placement amongst them within this new taxonomy.

The Oxford dictionary defines 'heritage' as 'the history, traditions and qualities that a country or society has had for many years and that are considered an important part of its character' and 'historicism' as 'the theory that cultural and social events and situations can be explained by history' (Wehmeier 2000: 561, 567). Both these terms are loaded and volatile when viewed through the lens of both the university's and the country's history, with the 'new' added in brackets after 'Historicism' referring to Stephen Greenblatt's theory²⁹ and suggesting the need for a reconsideration and reworking of both history and 'heritage'. Many objects within this section allude to this instability – from manuals of archaic scientific practices and weighing scales, to the small boat tossed around on a stormy ocean. Seen in relation to these themes, the medicine chest's inclusion alluded to many of these characteristics – from the redundant medicines it carries, which would offer no reprieve of illness today, to the institutional and countrywide healing that needs to occur in relation to its history.

Whereas *Curiosity CLXXV* sought to establish new connections across

disciplines, the editorial team of *Monday Monthly*, the UCT newspaper, produced special supplements in 2014 and 2015 with separate content on each of UCT's faculties. The Faculty Focus editions provided 'insights into the humanities, science, commerce, health sciences, law, engineering and the built environment, as well as the Centre for Higher Education Development (CHED)'.³⁰ Renate Meyer, M&A head librarian from 2014 to 2019, was approached by the Faculty Focus team to source documents, photos and objects that pertained to the featured disciplines. Where Hart was given free rein by the *Curiosity* team to choose manuscripts and objects she deemed representative of the department, Meyer was asked to source items in service of the respective faculties and their disciplines – a process she found challenging, as the taxonomy of the collection only allows surface level access, in which many items would be overlooked. Meyer knew of the medicine chest as part of the unofficial 'representative collection' of the department, and it was one of the first objects photographed for possible inclusion in the Science faculty edition, along with other manuscripts and objects, such as a cardboard model of a brain and a head measure from the J.G. Davidson phrenological collection, a collection of glass plate slides of the Cape Mountain Club, a reproduction of Prof J.L.B. Smith's famous coelacanth leaflet and plottings of the variances of star clusters by astronomer Dr Andrew David Thackeray. In the end, the chest was not chosen for publication by the editorial team.³¹

In addition to being an unofficial 'representative' of the Manuscripts and Archives department collection, a 'curiosity' in an exhibition and an object of scientific history, the medicine chest also became an object of scrutiny for UCT doctoral researcher Joanne Bloch in 2012. Her dissertation, *Letting things speak: A case study in the refiguring of a South African institutional object collection* (2016) focused on the specific substrata of objects of which the medicine chest forms part – those that entered the library tied to donations or bequests of personal and organisational papers, records and other ephemera – and on a second group of objects assembled by R.F.M. Immelman, university librarian from 1940 until 1970, to serve as a basis for a university museum that never came to fruition (Bloch 2016: 7).³² Bloch investigated this 'eclectic and intriguingly incoherent assortment of largely colonial (but in a few cases apartheid) era things' (Bloch 2016: 11), which exhibited 'no discernible overarching taxonomical system at work, and no relationship to any particular discipline' (Bloch 2016: 11), questioning its relevance in the university – especially in the light of the Rhodes Must Fall campaign of 2015 (Bloch 2016: 38). The medicine chest played only a small part in the larger scope of this project, which used the collection's incongruity to reveal, through artmaking, much that is taken for granted about this specific archive (Bloch 2016: 23–24). Her exhibition *Slantways* featured works across a variety of media in response to these objects. The chest was featured in a work titled *Hoard*, for which Bloch sculpted in clay the objects from the library along with objects from the 11th century Mapungubwe collection (housed at the University of Pretoria). She painted these sculpted objects gold and presented them in museum display cases, drawing attention to the arbitrary nature of objects' value and to the possibility that historically loaded items can



Figure 31.

Joanne Bloch. 2015. *Hoard* (detail). Modelling clay, spray paint and silk velvet. Dimensions variable.

be accidentally overlooked and misevaluated (Bloch in Honigman 2014: online). The medicine chest travelled to Venice in this wonky, gold-painted and ridiculed form when *Hoard* was shown in the South African pavilion of the 55th Venice Biennale in 2013 as part of *Imaginary fact: Contemporary South African art and the archive*. In September 2014, the UCT Works of Art Committee expressed an interest in purchasing the work, but after #Shackville³³ the new committee notified Bloch that the sale would not take place.³⁴

Contrary to the medicine chest's unassuming appearance and status in this department of the library, this chapter has demonstrated that it was a very powerful object during the period in which it was produced and promoted. Such chests were seen not only as a necessary accessory for explorers accomplishing extraordinary feats but also as instrumental tools within the colonial agenda. Produced by the empire, they travelled to colonial outposts, where they embodied and spread certain Western ideas. The historical scope of its influence (both internationally and locally) stands in striking contrast with its status in the library department in which it is currently housed. The chapter has revealed that the classification system of this facility could not readily accommodate an object with characteristics outside those it considers relevant and so rendered it not only invisible but even unsearchable using the library's own tools, such as search engines and finding aids. This last point is especially surprising because the facility is specifically geared to facilitate easy access to its vast holdings – access achieved by incorporating the taxonomies utilised by all the disciplines of the institution to ensure accessibility to insiders of all departments. The chest as blind spot therefore suggests a much larger problem within the institution – one investigated in the next chapter. If an object was rendered invisible by a classification system that facilitates multi-disciplinary engagement, how much more so could this occur in other departments of the institution, where the taxonomic systems they employ are geared exclusively to insiders. Moreover, because this in-depth study of a departmental blind spot has opened up new lines of enquiry and revealed a vast number of new insights about the object (bearing on a wide range of disciplines), the chest can be seen as a prompt and a provocation to explore where else in the institution knowledge is rendered invisible by the blind spots of its insiders.



(top) **Figure 32.**

A wounded bottle. BC666. Special Collections, University of Cape Town.

(bottom) **Figure 33.**

A torn object. BC666. Special Collections, University of Cape Town.

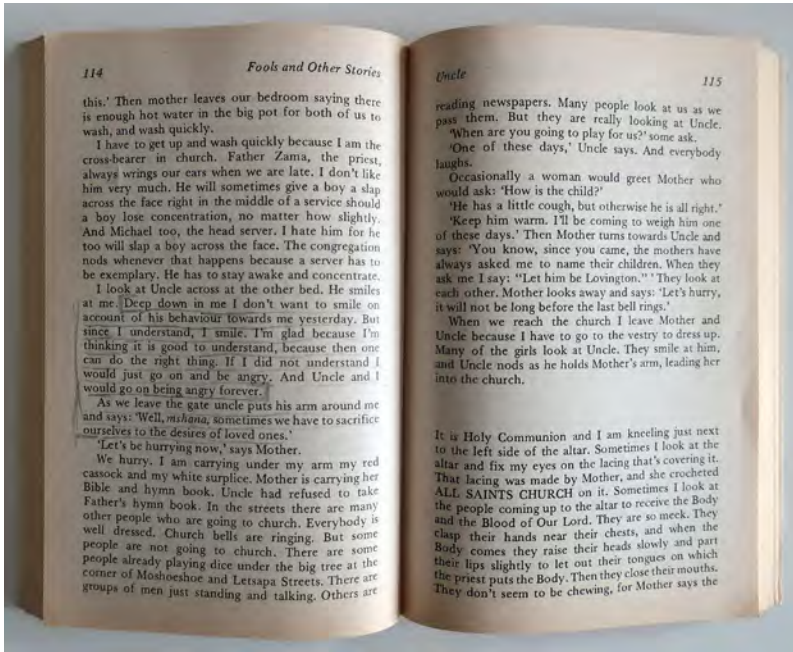


Figure 34.

My copy of Ndebele's *Fools and other stories*, read and underlined in 2001.

Endnotes

- ¹ The diary can be considered an internal administrative record, though it was informally kept at the discretion of the M&A librarian as a personal aide memoire (C. Kirkwood, personal communication, 2 February 2016).
- ² M. Floyd, personal communication, 11 February 2016.
- ³ The Bodleian Library at the University of Oxford housed a gallery of antiquities as early as 1638, as did several other European universities (MacGregor in Lourenço 2005: 27). Collections that form part of these institutional libraries are usually designated as 'library special collections' or 'fonds anciens' and, though they are usually paper archives, they may also contain museum-type objects. These collections are usually associated 'with the history of the university (e.g., the College Archive Collection at Imperial College London, or the Fonds anciens et précieux de la Bibliothèque universitaire, Université de Bourgogne in Dijon) or with a personality (e.g. Brunel Collection at the library of the University of Bristol)' (MacGregor 2003 in Lourenço 2005: 27). In South Africa, Rhodes University houses an object collection in its Cory Library that consists of, amongst many other things, 'a stereoscope viewer, a wheelchair, a pair of spectacles, an embroidered cloth bearing Rhodes's signature, several reef samples, a mantelpiece cloth and the teapot used during the sinking of no.1 shaft at Vogelsruisbult Mine' (De Wet in Bloch 2016: 29).
- ⁴ The process that led to these compressed pills originated in an artist's studio, not in a pharmacy or factory. Frustrated by the quality of the graphite in the pencils he used for sketching, the British artist and explorer William Brockden devised a mechanised method of crushing graphite and compressing the fine powder into a better-quality lead. He was granted a patent for this invention in 1843, after which the drug firm John Wyeth and Brother hired him to make compressed medicines using the same technique (see Bailey 2008a).
- ⁵ See <https://wellcomecollection.org/works/ep6yj5em/items?canvas=112>
- ⁶ The Wellcome archive houses many of these designs and adaptations. See Wellcome Foundation Marketing. Dartford Prints. Objects: Medicine Cases [Numbered cases 135 - 143, 200 - 204, 254 - 256, 258 - 261, 300 - 502, 709 - 716, 717 - 729, 733 - 745]. WF/M/1/PR/01.
- ⁷ The historian Daniel Headrick (1981) attributes the 'penetration of Africa' to the development of technologies that aided the imperialist project in various ways. These technologies (such as the scientific production of cinchona, a source of quinine) supplied European imperialists with both the means to pursue aggressive colonisation and to venture further and deeper into Africa.
- ⁸ These chests were featured in *The 'Tabloid' guide to medical and first-aid equipments* (1937), in which they were explicitly described as 'relics' (Hill 2006: 372–373).
- ⁹ The medicine chest made for Stanley was displayed at the 1886 annual meeting of the British Medical Association shortly before Stanley's departure on the famed Emin Pasha Relief Expedition up the Congo River to rescue the besieged Governor of Equatoria. At the 1895 International Medical Congress, Wellcome exhibited a large group of medicine cases, carefully choosing ones that were 'well battered' and showed 'sufficient wear and tear' to emphasise that 'the contents have stood the test of climate and rough usage' (Larson 2009: 22).
- ¹⁰ Sangomas use clairvoyant powers to diagnose the cause of illness or misfortune, while inyangas use plants and herbs in traditional medicinal remedies to connect with the ancestors (Bishop 2010: 118).
- ¹¹ British doctors practicing in the colony were fascinated by the potential of botanical medicine and made notes about how the indigenous population used certain herbs. Digby mentions local botanical remedies in a British Medical Association meeting held in the Cape in 1899: a Xhosa remedy for anthrax, *Blepharis capensis* (lightning bush) was used in treatments in Grey Hospital, King William's Town and *Bulbie alooides* was used for rheumatism; *Monsonia burkei* is mentioned for dysentery; *Monsonia ovata* for toothache or diarrhoea; and *Callepsis luareola* (ox-eye daisy) for coughs and, specifically, for whooping cough (Digby 2006: 346–350). The cross-pollination of botanical remedies is also noted in Karen Flint's chapter 'African-Indian encounters and their influence on African therapeutics, 1960–1948' in *Healing traditions*, which shows how Indians became practitioners and purveyors of African medicine while simultaneously introducing Indian herbs and other substances later incorporated into the African pharmacopeia (Flint 2008: 158–182). Afrikaners who migrated east and north in the

- 19th century took with them the 'hybrid medical traditions of the Cape' (Roberts 2017: 4) and used 'herbal baths for fevers, herbal poultices to dress wounds, and patent medicines as restorative tonics', in tandem with a 'Huis Apotheek', which was a 'portable set of common medicinal reagents imported from Europe' (Roberts 2017: 4).
- ¹² I use the term 'biomedicine' here to refer to 'a hegemonic medical system based on the principles of Western science' (Zank & Hanazaki 2017), in which disease is represented as 'culture-free' and 'neutral' (Moshabela, Zuma & Gaede 2016: 85). In its insistence on manufacturing the 'notable agents in all of modern medicine' characterised by 'purity, accuracy, uniformity and reliability' and overall 'supreme quality' – and as products that contributed to 'the great advances of the times' (BWC 1912: 27) – BWC became one of the main proponents of this system in the 19th and 20th centuries.
- ¹³ M. Floyd, personal communication, 11 February 2016.
- ¹⁴ Recent studies have revealed the close ties these explorers had with various scientific institutions. The East African explorers Richard Burton and John Hanning Speke, for instance, supplied 'botanical specimens they had collected to Kew Gardens, their field notes and maps to the Royal Geographical Society, their rock and soil samples to the School of Mines, their collection of shells to the Zoological Society, and twenty-four African skulls to the Royal College of Surgeons' on their return to the metropole (Kennedy 2013: 37).
- ¹⁵ These included calomel, ipecacuanha, cascara sagrada, cinchona and patent medicines such as Warburg tincture, Easton syrup and Dover powder.
- ¹⁶ See Viljoen 1999.
- ¹⁷ See BC666 (A1.35–A1.43).
- ¹⁸ C. Kirkwood, email correspondence, 23 March 2016.
- ¹⁹ M. Floyd, personal communication, 20 March 2016.
- ²⁰ L. Hart, personal communication, 22 March 2016.
- ²¹ An example of similar object allocations can be found in the BC1081 (The Simons papers) finding aid. The collection consists of the personal papers of Prof. Jack Simons and his wife, the veteran struggle activist and trade unionist Ray Alexander. It lists under one of its categories – 'Y (Additions to the Simons Papers)' and its subsection 'Y15 (Personal effects)' – a collection of hairbrushes given to Ray by John as gifts. Their designation within the finding aid is 'Y15.2 Hairbrushes (4 items; includes two gifts of silver brush sets from Jack to Ray)'.
- ²² AtoM@UCT is the Special Collections database of finding aids, built with Access to Memory (AtoM) software, an open-source software solution for archival description based on international standards. UCT has produced archival descriptions for most of the almost 1,500 fonds (collections) in their holdings and has also started to add digitised content (digital objects), which they are continually expanding. The database is a work in progress, and some finding aids are more searchable than others. See <https://atom.lib.uct.ac.za/>.
- ²³ C. Kirkwood, personal communication, 8 June 2020.
- ²⁴ This section can be argued to function similarly to the narrative note. The AtoM entry provides no evidence of the medicine chest's existence, and one would still have to download the finding aid to access this information.
- ²⁵ The fire that raged on 18 April 2021 and destroyed most of the Special Collections holdings has, of course, irrevocably altered the action of 'finding' an item, with thousands of items now lost forever. Searching any of these lost items using the library search engines now produces a 'Lost in 2021 Fire' result.
- ²⁶ L. Hart, personal communication, 22 March 2016.
- ²⁷ See <http://www.cca.uct.ac.za/cca/arc/visual-university/curiosity>.
- ²⁸ P. Skotnes, personal communication, 7 June 2019.
- ²⁹ 'New Historicism' developed in the 1980s, primarily through the work of the critic Stephen Greenblatt, gaining widespread influence in the 1990s and beyond. Utilised in literary criticism and literary theory, it contends that a literary work should not be viewed as an isolated work of art or text but as a product of the time, place and historical circumstances of its composition (Kumar et al. 2015: 111–112).
- ³⁰ To view these publications, see <https://www.news.uct.ac.za/publications/facultyfocus/>.
- ³¹ R. Meyer, personal communication, 6 March 2016.
- ³² Hart recorded Immelman's objects in an Excel spreadsheet titled 'Museum Objects'. This list includes some of the objects tied to donations and bequests, but not all of them – and not the medicine chest.
- ³³ See Introduction: endnote 21.
- ³⁴ J. Bloch, personal communication, 11 July 2018.

Things to observe (1841)

*From: Jackson, J. 1841. What to observe; or, the traveller's
remembrancer. London: John Murray. v - xx.*

CONTENTS.

PREFACE.	PAGE. iii

DIVISION I.

Of a Country considered in itself.

SECTION I.

GEOGRAPHICAL POSITION	1
DIVISIONS OF THE COUNTRY	2
GENERAL ASPECT OF THE COUNTRY	3
SUPERFICIAL CONFIGURATION	4
Mountains	7
Name	id.
Arrangement and direction	8
Height	id.
Form	id.
Slope	9
Plains	12

SECTION II.

HYDROGRAPHY, OR THE WATERS OF A COUNTRY	13
Springs	id.
Rivulets	15
Torrents	id.
Rivers	16
Name	id.
Origin	17
Course	id.
Recipient	18
Mouth	id.
A Delta	19
Confluence of two rivers	20
Affluents	id.
Bed of a river	21
Soil of the bed	id.

	PAGE.
Rivers	21
Velocity of a river	22
Banks	23
Erosion of the banks of a River	25
Quantity of water discharged	26
Débris	id.
Islands	id.
Particular objects	27
Rapids	28
Cataracts and Cascades	id.
Eddies and Whirlpools	30
Subterraneous course	id.
Shoals, permanent and moveable	31
Rocks	id.
Fords	id.
Bays and Creeks	32
Lagoons	id.
Inundations	33
Tides	34
Bore	35
Freezing of the river	id.
Subaqueous ice	37
Navigation	38
Fertility occasioned by the river	40
Of a river as a moving power for machinery	41
Of a river as a reservoir for feeding canals	42
Fish and Fisheries	43
Amphibious Animals	id.
Aquatic Birds	id.
Pearls	44
Minerals	id.
Quality of the water	id.
Colour	45
Transparency	id.
Temperature	id.
Remarkable peculiarities	46
Extraordinary bends	id.
Convexity of surface	id.
Change of current	id.
Natural bridges	47
Gaps or narrow rocky passages	id.
Junction of two hydrographic basins	id.
Canals	id.
Lakes	50
Name	id.
Geographical situation	id.
Topographical situation	51
Height above the sea	id.
Subterraneous communication	id.
Form	id.
Length, breadth, and circumference	52
Surface	id.
Depth	53

CONTENTS.

ix

	PAGE
Nature of the bed and borders	53
Transparency and colour	54
Temperature	id.
Quality of the water	55
Affluents	56
Outlets or Effluents	id.
Currents	57
Remarkable phenomena	58
Navigation	59
Fisheries	60
Formation and dessication of lakes	id.
Effect on health, &c.	62
Marine Lagoons	id.
Ponds of fresh water	63
Artificially collected waters	64
Marshes	65
Salt Water Marshes	66
Seas	id.

SECTION III.

METEOROLOGY OF THE CLIMATE OF A COUNTRY	74
Of the Atmosphere	id.
Winds	80
Trade winds	81
The Monsoons	id.
Sea and land breezes	82
Variable winds	id.
Dry fogs and Exhalations	87
Aqueous Meteors.	id.
Fogs	id.
Clouds	id.
Rain	92
Dew	95
Hoar frost	96
Snow	id.
Hail	97
Observations on Aqueous Meteors in general	98
Igneous Meteors	99
Ignis fatuus, St. Elmo's fire, &c.	id.
Falling stars	100
Fire balls or meteorites	id.
Lightning and Thunder	101
Optical Meteors	102
The Rainbow	id.
Haloes, Coronæ, &c.	id.
Parhelia and Paraselenes	103
The Mirage	104
Zodiacal light	105
The Aurora Borealis	106
Meteorological observations	id.
TEMPERATURE OF THE EARTH	110
TERRESTRIAL MAGNETISM	112

DIVISION II.

Productions of a Country.

SECTION I.

	PAGE
GEOLOGY AND MINERAL PRODUCTIONS OF A COUNTRY	114
Slopes and cones of modern débris	120
Fluvial deposits	121
Lacustrine deposits	id.
Marine deposits	id.
Estuary deposits	id.
Dunes	122
Calcareous sandstone with broken shells	id.
Calcareous Tufas and Travertins	id.
Peat bogs	124
Bog Iron ore	125
Conglomerates, sandstones, and Breccias	126
Osseous Breccia	127
Pisolitic Iron ore	id.
Saline efflorescences, and superficial deposits of Muriate of Soda, of Natron, &c.	id.
Sand and Gravel	128
Gravel	129
Boulders and Erratic blocks	id.
Siliceous Millstone	132
Gypsum	133
Rock salt	135
Aluminite	136
Colyrite	id.
Kaolin	137
Cimolite	id.
Plastic-clay	id.
Lithomarge	id.
Fuller's earth	138
Figuline or Potter's-clay	id.
Slaty-clay or adhesive slate	139
Mountain meal	id.
Marl	141
Chalk	id.
Limestone and marble	143
Lithographic stones	146
Coal	147
Compact coal	148
Fat coal	id.
Dry coal	id.
Geognostic character	id.
Uses of coal	150
Seeking for coal	151
Iron-stone	154
Wacké or Wacken	155
Common Grauwacké	156
Schistose Grauwacké	id.

CONTENTS.

xi

	PAGE
Trapp	156
Siliceous Schistus	157
Quartz	id.
Topaz Rock	id.
Greenstone or Whinstone	id.
Syenite	158
Serpentine	id.
Porphyry	159
Hornblende Rock	id.
Compact Hornblende	160
Hornstone Trapp	id.
Clayslate	id.
Micaslate	161
Gneiss	162
Granite	id.
Simple Minerals	163
Metals	165
Negative indication regarding	167
Portive indications of	id.
Localities and indications of the principal ores	168
Gold	id.
Silver	id.
Copper	id.
Iron	id.
Mercury	id.
Cobalt	169
Antimony	id.
Bismuth	id.
Zinc	id.
MINES, MINING, METALLURGY, AND MINERS	170
Veins	id.
Beds	id.
Masses	id.
Direction, Inclination, and thickness of a vein	171
Irregularity of Veins	id.
Exploitation or working of Mines	172
Shafts and Galleries	173
Excavation of the rock	id.
Timbering and walling	id.
Drainage	174
Ventilation	id.
Lighting	id.
Attack of the deposit of ore	id.
Very thin beds	id.
Extraction of the ore from the mine	id.
Mechanical preparation of the Ore	175
Picking	id.
Sifting	id.
Stamping	id.
Crushing	id.
Washing	176
Metallurgy	id.
Furnaces	id.

	Roasting, &c.	PAGE
	Miners	176
		179
VOLCANIC SOILS AND PRODUCTIONS		181
EARTHQUAKES		184
VOLCANIC ERUPTIONS		185
CAVERNS		186
	Grottoes and Cells	id.
	Calcareous Alabaster	188
GEOLOGICAL CHANGES		189
FOSSILS		190
	Petrifactions	id.
	Incrustations	191
	Casts	id.
	Impressions	192

SECTION II.

VEGETABLE PRODUCTIONS	193

SECTION III.

ANIMAL PRODUCTIONS OR ZOOLOGY OF A COUNTRY	id.
OF THE ANIMALS OF A COUNTRY CONSIDERED AS OBJECTS OF	
NATURAL HISTORY	id.
Quadrumanes	194
Viviparous Quadrupeds	195
Cetaceous Animals	196
Oviparous Quadrupeds	197
Serpents	201
Fish	id.
Mollusca	203
Shells	id.
Univalve	204
Bivalve	205
Multivalve	206
Worms	id.
Crustaceous Animals	207
Insects	id.
ANIMALS STATISTICALLY CONSIDERED	209
GENERAL OBSERVATIONS	212

DIVISION III.

The Inhabitants of a Country.

SECTION I.

POPULATION	213
Extent of the population	id.
Division of the population	217
Distribution of the population	218
MORALS AND MANNERS	220
PHYSICAL CONSTITUTION	223
LANGUAGE	225

CONTENTS.

xiii

	PAGE
DRESS	229
FOOD	231

SECTION II.

HABITATIONS	233
CITIES AND TOWNS	234
Style of building	235
Interior distribution of the habitations	236
Materials of building	id.
Furniture, &c.	237
Ruins of Cities	238
Population of Towns	239
Establishments of instruction	240
Religious establishments	241
Establishments for charitable purposes	242
Establishments for the administration of justice	243
Police establishments	id.
Military establishments	245
Commercial establishments	246
Establishments of Industry	247
Scientific establishments	248
Post establishment	249
Supplies of the City	id.
Amusements	250
Sovereign's Court	id.
Central or general government	id.
Particular government of the city	id.
Ambassadors	id.
Privileges of the City	251
History of the City	id.

DIVISION IV.

Industry.

SECTION I.

AGRICULTURAL INDUSTRY	252
Collection of spontaneous productions	253
Hunting	id.
Fishing	255
Collection of wild honey and other spontaneous animal productions	257
Collection of spontaneous vegetable productions	258
Collection of mineral productions	259
AGRICULTURAL INDUSTRY, PROPERLY SO CALLED	id.
Animal Kingdom	id.
Vegetable Kingdom	260
DISTRIBUTION OF LAND, ITS CULTIVATION AND PRODUCE	262
Of productive land	id.
Preparation of the soil and its different kinds	265

	PAGE
Sowing and planting	268
Collecting or harvesting	269
Preparation of the produce for the market	id.
General Remarks	id.
Price of labour and value of agricultural productions	270
Meadows and pasture grounds	271
Forests	id.
Dying plants	274
Medicinal plants	id.
Oleaginous, Textile, and other plants	276
Fruit trees	id.
Ornamental plants and shrubs	id.
Parts of a plant to be observed	277
Unproductive land	279
Manures	280
Animals employed in tilling	281
Implements of husbandry	id.
Farm buildings	284
Cottages	285
Of farms and farming	286
Rotation of crops	id.
General observations	287

SECTION II.

MANUFACTURING INDUSTRY	289

SECTION III.

COMMERCE	294
Home Trade	296
Foreign Trade	299
Carrying Trade	300
Warehousing and Commission Trade	301
Special Trade	302
Corn Trade	id.
Customs, or export and import duties	id.
Excise	305
Money	306
Coin	id.
Bank-notes	308
Banks	309
Weights and Measures	310
Trading Companies	312
Monopolies	313
Slave Trade	id.
Commercial Navy	id.
Roads and Canals	315
General Remarks	320
Commercial Balance	id.

DIVISION V.

Particular Institutions and Establishments.

CONTENTS.		XV
		PAGE
SECTION I.		
RELIGIOUS INSTITUTIONS		323
SECTION II.		
GOVERNMENT		327
Monarchy		328
Aristocracy		331
Democracy		id.
Mixed Government		333
General Remarks		id.
SECTION III.		
LEGISLATION		334
Legislative Power		335
Legislative Body		336
Laws		338
Executive Power		340
Executive Body		341
SECTION IV.		
FINANCE		345
First maxim		id.
Second maxim		id.
Third maxim		346
Fourth maxim		id.
DEMESNES OF THE SOVEREIGN		355
State Domains		356
Expenditure		357
SECTION V.		
LETTER POST		358
DIVISION VI.		
Science and Literature.		
SECTION I.		
SCIENCES		362
Moral Philosophy		id.
Metaphysics		363
Political Economy and Legislation		365
Mathematics		367
Physics and Chemistry		id.
Medicine		369
SECTION II.		
LITERATURE		373
Theological Writings		376
Religious Publications, not polemical		378

	PAGE
Of Sermons	379
Ethical Writings	380
Novels and Tales	381
Satirical Works	383
Dramatic Works	384
Comedy	id.
Tragedy	385
Opera	id.
Farce	386
Philosophical Works	id.
History	367
Poetry	389

DIVISION VII.

Fine Arts.

SECTION I.

ARCHITECTURE	393

SECTION II.

PAINTING	400
General Observations on	408

SECTION III.

SCULPTURE	410

SECTION IV.

ENGRAVING	415

SECTION V.

MUSIC	418

DIVISION VIII.

HISTORY.	424

DIVISION IX.

THE COUNTRY CONSIDERED UNDER A MILITARY POINT OF VIEW	428
Natural Capabilities	id.
Geographical Situation	429
Relative Position	430
Topographical Capabilities	431
Climate	id.
Disposition and Courage of the People	id.
Artificial Capabilities	id.
Sea and Land Forces	id.
Fortresses	434

CONTENTS.

xvii

	PAGE
Military Description of a Country	434
Frontiers	435
Maritime Coast	id.
Mountain Chains	id.
Rivers	436
Forests	437
Marshes	id.
Open Frontier	id.
Interior of the Country	id.
Intrenched Camps	438
Fortresses	id.
Detailed	id.
Armies	439
Navy	442
Influence of Political position	443

DIVISION X.

SECTION I.

FOREIGN RELATIONS	444

SECTION II.

COLONIES	448

DIVISION XI

Instruments and Operations.

SECTION I.

INSTRUMENTS	454
Barometer	455
Thermometer	460
Ordinary Thermometer	id.
Maxima and Minima Thermometers	462
Boiling point Thermometers	id.
For Temperature of Soil and Water	463
For Solar radiation	id.
For Terrestrial radiation	id.
Hygrometers	464
Daniell's	id.
Leslie's	465
Chronometer	466
Instrument for bringing up water from great depths	id.
Hydrometer	468
Diaphanometer	id.
Log and Line	469
Ombrometer, or Rain gauge	472
Atmometer for estimating the extent of evaporation	473
Anemometer, or Wind gauge	id.
Drosometer	475
Electrometer	id.

	PAGE
Cyanometer	475
Photometer	476
Eudiometer	477
Instruments for Terrestrial Magnetism	id.

SECTION II.

OPERATIONS	478
Measurements by the eye	id.
Estimation of distances by actual measure	480
Standard measures of length	481
To walk in a straight line	id.
To measure distances by pacing and time	482
Of measuring distances by sound	483
To measure a straight line	id.
To raise a perpendicular from any point on a given line	484
From a given point out of the line, to let fall a perpendicular to it	485
To raise a perpendicular at the end of a line	id.
To draw a line parallel to a given line	487
To make an angle on the ground equal to a given angle	id.
To measure an angle of a building, &c. having no proper instrument	id.
To ascertain the length of a line accessible only at its two extremities	488
To ascertain the breadth of a river, a marsh, &c.	489
To measure the distance of two inaccessible objects from each other	491
To take the plan of a wood, a marsh, a lake, a crater, or other hollow	id.
To take the plan of any crooked line, as of a river, a neck of land, &c.	492
To obtain a meridian line	id.
To ascertain the height of a building when the base is accessible	493
To measure time	496
To construct a make-shift sun-dial	497
To construct a make-shift quadrant	499
To make a sand glass, or a clepsydra	500
To know the hour of the day or night	501
To find one's way without compass	id.
over a plain	id.
through a wood	502
in a cavern or intricate subterranean passage	503
To climb trees	id.
To climb or descend precipices	504
To pass a rope over an elevated, or to a distant object	505
To jump wide ditches	506
To seek for fords	id.
To pass rivers	id.
Of signals by sight or sound, night and day	507
To seek for fresh water, and to obtain it	509
To clarify foul or turbid water	510

CONTENTS.

xix

	PAGE
To kindle a fire	511
To ascertain the breadth, depth, and slope of the bed of a river	512
To ascertain the velocity of a river	513
To find the quantity of water discharged by a river at a given point in a given time	516
To ascertain the quantity of solid matter held in suspension by running water	518
To observe the temperature of the air	521
To take the temperature of springs	523
To take the temperature of rivers, of lakes, of the sea, and of wells	524
To take the temperature of rain	525
To take the temperature of the soil	526
To take the temperature of gases rising from Volcanoes	527
To observe the atmospheric pressure	id.
To determine the transparency of water	528
To observe the colour of water	529
To ascertain the quality of water	530
To take the specific gravity of water	331
To bring up water from considerable depths	532
To estimate the evaporation from standing or running water	id.
To observe the quantity of rain, snow, or hail	id.
To observe the quantity of dew which falls	533
To observe the force of the wind	id.
To observe Solar radiation	534
To observe Terrestrial radiation	id.
To observe the electrical state of the atmosphere	id.
To observe Terrestrial magnetism	535
To collect the gases from Volcanoes, Springs, &c.	id.
To observe the direction of the undulatory motion of earthquakes	536
To measure the heights of Mountains	id.
Method of taking the dip and strike of strata	544
To take the length, breadth, circumference and surface of lakes	546
To copy inscriptions	547
TO MAP A COUNTRY	548

APPENDIX I.

Analysis of Mineral Water	554

APPENDIX II.

ON THE MODE OF COLLECTING, PRESERVING AND PACKING

ANIMALS, PLANTS AND MINERALS	557
Animal Kingdom	558
Vegetable Kingdom	564
Mineral Kingdom	567
Explanation of the Tables	571

LIST OF TABLES.

- No. 1 Tabular view of the waters of a country.
 2 Uncorrected Meteorological Observations.
 3 Details of a Metallic Vein.
 4 Detail of Observations to be made on a Mine.
 5 Table of Mineral Productions.
 6 Table showing the quantity, value, exportation, &c., of Domestic Animals.
 7 Table of raw Animal productions.
 8 Table of the Animal Produce of the Fisheries.
 9 Table of the Population of the Russian Empire.
 10 Table of the Industry which collects the spontaneous productions of the land and water.
 11 Table of raw Vegetable produce, and of lands in a province or country.
 12 Table of the details for an unknown, or but little known plant.
 13 Table showing the Distribution of Territorial Property.
 14 Table of Manufacturing Industry.
 15 Table of the details of a Porcelaine Manufactory.
 16 Table of Home Trade, or Inland Commerce.
 17 Table of Exportations.
 18 Table of Importations.
 19 General Table of Foreign Trade.
 20 Table of the Transport Trade.

INADVERTENCES.

PAGE.	LINE.
1.	2. for <i>latitute</i> , read <i>latitude</i> .
3.	5. for <i>aggrandisements</i> , read <i>aggrandizements</i> .
19.	9. from the bottom, for <i>if</i> , read <i>of</i> .
20.	8. for <i>divergance</i> , read <i>divergence</i> .
24.	21. from the bottom, for <i>glasiers</i> , read <i>glaciers</i> .
32.	1. from the bottom, for <i>expence</i> , read <i>expense</i> .
65.	17. for <i>homicide</i> , read <i>homicidal</i> .
98.	27. for <i>facility</i> , read <i>faculty</i> .
104.	12. from the bottom, for <i>desserts</i> , read <i>deserts</i> .
116.	15. leave out the words, <i>or line</i> .
119.	23. for <i>operations</i> , read <i>appendix</i> .
133.	2. from the bottom, for <i>number</i> , read <i>member</i> .
147.	1. for <i>homogenous</i> , read <i>homogeneous</i> .
224.	20. for <i>facultie</i> , read <i>faculties</i> .
253.	9. for <i>is</i> , read <i>are</i> .
278.	12. from the bottom, for <i>Merbel</i> , read <i>Mirbel</i> .
360.	17. for <i>controul</i> , read <i>control</i> .
366.	9. from the bottom, for <i>civilisation</i> , read <i>civilization</i> .
367.	19. same error.
374.	6. from the bottom, for <i>benefitted</i> read <i>benefited</i> .
405.	4. from the bottom, for <i>takes</i> , read <i>take</i> .
417.	3. for <i>artist</i> , read <i>artists</i> .
425.	21. for <i>indispensible</i> , read <i>indispensable</i> .
593.	11. from the bottom, for <i>add or</i> , read <i>add to or</i> .
572.	13. from the bottom, omit the comma after the word <i>garden</i> .

Chapter Two:
The Disciplinary Insider

Medicine chests were not the only objects 19th century explorers carried with them during their expeditions. A catalogue of their luggage would consist of a great many additional objects – sextants, compasses, chronometers, barometers, pedometers and artificial horizons; journals recording latitude and longitude, rainfall measurements and wind directions; botanical specimens and geological samples; word lists and ethnographic artefacts traded (and stolen) from indigenous peoples (Kennedy 2007: 1887); and also, most probably, a 454-page guide titled *What to observe; or, the traveller's remembrancer*, published by the Royal Geographic Society (RGS) and written by one of its employees, Julian Jackson.

As briefly discussed in the previous chapter, the RGS was a shrewd promoter of imperial interests abroad – both scientific and political – and provided the financial backing and impetus for many expeditions of this period. Jackson occupied several positions from 1830 onwards: he was appointed RGS secretary in 1841, occupied the role of its journal editor in 1844, served as librarian for a short period and, in 1845, was elected a fellow of the society (Goudie 1978: 264). In a period when different scientific fields were staking their claim on their objects of study and their methods and formulating arguments to support their validity, Jackson was concerned that the institution placed too much emphasis on discovery and exploration. He stressed the need for the nascent field of geography to ‘undertake and organise systematic science’ by implementing certain modes of observation, inscription and instrumentation that would serve as a ‘methodological warrant’ for its identity and as a ‘declaration of epistemic conduct’ (Withers 2013: 170–171).

The period from 1750 to the mid-19th century was viewed as a ‘second scientific revolution’ (Kuhn 1977: 147, 220; Hahn 1971: 275–276; Brush

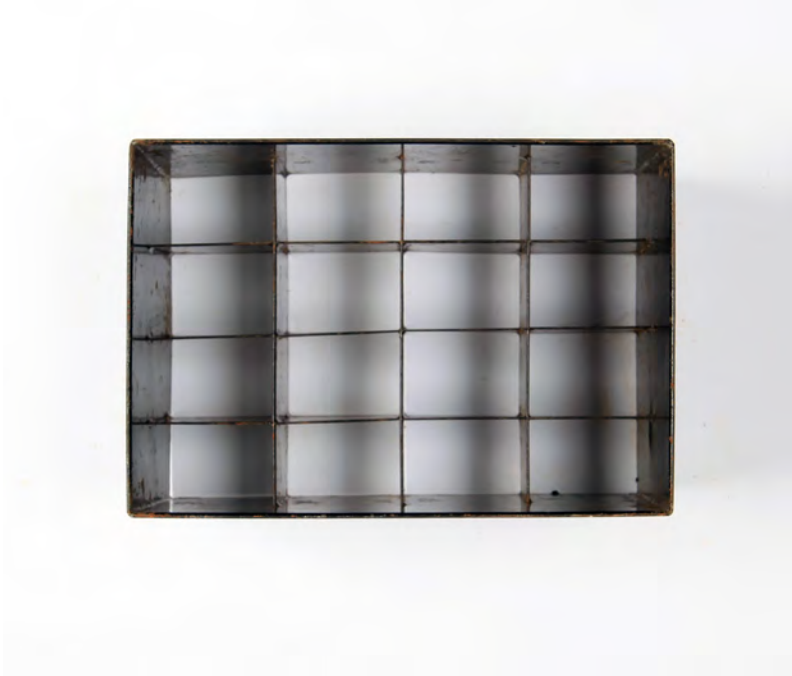


Figure 1.

The medicine chest (detail). BC666. Special Collections, UCT.

1988 in Golinski 1998: 67) – a time during which disciplines such as geology, biology and physiology were founded and existing ones (especially physics and chemistry) were dramatically reconfigured. In the 19th century, the boundaries of distinct disciplines also became a more ‘entrenched feature of the production of knowledge’, seen in the manifestation of university departments and institutes, specialised scientific societies and new journals (Golinski 1998: 67). Entirely new domains of knowledge were carved out during this period, each with its unique defining practices and regulated borders (Stichweh in Golinski 1998:67).

Published in 1841, Jackson’s *What to observe; or, the traveller’s remembrancer* was compiled to stake the ground for the emerging field of geography, though its contents covered a wide variety of disciplines of the period. This was the first of a series of guides that offered notes for the traveller on appropriate conduct in the field – from providing methods for training the eye to observe relevant details to instructions on which precision instruments should be carried and how to use them to record and inscribe the results of observations (Withers 2013: 170).¹ As Jackson himself wrote, the guide was intended to inform the ‘uninitiated Traveller what he should observe, and to remind the one who is well informed, of many objects which might, but for a remembrancer, escape him’ (Jackson 1841: i). These observations included features such as an area’s topography, hydrography, meteorology, geology and zoology, as well as its local inhabitants and their agricultural products, manufactured goods, political institutions, social customs and religious beliefs. The guide also gave advice on how to map, how to collect and preserve plants and animals and how to use various precision scientific instruments (Kennedy 2013: 58).

In publishing these guides, institutions such as the RGS sought to mitigate doubts about the veracity of returning travellers’ accounts and ‘to resolve some fundamental dilemmas about the means and status of observation in the field’ (Driver 2001: 66). ‘The field’ was more open and diffuse than the lecture halls or the laboratory back home and was ‘inhabited by a wide range of people practising different kinds of observation’ (Driver 2001: 54–55), so ensuring credibility was a critical concern for furthering experimental and observational science of the period.² Along with the guides that regulated practices and protocols to stabilise and standardise an individual’s response to unfamiliar and disorienting sights (Kennedy 2013: 42), the gender, class and ethnicity of the observer were also of importance³, as was the use of ‘ever more sophisticated instruments and calculations designed to minimize the intrusion of subjectivity into the reporting of information’ (Driver 2001: 55).⁴ By regulating who was doing the viewing, stipulating what should be viewed and how and supplying tools to measure these observations, scientific institutions promoted an authoritative ‘way of seeing’ in the field that differentiated the *scientific* view from that of the ordinary traveller (Driver 2001: 49).

On return to the British metropole, the sets of data and specimens collected by these travellers were assimilated into various museums, institutions of learning and scientific organisations, where further observation and comparison enabled the ‘raw data’ to undergo ordering and classification (Kennedy 2013: 38–39).⁵ The theories formulated using the proliferation of specimens and data



Figure 2.

Page 171 of the *Curiosity CLXXV* catalogue, 2004. Chalkboard dusters taken from 175 lecture theatres of the University of Cape Town (each duster replaced by a new one).

collected in the 18th century led to a dramatic rise in information being produced and communicated, creating pressure to differentiate and treat materials and data selectively according to criteria specific to individual fields (Stichweh 1984 in Weingart 2010: 5). In addition to staking their ground, scientific disciplines now also had to combat the 'too plentiful and too various' range of objects flowing into the colonial centres, which they did by selecting sets of 'working objects' – 'manageable, communal representatives of the sector of nature under investigation' (Daston & Galison 2007: 19–22). These sets were represented by atlas images or type specimens and were studied with discipline-specific tools using discipline-specific procedures. These working sets standardised the unrefined natural objects – too 'quirkily particular to cooperate in generalizations and comparisons' – and facilitated comparison by investigators dispersed over continents and, subsequently, generations (Daston & Galison 1992: 85, Daston & Galison 2007: 19–22).

Used from the 18th to the 20th centuries, the scientific atlases provided, for example, simplified, generalised and idealised versions of the objects of anatomy, physiology, botany, palaeontology and astronomy, to name a few, guiding the student and practitioner to what was worth looking at, how it looked and, perhaps most important of all, how it should be looked at (Daston & Galison 2007:23).⁶ The establishment and representations of these working sets of objects, and the standardised procedures for studying them, thus extended the initial influence exercised on the individual traveller in the field.⁷ By controlling the very act of seeing and by creating a sense of individuals working as members of academic communities, the atlases shaped the subjects and the objects of their disciplines. Processes initiated in the field and reinforced in institutions, societies and museums laid the foundation for procedures still used by the disciplinary insiders of university departments today.

University curricula are designed to train students to become aware of the object characteristics deemed relevant to a discipline and that tie them to the signification system of the discipline, supporting a historical continuum that highlights particular qualities of their object of study and developing ever more specialised ways of viewing and understanding it. These disciplinary viewing practices have been studied by historian and art critic James Elkins and form the subject matter of two of his books, *How to use your eyes* (2000) and *Visual practices across the university* (2007). Elkins posits that art history is the only discipline to make the act of looking a part of its discipline. In 2005, Elkins used the exhibition format to provide examples of how disciplines at the University College of Cork visualise and understand their subject matter, with each example accompanied by a short text by its practitioner; these were collated into the 2007 publication.⁸ From computer graphs illustrating the effect of wind drag on a bird's wing to photographic images of the seabed studied by oceanographers, the project provides a compendium of how different insiders understand their objects and subjects of study, illustrating the extent to which they hone in on details the outsider might overlook or fail to register as significant. One such example is a photograph of a small selection of seemingly non-descript smooth rocks; the accompanying text, compiled by a geologist, reveals a wealth of information. By



Figure 3.

Figure 5. James Elkins. 2007. Deductions from smooth rocks. *Visual practices across the university*, University of Cork.

studying the grains that make up these rocks and noting their shape, wear and iron content, the geologist deduced their age (older than 360 million years) and their movements (travelled down rivers running from the north to the south of Ireland in water that was oxygenated, causing the iron to precipitate out as iron oxide, cementing the grains and giving them a red tinge). She also inferred that the rocks were deposited after this aquatic journey and became part of a mountain (which rose and fell) before accumulating its last layer of sediment – chalk – which provided some with their white streak (Elkins 2007: 74–78). In *How to use your eyes* – a book with short chapters titled, for example, ‘How to look at an X-ray’ or ‘How to look at a twig’ – Elkins again draws on the viewing techniques of insiders. In one example he discusses a moth’s wing in entomological terms, describing the complex design elements that make up the three main symmetrical systems used to identify species: the central and ocellary symmetry and the submarginal or marginal bands (Elkins 2000: 182–189).

While these examples offer remarkable insights into these objects and subject matter and enable innovative developments in their respective fields as a result of the elevated levels of attention trained on them, in many cases they retain the ghost of the traveller’s *What to observe* volume – a manual that could just as well have been titled *What to ignore*. In *On looking: Eleven walks with expert eyes* (2013), the writer Alexandra Horowitz, who holds a PhD in cognitive sciences, illustrates the potential of the insider’s view to both generate insight and render blind, taking eleven experts on the same structured walk around her neighbourhood and asking them to share their observations. The book describes the walk, which is the constant in this experiment, through the eyes of an urban sociologist, an artist, a geologist, a physician and a sound designer, among others. Horowitz discusses what the participants see, how they see it and why they do not see the same things, revealing the extent of human attention, the cognitive aspects of what it means to be an observer and the influence of a disciplinary field on one’s perception. Critically, it repeatedly emphasises that in revealing particular aspects of the world around us, disciplines overlook other aspects.⁹ Anthropologists use the term ‘naturalisation’ to describe this process of focusing exclusively on details relevant to a particular discipline and being blind to anything that falls outside of its scope (Bowker & Star 1999: 294).

As discussed briefly in the introduction to this thesis, becoming part of an academic community requires a series of encounters with the objects involved in the practice – the research materials, tools, furniture, text and symbols, and the categories that apply to all of these (Bowker & Star 1999: 294–295). As individuals’ familiarity with these deepen over time through the communal activities of attending lectures, reading discipline-specific literature and learning and discussing current ideas in the field, participants become insiders naturalised to their community’s biases, habits, norms and conventions. While these processes enable specialised knowledge production (as in Elkins’ examples), they can also have negative repercussions that hinder discovery – as illustrated by historian of science Thomas Kuhn’s well-known discussion of the development of X-rays.

In 1895, Wilhelm Röntgen, Professor of Physics in Wurzburg, Bavaria, accidentally discovered X-rays while testing whether cathode rays could pass

through glass. Using a cathode tube covered in heavy black paper, Röntgen was surprised when luminescent green light escaped and was projected onto a nearby fluorescent screen. Upon further experimentation, he discovered that this mysterious light passed through most materials but left a shadow of solid objects. This discovery was met with shock and disbelief: though X-rays had not been ruled out by established theory of the period (accepted scientific theory and practice in 1895 admitted a number of forms of radiation, such as visible, infrared and ultraviolet), they violated the expectations ‘implicit in the design and interpretation of established laboratory procedures’ (Kuhn 1970: 59). The decision to employ a particular piece of apparatus and use it toward a particular end carried with it the assumption that ‘only certain sorts of circumstances will arise’ (Kuhn 1970: 59). In acknowledging that this equipment, widely deployed since the 1890s, produced these rays, the scientific community also had to concede that their existence had gone unnoticed for quite some time (Kuhn 1970: 59).

This example illustrates how the entrenched expectations of experimental outcomes and prescribed instrumental functions of an insider’s view of the laboratory and its equipment can pose a threat to new discoveries. The circumstances that enabled Röntgen (an insider) to first notice these new rays are not clear, but Kuhn proposes that the occurrence of anomaly enables discovery and that Röntgen’s ‘*recognition* that nature has somehow violated the paradigm-induced expectations that govern normal science’ (1970: 52–3, my emphasis) was important. Kuhn emphasises that Röntgen *valued* the anomaly instead of ignoring it – a vital step in the process of discovery.

The discovery of anaesthesia offers a similar warning about entrenched belief systems. Diethyl ether was first synthesised in 1540, centuries before its first public demonstration in 1842. Ether, also named sweet vitriol, was known and apparently independently developed by other scientists – from Boyle as early as 1680 to Sir Isaac Newton in 1717 (Papper 1995: 29–30). Following Joseph Priestley’s published discovery of nitrous oxide in 1769 in *Experiments and observations on different kinds of air*, Humphrey Davy used it as a putative cure for tuberculosis, overlooking its potential as an anaesthetic. The historian E.M. Papper (1995) speculates that its use as an anaesthetic only occurred because of outside pressures on the laboratory, positing that the changes in intellectual and emotional views of the human condition of the early 19th century (with the advent of the Romantic movement) made these agents ‘visible’ to practitioners. As there had been no apparent interest in pain prevention (caused by surgical intervention or in general) for the common person (Papper 1995: 22), there had been no concerted effort to attain it, and insiders remained blind to the potential of the substances in their midst.

Naturalisation can also occlude the contextual and artefactual nature of a discipline’s objects and, in many cases, obscure the often biased foundations and prejudices that have informed the discipline’s development. Scientific disciplines’ historical foundations were founded in the West, and, as such, the particularities of this now-naturalised origin still influence how we understand what we study in these fields. The next section uses the prompt of the medicine chest to examine object collections in different UCT departments to establish how the insider



Figure 4.

Nina Liebenberg. 2011. *Planthology*. Perspex lightboxes.

Dr Yeats mentioned that no plants survive at the PLC centre. They all die of a mysterious cause. I sourced three medicinal plants – *Lessertia frutescens*, *Bulbine frutescens* and *Artemisia afra* – and X-rayed them to diagnose the cause of their demise.



(top) Figure 5.

Marcel Duchamp. 1927. Door, 11 rue Larrey, New York.

(bottom) Figure 6.

Lucy and the wardrobe. Film still from *The lion, the witch and the wardrobe* (2005), directed by Andrew Adamson.

methods of its communities have rendered aspects of knowledge invisible, in many instances as a result of naturalisations that have occurred over time.

Insiders of the University of Cape Town

In its many departments, the University of Cape Town has a vast array of materials, most of which are not part of an official collection (as discussed in Chapter One and the *Curiosity CLXXV* exhibition). In conducting an overview of materials for this thesis, it became clear that employing my own taxonomy to group these varied depositories would help me ascertain the extent to which insider methods have rendered aspects of these materials invisible. I grouped objects into two categories:¹⁰

1) Collections, objects, representations and tools that are actively collected and used in teaching and research because they facilitate the formulation of answers to current questions regarded by the discipline as important. These materials are closely tied to disciplines because of their relevance to the research programmes and teaching curricula and as such are rarely considered by the insider as relevant to issues that fall beyond immediate disciplinary concerns. They are representative of the insights their discipline can offer and are usually described in jargon.

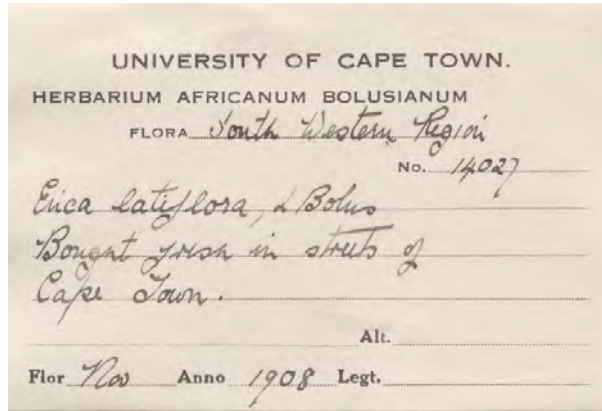
2) Collections, objects, representations and tools that have fallen out of date, are viewed as somewhat redundant by the disciplinary insider and, most often, speak to aspects of the history of the discipline or department. Many are kept for nostalgic purposes or as curiosities by staff members. In this same category are collections given to or acquired by the university that do not function as part of a curriculum, as they exhibit qualities external to those regarded by the host discipline as relevant, such as historical worth or having belonged to a person of note. Many of these objects or collections function as departmental blind spots.

Members of the first category include: the university's Bolus and Guthrie herbaria, situated in the Department of Biological Sciences; the upper-mantle-derived materials sourced from major diamond mines and diamond mining areas, kept in the Mantle Room of the Department of Geological Sciences; the collections that form part of the Archaeology Department of the university; the Pathology Learning Centre collection of approximately 3,500 specimens derived from surgical procedures or autopsies performed at Cape Town's teaching hospitals that are used to train medical students about how diseases manifest in the human body; the plastinated body parts, anatomical models and skeletons in the M.R. Drennan anatomy collection; the Physics Department's collections of models and visualisations that demonstrate idealisations used in research and education; and the Biological Sciences Department's skeletons of various animal species, used to teach comparative physiology.

Each of these collections is subject to the restrictions of the insider's view. The botanical specimens in the herbaria are viewed in terms of their genus, species, geolocation and role in biodiversity but not in terms of the colonial history of botanical expeditions that informed how these specimens were taxonomised and understood. A rock categorised as a kimberlite in the Mantle Room offers information about plate tectonics, the structure, age and past climates of the Earth but not about its role in South African history. When considered from an outside perspective, these rocks can be representative of how gold and diamond mining have served as a force of exploitation in the country,¹¹ leading to such devastating events as the Marikana massacre, or how most of the funds that enabled UCT to develop into a fully-fledged university (from 1880 to 1900) came from government and private sources to train skilled personnel to work in the country's emerging diamond and gold-mining industries.¹² A heart floating in formaldehyde in the Pathology Learning Centre offers students a glimpse of a tricuspid orifice obstructed by a very large soft mass of vegetations also present on the anterior wall of the right ventricle, but there are no details about the individual to whom the heart belonged.¹³

The second category of objects, although present in most departments, has in many instances become invisible to its insiders. These objects include redundant instruments of measurement found in the Chemistry, Physics or Engineering storerooms; a locked cabinet of eggs in the Biological Sciences Niven Library; a collection of indigenous musical instruments in the South African College of Music; a small grouping of forensic objects once used as evidence in court cases, now displayed in a non-descript cabinet on the medical campus; wax models of skin diseases in the Pathology Learning Centre; and a Von Luschan chromatic scale in the M.R. Drennan anatomy collection. These collections and objects are mostly invisible to the current insiders of their departments, but they – like the medicine chest – offer interesting insights into the limitations of the host departments when scrutinised from an outsider's perspective. The small cabinet of eggs in the library of the Biological Sciences department was donated to UCT's Percy Fitzgerald Institute of African Ornithology in 2007 and offers perhaps the best example of the tension between these two categories of collection.

Prior to its donation, the collection of eggs (currently locked in a bespoke cabinet in the Niven Library) was the personal collection of ornithologist Peter Steyn. The collection contains just over 400 eggs and a range of accompanying material and documents. Three notebooks provide details about each egg and its collection event. Roughly divided by time period and each ordered alphabetically, the notebooks have been annotated with notes and arrows, usually with information about the change of a species name after the initial entry. The collection can only be viewed by appointment, for which the cabinet is unlocked, and the examination is conducted under the watchful eye of the staff member on duty. Visually (the colours range from pastel blue to speckled black and green in a wide variety of shapes and sizes) and olfactorily (there is a pervasive scent of naphthalene, used to protect the eggs against moth larvae) engaging, the collection consistently elicits responses of wonder from those who view it. In



(top) Figure 7.

Information found on a botanical specimen (K000225239) donated by the University of Cape Town to the Royal Botanic Gardens of Kew. Written in pen in the notes section, the specimen is described as being the local *Erica latiflora*, collected in 1908, when it was 'bought fresh in the streets of Cape Town'.

(bottom) Figure 8.

A variety of pottery shards of Asian porcelain, European earthenware and British stoneware in a drawer in the Department of Archaeology, UCT.



(top) Figure 9.

Histopathology slides of the brain (human and animal). Pathology Learning Centre, UCT.

(bottom) Figure 10.

A drawer of specimens in the Department of Biological Sciences, UCT.

addition to the colours and smells, the wide selection of bird names presented to the viewer also delights and amuses – in many cases a result of the correlation between a familiar bird species and its incongruous egg. Engaging to visitors as it is, however, the collection serves no practical purpose in its host department. Representative of a practice (oology) no longer deemed scientific or ethical (Birkhead & Montgomerie 2018: 69) and thus outside of the current research scope of the department (speaking to its history rather than its present), it is invisible to the resident students, lecturers and researchers.¹⁴ This seems odd when one considers that these materials can speak to pressing current ecological issues and changing views of human and animal environments in the Anthropocene, as well as to the ethics of collecting. It seems logical that insiders of this department, whose research presumably touches on all these concerns, should draw on the ‘alternate’ forms of knowledge available in the collection. Despite contemporary researchers of this department being subject to much stricter ethical protocols when collecting, students of this department do not engage with the history and current debates around these practices as part of their curriculum. As a powerful reminder of past attitudes, this little cabinet could at the very least enable self-reflexivity within current practice.

To foster a broader understanding of how these two categories of objects intersect to illustrate the limitations of the insider, the next section considers a collection representative of each. For the first category, I refer to the M.R. Drennan anatomical collection, which is still used in various medical-related programmes in the university. The Kirby collection of musical instruments is discussed as an example of the second category, serving no role in the teaching curriculum and, as such, becoming all but invisible to and within its discipline.

*M.R. Drennan anatomical collection*¹⁵

Held in the Department of Human Biology in the Division of Clinical Anatomy and Biological Anthropology, this collection consists of prepared specimens – both bottled and plastinated, anatomical models – and a skeletal repository used for research purposes.¹⁶ The materials are kept in three separate rooms, with the anatomical models in one, the prepared and plastinated specimens in another and the skeleton repository in its own room behind locked doors, viewable by appointment only. The room housing the anatomical models functioned as a workshop when modelmaking was still offered to first year medical students as an elective course:¹⁷ its walls are lined with shelves that display models made from materials ranging from papier-mâché to modern silicon copies and are taxonomised according to their anatomical representations, such as ‘the eye’, ‘head & neck’, ‘dentistry’, ‘embryology’, ‘lungs’ and ‘cardiovascular system’, to name a few. The models represent each anatomical section and are brightly coloured to differentiate the different parts of the human body and aid in identification. Many of the models can be dismantled into separate pieces and, like a puzzle, be reassembled into their original shapes. Interspersed with these models are rolled-up charts depicting organs, bodily systems and anatomical sections of the body

in two-dimensional form, as well as old student modelling projects. A selection of animal skeletons is displayed on the far side of the room, and a shelf with a few anatomical specimens in formaldehyde is across from it.

In the second room, the teaching venue (also known as the Anatomy Museum), a small alcove houses the plastinated and formaldehyde specimens and an overflow of the student models. Large displays cases present themed biological content along the walls of the venue, a selection of images, text and anatomical models representing the endocrine, cardiovascular, lymphatic, respiratory, urinary and digestive systems respectively, as well as skeletal development, the structure and function of bone, foetal circulation and the workings of the heart.

The objects and displays housed in these two venues are very similar in content to anatomy teaching collections the world over, from the University of London and the University of Glasgow's Hunterian collections and Copenhagen's Moulagen Museum to Harvard's Warren Museum. It is one of four anatomy museums in South Africa to form part of the curriculum of its respective institutions – the Hunterian Museum at Wits, the Medical Morphology Museum of the University of Stellenbosch and the University of Pretoria's Bone Collection being the others. Students who use the collection are part of teaching programmes and research that include medicine, health and rehabilitation, physiology, biokinetics, biomechanical engineering, physical anthropology, forensics and audiology. Insiders of this faculty thus consult these materials regularly for answers to medical and scientific queries.

These rooms also house many of the older educational models that have become somewhat redundant in terms of teaching. Newer versions of these models offer clearer representations of the section of the body under scrutiny, or include detail discovered subsequent to the manufacture of the earlier models. They have nonetheless been retained as part of the larger collection because the collection manager values their craftsmanship.¹⁸ Forming part of this strata of older materials is a small, inconspicuous object – a chart with 10 blocks of chromatic colour on either side of a central panel, the colours ranging from black to very light beige. Unassuming in appearance and, like the bird egg collection, invisible to insiders using the collections, it offers a surprising glimpse into the history of the collection and the limitations placed on the larger collection by its practitioners.

Created by Felix von Luschan, an Austrian doctor, anthropologist, explorer, archaeologist and ethnographer in the early 20th century, the chart, known as the Von Luschan chromatic scale, is representative of an object from my second category of collection. It was used to classify skin colour and featured as a tool in race studies and anthropometry of the time.¹⁹ Forgotten by its current department staff and students, its presence draws attention to the role of medicine and science in the apartheid agenda and to the larger racist scientific practices of measuring and classifying human physical differences in the 19th and 20th centuries to produce a 'typology of race' (Sturken & Cartwright 2018: 351–352). To support such theories, object collections in scientific university departments worldwide also featured collections of human remains; tools for measuring the size and shape of skulls; and charts detailing various physiognomic



Figure 11.

Page 79 of the *Curiosity CLXXV* catalogue.



(top) Figure 12.

Miscast (cabinet with scientific instruments sourced from the M.R. Drennan collection). 1994. The South African National Gallery, Cape Town.

(bottom) Figure 13.

A student model of the 'Villus of the small intestine wall' found in the workshop of the Anatomy Building, UCT.

features (Sturken & Cartwright 2018: 351 – 352).

In the University of Cape Town and its M.R. Drennan collection, the Von Luschian scale is a historical curiosity and is invisible to its insiders, as it does not serve the needs of the current curricula. With many other objects, the scale is, however, part of the inheritance of the Drennan collection and of every science and medical student. As is true of the skeletal repository, the absence of this inheritance from the curriculum can have significant consequences.

The skeletal repository

Scottish anatomist Robert Black Thomson, head of the Department of Anatomy in the early 20th century, sourced the first three skeletons of this teaching collection (Morris 2012: 154), which now consists of 352 archaeological and forensic skeletons. Described as ‘traditionally Bushman skeletons’ and numbered S.A.C. 1, S.A.C. 2 and S.A.C. 3, Thomson’s skeletons were excavated from graves in the Richtersveld of the Northern Cape by the well-known social and cultural anthropologist Winifred Hoernlé (née Tucker) (Morris 2012: 154) and became the very first specimens from the university (then the South African College) to be described in a publication (Thomson in Tobias 1990: 332). This research propounded the insider’s view of the time, which held to a racial typological approach. Thomson claimed he detected a ‘characteristic racial structure’ in the vertebral columns that proved there were marked differences in the spinal development between ‘higher’ and ‘lower’ races (Thomson in Tobias 1990: 332).

Thomson’s successor, Matthew Robertson Drennan, was an anatomist and physical anthropologist, qualifying as a Fellow of the Royal College of Surgeons of Edinburgh in 1913 and emigrating to South Africa that same year. Drennan was appointed Professor of Anatomy at UCT in 1919 and continued the work of his predecessor in the field of physical anthropology, showing an interest in how morphological features were affected by race and evolution. In his study of the racial practices of science in South Africa at this time, historian of science Saul Dubow describes Drennan as ‘dourly contemptuous of the Bushmen he studied, regarding them as anatomical curiosities or living fossils’ and ‘one of the dying branches of the genealogical tree, soon to be added to the many dead branches of already extinct forms’ because of their inability to adapt (Drennan in Dubow 1989: 9). The racial typologies formulated during this period were represented by how the skeletons in the collection were viewed and understood and served to provide an ‘unambiguous mechanism for identifying and separating groups on morphological grounds’ (Morris 2012: 159). These supported the apartheid agenda and ensured that the average South African (an outsider to science) would not easily be able to conceive of a scientific counterargument against the policy (Morris 2012: 158). While the skeletons are not used to support these views any more, they remain a critical reminder of how scientific practice has supported, and may yet support, views shaped outside of science.

In 1987, Alan Morris,²⁰ then senior lecturer in the department, conducted a study of the documentation of the Khoi and San skeletons housed



Figure 14.

An object from the Pathology Learning Centre next to one from Special Collections.

in the Drennan collection,²¹ which revealed the horrific manner in which these groups were viewed and treated when the skeletons were collected and studied. As a doctoral student at Wits University in the 1980s, Morris focused on a selection of archaeologically derived human skeletons from the late 17th to the early 19th centuries excavated along the historic border of the Northern Cape Colony that were held in the McGregor Museum in Kimberley and the National Museum in Bloemfontein.²² This research introduced him to the many issues raised by the collection of materials by the physical anthropologists of the time and exposed him to the methods of typology that had become engrained in the collection, description and publication of specimens.²³ When he started working in UCT's Department of Anatomy a few years later, Morris identified nine individuals in the UCT collection who had been disinterred from graves on farms in the Cape Province, with verification based on the testimony of the farm owner, who stated that he had known the individuals in life. Mr C.G. Coetzee, of the farm Kruis River in the Sutherland District, presented six San and two Khoi skeletons to the Department of Anatomy between 1925 and 1927. As recorded in these documents, his testimony is consistent with known historical events, revealing how these 'wild' individuals (usually children, because the adults were often shot on sight) were 'caught' in the Karoo and the adjacent regions in the first half of the 19th century (Morris 1987:17) and invariably ended up as domestics, shepherds or labourers on colonial farms.

Other than being published in the *South African Archaeological Bulletin*, Morris's findings did not lead to any further engagement in the department in the years that followed, with students and lecturers continuing their study of the more recently acquired material. In 2017, following a discussion on the ethical procurement of human remains at a national symposium on human remains management at Iziko Museums, Prof. Victoria Gibbon,²⁴ the current manager of the skeletal repository, was moved to conduct an analysis of UCT's collections and records (Cloete 2018)²⁵. She found very limited documentation overall but pinpointed the nine cases identified by Morris in 1987 as unethically procured – setting in motion a chain of events that has included the return of the skeletal remains to a Sutherland community in the Northern Cape,²⁶ a call for the renaming of the collection²⁷ and stricter protocols for strangers to the department gaining access to the collection²⁸.

These developments emphasise the shadow side of the insider's view and its limitations, as well as the reactions it can generate in the institution once identified. Morris's historical interest in the collection and Gibbon's engagement with ethical debates in the humanities about such collections, and the subsequent Sutherland reburials, illustrate how outside perspectives can influence insiders' perceptions of materials and their disciplines. This was further emphasised in May of 2003, when a large burial ground was unearthed during the redevelopment of Prestwich Place, along what had once been the Cape Town foreshore. On making this discovery, the developers (Styleprops Ltd) duly notified the regulatory authority for these procedures, the South African Heritage Resources Agency (SAHRA), who in turn commissioned a recognised archaeological agency, UCT's Archaeological Contracts Office, to carry out the necessary initial investigation

and compile a report.

This section of the city was known to be where the colony's slaves, dispossessed indigenes and other marginalised factions were buried, and the discovery invited much attention from various contemporary groups who felt implicated (Hall 2009: 70). These groups shared a lineage of 'concern with memory, heritage and land rights, and a complex and often fraught relationship with the City of Cape Town's professional planning structures' (Hall 2009: 70). Working together as a coordinated group called the Hands Off Prestwich Place Committee, they opposed any further exhumations (Weeder in Hall 2009: 70). Although they were not involved in the unearthing of the material and compilation of the report, Morris and his team of UCT students drew on their rights as scientific insiders and made a claim for right of access to the 1,200 or so skeletons found at the site. They applied to SAHRA for a permit to study the skeletons and take bone samples for chemical analysis, but the application was turned down in April 2005 (Shepherd in Hall 2009: 70–71). The events of this period highlighted the contrast between insider/outsider views, as expressed by the desires of science and those of the public. The Department of Archaeology and the Department of Anatomy (now known as the Department of Human Biology), of which Morris and his team formed part, both presented insider views of the scientific community – 'that of an external truth awaiting discovery by a politically disinterested community of scientists using objective methodologies tested by proved theories' (Hall 2009: 2). When presented at public meetings, these insider views invited an outpouring of protest from the communities involved, who, as outsiders to science, argued for the historical, social, cultural and political rights of these same skeletons.

As shown by these examples, the meaning and significance of the M.R. Drennan collection (now in the process of being renamed) far exceeds its scientific use and illustrates how such a collection confronts insider views and demands their expansion. As with the Von Luschan chart and the provenance of the skeletons, the collection evidences the insiders' views that have shaped their disciplines and limited the understanding and treatment of these materials over the past 100 years. Understanding this is not merely a matter of developing student sensitivities to the public life of their research, but it reveals the ways in which science has been – and will surely continue to be – shaped by prevailing ideologies. In 2015 and 2016, additional outside pressure mounted, spurred on by student activist movements such as Rhodes Must Fall and Fees Must Fall. Current university curricula were first brought under student and public scrutiny at this time, led by a critique of science and its disavowal of alternatives offered by indigenous African forms of knowledge, and concerns were addressed at several sessions convened between staff and students.²⁹ These debates have gathered momentum, exposing the limits imposed by insiders on materials in their collections and illustrating how the pursuit of knowledge is shaped outside the discipline.³⁰



Figure 15.

The Old Anatomy Lecture Theatre (currently part of the Centre for Curating the Archive).





Figure 16.

The workshop and storage space for educational models in the Anatomy Building, UCT.

Kirby collection of rare musical instruments

The Kirby collection is situated in the Strubenholm building of UCT's South African College of Music (SACM). The SACM was founded in 1910 and was incorporated into UCT in 1923, when its principal, Prof. W.H. Bell, was made Dean of the Faculty of Music for the university. As a satellite campus, it is small and intimate, consisting of only three buildings: the Strubenholm (a private residence before it became the SACM in 1925), which houses administrative offices, lecture rooms and the Kirby collection; and two newer buildings (linked to the Strubenholm) built in 1972 that contain recital rooms, an opera studio, over 100 teaching studios and practise rooms, the W.H. Bell Music Library, recording and electronic music studios and a listening laboratory.

Locked away in a light- and temperature-controlled room with custom-made cabinets, the Kirby collection is accessible to university staff and students for research and is open to the public by appointment. It consists of two interleading rooms with high ceilings and cabinets lining the walls – except the wall on the left as one enters, which boasts a platform displaying the larger instruments in the collection. The cabinets consist of glass-fronted top halves fitted with glass shelves displaying an array of instruments; the bottom halves are drawers that can be pulled out to display additional groupings of instruments lying horizontal and covered with protective Perspex covers. The collection includes 'instruments made and played by all indigenous southern African groups, as well as a smaller collection of instruments from five continents, notably Asia, and some unusual instruments from Western Europe' (Nixon 2015: online). In addition to the instruments themselves, 'the collection also features paintings, sculptures and other objects relating to the field of sound' (Nixon 2015: online).

The collection is comprised of more than 600 musical instruments, most of which were used in southern Africa before 1934, many pre-dating urbanisation. Starting as early as 1923, the Scottish historian and musicologist Percival Kirby, then Professor of Music at the University of the Witwatersrand (Wits), observed the music cultures of indigenous South Africans on a series of field trips conducted during university vacations (Nixon 2013: ix). Kirby observed that the music of many local communities was disappearing under Western influences, and these initial trips developed into a project to collect, document and describe examples of each kind of musical instrument in southern Africa south of the Limpopo (Nixon 2013: x). Kirby took photographs, made wax cylinder sound recordings of performances and, where possible, learned how to perform the music – all practices that became standard in ethnomusicology but were uncommon at the time (Nixon 2013: ix). The field trips became the basis for *The musical instruments of the native races of South Africa* (1934), now in its third edition, which remains the standard reference for this collection. The collected instruments were displayed in his 'museum' in the music department at Wits, where he used them in his teaching. When Kirby retired, he loaned his collection to the Africana Museum, Johannesburg, where it remained from 1953 to 1981, at which point the University of Cape Town acquired it.

On arrival in Cape Town in 1981, the collection consisted of



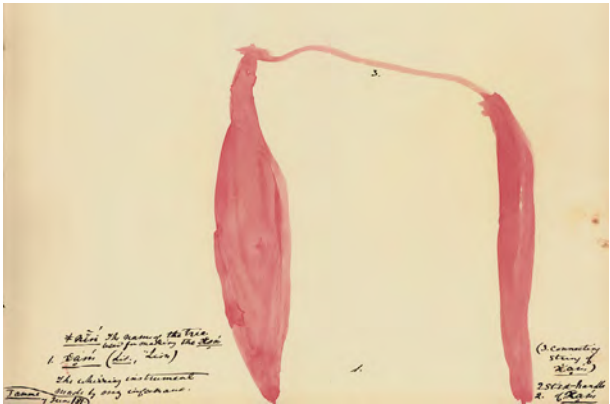
Figure 17.

The Kirby collection of musical instruments. South African College of Music, UCT.



(top) Figure 18.

Miscast (installation detail). 1994. The South African National Gallery, Cape Town.Town.



(bottom) Figure 19.

A watercolour of a whirring instrument painted by Tamme in 1881.
Digital Bleek and Lloyd. Centre for Curating the Archive, UCT.

numerous boxes and crates filled with instruments, papers, photographs and a small contingent of phonographic (ediphone and dictaphone) wax cylinders (Zimmer 2015: 101). The instruments remained in the SACM, while the wax cylinders, documents, papers and pictures were sent to UCT's Manuscripts and Archives department. In 1983, the collection was opened to the public by Chief Mangosuthu Buthelezi.

When UCT Fine Art lecturer Pippa Skotnes visited the collection in 1994 to source material for an exhibition at the South African National Gallery, she found the instruments in a dismal condition, with the dusty evidence of wood borer beetle visible in many of the wooden instruments.³¹ In 2004, when Michael Nixon, then lecturer in the Ethnomusicology and African Music programme, took over the collection, he too found the collection in a dreary state, as the rooms it was stored in were damp and most of the instruments were covered in mould. With the aid of funds from the National Lottery Distribution Trust, the collection was subjected to various restorative and conservation processes and curatorial considerations. From a conservation perspective, the collection – made up of mostly organic material such as animal skin, botanical elements (reeds, gourds and seeds), horns and bone – presents an array of challenges. The additional funds brought all of these conservation issues under consideration and addressed them in terms of best practice – a process that rendered them unusable and invisible to the insiders of the department, as they could now be viewed but not touched or played (Kashe-Katiya 2010). In addition to muting the instruments, the conservation process limited their exposure to the department's insiders, as large groups of students pose a threat to the stability of the temperature-controlled environment.

The instruments are now grouped in different cabinets according to the taxonomy set out by Kirby in his book. In the preface to the second edition (1964), Kirby shares some of his considerations when deciding how to group the instruments, writing that he had to decide 'whether to arrange my material tribally, or to deal with each type of musical instrument separately from the technological and historical points of view, allowing the tribal aspects to emerge incidentally' (Kirby 2013: xix). Kirby chose the second alternative, stating that his chief reason was that he wanted the work to be, as far as possible, 'a complete and comparative study of one particular aspect of the life of our aborigines' (1964: xi). His second consideration was to find the most suitable manner for classifying the instruments, for which he defaulted to the 'age-old simple classification of musical instruments into three main groups of percussion, wind and strings' (1964: xi) – a Western system for the classification of instruments and the principles on which they were based.³² The chapters in his book and the displays in the room are thus grouped into three categories: percussion – 'rattles and clappers', 'drums', 'xylophones and sansas' and 'bull-roarers and spinning-disks'; wind instruments – 'horns and trumpets', 'whistles, flutes, and vibrating reeds' and 'reed flute ensembles'; and stringed instruments – 'stringed instruments' and 'Bushmen and Hottentot violins and the ramkie'. Kirby encountered one taxonomic anomaly when employing this system: the 'gora', an instrument both wind and string, which he termed 'a stringed-wind instrument'.

Kirby's choice of an 'age-old simple classification' to order the instruments can be correlated with another classification formulated at Wits around the time he was collecting. The Department of Bantu Studies was established in the 1920s at roughly the same time as the Music Department. Kirby's use of the phrase 'native races', which features in the title of his book, resonates with the descriptive subtitle of the Wits journal connected to research in this department: *Bantu Studies: A Journal Devoted to the Scientific Study of Bantu, Hottentot, and Bushman* (Nixon 2013: xii). The homogenising act of categorising all diverse indigenous South African groups into three general categories seems to echo Kirby's taxonomic imposition on the diverse instruments he collected on his trips and that continues to feature as the ordering principle of this collection.

In addition to homogenising, the taxonomy of the current curation encourages a 'comparative' viewing framework, which Kirby describes as one of his objectives in compiling the collection. Comparative displays were very popular in 19th and early 20th century anthropology. Grouping objects from communities worldwide according to 'types' in relation to Western versions enforced ideas of social Darwinism, suggesting a scale of development from 'primitive' objects to more evolved Western versions. This social evolutionary approach was also common in the social sciences in South Africa in the 1930s (Dubow 1995a: 49). Kirby followed theories about the prehistory and history of southern African populations and was influenced by Raymond Dart, Wits Professor of Comparative Anatomy, when theorising the development of the peoples and their music cultures. Though Dart was valorised as a teacher and researcher, placing South African palaeontology on a dynamic scientific path, Saul Dubow notes that his adherence to theories of social evolution fed directly and indirectly into the currents of scientific racism in South African theory and public discourse (1995a: 39–47). Nixon's research into the Kirby archive suggests that Kirby was strongly influenced by these streams of theorising and that he saw all music in history passing through the same evolutionary stages along a universal evolutionary path (Nixon 2013: xi) – a view that saw him be heralded internationally as an expert on 'primitive music', to which he continually updated his theories about what constituted this 'primitive stage' in music (Nixon 2013: xi).³³

In its current state, the taxonomy and display of the Kirby collection occludes the rich history of its objects and their use in the social life of the communities from which they were sourced, which include their use in healing, warfare, calling animals and as tools in spiritual ceremonies. Many of these uses are noted in Kirby's publication, but they were not incorporated into the 2010 curation and thus remain invisible to the insiders of the department and its few visitors. In addition to these occlusions, Kirby writes in his introduction to the first edition (1934) that instruments of Indian or Chinese origin present in South Africa at the time were omitted from the collection, because 'such instruments [...] had no influence upon those of the native races of South Africa' during the period he was collecting (Kirby 2013: xvii).

Taking all these factors into account, the collection is an interesting example of the limitations imposed on these materials, many due to past insider

practices. Conservation concerns have rendered them somewhat redundant and invisible in a department with sound as its largest research focus. Throughout the years, Nixon has nevertheless tried to interest the teaching staff in utilising the collection, but interest has apparently been slim.³⁴ When interest has been shown, it has been on the Western aspects of the collection (its classification system and its older Western instruments), symptomatic of the largely Western-focused curriculum of the department. The opportunity to study these instruments' role in the social, spiritual and cultural lives of the local communities from which they were sourced has been ignored to date.

This chapter started with a brief examination of how the different methods employed by disciplinary insiders were first established, tying developments in with the materials that served as the foundation for these practices and their academic communities. Disciplines were able to stake their ground and establish epistemic borders by focusing on the authorial regimes of seeing imposed first on the traveller in the field and then on the researcher studying the materials back home, and on the taxonomic systems utilised by scientific institutions, museums and societies. These regimes taught their insiders what should be regarded as relevant and what could be ignored. The chapter then investigated how these authorial methods are evident in the departments and curricula of the present-day university, and used UCT as a case study. Just as the medicine chest proved effective for an examination of how systems of classification can occlude the characteristics of an object and render it invisible, so examining the object collections of different university departments offered a view into the characteristics of the objects being ignored by their insiders.

An overview of these collections revealed a vast selection of objects that could be grouped into two categories in terms of these enquiries: those used in teaching and research and therefore representative of current insider methods being utilised in these departments; and those collections and individual objects that had once occupied the former status but were now outdated and viewed as redundant, or related to the history of the discipline or the host department. Both categories manifest the limitations being exercised on them by their insiders in various ways. The M.R. Drennan anatomical collection still in use as a teaching aid to supply answers to medical and health enquiries occludes the provenance of its materials because of the parameters of the insiders' curriculum. Meanwhile, the Kirby collection of instruments offers a similar glimpse into insider limitations, illustrating how its objects – and particularly their social life – are largely invisible to the students and staff of the SACM, a department in which sound is deemed the most important research output and the study of music follows Western taxonomies. Its current curation enforces this restrictive taxonomy implemented by a past insider of the discipline and continues to occlude the rich history of its objects.

Recent controversies around the Drennan collection have revealed how pressure exercised by outside perspectives can lead to a ripple effect in the institution. The next chapter examines a series of exhibitions first staged in the 1990s that embraced the potential of the outsider perspective and subjected a number of institutional collections to such pressures.

workers to become partners in his ship-yards, and share in the profits of the concern.

After a period of comparative quiescence, the suffragettes are once more becoming active. Undeterred by previous failures, another attempt to raid the Houses of Parliament is now contemplated, and the latest effort promises to be on a much more extensive scale than previous ones.

Next Tuesday is the day fixed for the demonstration, and the leaders of the movement have issued an impassioned

In
recept
stock
The
to th

Pre
porte

The
journ
than

It
Eulen
promi

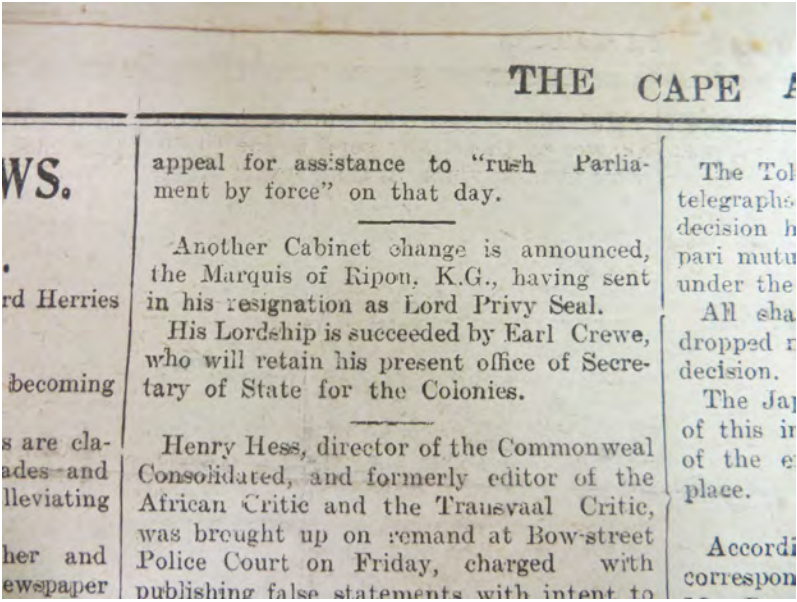


Figure 20-21.

News about the suffragettes storming the Houses of Parliament, from the same 14 October 1908 *Cape Argus* newspaper clip that Floyd saved for photographs of the Alfred Rowing Club's annual regatta. BC666 A1.22. Special Collections, UCT.

The Aurora Borealis has been so often described, that the various appearances it assumes must be known to all, notwithstanding which the real nature and cause of the phenomenon are yet a mystery. All that the traveller can do, when he may be in a situation to observe this singular phenomenon is, to note the day and hour, the appearances presented by the aurora, the manner of its commencement, and termination, its duration, its extreme points, its angular extent, and height of the arch, as also the ordinary meteorological observations at the time, and the effect of the aurora on the magnetic needle.

Figure 22.

How to observe the aurora borealis. Extract from Julian Jackson's *What to observe; or, the traveller's remembrancer* (1841).



Figure 23.

Nina Liebenberg. 2018. *The northern lights*. Histopathology slides of the brain (human and animal) sourced from the Pathology Learning Centre, scanned and converted into video projection.

Endnotes

- ¹ *A Manual of Scientific Enquiry*, edited by the astronomer John Herschel, and Francis Galton's *Art of Travel* were also popular publications of the period (Kennedy 2013: 40–41, 61).
- ² Viewing by an explorer or traveller entering foreign terrain differed from, for instance, the controlled viewing implemented in Gresham College, where Boyle's unprecedented early experiments with the air pump first established the rules of the experimental method, discussed in detail by historians of science Shapin and Schaffer (2011). In Boyle's controlled environment, procedures and outcomes were validated by an audience that consisted of Royal Society members and their invited guests. This community of 'gentlemen' (Shapin 1988, 1994) were different to the explorers – still white and male, explorers were, according to historian Adriana Craciun (2011: 45), a more 'heterogeneous group' of individuals, geared towards a 'profitable display of autonomy, discovery and identity'.
- ³ Shapin (1994) has shown that questions of epistemology were linked to the 'gentlemanly' status of one's informant. This individual's social standing and the sanctioning of his duties by a government or a scientific body were deemed very important. See also McEwan (1998).
- ⁴ In "Precision," "perfection," and the reality of British scientific instruments on the move during the 18th century', historian Alexi Baker illustrates how many of the instruments of precision were, in fact, temperamental and sensitive to their surroundings (Baker 2012: 19). Bourguet, Licoppe and Sibum's *Instruments, travel and science: Itineraries of precision from the seventeenth to the twentieth century* similarly demonstrate how the 'universal dimension of science' represented by these instruments of standardisation was predicated upon the Western context in which they were made and, as such, were deeply grounded in this locality. They illustrate how a 'working instrument' in the new context depended in many cases on the consensus reached between the individuals involved in taking the measurements (2012: 14–17).
- ⁵ A variety of scientific institutions, museums and learned societies emerged in the late 18th and early 19th centuries that benefited from the information and items obtained by explorers. In London alone, these organisations included the Linnaean Society (1788), the Royal Institution (1799), the Royal College of Surgeons (1800), the Geological Society (1807), the Astronomical Society (1820), the Asiatic Society (1823), the Athenaeum (1824), the Zoological Society (1826) and the British Association for the Advancement of Science (1831). In addition, the Royal Botanic Gardens at Kew and the British Museum assumed their modern forms in this period as research institutions and repositories of specimens collected from 'the far corners of the globe' (Kennedy 2013:35–36).
- ⁶ The 'father of modern taxonomy', Carl Linnaeus's ways of looking at, describing, depicting, and classifying plants in the 18th century were very influential in the construction of these images. Daston and Galison (2007: 59) describe this process as 'openly, even aggressively selective', with botanists training themselves to concentrate on characteristics that were 'constant, certain and organic'; combating distraction by irrelevant details of a plant's appearance which could lead to unnecessarily multiplying species. Botanists had to also prevent their illustrators from rendering 'accidental traits, like colour, as opposed to essential ones, like number, form, proportion, and position' (Daston & Galison 2007: 59).
- ⁷ For a similar discussion on the 'type specimen' and its changing role in the history of taxonomy – how it functioned to 'fix as typical' the variations found within species – see Daston 2004.
- ⁸ Fields of research represented were chemistry, field geology, economics, linguistics, astrophysics, law, computer science, occupational therapy, speech and hearing science, radio astronomy, archaeology, civil engineering, anatomy, philosophy, aerodynamics, mathematics, pathology, zoology, oceanography, microbiology, art history, geochemistry, food science, epigraphy, applied social science, legal pedagogy and restorative dentistry.
- ⁹ Horowitz utilises the same process in *Being a dog* (2016), in which the emphasis is on smell rather than sight to generate completely different conceptions of the world.
- ¹⁰ I am, of course, alert to the inevitability that my own categories will similarly render some aspects less visible than others.
- ¹¹ See Wilson (2001).
- ¹² See <https://www.uct.ac.za/main/about/history>.
- ¹³ See https://digitalpathology.uct.ac.za/case_detail.php?case_id=650.

- ¹⁴ I have visited this collection on many occasions, by myself and with students, and students in the library react with amazement every time the librarian opens the cabinet.
- ¹⁵ M.R. Drennan's name was removed from the collections in 2019 for reasons that will be discussed. A renaming process is underway.
- ¹⁶ See 'The visual university' at <http://www.cca.uct.ac.za/cca/arc/visual-university/drennan-anatomy>.
- ¹⁷ This elective is not offered any more, as a result of a change in directorship at the school and a subsequent shift in the programme focus (C. Powrie, personal communication, 20 February 2021).
- ¹⁸ C. Powrie, personal communication, 20 February 2021.
- ¹⁹ For more on Von Luschan's visit to SA in 1905 and his association with James Drury and Louis Peringuey, see Morris (2008).
- ²⁰ Programme convener in the Department of Anatomy from 1981 to 2014 and current Professor Emeritus.
- ²¹ Morris included a study of similar collections and documentation in the Anatomical Museum, University of Edinburgh; the British Museum (Natural History), London; the Royal College of Surgeons, London; the Musée de l'Homme, Paris; the Institut für Humanbiologie, University of Vienna; the Department of Physical Anthropology, Cambridge; the National Museum, Bloemfontein; the Albany Museum, Grahamstown; the Department of Anatomy, Wits; the South African Museum, Cape Town; and the McGregor Memorial Museum, Kimberley (Morris 1987: 12–22).
- ²² See Morris (1984).
- ²³ When he started working in UCT's Department of Anatomy in 1981, Morris's archaeological interests led to a collaboration with the Department of Archaeology's Martin Hall, in which they examined the problems that typological assessments had created in understanding the Iron Age populations in southern Africa. Morris developed these ideas for a five-lecture series at the UCT summer school in 1984 (A. Morris, personal communication, 1 August 2021).
- ²⁴ Of the Department of Human Biology in the Division of Clinical Anatomy and Biological Anthropology.
- ²⁵ See <https://www.news.uct.ac.za/article/-2018-10-12-khoisan-skeletons-to-be-returned-home>.
- ²⁶ As Morris's research had shown, they were believed to have been San and Khoi people captured and forced to become farm labourers in the 1800s. In 2018, UCT worked with the community of Sutherland in the Northern Cape to return the skeletal remains of these individuals to their descendants. The project attracted much media attention and led to a continuing investigation into the larger skeleton collection as well as other departmental collections. See <https://www.news.uct.ac.za/features/sutherland/-article/2019-11-04-restoring-ancestors-to-their-home-through-transformational-uct-process>.
- ²⁷ See <https://www.news24.com/news24/southafrica/news/dishonourable-names-up-for-replacement-as-uct-opens-renaming-process-20190403>.
- ²⁸ The skeletal repository has its own set of strict rules regarding access. For more information, see <http://www.anatomybioanth.uct.ac.za/uct-human-skeletal-collection>.
- ²⁹ A video recording of a session convened between activists and the UCT Science faculty is available at <https://www.youtube.com/watch?v=C9SiRNiBD14>.
- ³⁰ In September 2017, Deputy Vice-Chancellor Professor Loretta Feris and the Curriculum Change Working Group facilitated a panel discussion on decolonising the science curriculum, to which they invited the UCT community. Professor Chandra Raju, the vice-president of the Indian Social Science Academy, was featured as the guest speaker (see <https://www.youtube.com/watch?v=ckbzKfRIi6Q>). Many articles discussing the movement and its necessity have been published in newspapers and journals. See, for example: Nhemachena et al. 2020; Ally & August 2018; Illing & Sloan 2016; Nordling 2018; and Opuko & James 2021.
- ³¹ P. Skotnes, personal communication, 6 November 2020.
- ³² Interestingly, Kirby decided against using the five main 'divisions' set out in Galpin's (1937) *Textbook of European musical instruments*, writing that they frame the objects in terms of 'natural science' rather than as 'human artifacts'. He does offer a breakdown of how Galpin's categories could be interpreted in this system, noting that only the last division, 'electroponic, or electrically vibrating instruments' are not represented, 'since none of these has been made or used by aborigines in South Africa' (Kirby 2013: xix).
- ³³ Kirby would, for instance, argue that Africans of his time were at the same stage of musical development as Europeans of the tenth century, drawing a parallel with English church music of the tenth century based on the use of certain musical intervals (Kirby 1982: 272–273). Kirby would have used Western choral music as a standard measurement in the context of

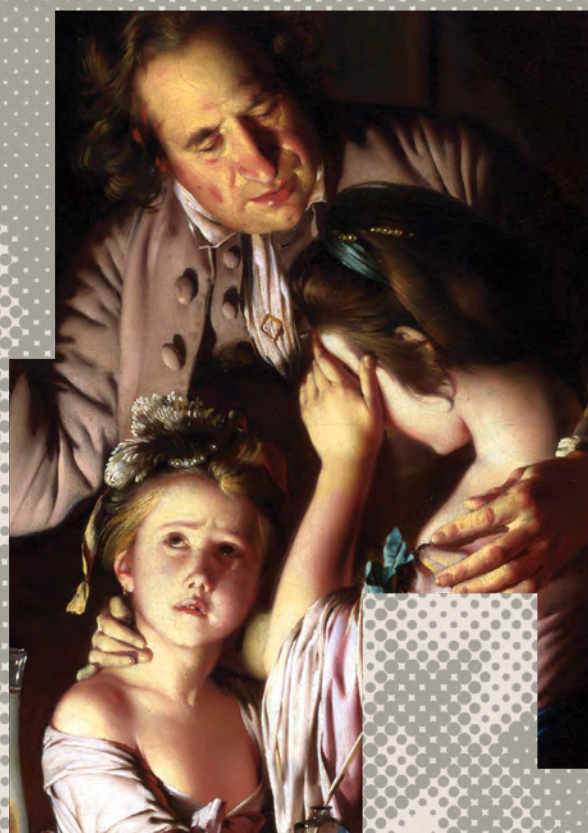
these field trips because of its use by the local mission schools as a 'civilising' force to eschew African musical influences (Mthetfnva in Stewart 2000: 3–13). This dichotomy would therefore have been set up and somewhat naturalised, encouraging comparisons between two vastly different practices.

- ³⁴ Morne Bezuidenhout, who taught an introductory course on acoustics, used the collection not so much for the instruments as for its classification system. He taught his students the principles of the von Hornbostel-Sachs musical instrument classification system, as it is very widely used in academia, museums and other collections. Bezuidenhout devised a set of questions that the students would investigate and answer by visiting and studying the collection. Becky Steltzner similarly brought clarinet and other woodwind students in. Western instruments were generally of more interest to these staff members, as the instruments were older and spoke to the history of Western music (M. Nixon, personal communication, 25 July 2020). The instruments did, however, form part of the (now defunct) Solms-Delta initiative, started in 2001 by UCT Professor of Neuropsychology Mark Solms. The project engaged with the history of his farm through the discipline of archaeology, displaying what they found alongside stories of its workers and residents in a public museum on site. Solms also established a platform through which ownership of land and equity in the business could be shared with the workers and residents. For the Music van de Caab project, instruments from the Kirby collection were remade and were played in performances staged at the farm during which communities from around Solms-Delta would gather, joined by various local music ensembles. See <http://www.solms-delta.co.za/museums-archaeology/>.

Observers (1768)

From: Joseph Wright. 1768. An experiment on a bird in an air pump. Oil on canvas. National Gallery, London.





Chapter Three:
The Artist-Curator as Disciplinary Outsider

The early 1990s was a time when many things that had not been possible suddenly became possible. It seemed as if museums were embracing change. They were open to being more self-critical – and to looking at their collections critically.

Dr Patricia Davison¹

The academic boycott of South Africa eased soon after 1990. The influence of this on the museum sector was pronounced and manifested in a growing interest from international scholars eager to visit and engage with local collections and in the formulation of new public programmes as part of their mandates.² Many local museums had already been subject to criticism in the 1980s for allowing apartheid ideology to influence the categorisation, storage and display of their collections. Patricia Davison, then Assistant Director of the South African Museum (SAM), with responsibility for the newly established public programmes portfolio, remembers the marked shift that occurred in the SAM's research output in the early 1990s after the boycott was lifted. Achievement, previously assessed primarily by the number of peer-reviewed papers its staff generated, now expanded to include a focus on promoting activities that engaged with the changing cultural politics of the time and on increasing public awareness of museum programmes. As part of a wider commitment to public programmes, the SAM executive management in 1991 were thus open to a lecturer from the Michaelis School of Fine Art, an outsider to the institution, proposing an exhibition of her artworks alongside objects belonging to different disciplinary fields sourced from the museum and the university, to be accompanied by a text written by a diverse selection of disciplinary experts.



Figure 1.

An artist-curator in the South African Museum, Cape Town. 1993.

Sound from the thinking strings

Wandering through the different galleries of the South African Museum in 1991, visitors would at some point have found themselves in a space similar to the ethnographic hall they had passed through on entering the museum. Gathering and hunting bags, bows and arrows, animal hides, body adornments, musical instruments, ostrich eggshells and a range of excavated objects were displayed in a long corridor leading off from the whale well. Most of these objects had labels that stated the object's presumed use and the sites from which they had been recovered, affirming their affiliation with the content on display in the ethnographic halls³ and their home within the disciplines of archaeology and anthropology. So far so familiar, visitors might have thought.

However, these objects were not the only things on display in this space: hung on the walls to accompany the object groupings were historical notes, documents and photographs and a series of contemporary etchings depicting subject matter that echoed the objects on display – a visual reassurance for visitors (like a label confirming what you think you are looking at) were it not for the strange context in which the objects in the etchings were situated. An animal hide on display on a plinth was accompanied by an etching of a group of figures seeming to hover between animal and human form. In another etching, similar therianthropomorphic figures wield musical instruments (echoed by the instruments on display), playing them up to a sky in which animal forms float against entoptic spiral shapes. On another wall, an etching of a hunting or gathering bag was surrounded with similar bags from the museum collection, hung on the wall on either side of it, while in another etching further along the wall, a similar bag hovered in the sky above a man-made shelter on the ground.

Pages containing poems and texts – essays, on closer inspection – written by a historian, an archaeologist and an artist-curator and a 'foreword' written by an evolutionary biologist also filled the walls. In the middle of the exhibition, a book on a plinth revealed, when paged through, the same pages as those dispersed across the walls. This 'special exhibition', as the vinyl above the doorway declared it, was *Sound from the thinking strings*, curated by the artist-curator Pippa Skotnes.

Sound from the thinking strings was comprised of twenty etchings created by Skotnes that drew on southern San mythology, archaeological and historical research and rock paintings;⁴ poems by the late poet Stephen Watson that interpreted extracts of nineteenth-century recordings of !xam cosmology compiled in the Bleek and Lloyd archive and pre-selected by Skotnes; and historical and archaeological contextualisations of these recordings in the form of essays by archaeologist John Parkington and historian Nigel Penn. The exhibition also displayed associated visual material that Skotnes sourced from the UCT and State Archives, the UCT Archaeology Department and the SAM.⁵

Skotnes admits that the politics of representation posed a problem for her from the start when working with this subject matter (Skotnes 1991: 27). The rich collection of San myths and legends, poems, oral folklore and personal histories that make up the Bleek and Lloyd archive provide access to the cosmologies and complex social structures of a people denied these attributes in the colonial

records, but Skotnes remained cognisant that this record was the interpretation of the two Europeans who recorded and transcribed the interviews conducted with the San informants (Skotnes 1991: 27). As such, the materials could not be seen 'merely as a medium for communicating facts that could be observed in other ways' (MacLuhan 1962; Foucault 1974; Derrida 1976; Thornton in Skotnes 1991: 27) and could not or should not be represented in such a manner. To address what could, in the scope of this thesis, be understood as Lloyd and Bleek's 'insider views', Skotnes formulated a methodology that enabled the inclusion of other interpretations, both scholarly and imaginative, and collated these views in a book and a physical space, opening up these materials and their interpretations even further by presenting them to the diverse publics of the SAM.

Skotnes commissioned essays from UCT lecturers Parkington and Penn, academics who have both conducted extensive research on these hunter-gatherers in their respective disciplines of archaeology and history. Parkington's archaeological research has shed light on the relationship between home and hearth and the rock paintings that populate shelter walls,⁶ while Penn's historical work has provided an understanding of the northern Cape frontier in the 18th and early 19th century and of the clashes that occurred between the white settlers and the San.⁷ Skotnes also sourced a range of archaeological materials from UCT's Department of Archaeology and the SAM and historical material from the university archives and the State Archives. Her inclusion of these materials and the academic essays highlighted an interesting tension between these separate but related components of academic research.

In conducting research, both the archaeologist and the historian are reliant on the material evidence they discover or source and then study, be it material gathered from a digging site or the various documents and photographs held in the archives. These are, in fact, the primary sources from which these disciplines make their deductions or inductions (Renfrew & Bahn 2005: 119–121). The physical reality of these materials is, however, normally omitted from the end product of research, which usually takes the form of research papers presented at conferences, of articles in academic journals or as published books. As textual documents, they translate primary materials into words, descriptions and two-dimensional images, which highlight particular aspects of the objects or archival documents that support their topic of research. By using the medium of the exhibition, which not only allows the joint presence of text and objects but foregrounds it, *Sound from the thinking strings* reinstated this relationship by displaying the essays *and* the objects, facilitating a different experience of research that included seeing and experiencing as an additional means of dissemination.

Skotnes also included creative interpretations of the archive in the form of poems and a series of etchings. For the poems, she approached Stephen Watson, a poet and lecturer in UCT's Department of English, and asked him to undertake 'translations' of a selection of stories she had made from Bleek and Lloyd's English versions of the |xam and !kun texts (Skotnes 2007: 48). Watson tried to remain as true as possible to what he termed the 'spirit' of the San stories selected for him and admitted in a newspaper interview that being involved in the project had opened his eyes to the rich culture of the people wiped out by



(top) Figure 2.

Sound from the thinking strings (installation detail). 1991. South African Museum, Cape Town.

(bottom) Figure 3.

Pippa Skotnes. 1991. Etching from *Sound from the thinking strings*.



(top) Figure 4.

Sound from the thinking strings (installation detail). 1991. South African Museum, Cape Town.

(bottom) Figure 5.

Pippa Skotnes. 1991. Etching from *Sound from the thinking strings*.

the white settlers at the turn of the century, stating that no book or poem could begin to right these historical wrongs (Holzhausen 1991). In the same article, he expressed his wish that these poems would enable at least 'some echo of the San's presence' to be heard (Holzhausen 1991).⁸ By including Watson's poems in the exhibition and book, Lloyd and Bleek's interpretations were extended and given a contemporary voice, adding another perspective to the archaeological and historical views represented by the essays and objects (Skotnes 2007: 48).

Skotnes's own visual interpretation of the history and cosmology of the |xam formed the last component of this interdisciplinary endeavour and constituted a visual component that drew together the various strands of disciplinary interpretations and presented a perspective on the |xam life she felt 'was missing from the other interpretations' (Skotnes 1991: 30). In these images she drew freely on San mythology, accounts of |xam life recorded by Lucy Lloyd, historical and archaeological research and images from rock paintings in a landscape setting. She writes in her preface that these etchings were direct attempts at 'inverting the museum dioramas' in the ethnographic halls close to the exhibition which, through their display of the San's body casts, rendered them closer to specimens of biology than as members of a highly developed culture (Skotnes 1991: 52). By creating images that combined shamanistic rituals, entoptic spirals, plants, hunting bags, bows and arrows, snakes, eland-shaped rainclouds, colonists, musical instruments, shelters and therianthropic shapes, Skotnes eclipsed the static narratives of the dioramas and the object labels in the exhibition, placing them in a context in which their metaphysical qualities were celebrated more than their physical qualities. These prints stood in striking contrast to the other exhibits, which framed the San as physical types, and they challenged viewers to confront the reality that the San had a rich history and cultural and social life.

These interpretations of the life and history of the San expanded the archive and highlighted the limits of any single understanding and interpretation of this subject matter. Moreover, by conflating timelines (a 19th century archive with present day research and material), Skotnes drew explicit attention to the contingency of understanding and interpretation. *Sound from the thinking strings* seems to propose that the only way to represent the many dimensions of |xam life is through the amalgamation of various component disciplines – those of the artist, the poet, the historian and the archaeologist (Skotnes 1991: 30). The poems, prints and historical and archaeological essays worked together to create associations with one another, each adding to the understanding of the other (Skotnes 1991: 30). In addition to drawing together these different disciplinary views, the exhibition also strove to address 'the false dichotomy between the visual arts, literature and the sciences' (I.B. 1992) by creating an interplay between them in both the exhibition and the book. This latter incentive was one of the founding principles of the Axeage Press, an initiative started by Skotnes and her colleague at the Michaelis School of Fine Art, Malcom Payne, and artist Alma Vorster.

Established two years prior to the exhibition, the Axeage Press published handmade artist's books with an inter-disciplinary interpretation of a subject



Figure 6.

Sound from the thinking strings (installation detail). 1991. South African Museum, Cape Town.

of South African culture. The publication of these artist's books was only the first part of the process, however; the second part was to stage an exhibition in which both the book and its associative material were curated by the artist-editor of the book. These publications challenged the general understanding of what constituted 'a book' and, through their execution, content and display, asserted that a book could be an artwork. This new category of the book created by Skotnes and Payne was, however, not readily accepted by insiders of the written word, and Skotnes was sued by the National Library for free copies of *Sound from the thinking strings* under the Legal Deposit Act. The library maintained that a book could not be an artwork and that *Sound from the thinking strings* was not exempt from the Act. The much-publicised court case eventually found in favour of Skotnes.⁹ *Sound from the thinking strings* was the first publication of the Axeage Press. *Face value*, a book and exhibition that took the Lydenburg Heads as its subject matter, was the second.

Face value: Old heads in modern masks

In his opening speech at Skotnes's *Sound from the thinking strings* launch and opening, Neville Dubow referred to the two cultural depositories on either side of Government Avenue in Cape Town: the South African Museum (SAM) and the South African National Gallery (SANG), asking the audience to consider what the two institutions had in common. He spoke of objects in the SAM that could easily find a place in the gallery, and he fantasised about digging a tunnel between the two venues, hypothesising what the displays in this underground concourse would be comprised of (Martin in Payne 1993: 4). Two years later, a set of objects did indeed move from the SAM to the SANG (albeit above ground), as part of artist-curator-editor Malcolm Payne's exhibition *Face value: Old heads in modern masks*.

The 'mobile' objects in question were seven terracotta modelled heads given to the SAM in 1979 by UCT's Department of Archaeology, to be kept on permanent loan. Reconstructed from pottery shards estimated to be about 1,500 years old found near the town of Lydenburg in the Transvaal province in the 1950s, these objects, known as the Lydenburg Heads, were (and continue to be) shrouded in mystery. Over the years, they have been classified simultaneously as 'art, ceremonial artefact and archaeological specimen' (Davison in Payne 1993: 7). In their new home in the SAM, they occupied a position on the stairs halfway between the entrance hall below and the animal halls above – a liminal placement reflecting the ambiguity of an institution that also housed the fossilised remains of extinct animals, taxidermied birds, fragments of meteorites and whale bones.

In 1993, the heads were temporarily moved from the SAM stairs into the SANG as part of Payne's exhibition. In the gallery context, where 'the shifting definitions of art, the meaning of objects, the contexts of spaces as well as the politics of culture are continuously examined' (Martin in Payne 1993: 4), these objects became part of an exhibition of Payne's own terracotta heads,¹⁰ painted and sculpted cases, etchings inspired by the heads, drawings and a collection of

supermarket trolleys¹¹.

Staff from the museum and gallery were, at first, dubious about the move. In negotiating the loan of the Lydenburg Heads from the museum, they proposed that associated pottery and other artefacts from the site in which they were found should be included in the exhibition; they felt it was important to provide viewers with this contextual material. Payne disagreed (Payne 1993: 4), as he wanted the heads to be displayed without any additional materials and without supporting labels or text. After some deliberation by museum staff, his curatorial request was granted.

This is significant when considering how disciplines view their objects and how institutions propagate those views. For the museum and gallery staff, the placement of the heads in a new context required supporting disciplinary material so that an outsider would understand how they had been kept, studied and understood by the archaeologists who had custodianship over them – as contributions to knowledge of the early social history of South Africa (Martin in Payne 1993: 5). For both the gallery and museum staff, conflating the categories applied to the objects in their respective depositories posed a risk to how these objects should, according to them, be understood. In refusing this request and exhibiting the heads without this archaeological support, Payne asserted that the Lydenburg Heads were not just objects of archaeological interest and that this was, in fact, a lesser aspect of their identity when relocated to the SANG.¹²

Payne included archaeological material as part of the exhibition in the form of an essay in the accompanying Axeage Press publication, *Face value: Old heads in modern masks – a visual, archaeological and historical reading of the Lydenburg Heads*. He drew on the research of Martin Hall, a historical archaeologist, and anthropologically trained museologist Patricia Davison, both specialists who have studied the heads in their own disciplinary fields.¹³ These essays and a foreword by the then director of the SANG, Marilyn Martin, and an essay by Payne enabled viewers to the exhibition to experience a range of diverse disciplinary contextualisations of these objects, similar to that provided by Skotnes's *Sound from the thinking strings*.

The heads' brief journey across Government Avenue to the gallery and back seemingly awakened in the museum staff the need to emphasise the meaning of these heads within the SAM on their return. When *Face value* came to an end, the heads were moved from the stairwell into the (then) African Cultures Gallery, a series of ethnic displays depicting the Zulu, the Swazi, the Southern Nguni (Xhosa), a Nama camp, Khoisan hunter-gatherers, dancers in the Central Kalahari, the South Sotho, the Tswana and the Lobedu. This was a gallery heavily criticised for its rendering of, as the labels stated, 'dark-skinned people' as timeless and static 'tribes' and 'groups' (Witz et al. 2017: 115). These groups were 'clad in traditional dress and adornments', busy in the acts of 'weaving, beading, dancing or playing musical instruments' (Cedras 2016: 104). Items on display in these arrangements were signalled 'as objects of traditional ethnic use', and the accompanying text 'explained initiation rituals, and the roles of men and women in brewing beer, hunting, beadwork and so on' (Cedras 2016: 104). Exhibited alongside these displays, the label accompanying the newly resituated



(top) Figure 7.

Face value. 1993. South African National Gallery, Cape Town.

(bottom) Figure 8.

Malcolm Payne. 1988. *The Mafikeng Heads* (Nos. 8 & 10).



Figure 9.

Face value. 1993. South African National Gallery, Cape Town.

Lydenburg Heads suggested that they ‘could have been masks’, despite being made of heavy terracotta and their shapes being such that they could hardly fit on the heads of people (Cedras 2016: 104). But this interpretation best fitted its new placement in this section of the museum. In situating the heads in a gallery governed by anthropological research and that displayed and explained forms of African rituals, the new label highlighted only one of its many possible readings¹⁴ – that of a mask used in timeless rituals¹⁵.

As exhibitions, *Sound from the thinking strings* and *Face value* broke new ground – both locally and internationally. Internationally, they resonated with shows such as Eduardo Paolozzi’s *Lost magic kingdoms* (1985) at the Museum of Mankind, Joseph Kosuth’s *Play of the unmentionable* (1992), Peter Greenaway’s museum projects and the work of Hans Haacke, Fred Wilson, Adrian Piper and Andrea Fraser. These shows, which introduced a new role for artists – that of both guest curator and as curator of site-specific installations (Putnam 2001: 31) – were similarly staged in museums and renowned galleries and drew on or responded to these spaces and collections to challenge the authority of the insider views they propagated. They also created a new role for the artist-curator, that of the welcome stranger able to formulate a set of circumstances that generates new perspectives for insiders and outsiders. Kosuth’s *Play of the unmentionable*, comprised of photographs, paintings, prints, furniture, glass, porcelain, text, sculpture and sculptural fragments from the Brooklyn Museum’s collections, spoke to the theme of censorship within the institution. It is cited by both Payne and Skotnes as a source of affirmation and inspiration for the manner in which the artist-curator claimed ‘artistic authorship of the exhibition as an entity, made up of parts of which he was not the author, and which in another context may have entirely different lives’ (Skotnes & Payne 1995: 85).

Sound from thinking strings and *Face value* both embraced this model and extended it by including original elements, such as text and artworks specifically created to act as interpretive agents. The texts commissioned from practitioners knowledgeable about the subject matter and the creative interpretations by the artist-curator-editor collated in the format of a book and an exhibition were ground-breaking strategies at the time. Not only did they address the sites in which these exhibitions were staged, they extended the critique to address the academic programmes housed, developed and supported by these institutions. This critique became manifest through the interdisciplinary material included in the book and the dissemination of this material within the exhibition space (as pages on walls or a copy on a plinth), where it became one of many of elements speaking of the subject matter on display. As such, the exhibitions both asserted ‘disciplinary symmetry’ (Skotnes & Payne 1995: 89–90) through their interdisciplinary content and challenged ‘the hegemony of the written word’ by providing alternative access to the subject through ‘images and the articulation of space, rather than via mere description’ (Skotnes & Payne 1995: 89–90). Writer Tony Morphet’s account of engaging with Payne’s *Face value* in the exhibition space affirms the affective and relational experiences the texts set up in these exhibitions. Morphet (1994) describes reading the text during a quieter period in the gallery, standing up as necessitated by the text’s placement, which brought

‘an entirely unexpected physical and sensory experience into the act of reading’.

The colour, shape, size and weight of the paper; the hand-torn edges; the shape and density of the script on the page; the punctuation of paragraphs with a micro-representation of one of the Mafikeng Heads sculptures; the marking of chapters with sequences of red dots; the sub-heading of the essays in scarlet type produce a total impression which is given still further weight after seventy-one pages, by the presence of the fourteen etchings and the etched renderings of the Mafikeng Heads. (Morphet 1994: online)

For Morphet, the physical text set up ‘dissonant reverberations’ with the other forms of representation that produce and surround the words, resulting in the arguments of the text reaching him from one direction and the expressive qualities of the prints, and even of the pages, from another (Morphet 1994: online). The visceral, relational and affective dimension Morphet experienced in *Face value* was highlighted in Skotnes’ next exhibition, *Miscast: Negotiating the presence of the Bushmen*, staged three years later in the SANG.

Miscast: Negotiating the presence of the Bushmen

Skotnes continued to draw on objects and research conducted in several disciplines – from anthropology, archaeology, comparative religion, literary studies, photography, art history and musicology – for an exhibition and a book that was ‘a critical and visual exploration of the term “Bushman” and the various relationships that gave rise to it’ (Skotnes 1996: 18). Continuing the methodology she employed in *Sound from the thinking strings*, which drew attention to the singular ways in which the San have been understood and to the contingent nature of interpretation itself, *Miscast* threw a spotlight on the representation of these groups of people by the various disciplines who studied them, highlighting the severe imbalances of power reflected in their objectification as live scientific specimens to be prodded, measured, displayed and exhibited (Skotnes 1996: 20).

With the assistance of architect Jos Thorne, Skotnes curated a variety of objects from the fields of science, anthropology and museology and combined them with historical photographs, press clippings, archival records and copies of rock paintings. Skotnes’s collaboration with Thorne extended the interdisciplinary manner of working she implemented in *Sound from the thinking strings*. Drawing on Thorne’s architectural skills of understanding the built environment and its manipulation and on her own understanding of space as a curator, Skotnes transformed three rooms at the South African National Gallery into a compelling visual presence in which every part was considered in terms of how visitors would navigate the space, and how ‘the visual and affective contrasts would direct viewer attention’ (Skotnes in Martin 2019: 163).¹⁶

Forming the dramatic focal point in one of the rooms was a grey brick structure, based on a centrally planned Renaissance church (but also evoking a fort, jail or tomb), on which a circle of twelve rifles and a tall metal flag were displayed. At the bottom, a ‘garden’ of cacti partially concealed a box that suggested

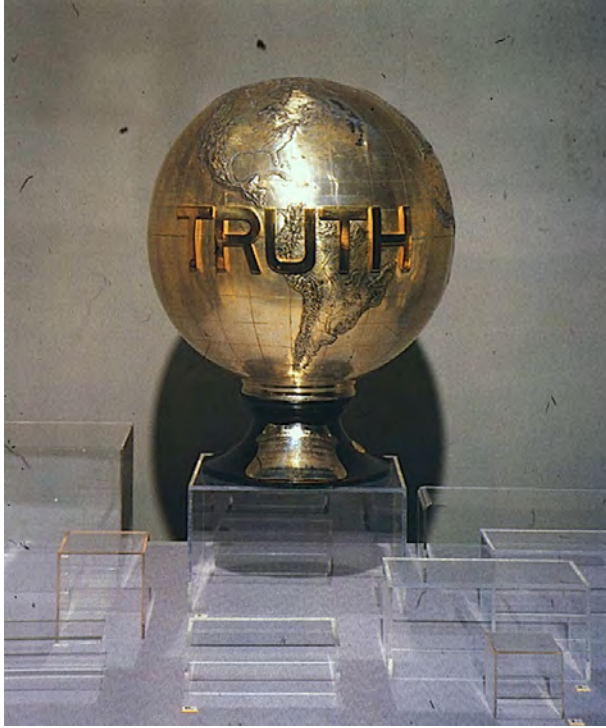


Figure 10.

Fred Wilson. 1992. *Mining the museum* (installation detail). Maryland Historical Society, Baltimore



Figure 11.

Miscast (installation detail). 1994. The South African National Gallery, Cape Town.

a collection of cast human remains and five books with the spines collectively spelling the word 'truth' (Martin 2019: 163). Surrounding the structure, a semi-circle of thirteen pedestals, each displaying a resin cast of a body section made from the painted plaster casts at the SAM, delineated the central space. Drawn from the storerooms of the SAM, these casts were made in the early twentieth century by James Drury as part of the same casting project that made the painted plaster figures in the controversial 'Bushman' diorama (Cedras 2016: 49–54).¹⁷

These 13 yellowed, translucent body casts, positioned and lit to evoke the Last Supper, were 'viscerally evocative of both past lives and objectified body parts' and were chillingly offset by anthropometrical images and archival photographs, which included images of San executions, displayed on the surrounding walls and by the circle of rifles (Hamilton et al. 2020: 50). Casts of the heads, also from Drury's project, were displayed in vitrines and echoed images on the walls of actual trophy heads held in international museums. Musical instruments and cultural apparel from the Kirby and (then) ethnographic collections from the neighbouring SAM and many other museums were displayed in a series of cases surrounding the central exhibit.¹⁸ Staffs, beadwork, skin bags, bone knives, arrows and quivers, decorated eggs, hats, instruments, jewellery and ritual objects such as divining discs represented a stark contrast to the central display and to the scientific instruments and materials presented in two neighbouring glass cabinets.

These cabinets displayed steel anthropometric measuring rods, diagrammatic drawings, scalpels, a Von Luschan skin colour chart (from the M.R. Drennan anatomy collection discussed in Chapter Two) and cameras – all used for observation and comparison associated with 19th and early 20th century physical anthropology. Piles of unlit body casts and metal shelves with cardboard boxes were positioned against the walls of this room, the latter referencing the classic format of museum and archival storage. The boxes were neatly labelled and a stepladder was provided. On closer inspection, some boxes simply declared '*Human Remains. Not Suitable for Display*', while others carried dates and fragments of the history of colonial settlement in South Africa and of European-San interactions: '1739 [1993] *All male burgers in the frontier districts are obliged to serve in commandoes. It is hoped this will curb Bushmen stock theft*'; '1922 [1996] *Koos Sas is shot while resisting arrest. His skull is sent to the Physiology Department, University of Stellenbosch, and postcard images of the dead Koos Sas are sold in aid of the Afrikaans Christian Women's Organisation*' (Lane 1996: 6). These formed an achronological timeline of the exhibition, where the date in brackets referred to the date at which details of the events first entered the public record through publication. As such, they emphasised the contexts in which these historical materials are kept and become occluded, and their surfacing and relevance as these contexts shift.

While navigating this central space, viewers were made aware of their presence through the placement of mirrors in which they could see their reflection. As they moved into the next room, they were forced to walk on history in the form of vinyl tiles screen-printed with largely denigrating newspaper articles about indigenous people from 19th and early 20th century sources. In

this room, cameras protected by vitrines were placed directly on the floor 'as if to record reactions' (Martin 2019: 164) – creating an echo with the cameras in the glass display cases next door. Displayed on the walls of this room, Paul Weinberg's photographs of the daily life of San people, taken between 1984 and 1995 with the cooperation of various groups in southern Africa, 'removed the Khoisan from the timeless historical vacuum and placed them in contemporary society' (Martin 2019: 164). Painted, coloured reproductions of regional rock art hung on the surrounding walls of the last room, as did a single contemporary original painting of a pink, grey and white eland against a vivid blue background by Qwaa, a Naro artist based at the Kuru Development Trust in Botswana (Lane 1996: 8). Dual audio-visual facilities, each running a continuous loop of 16 mm archival footage of San communities, provided the overlapping sounds of songs and narrative that served as an aural backdrop. Viewers could recline at a table and browse a selection of the research materials used in the making of the exhibition or comment on their experience in a visitor's book. The book, which was transcribed after the exhibition came to an end, offers a glimpse into the affective dimension of exhibition-making and the force of the visual to elicit powerful emotional reactions:

I feel distraught, depressed and sickened that this oppression has taken place, its not that I don't know – the graphics made it even more real – as a Jew it conjures images of past genocides – where are the 'survival stories' and the proud legacies – it would have been nice to have the negative with the positive – still, well put together and N.B. for the world to see – may the Khoisan and all oppressed indigenous peoples have recourse to the justice they deserve. Shifra. 20.4.96.

I as a 'coloured' child feel disgusted at the way my 'white' ancestors treated my 'black' ancestors. But learned a lesson from it all that we should respect each other for who we are irrespective of colour, race and culture. Final comment: Very good. Rosanne E. De Kock. Std 7. Elsies River High School. 5th July 1996.

I leave this exhibition filled with sadness, anger, guilt and the realization that humankind will never learn from the past. History just keeps repeating itself. Why! (Brenda)

I am not impressed by having to literally trample on the dignity of the Bushmen like this. I however appreciate the trouble you went into in putting together this exhibition. To repeat I don't think there will be any intelligent excuse for dehumanising these people like this. Chaile Makaleng. UWC. 05/07/96.

The varied responses of visitors to the exhibition became a focus of the research of Stephen Robins,¹⁹ a social anthropologist who wrote about the exhibition for both a newspaper and academic journals.²⁰ This 'Rorschach reaction' (as he terms it) still remained uppermost in his memory when I asked him what he remembered about the exhibition many years later (S. Robins, personal communication, 16 September 2020).²¹ Robins (1996) collated these opinions in an article for



Figure 12,13.

Miscast (installation details). 1994. The South African National Gallery, Cape Town.



Figure 14,15.

Miscast (installation details). 1994. The South African National Gallery, Cape Town.

the *Sunday Independent*, with reactions ranging from outrage at the display of body casts and the explicit labels on the boxes ('disgusting') to disbelief that these acts should have been performed in the name of science. He also described the reaction of individuals who seemed to have completely missed the point and viewed the exhibition as one that 'spoiled' the 'pristine image of Bushmen' as depicted in the SAM dioramas (Robins 1996: 23). He also referenced the reaction of a postgraduate anthropology student who was 'profoundly disturbed' by the discipline's implication in the objectification and dehumanisation of the San (Robins 1996: 23). The visitor's book provides interesting insights into how practitioners of history and of anthropology viewed the exhibit and of how the public reacted to the implication of the sciences in this history:

I am very happy to have had a chance to see this exhibit. Unfortunately, the plight of the Bushman is a scenario which has been occurring throughout history ... whenever two or more cultures, 'foreign' and indigenous peoples, meet. I think it is valuable and important to know what happens under these circumstances, whether it be unpleasant or not. To understand the controversial resin body casts it is important to look beyond the 'sensationalistic' aspect of the display, and realize, as Pippa points out in the caption, that physical anthropologists were working with the means at their disposal – both technical and intellectual. Research doesn't take place in a social vacuum, but reflects the social and political attitudes most prevalent at the time. The mistake is not to 'sensationalize' the past, but to not change as we learn more about humans and our past – evolutionary, cultural and historical. Julia Lewandowski. Dept. of Anatomical Sciences, Wits. Dept of Anthropology, University of Pennsylvania, Philadelphia, USA.

I've been reading about this exhibition – both text and on-line // seeing it drives home the power of the visual media. This is a challenging combination of text, materials and ideas. Thanks for bringing it all together, so that each of us can have the opportunity to confront our images/conceptions of a people who rarely have a chance to represent themselves to a western view. It challenges our knowledge – and the way that knowledge has been acquired about African peoples. Laura Mitchell. History Department. University of California, Los Angeles.

If science thought it well & proper to categorise, store and analyse human heads & penises as displayed here not too long ago, what is science (and society) doing today? (Are we 'better' now?) Ralph Hamann, C.T.

In drawing together materials from diverse fields and subjecting them to various curatorial strategies, Skotnes enabled the disciplinary practitioners to view their objects and processes as strange and, in so doing, allowed them to re-evaluate aspects of the discipline they had come to accept as self-evident or had simply forgotten. The scientific instruments used for measuring and observing the San, for instance, implicated many scientific practitioners who visited the exhibition or who worked in the museum. As these practices do not form part of the current methodologies of these disciplines, they had become invisible to their community

(Bowker & Star 1999: 298–299); on being confronted with them, they elicited disbelief for their implied involvement from these insiders.²² In juxtaposing instruments that are still being used (such as the scalpel and the camera) with ones that are not (the Von Luschan skin colour chart and the anthropometric measuring rods), Skotnes set up an opportunity for science to reflect on its past and on the activities and objects of its present, enabling a mode of self-reflexivity that is not a standard part of its day-to-day practices. Through curatorship, she exposed disciplinary practitioners to naturalisations and blind spots within their fields and sensitised them to these previously occluded characteristics. An article by Paul Lane, an archaeologist from the University of Botswana who visited the exhibition, provided me with a range of insights into curatorship's ability to reveal – through analogy, suggestion, visual quotation and affect – the naturalised characteristics of a discipline's objects and methods.

Lane, now Professor of Archaeology at the University of Cambridge, reflected on the complicity of archaeology in the transformation of the San from human subjects to museum objects, not only through its treatment of human remains, but in its 'general obsession with documentation, display and storage of other people's history' (Lane 1996: 7). Though 'there are no pictures of archaeologists at work in the exhibition, no dioramas of trenches during excavation or similar fieldwork scenes which provide the usual means for displaying "Archaeology"', he recognised the discipline Skotnes alluded to in various ways and admits to finding them 'extremely disconcerting', especially as their implicitness adds to the subversion (Lane 1996: 7).

Lane provides a perceptive description of the exhibition, pinpointing 'archaeological' moments that caused him to reflect on his practice. These included the display of standard-size museum storage boxes, which Skotnes labelled to provide glimpses of the individuals whose lives and deaths became part of a collective history – a gesture that challenged 'the anonymity to which such human remains are normally assigned and the rationale for keeping and examining them' (Lane 1996: 6), as well as foregrounding history as subjectively written. A particularly powerful moment between the archaeologist and the objects of his discipline was, however, when he viewed the resin head casts exhibited in the vitrines that formed part of the central display (Lane 1996: 6):²³

One seemed strangely familiar, although it was not until I came across a photograph of the same head later, complete with details of its history and current provenance, that I realized why. This head is held by the Duckworth Laboratory, in the Department of Biological Anthropology at Cambridge University, and I remember it from my undergraduate days. Although no longer on such public display, at the time it stood on top of a filing cabinet in the room used for student practicals, as a silent onlooker to our inexperienced grapplings with the intricacies of human and primate anatomy. (Lane 1996: 6)

Where viewers had to walk over a floor of vinyl tiles printed with photocopied newspaper articles and photographs of the San, Lane reflected on another archaeological parallel: 'just as the texts and images on the floor represent the debris of a particular history, so too do the artefacts strewn across the surface of a site' (Lane 1996: 7). Yet in trying to define sites and their history, archaeologists



Figure 16.

Miscast (installation details). 1994. The South African National Gallery, Cape Town.

feel ‘they can tread on the debris of their own or others’ ancestors with equanimity, colonizing that space for themselves’ (Lane 1996: 7).

Lane’s description and insights into the contents and display of the last room of the exhibition can also be viewed as ‘archaeological’ in nature. He describes ‘the absence of “the European”’ in this room and the ‘conscious effort (that) seems to have been made to erase the *sedimented layers* of successive European representations of Khoisan culture and society’ (my emphasis). He sees this ‘wished-for transformation of power relations’ in Skotnes’s display of page-proofs of the accompanying book on the partitions that screened the audiovisual area (Lane 1996: 8).

The page-proofs are overlain by eighteenth and nineteenth century photographs and prints, which in turn are overlain by ink tracings of San rock art. A reverse *stratigraphy* of images is thus created, the very latest at the bottom, the earliest at the top. [My emphasis.]

In highlighting this arrangement from his archaeological perspective, Lane pinpoints a strategy Skotnes used to display the boxes, with their varied dates and descriptions of contents or events (some significant and others seemingly not); Weinberg’s contemporary photographs juxtaposed with the tiled archival material on the floor; and the inclusion of a contemporary work of art alongside the rock painting reproductions – a conflated and, at times, jumbled timeline. Similar to the conflation of time she introduced in *Sound from the thinking strings*, Skotnes draws attention to the contingency and volatility of knowledge, interpretation and understanding and the unknowability of the past and its power to influence the present. The boxes confused many viewers because their format did not represent history as neatly packaged and linear. Skotnes explained in a newspaper interview:

The labels on the boxes were my solution to trying to deal with time. We wanted to show that history is a much more random process, much more chaotic. It exists in bits and pieces all over the place, and it takes somebody to get it all together and tell a story with it. I put history in storage on the cardboard boxes, in little bite-size chunks, and I tried to include bits of information that might seem more or less irrelevant together with bits of information that are considered to be significant. (Coan 1996: online)

Lane admits that though *Miscast* evoked ‘emotions of pain, disbelief and denial’, it recontextualised his own discipline for him (Lane 1996: 7). He drew on the affective encounters provoked by laying bare his disciplinary objects and processes, rendering them strange and horrifying, and reflected on his responsibilities in the present. Asked to reflect on the exhibition recently, Lane reiterated its worth in highlighting the implications of dealing with material evidence and those tied to an ‘archaeological way of seeing’ (P. Lane, personal communication, 21 September 2020).

Another member of the archaeological community, Nick Shepherd, then a doctoral candidate at UCT, wrote about *Miscast* in his thesis. He likened the exhibition to another significant event happening in the country at the time, the

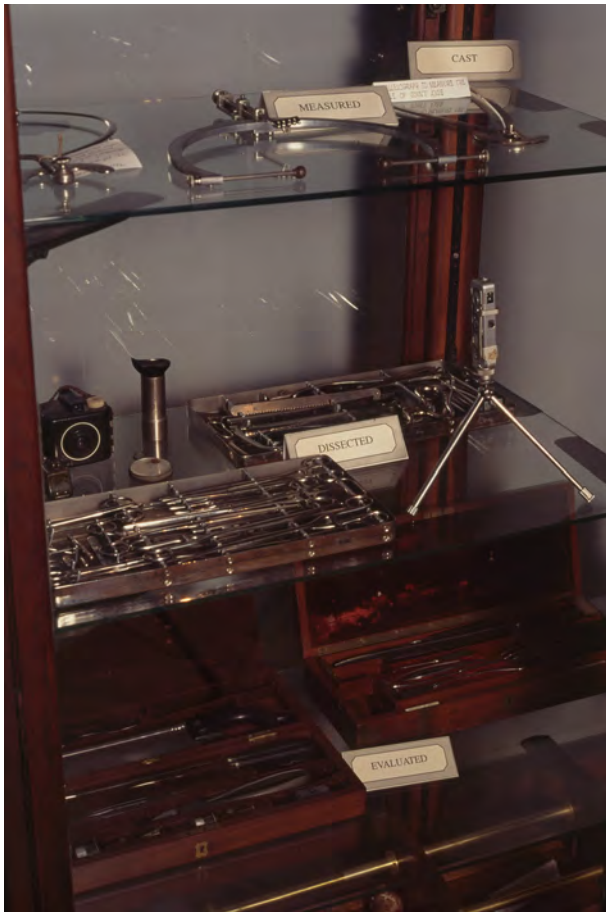


Figure 17,18.

Miscast (installation details). 1994. The South African National Gallery, Cape Town.



Figure 19,20.

Miscast (installation details). 1994. The South African National Gallery, Cape Town.

Truth and Reconciliation Commission. Shepherd posited that both these events figured the past as an act of memory that stood in contrast to the real-time testimonies of the San representatives who, in their responses to the exhibition, embodied the idea of the past as ‘a living, moving force in the present’ (Shepherd 1998: 183). Shepherd’s engagement with the exhibition and its related forum and discussions led him to formulate a string of questions about the social role of his discipline: ‘What can archaeology say to the present? More particularly, what can archaeology say to a post-colonial present? Of what value is archaeology to a society in a period of recoil from the horrors of the past?’ (Shepherd 1998: 184). More recently, Shepherd, who has since written extensively about the violence of epistemic practices, particularly in archaeology,²⁴ reflected on how *Miscast* exposed the practices of disciplinary collecting and ordering as fraught with material violence – and did it in a way that confronted viewers but was not didactic (N. Shepherd, personal communication, 21 May 2021).

Miscast functioned as a prompt for self-reflection in the academic community, but for certain members of the community studying history, it also served as a powerful pedagogical tool. Historians Leslie Witz and Ciraj Rasool,²⁵ lecturers at the University of the Western Cape, brought their graduate students in public history to the exhibition and joined the archaeological and history students of UCT’s Martin Hall and Andrew Steyn for in-situ seminars. In his opening speech for the launch of the catalogue at the time, Rasool commented that it had been a privilege for him to ‘invade, observe and learn’ as the project unfolded and that it came at a time when ‘many of us (historians) have been shedding the literate and the archival (in the verbal sense) conventions of the historical discipline, and beginning to think in various ways about visual knowledge and public histories’.²⁶ He acknowledges that being close to *Miscast* informed him considerably about the visual and its ability to extend beyond illustrative purposes.²⁷

There were, of course, other responses to these exhibitions, particularly to *Miscast*,²⁸ but I have focused on those strategies and responses to *Miscast*, *Face value* and *Sound from the thinking strings* that enabled insiders to become more self-reflective. By exhibiting diverse disciplinary objects and research with text and artworks that served as interpretive tools in the context of an art gallery and a museum, Payne and Skotnes developed a methodology that enabled academic communities and institutions to reflect on their collections, their systems of classification, their roles in history and their contemporary responsibilities. These exhibitions set in place the groundwork for *Curiosity CLXXV*, staged at the Michaelis School of Fine Art in 2004.

Curiosity CLXXV

Whereas *Sound from the thinking strings*, *Face value* and *Miscast* brought the disciplinary objects of various collections into the context of the South African Museum and the South African National Gallery, *Curiosity CLXXV* brought disciplinary objects from UCT departments to its Fine Art campus, where



Figure 21.

A display on page 135 of the *Curiosity CLXXV* catalogue (2004).

they were displayed alongside original artworks by its three artist-curators and colleagues and accompanied by a catalogue with essays from various disciplinary practitioners. While it utilised the methods first set in place by Payne and Skotnes, its relevance to this research is more pronounced, as it pushed the inclusion and curation of diverse disciplinary materials to an unforeseen level.

Prompted by then vice-chancellor Professor Njabulo Ndebele, who wanted a celebration of some kind for the university's 175th anniversary, the three artist-curators of *Curiosity CLXXV* – (then) director of the Michaelis School of Fine Art Pippa Skotnes, fellow lecturer Fritha Langerman and Michaelis graduate Gwen van Embden – presented an exhibition that drew together objects from every department 'to curate the university', using these objects and collections 'to trace the historical development of knowledge and teaching at the university' (Brown 2015: 124). This marked the first time the institution's teaching, research and historical collections were brought into public view, along with university memorabilia, objects stored in lecturers' offices and objects in storerooms awaiting disposal.

Held in Hiddingh Hall, the staging of the exhibition on this campus was significant in that it referenced UCT's history – Hiddingh was the site of the original University of Cape Town before it spread to its new, larger premises on the Upper, Middle and Medical School campuses.

Visitors who made their way up Hiddingh Hall's winding staircase and into the vast hall were greeted by 175 cabinets. Instead of grouping the objects of each discipline together, each cabinet consisted of a carefully curated selection of objects stemming from diverse university departments. Peering into one of them could, for instance, reveal musical instruments from the South African College of Music's Kirby collection; old wooden mathematical models of abaci and polyhedrons from the Maths department; mobiles demonstrating platonic solids made by mechanical engineering students; publications by a UCT Professor of Astronomy; a sign pointing to ward D10 from the old section of Groote Schuur Hospital; glass slides once used as a teaching aid for art history at Michaelis; bird ringing material from the Avian Demography unit; and a bottle-brush plant labelled by the son of one of the curators.

Lecturers and students from all campuses visited the exhibition during its yearlong run and found their objects of study dispersed across a wide variety of cabinets and in strange combinations with neighbouring departments or those further afield on satellite campuses. Displays, which were crowded and overflowing in most instances, encouraged specialist practitioners to search for their objects, challenging them to consider new combinations once found. Glassware from Chemical Engineering, for example, featured in many displays – paired in one cabinet with bird bones, medical instruments from the Drennan museum, glassware and lead blocks from Physics and a flat-bottomed basket, hand tools and weapons from the Ngwato; in another with objects from Forensic Pathology and the Kirby collection of musical instruments; and in another forming part of a curation by staff from the department that illustrated chemical engineering processes at work in the space. In addition to students and lecturers of the university, the exhibition was also widely attended by members of the general

public, allowing them access to conversations between multiple forms of research conducted across the university – a novel gesture considering most research generated at a university is disseminated internally or internationally through journal articles and conferences presentations and is therefore inaccessible to the disciplinary outsider.

As discussed in the previous chapter, objects and collections can reflect naturalisations that occur when the disciplinary perspective renders its subject matter in terms of what it deems worth looking at and how it should be looked at (Daston & Galison 2007: 23). This process has dual consequences, resulting in the honing of a specialised insider focus directed at the object and a blindness to qualities that sit outside the disciplinary frame of reference (as discussed in relation to the Drennan and Kirby collections). *Curiosity CLXXV* drew on and challenged both these aspects by forcing objects into visual conversations outside their discipline and inviting insiders to view them in these new configurations. These curatorial strategies enabled insiders to become aware of characteristics not normally deemed important in their discipline and to identify the characteristics their discipline *did* deem important (their attentional subculture, in other words) in objects not studied in their field. For example, the combination of botanical specimens from the university's Bolus Herbarium with a tobacco pouch from the Archaeology department and a San waistband from the UCT collection housed at the SAM highlighted the organic qualities of the pouch and the waistband. Such characteristics are not immediately considered in the field of anthropology, where these objects were sourced, and could reveal new insights that extend beyond the historical archival fieldnotes typically used as a reference to understand these objects. The relationship between the herbarium specimen and the historical materials also allows the botanical information usually gauged from the former to extend to a consideration of the social history and politics of botany in Cape Town.²⁹

The curators encouraged outsider engagement by ignoring traditional disciplinary taxonomies and replacing them with new categorisations, many of them based on organising principles of the Renaissance wunderkammers that enable the formulation of imagined connections between objects. This strategy proves relevant when considering the historical relationship between museums and universities and these cabinets of curiosities. The origin of both the museum and the university can be traced to the pre-Enlightenment activities of collectors and their cabinets and the idiosyncratic collections of objects intended to create a microcosm of the macrocosm.³⁰ Owners structured these worlds according to their own logic – a process subject to flux and whimsy as new objects were added and others subtracted. The initial playful method of categorising objects based on their appearance informed their positioning within the cabinets in relation to other objects but shifted to a more studied, conservative one as general members of society started assembling collections later in the 16th century. These members included merchants, doctors, apothecaries, clergymen and artisans, and their collections reflected their specific interests and aided their research (De Clercq 2003: 60). Many of these private collections were bought by universities, where objects were subjected to scrutiny and studied by dissection, microscope, analysis



Figure 22.

Pages 38-39 of the *Curiosity CLXXV* catalogue (2004).

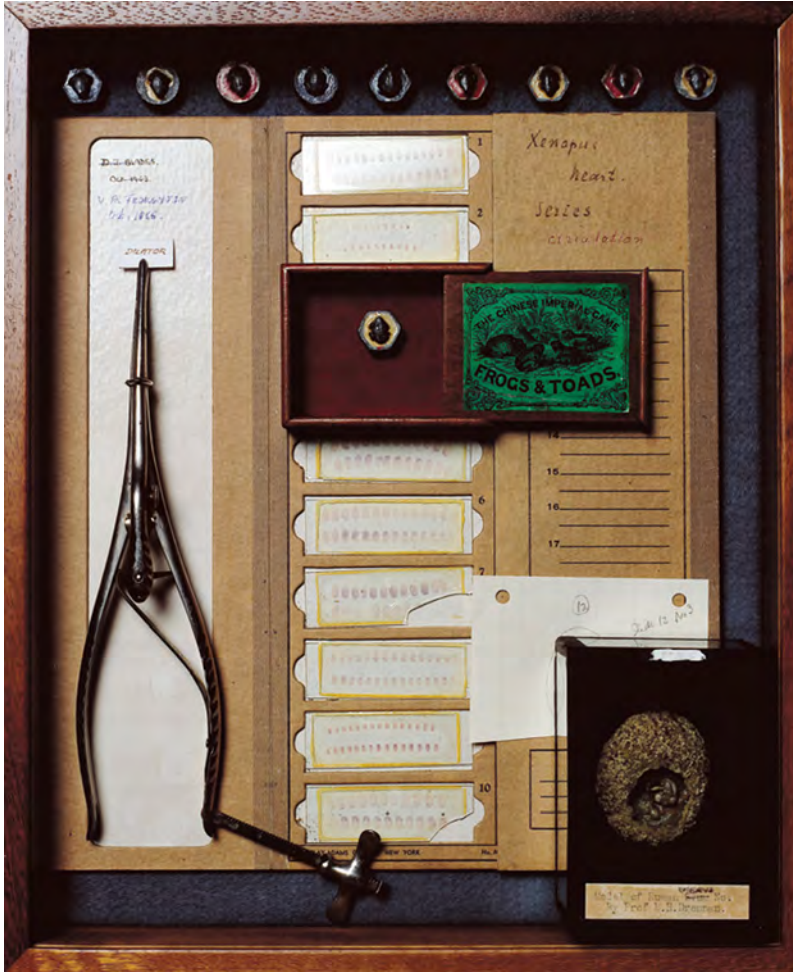


Figure 23.

A display on page 97 of the *Curiosity CLXXV* catalogue (2004).

and comparison and were categorised by a divisive topology into departments where the specialisations increased as the object collections grew (De Clercq 2003: 60). The curatorial strategies employed by the artist-curators of *Curiosity CLXXV* worked in an inverse manner, disentangling objects from their entrenched disciplinary positions and displaying them in more fluid combinations in the cabinets.

This method is evident in a display case that held a stainless-steel dilator from the Drennan collection, a carded set of glass slides of xenopus³¹ heart sections from the Medical Microbiology collection, a 19th century game called *Frogs and toads* from Special Collections and a wax model of an embryo, also from Drennan. This ‘amphibian’-inspired display showcases many qualities of the curatorial method, such as visual quotation (the combination of these materials foregrounds that the shape of the dilator resembles a frog), analogy (the wax embryo, dilator and frogs allude to the resemblance between sperm and tadpoles)³² and juxtaposition (the frog as a scientific topic dissected and contained in the slides, and the frog as a board piece in a game played by children). By disentangling these materials from their disciplinary contexts and subjecting them to these strategies, insiders had to consider alternative organising principles to make sense of their objects anew, with these new characteristics simultaneously resonating with and undermining the conventional classificatory schema (Davison in Skotnes et al. 2004: 15). The historian, the anatomist and the microbiologist viewing their objects in this new collection would, for instance, have been challenged to identify similarities and differences between objects (and their disciplines) suggested by the visual and conceptual links generated by these new visual combinations. A cabinet curated as a single unit by Fritha Langerman further exemplifies how these strategies worked in practice, as well as their potential to combat insider naturalisations by revealing novel characteristics.

In *Similitude*, Langerman brought together a selection of objects from three disparate disciplines – glassware from chemical engineering; a skull with an arrow embedded in it and a torch used as a murder weapon from forensic pathology; and two flutes from the Kirby collection. Ignoring the assigned functions the objects performed within their respective disciplines, she chose instead to use their formal characteristics as a taxonomic device. They were all, as she described them, ‘long thin things’ (Langerman n.d.: online). In displacing these objects from their respective disciplines and positioning them in proximity to objects that shared this new category, she neutralised their disciplinary functions and flattened their meanings within those fields (Langerman n.d.: online). This allowed the objects to surface aspects of themselves that would have been obscured were they still functioning in their insider communities.

When viewed in combination, a schism appears between the innocuous objects in the display (the flutes and glassware) and their more sinister or charged cabinet neighbours (the torch and the arrow in the skull). In generating this juxtaposition, the display simultaneously neutralises the charged content of the arrow and the skull and imbues the seemingly innocuous objects with more sinister implications (Langerman n.d.), surfacing aspects about chemical engineering, for instance, that would not generally be generated when considering the discipline –





Figure 24.

Similitude. Page 151 of the *Curiosity CLXXV* catalogue (2004).

such as its role in pollution and warfare. Or, when considering the flutes, inviting reflection on the ivory trade and how it has decimated elephant populations – rather than their association with Mozart and Hayden. Once relationships start surfacing, they have the potential to abound. My own associations were immediately with the breath required to produce music through the instruments and whose absence rendered the skull silent; valves and pistons as functioning units in both chemical engineering tubes and in the flutes and clarinets; bone as skull and bone as ivory; and shedding light literally (torch) and metaphorically (forensic pathology).

By addressing the very act of classification, *Similitude* threw its contingency as a practice into focus. A viewer (especially from any one of the disciplines represented by these objects) might scoff at this new classification of ‘long thin things’, feeling that it somehow demeaned their object’s importance. But when brought into the proximity of another system of classification, such as the Von Luschan chromatic scale discussed in the previous chapter (and that featured in a neighbouring cabinet), it becomes evident that *any* system of classification is artefactual and contextual and is thus susceptible to the biases and prejudice of its insiders.

Strategies such as juxtapositioning also served to highlight poetic and emotive qualities in fields not known for encouraging them, as in a cabinet curated by Langerman titled *Capitance*. This featured a range of instruments from the Physics department used to measure electrical currents (galvanometers, capacitors and Wheatstone bridges); a crystal goniometer measuring crystal face angles and crystal 175 from the crystal collection in Geological Sciences; M.R. Drennan’s models of the human embryo and a wax model of flesh; and a white tutu from the School of Ballet. In combining this selection of scientific instruments with a tutu, Langerman made allowance for the materials to be considered in a more poetic light, inviting the viewer to consider how a grand jeté defies the laws of physics, for example.

Because *Curiosity CLXXV* convened diverse disciplines in the cabinets on display, each inviting different connections to be made across their fields, it offered a rare opportunity for these disciplines to engage in dialogue with each other. These engagements were made manifest to some extent in one of the larger displays in the exhibition through video material compiled by Mark Antonello, an MFA student in new media. In the cabinet, curated by Gwen van Embden, four TV monitors featured a range of academics in discussion with each other or speaking to an off-screen interviewer about a range of topics. Disciplinary material relating to each video was displayed around these monitors. Two of the discussions and displays are of particular significance to this research. The first was a discussion between Helen Moffett of the African Gender Institute and Tim Noakes of the Sport Science Institute about their mutual interest in cricket: Moffett interested in the value of reverse swing for both the sport and post-colonial theory and Noakes in the early apprehension of a cricket ball by a batsman. The other discussion, displayed on a monitor surrounded by seal and dassie bones, was between two academics from the Department of Archaeology, John Parkington and Cedric Poggenpoel, who discussed the dassie, the seal maxilla and the



Figure 25.

Capitance. Page 127 of the *Curiosity CLXXV* catalogue (2004).



Videos in this cabinet were filmed and edited by Mark Antonello, a candi



Figure 26.

Pages 56–57 of the *Curiosity CLXXV* catalogue (2004).

wrapped mussel shell found in the archaeological record and their importance in supporting their theory of seasonal migration. Whereas Moffett and Noakes verbalise the potential of disciplinary overlaps on display in the exhibition, the video of Parkington and Poggenpoel's discussion and the disciplinary material surrounding their monitor engage the display of the primary objects of research in combination with the academic's output on it, much as Skotnes did in *Sound from the thinking strings*. This grants the outsider an opportunity to experience how the insider reads and understands these material objects, even as it enables them to project their own understanding onto them.

In correspondence that formed part of the research of the *Curiosity* exhibition, many insiders acknowledged being influenced by the exhibition's promotion of seeing and experiencing in parallel with reading and learning (Skotnes 2019: 21) and how it influenced their undergraduate teaching. Chemical engineer Jochen Petersen, for example, curated materials from his department to illustrate a physico-chemical principle (flotation) in an 'aesthetically appealing way [...] to raise curiosity [...] without demanding an understanding'.³³ This exercise in making visual complex physico-chemical interactions has, by his own admittance, become his 'trademark' for communicating science to his students in subsequent years. Professor of Mathematics (and then Dean of Science) Daya Reddy contributed 'a technical example' of the activities he engaged with by writing a mathematical equation on a blackboard.³⁴ Materialising the process of mathematical reasoning for the exhibition led him to realise that he could also materialise 'the bureaucracy that accompanied the apartheid-based legislation on university admissions' to which he was subjected as a student. This took the form of a permit he was forced to attain from the Minister of Indian Affairs in 1974 that permitted his registration for an MSc (Eng) at the university – a document he presented to the curators and which was put on display.³⁵ Cheryl de la Rey, Professor of Psychology and deputy vice-chancellor of research at the time, reflects that the selection of these objects (often small and hidden from public view) and personal narratives interspersed with key moments in UCT's institutional history enabled members of its academic community to reflect on and engage in dialogue with each other about that history.³⁶

I did not see the *Curiosity CLXXV* exhibition. My first interaction with it occurred only years later, when, in 2012, I started working at the Centre for Curating the Archive and encountered one of the last remaining cabinets – a 'paper cabinet', as the curators called the catalogue they produced for the show – and paged through it.³⁷ The publication is not simply a catalogue that reproduced and documented the exhibition (though it also does this); the curators used the format of the book as another organising device to highlight the multifarious connections that can be made in and across the university. It also became the cabinet that housed objects that were collected but were not ultimately displayed in the exhibition. Objects were re-curated in this publication under alphabetical headings such as 'astonishment', 'brilliance', 'censorship' and 'diversity', all the way through to 'yearning' and 'zoomorphism' – and became mnemonics able to 'refer to a range of ideas and stories' (Skotnes et al. 2004: 10). A timeline ran along the bottom of each page of the catalogue, referencing events in the

Ref. No. 19/13/4/1698

Department of Indian Affairs,
Private Bag X92,
PRETORIA.
0001

DEPARTMENT OF INDIAN AFFAIRS
PRETORIA
DEPARTEMENT VAN INDIËREAKE

CONSENT TO ATTEND A UNIVERSITY IN TERMS OF SECTION 31 OF ACT 45 OF 1959.

The Minister of Indian Affairs has given his consent in terms of section 31 of Act 45 of 1959 to :

Surname : ..REDDY.....
Given names : ..BATMANATHAN ..DAYANAND.....
Date of birth : 10-3-1953.....
Identity number : 80015464A.....
Home Address : ..P.O. BOX 12.....
.....ATHLONE, CAPE TOWN 7760.....
to attend the University of ..CAPE TOWN.....
as a student, commencing academic year 19 74.....
for reading for the degree of ..M.Sc.(ENG.).....
with the following subjects : ..ALL REQUIRED.....
.....
provided that the University concerned is prepared to admit the abovenamed to the course specified above.

This consent is valid only at the University and for the degree and subjects indicated above.

A Kaulshy
v SECRETARY FOR INDIAN AFFAIRS.

Figure 27.

A document provided by Prof. Daya Reddy. Page 85 of the *Curiosity CLXXV* catalogue (2004).

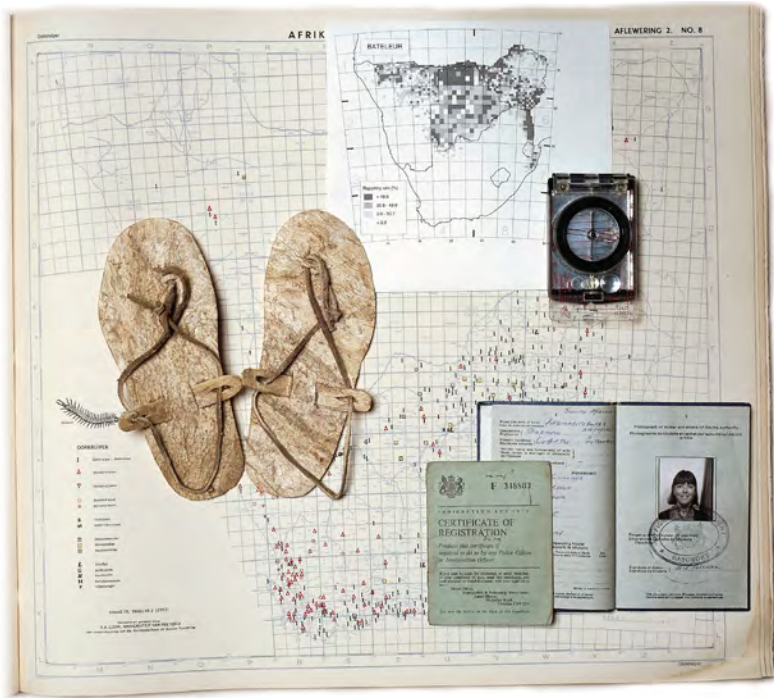


Figure 28.

Page 175 of the *Curiosity CLXXV* catalogue (2004).

university's history and in the country in a non-linear manner, supplemented even by dates and descriptions of future events ('2010: The university recognizes the importance of visual literacy, and art classes are made compulsory for all first year students' (page 86)). Curated by Pippa Skotnes as a dispersed whole, this timeline was also featured in the exhibition, where it was displayed on the spines of box file holders and was inserted into most cabinets – again (as with the *Miscast* boxes) drawing the audience's attention to how the past and the present continuously exercise pressure on each other and on the future.

The catalogue also functions as a tool with which to attain a broad overview of the exhibition and allows some of the potentially more occluded themes or connections to surface.³⁸ As one of the main aims of the exhibition was to showcase and interrogate the university's identity and history, the curators included objects that spoke to the specific history of many of its disciplines (and that formed part of my second category of objects as formulated in Chapter Two) as part of most of their curations. In paging through the curations displayed on the pages of the catalogue, objects become evidence of how colonial and apartheid histories are deeply embedded in almost every discipline – from the more obvious collections of political paraphernalia sourced from the Faculty of Law and the Von Luschan chromatic scale to more elusive manifestations, such as the geological kimberlite specimens from the Geological Sciences collection that first signalled the presence of diamonds in South Africa in the early 20th century and was the cause of migrant labour.

An image of interdisciplinary materials on one of the pages of the catalogue perhaps best illustrates how these histories are dispersed across various fields, and curatorship's ability to surface them. The page presents a curated collection of images: a map from the Avian Demography Unit illustrating the distribution of the bateleur *Terathopius ecaudatus* along the political border (the bateleur is more frequently found where there is no formal farming); a Ngwato child's oxhide sandals collected by Isaac Schapera (a British social anthropologist who worked in South Africa and Botswana); a compass; the identification documents of Paula Ensor (previous dean and Professor of Education), who spent time in exile in Botswana; and a Certificate of Registration necessary for movement across borders, all of which are overlaid on top of a large map from the *Afrikaans Atlas* provided by Rajend Mesthrie of the Department of Linguistics and Southern African Languages that shows the Afrikaans language's distribution. Contextualising all of these objects in relation to the large map cuts across disciplinary boundaries and illustrates the scope and impact of the colonial and apartheid regimes and their influence on immigration laws, language studies, ornithology and anthropology.

By displaying objects sourced from various disciplinary departments (in the museum or the university) in ways that render them strange to their insiders, *Sound from the thinking strings*, *Face value*, *Miscast* and *Curiosity CLXXV* enabled insiders to identify previously obscured characteristics about the objects. This process not only showcased objects' wider resonance as it extended into other departments in the institution and even beyond, but revealed the dangers posed when, for example, insiders limit objects to exclude the politics of the past. In



Figure 29.

Amogelang Maledu. 2018. *Isigubu through gqom: The sound of defiance and Black joy*. UCT Honours in Curatorship project.

these exhibitions, curatorship and artmaking have been utilised to reveal such limitations through strategies such as analogy, juxtaposition, suggestion, visual quotation and affect.

These exhibitions also employed mobility or travel to invite outside perspectives on insider materials: objects travelled out of museums, university departments and storerooms and into spaces in which art and curatorship facilitated new interpretations, after which they travelled back to their holding museums, university departments and storerooms. While displayed, insiders visited their objects, leaving their departments and entering new environments, and then returned to their home departments. These movements instigated, amongst other things, an opportunity for insiders to develop fresh perspectives of the visual dimension of their disciplines and of the potential of objects and material collections to represent the history and research of a department. After *Curiosity CLXXV*, the Department of Chemistry started to set objects aside for the express purpose of display, which Langerman used to curate two works in 2011 (Langerman in Brown 2013: 166).³⁹ The curators were invited to formulate installations in other departments too, such as Pharmacology, Public Health, Pathology, Archaeology and Psychology.⁴⁰

Because it engaged almost every university department, their staff and their object collections and featured in the media,⁴¹ *Curiosity CLXXV* established curatorship as a force within the institution and secured the role of the curator as the outsider now welcomed into departments and collection storerooms. In the years that followed, curatorship continued to gain momentum, evidenced by the instatement of the Archive and Curatorship project (ARC), curatorial departmental interventions on various campuses and the development of an Honours in Curatorship programme.

Cultivating the disciplinary outsider

i) The Archive and Curatorship programme and departmental interventions

In 2010, the UCT vice-chancellor supported several strategic focuses across the university, of which the Archive and Curatorship programme (ARC) was one. The project was a collaboration between the Centre for Curating the Archive (CCA)⁴² and the Archive and Public Culture Research Initiative (APC),⁴³ under the directorship of Prof. Pippa Skotnes and Prof. Carolyn Hamilton respectively, and included exhibitions, curations and funding for a cohort of Masters and PhD students. At the opening of the APC in 2009, Prof. Ndebele stated that ‘there can be no transformation of the curriculum, or indeed of knowledge itself, without an interrogation of archive’,⁴⁴ a call which both the CCA and the APC have sought to answer by producing scholarship that questions and expands what we understand as ‘archive’ and its relevance in a South African context and in an African university (Skotnes 2019: 21). The ARC project, which proposed curatorship as its methodology and trained its focus on disciplinary objects and images as its main material, provided a new means for these two centres to extend their research. The ARC’s alternate name, ‘the visual university’,

speaks to its focus on visual methodologies (as opposed to the dominant textual and numerical methods) for fostering alternate understandings and inducing an outsider's perspective in relation to insider materials. This focus enabled researchers such as Michael Nixon to expand his research on the Kirby collection at the South African College of Music (SACM) by investigating its accompanying photographic archive⁴⁵ and focusing on the materiality of the instruments.

As shown in the previous chapter, the Kirby collection occupies a somewhat invisible status in its department. Various conservation protocols prohibit large groups entering the space in which the instruments are displayed and forbids students from handling or playing them. In addition to these physical limitations, the current curation performed by the insiders of the department highlights the Western taxonomy employed by the ethnomusicologist who originally collected the objects. Using a visual archive to interrogate a sonic project enabled Nixon to sidestep these limitations and expand his research into the collection in novel ways⁴⁶ – a strategy he also employed on the instruments in the collection by examining them in detail⁴⁷. By studying the instruments in the manner of an outsider unable to play or understand music, Nixon gained an understanding of their history (and their role in history) that was previously occluded.

The *isigubhu*, for instance, refers to a specific period within colonial history, in which it played a powerful role. Nixon speculates that the drum was played during the 1906 Bambatha rebellion against British rule and unfair taxation in what was then Natal – a battle in which between 3,000 and 4,000 Zulus were killed, over 7,000 were imprisoned, and 4,000 were flogged (Nixon 2015: online). Nixon references the belt (now broken) that the drummer would have used in wearing the drum and that is a functional part of the instrument in *ingoma* (dancing) performed with drums, whistles and, often, full regimental attire. He also focuses on the material of which the drum is made ('a section of a hollow log'), which despite looking heavy, is 'actually very light, allowing for movement'; it has 'dried out a lot' but 'must have been very thin even then' (Nixon 2015: online). Nixon also draws connections with the 40-gallon petrol cans contemporary musicians use for drums like these, and he notes that there is no record of how Kirby came to acquire the drum for his collection, reflecting a critical response to the acquisition practices of the collection as a whole.⁴⁸

Another instrument, the sanxian, was bought by Kirby in Johannesburg, where it had been used in the time of Chinese labour on the Rand. At the time of its purchase, its presence would have been a marker of the absence of the Chinese community, the newly formed Union of South Africa having sent labourers back to China in 1910 because of xenophobic 'yellow peril' prejudices in keeping with a general wave of anti-Chinese sentiment across the Western world. Nixon posits that these instruments suggest that Chinese music clubs must have been active in early Johannesburg. He notes that the instrument's neck shows signs of repair made using fine, woven brass and copper wire in a manner evocative of contemporary Zulu baskets woven from brightly coloured telephone wire (Nixon 2015) – an observation that challenges Kirby's claims that instruments from China would have had 'no influence upon those of the native races of South



Figure 30.

The sanxian. Kirby collection of musical instruments. South African College of Music, UCT.



Figure 31.

Subtle thresholds (installation detail). 2009–2010. South African Museum, Cape Town.

Africa' during the period he was collecting (Kirby 1934: xvii). These observations enabled Nixon, an insider of the SACM, to draw attention to a forgotten section of musical history and to attest to the interactions between different cultures (many of them barely represented in the official archives) occurring in a certain place at a certain time.

After engaging with the collection in this manner, Nixon started using the collection as a teaching resource for his students, holding seminars⁴⁹ in the space and sharing readings on the social life of instruments and on gender and instruments (among others) to challenge musicians to 'think creatively about the collection'⁵⁰. He also ensured they got a 'good dose of the collection's biography' and were told 'how certain instruments related to key moments in South Africa's colonial history', extending these discussions to also include 'the spiritual, gendered, and aesthetic dimensions embodied in the collection'.⁵¹ This abundant evidence of instruments and musics no longer performed gives Nixon cause to emphasise the potential of the collection to bear witness to barely told histories, which has led to students pursuing these discussions at postgraduate level.⁵²

From its launch in 2010,⁵³ the ARC programme has manifested in a website that collates visual imagery across disciplinary departments;⁵⁴ seminars for students whose projects work with ARC methodologies; the publication *Uncertain curation* (2014), which brought together essays workshopped in the seminars; a number of graduated students;⁵⁵ and various departmental installations across the university. The departmental installations extended the methodology introduced by *Curiosity CLXXV* by curating the objects of a discipline in their host departments – a significant step that has caused repercussions within the departments, their teaching programmes and even further afield. One such was the installation *Subtle thresholds*, curated by Langerman on the Health Sciences campus as part of the development of the new Pathology Learning Centre in 2011.

ii) Subtle thresholds

This project was set in motion when Jane Yeats approached the Michaelis School of Fine Art in 2010 to discuss possibilities for the curation of the pathology collection.⁵⁶ Skotnes directed her to Langerman, whose exhibition *Subtle thresholds* (installed at the South African Museum in 2009 and still running at that time) took as its subject matter infectious disease and how it has been imaged in both the popular imagination and medical literature (Langerman 2016).⁵⁷ Langerman drew on the work created for *Subtle thresholds* to develop a design proposal for the centre and subsequently took on the departmental installation. In order to understand the installation, this section first briefly discusses the exhibition at the SAM.

Langerman's *Subtle thresholds* at the SAM followed a format similar to that introduced by Payne and Skotnes,⁵⁸ incorporating objects sourced from the SAM and the Wits Adler Museum with original artworks and a catalogue⁵⁹. The exhibition was presented in an L-shaped gallery between the museum's social history section and its natural history displays, and Langerman curated its

contents to enable the viewer to read it as both a cathedral and a laboratory.

The exhibition showcased a wide variety of display strategies, and works were rendered across many media: a large set of 'angelic wings' was constructed from silhouettes of art historical and popular images of healers' hands – the shape suggesting both a schematic tree and a set of lungs; painted chalk boards showed quotations from personal, mythical and philosophical readings of the diseased body; digital prints of enlarged images of animal faeces collected from pet shops and produced by UCT's Electron Microscope Unit were framed in the trefoil and quatrefoil frames of cathedral windows; and framed index cards, magnifiers and number plates showed the GPS coordinates of sites of major disease outbreaks in history. Glass display cases were filled with the objects sourced from the SAM and the Wits Adler Museum – taxidermied animals, study skins and specimens, medical tools and equipment, mirrors and printed images. Ten lightboxes ran the length of the room. These contained visual representations of viral forms known to cause disease, made from pharmacological labware and labelled with international disease codes.

The exhibition formed part of Langerman's larger research conducted for her doctoral degree, which addressed the display strategies employed in natural history museums and how their use of space, layout and labelling continue to celebrate a 'tree of life' model. *Subtle thresholds* worked to subvert the 'ascendant bias' promoted by such spaces and their insiders by positioning the exhibition between the social history and natural history sections, disrupting the museum's calculated conceptual flow that enforces an understanding of evolutionary development through its displays and their themes. Langerman deployed other strategies, such as heterarchy, to similar ends.

In the exhibition, Langerman treated animals as patients and as the main actors in her displays, while humans were only represented in quotes, textual references or fragments (like the angelic wings of laser-cut hands from images of healing from 2500 BC to 2000 AD). The taxidermied animals sourced from various collections were bandaged, supplied with oxygen masks and perched on laboratory equipment, while the prints of animal faeces subverted these 'sites of contamination' by presenting them as beautiful landscapes (Langerman 2010: 29). Many of these strategies also encouraged empathy towards the animals and highlighted the pivotal role they have played in combating disease by being 'sacrificed' as laboratory specimens. These religious ties were amplified by Langerman's use of metaphor and visual analogy (the cathedral layout, the angelic wings, the trefoil windows) in the space and represented the historical relationship between the church, disease and healing and promoted reflection on how these occluded ties still influence how we understand disease.⁶⁰

Langerman also used chains of references and cross-referencing to encourage viewers to search for clues and follow visual links – a process that ultimately left viewers defeated and disorientated, however, as the seemingly logical progression gradually became more self-referential and hermetic.⁶¹ For the insider, such as those familiar with the international disease codes on the viral lightboxes, many moments dispersed throughout the exhibition offered respite and encouraged attempts at gathering more clues to generate an organised

overview of the exhibition, but this inevitably proved futile. This strategy is very effective from an insider-outsider perspective, visually and physically illustrating the discussion in Chapter Two about the insular development of disciplines after the 1800s and the effect of the rhetoric employed by scientific insiders.

Latour (1987: 21–62) views scientific literature as being layered in impenetrable references that serve to reinforce the author's statements and assert authority through their association with the referenced authors, arguing that it is a stylised mode of writing that promotes credibility by raising the cost of dissension (disagreeing with a statement entails disagreeing with all the sources that were cited to support it).⁶² Research's 'factual' status is also increased when it is cited by new writers who, by reinscribing it, 'enhance its factuality' by distancing it from 'the particular circumstances' in which it originated (Golinski 1998: 38). Langerman's hermetic treasure hunt subverts this process, revealing academic verbosity and jargon as smokescreens that obscure the reality of knowledge as being social and constructed.

The exhibition illustrated disease 'as biological, set within a complex network of cultural interpretations' that acknowledged 'the active nature of knowing' and knowledge as a construct and highlighted the cultural narratives embedded within the field of medical science (Langerman 2010: 8). Staff of the museum viewed the exhibition as 'a landmark' because of its alternative approach and its 'disruption of conventional ways of presenting science' (H. Robertson, personal communication, 7 July 2020).⁶³

Langerman incorporated many of the exhibition's works and strategies into the 2011 installation at the Pathology Learning Centre (PLC), from the viral lightboxes and chromed and rusted steel plates of bacteria and parasites to the animal-faeces digital prints. Integrated into the PLC, these works speak to the specimens on display and provide interesting access points to the collection. The animal-faeces prints (which referenced 'sites of contamination' in the context of the SAM exhibition) resonate, for instance, with many of the specimens on display in the PLC, such as the heterotopic heart (also called a 'piggy-back heart transplant') created by Dr Chris Barnard in 1977, consisting of a baboon heart grafted onto a human heart for additional motoric support. In addition to their more 'famous' specimens, the centre also has an extensive intestinal worm collection and many organs affected by zoonotic diseases, such as a liver ravaged by malaria.⁶⁴ This was not a conscious decision on the part of the artist-curator and illustrates how curation can draw attention to aspects of a collection and liberate new associations when brought into conversation with it.

Many insiders of the medical faculty who use the PLC as a teaching resource recognise the format of international disease codes in the viral lightboxes and become curious about the visual representations accompanying them (J. Yeats, personal communication, 10 July 2020). Learning that the lightboxes are visual representations of familiar viral forms encourages the insiders to search for the virological characteristics and patterns they have learned in the curriculum and apply them to this strange new format. This process of defamiliarisation works against how medical imagery becomes naturalised. The materiality of these works, made of pharmacological labware, also draws attention to the





Figure 32.

Subtle thresholds (installation detail). 2009–2010. South African Museum, Cape Town.

hidden economical and political forces that drive the discourse of disease, which insiders may not yet be aware of at undergraduate level (F. Langerman, personal communication, 30 August 2020).⁶⁵

Langerman's work in the host department offers rich opportunities for the medical students and lecturers who engage with the pathology collection to interrogate how they view and understand disease. This is unfortunately not the case on this campus, where curricula are full to the brim and engagement with the works has been limited to a surface-level appreciation of the displays' aesthetics (J. Yeats, personal communication, 10 July 2020). Since its installation in 2011, Dr Yeats and her team have, however, continued to open up the collection and its material to outsider eyes, welcoming visits from various departments and institutions,⁶⁶ outside visitors⁶⁷ and scholars⁶⁸ and have continued to commission and acquire artworks that speak to the collection⁶⁹. Yeats and her colleague Jurgen Geitner have also created a blog in which they discuss some of the curiosities of the collection, such as the terms used in old post-mortem ledgers to describe certain cases ('anchovy sauce' to describe the contents of an amoebic liver abscess and 'nutmeg liver' for the mottled appearance of a chronically congested liver)⁷⁰, tracing the context of origin for these terms; or investigating specimens with an unusual history (such as the Barnard heterotopic hearts and the liver of an individual who died of mushroom poisoning)⁷¹. The centre has also curated online exhibitions that draw on the collection under titles such as 'Harmful substances', 'Congenital anomalies' and 'Syphilis in the city'. The digital space has thus presented an opportunity to expand the collection beyond the limitations of medical school curricula and can highlight the different characteristics of the specimens on display.

The PLC represents a striking difference to the M.R. Drennan anatomical collection, housed only a few meters from the PLC on the same campus. Curatorship has opened up the former collection to outsider interactions, and multiple interpretations have initiated a treatment of its inherent naturalisations, opening the PLC specimens up to different ways of knowing and understanding. However, there are still unrequited opportunities for these curatorial interventions to influence the curricula that are taught with the collection in a more concerted manner. Skotnes's *Division of the world* is an example of an installation that has infiltrated its department's teaching programmes.

iii) Division of the world

In 2012, the Department of Archaeology invited Skotnes to curate an installation in the large foyer of their department on upper campus. No stranger to the department, having worked at the interface of archaeology, art and curatorship since the 1980s,⁷² Skotnes decided to reflect on the legacy of the department through the practice of its scholars, with the central exhibition reflecting on the Goodwin division of the history of the people of southern Africa into Early, Middle and Later Stone Age⁷³. To this end, Skotnes and her team⁷⁴ used material from various sites excavated over decades of the study of archaeology at UCT.

The installation, titled *Division of the world*, includes materials from



Figure 33,34.

Subtle thresholds (installation detail). 2009–2010. South African Museum, Cape Town.



(top) Figure 35.

Subtle thresholds in the Pathology Learning Centre, UCT. 2011.

(bottom) Figure 36.

Viral lightboxes in the Pathology Learning Centre, UCT. 2011.

departmental storerooms, personal staff collections and documentation from fieldwork archives.⁷⁵ UCT houses huge storerooms of material excavated from the Western Cape – collections which in many ways tell not only the story of the city of Cape Town and the colony, but of the pre-colonial past stretching back to the Early Stone Age. As research in the discipline is based on excavation and the accumulation of material, the storerooms of the department overflow with boxes of research material assembled over the years of the department's existence, many unopened for decades. Like an archive, the boxes physically represent the archaeological community's memory bank, with many of the materials forming part of the second category of object formulated in Chapter Two. Scavenging through the storerooms and materials, Skotnes engaged with the material in innovative ways, selecting her displays along very different sets of criteria than those suggested by the labels on the boxes.

The installation consists of a low table in the centre of the foyer, on which the various stone typologies formulated by Goodwin are arranged in four demarcated sections covered with glass and combined with labels of phrases from the Bleek and Lloyd archive; four glass cabinets, one in each corner of the foyer, displaying materials excavated from the storerooms; and two floor-to-ceiling columbarium-like displays across from the stone typology display, next to the glass cabinets, containing images, text and objects relating to the history of the department and its staff members. Enlarged images of sangoma divining bones run along the wall above eye-level on both sides of the room, with the carved wooden skulls of a lion and a dolphin by Malawian sculptor Friday Jibu at the same level as the divining bones, on the wall between the columbaria.

Division of the world introduced an outsider perspective in a variety of ways. Viewing the installation, the archaeological staff and students recognise their 'tools of trade' – ceramic shards, bones, stone tools and grids – but displayed in a way that evokes an understanding of the objects beyond their discipline. By positioning artefacts to emphasise their labelling (stones are positioned to reveal the details written on them), including seemingly familiar objects and expanding and shrinking timelines, the installation draws attention to the framing devices, tools and methods of the department's insiders. Skotnes's inclusion of objects across a wide time range (from early lithics to ceramic Willow-pattern dish fragments) and 'process objects' such as microscopes, tags and boxes and images of the landscape (usually only seen in close-ups of a selection of objects or showing sections of a dig) all challenge normal insider contextualisations (N. Zachariou, personal communication, 27 May 2020).⁷⁶

Skotnes's display of the lion and dolphin skulls – artworks, not artefacts – similarly inspires reflection by drawing the insider in with their familiarity, only to reveal them as incongruous in the department. This casts doubt on the other disciplinary objects on display, causing the insider to question their authenticity and self-evidentiary status. The juxtaposing of Goodwin's stone typologies, used to formulate a hierarchy of intellectual development, with the sangoma bones, highlights the intellectual traditions represented by the latter and their omission from this theory of development.



Figure 37.

Division of the world. 2012. Department of Archaeology, UCT.



Figure 38,39.

Division of the world. 2012. Department of Archaeology, UCT.

Undergraduate students regularly engage in discussions around certain displays as part of their teaching programme (N. Zachariou, personal communication, 27 May 2020), and the installation is also used to introduce visitors (exchange students and school children, for example) or students from other UCT departments (architecture students taking the archaeology module) to the department and the discipline (J. Parkington, personal communication, 20 June 2020). It has even been described as a ‘super curriculum’ (or as ‘several super curriculums’) for how it visualises what archaeology does on both an empirical and procedural level (J. Parkington, personal communication, 20 June 2020).

These responses show that the curatorial strategies wielded by Skotnes and her team address insider limitations in various ways and have opened disciplinary objects and processes up to outsider audiences and interpretations. Perhaps the most surprising has been the response from the department’s cleaning staff, who have taken great interest in the display of a collection of pins, buckles and buttons excavated from the washing pools used by slaves on Table Mountain (J. Parkington, personal communication, 20 June 2020). Taken from their dusty boxes in storage and exhibited, they resonate with these disciplinary outsiders, who can identify with the lives and work of the women whose voices are absent from most official archival records.⁷⁷

In considering the role of these departmental curations and their efficacy in addressing the limitations posed by their insiders, the extent to which they have infiltrated the teaching curriculum plays a significant part in their ability to enable an outsider perspective and to highlight naturalisations and blind spots. It is, after all, the curriculum of each discipline that teaches the student what to look at and what to ignore. If this limiting process can be combatted from the outset, students may become more self-conscious and critical and guard against the development of these blind spots. The Honours in Curatorship programme set this process in motion in various ways.

iv) The Honours in Curatorship programme

Launched in 2013, the UCT Honours in Curatorship programme was one of the first programmes in South Africa to offer a specialisation in curatorship, and it remains the leading source of postgraduate training in this field in South Africa (Skotnes 2019: 67).⁷⁸ In its ninth year in 2021, the programme offers courses in the theory and practice of curatorship, developing in students a sophisticated awareness of the practicalities, politics and poetics of working with a wide range of collections. This includes existing material UCT collections (from pathological and botanical specimens to musical instruments), Iziko South Africa institutions, and city collections. Interactions occur through a wide range of formats, including field trips and on-site discussions with curators and collection managers, exhibition-making, digital curations and workshops.

From the start, students from diverse disciplinary backgrounds (across the visual arts, humanities and sciences) were encouraged to apply – and they did, enrolling with undergraduate majors in chemistry and political science, drama, social anthropology and film and media studies. As the ARC project

and the previous chapter have illustrated, objects and images form part of every discipline taught at the university to varying extents and are representative of the naturalisations caused by insider views propagated by their discipline. Many of the modules and workshops that form part of the programme draw on object collections from disciplines housed in the university and affiliated Iziko Museum institutions, and students are encouraged to engage critically with the materials and subject them to a range of visual and affective strategies. This has proven successful, enabling students to see curatorship's ability to address insider limitations fostered in undergraduate degrees and for insiders of these disciplines to be exposed to a wide range of outsider perspectives. These interactions have challenged institutional insiders to reconsider some of their assumptions about their own materials and how these materials are displayed in museum exhibitions.⁷⁹

As part of a module titled 'Working with museum collections', students in 2018 engaged with a pre-selected collection of SAM and SANG objects, choosing one about which to write an essay and formulate a curatorial strategy to represent it. These essays formed part of an ongoing website,⁸⁰ and the displays featured in the exhibition *Object ecologies* at the SAM. Student Thembakazi Matroshe, for example, chose a Venda divining bowl and emphasised how such objects were intended as part of sacred rituals and not for viewing by the general public, using an opaque curtain to shield the object from view. In foregrounding the bowl's indigenous use, her strategy raised awareness of how such aspects of an object remain hidden (and often disregarded) by their host institutions and the disciplines that study it. Another student, Ndeenda Shivute, used the few personal details (a name and age) she could glean from a slave certificate to attest to the humanity of the individual, highlighting those details in large vinyl lettering. These displays provided alternative entry points to the insiders of the museum and their objects of study.

Many of the university object collections discussed in this thesis have featured in the programme. Students have engaged with the eggs in the Peter Steyn collection,⁸¹ specimens in the Bolus Herbarium,⁸² objects from Special Collections⁸³ and instruments from the Kirby collection. One such honours project used an item from the Kirby collection to illustrate how object collections can, through curatorship, extend beyond their Western hegemonic foundations and serve as generative material for rethinking curricula. In 2018, the Zulu drum alleged to have been played during the 1906 Bambatha rebellion against British rule and unfair taxation in the colony of Natal (discussed by Nixon) became the focus of Amogelang Maledu's Honours research project. In 'Isigubhu through gqom: The sound of defiance and Black joy', Maledu (who has an undergraduate degree in Anthropology and Visual Culture) used the drum's history of colonial resistance and contextualised it through the contemporary musical genre of *gqom*,⁸⁴ showing music as both an act and celebration of joy and freedom and of defiance against the limitations of township life. Through her 'speculative and imagined interconnectedness' of the *isigubhu* and *gqom*, Maledu appropriated the limited information available about the former and expanded it by reinventing new historical pathways that reframed colonial narrations and

aesthetics (Maledu 2018: 29–30). Her curation broke the silence of the Kirby instruments and liberated the *isigubhu* from its ethnomusicological framework through a juxtaposition that spoke back to history and the contemporary moment. In addition, a website⁸⁵ provides a framework for historicising *gqom* and encouraged the growth of its archive through viewer engagement, also highlighting the speculative and stagnant colonial archive in which the *isigubhu* is situated (Maledu 2018: 29–30)⁸⁶.

Since Maledu's exhibition in 2018 and the return of the drum to its platform in the Kirby collection, the collection has opened its doors to a variety of outsiders⁸⁷ – a development that signals the culmination of almost 15 years of curatorial work conducted on and with it. The exhibitions and programmes discussed in this chapter have used a variety of curatorial strategies to address the limitations exercised by departments and insiders on their objects and subjects of study and to encourage outsider perspectives. The next chapter develops these findings through a new focus on the library's medical chest, subjecting it to my own range of artmaking and curatorial strategies.



Figure 40.

Nathalie Viruly. 2019. An oologist's note on grief. *Object ecologies*.
UCT Honours in Curatorship project.



Figure 41.

Melissa Waters. 2018. *Prrrip-Prrrip, Tseeeep!: The silence of birds' eggs*.
University of Cape Town (Honours in Curatorship exhibition).

Endnotes

- 1 P. Davison, personal communication, 28 January 2021.
- 2 P. Davison, personal communication, 28 January 2021.
- 3 The halls that housed Skotnes's exhibition were known at the time as the African Cultures Gallery and featured a series of casts or models of ethnically defined groups. The Bushman diorama was also part of this section but was removed in 2001. The African Cultures Gallery was officially closed in 2018.
- 4 The rock paintings were from shelters in the south-western Cape, the Maluti and southern Lesotho mountains, the Drakensberg and the rock engravings of the northern Cape (Skotnes 1991: 5).
- 5 Skotnes had a longstanding relationship with the museum, which started when she was still a student at the Michaelis School of Fine Art. Davison remembers that Skotnes would visit the taxidermy section of the South African museum to draw bones. As an anthropologist, Davison admits to finding Skotnes's way of looking at things stimulating – an individual way of looking at objects that made *her* look at them differently, even though she was already very familiar with these materials. Davison recalls a visit to the ethnographic stores during which she showed Skotnes the San skin bags, carefully conserved in their drawers and laid out on acid-free paper. Skotnes admired not only their aesthetic qualities but related the stories she had been studying in the Bleek and Lloyd archive to them – stories that shifted their status from anthropological museum objects to powerful animate objects in San spiritual and social life (P. Davison, personal communication, 28 January 2021). Skotnes remembers that she asked staff whether they knew what was inside the bags and was shocked when nobody could remember looking in them. She was allowed to look inside one and found a claw, which they thought must be a leopard's (P. Skotnes, personal communication, 9 May 2021).
- 6 See Parkinson (1976).
- 7 See Penn (2005).
- 8 Watson's method of working established what has since become a tradition of poetic adaptation of narratives from the archive and has inspired a sustained debate, often heated, about this form of interpretation (Skotnes 2007: 48). Watson also contributed a selection of !kun 'translations' for Skotnes's publication *Claim to the country*, published in 2007.
- 9 In the first iteration of the case, the Magistrate's Court ruled in favour of Skotnes, but the library appealed. The Supreme Court ruled in favour of the library, holding that a book could not be an artwork. The Appeals Court ultimately ruled that a book *could* be an artwork but that one copy must be given to the National Library. The law was subsequently adapted to exclude books produced in small editions (such as artist's books).
- 10 A series of terracotta works titled the 'Mafikeng Heads' that corresponded to the Lydenburg Heads in both technique and scale (Powell in Payne 1993: 13–14).
- 11 The trolleys represented Payne's critique of institutions and how they 'shop around' for meaning (Powell in Payne 1993: 15–16).
- 12 The first display of the heads, just after their reconstruction, was also at the SANG. In an adjunct display to the main *African art in metal* exhibition in 1970, the heads were exhibited as art (Martin 2019: 18). This period at SANG was marked by a shift of emphasis in acquisitions, spearheaded by its assistant director at the time, Bruce Arnott, to include African art (Martin 2019: 18). However, after this initial display the heads were returned to the custodianship of UCT's Department of Archaeology before being loaned to the SAM to be displayed on its stairs with supporting archaeological material from the site.
- 13 See also Maggs & Davison (1981), in which the authors focus on the aesthetic components of the heads rather than on their archaeological worth (as argued in Hall's essay): the curved lines of the ridge running across the forehead of all seven heads are described as perfectly counterbalancing the curve of the ear, and these and other design elements are seen as testifying 'to a well-developed artistic awareness' (Davison & Maggs 1981: 30).
- 14 The multiplicity of meaning was emphasised by Payne's shopping trolleys as part of *Face value* at the SANG.
- 15 Even after the closure of the African Cultures Gallery in 2018, the museum continues to prefer the reading of the heads as masks to outsiders, as seen in a recent online exhibition that took place during the Covid pandemic and the nationwide lockdown, titled *Looking a head: Revisiting the Lydenburg Heads*. This virtual exhibition presents the heads as objects that could

have been used in rites of passage (a consideration that accounts for their size but ignores their weight) and invites visitors to share their diverse experiences of rites of passages as part of a growing online memory bank. Though the online exhibition invites the sharing of a diverse range of experiences, it continues to propagate the singular archaeological framing of them as evidence of social customs. See <https://www.iziko.org.za/exhibitions/looking-a-head-revisiting-lydenberg-heads>.

- 16 In a recent interview, Thorne reflects on how *Miscast* demonstrated to her that ‘space had power’ and that it could be choreographed (J. Thorne, personal communication, 21 January 2021). After *Miscast*, which she confirms influenced every project she took on afterwards (including the *Digging deeper* (2000) exhibition at the District Six Museum and the Lwandle Migrant Labour Museum), she completed a Master of Philosophy (Fine Art) thesis in which she reflected on the ability of certain exhibits to facilitate powerful emotional responses from their viewers (see Thorne (2003)).
- 17 See also Davison (2018).
- 18 These collections have been housed in Iziko’s Social History Centre since 2010. The centre was built to provide a new home for ‘the indigenous cultural material from southern Africa, artefacts from the colonial period of the Cape, including maritime and historical archaeology, as well as collections of world ceramics, furniture, coins and textiles, among others’ (Iziko Museums of South Africa (2021)).
- 19 Robins is currently a professor in the Department of Sociology and Social Anthropology at the University of Stellenbosch.
- 20 See Jackson & Robins (1999) and Robins (1996).
- 21 The ‘Rorschach effect’ that Robins alludes to was not limited to the general public but extended to journalists writing for established newspapers, who listed objects such as ‘pieces of bone and skin’ that were in fact not on display (see Minnaar (1996)). Skotnes also recalls regularly correcting newspaper article drafts by journalists who inaccurately listed what was on display (P. Skotnes, personal communication, 12 April 2018).
- 22 P. Skotnes, personal communication, 12 April 2018.
- 23 Lane’s description of the head casts in the *Miscast* vitrines being made from slain San and being held in museum and university collections is in fact incorrect. The heads were part of Drury’s casting project and bear no relationship to the trophy head he recognised in a photograph in the exhibition as being from his undergraduate days at Cambridge. This is another example of Robins’ ‘Rorschach reaction’, where viewers projected their own views and personal histories onto the materials.
- 24 See Shepherd (2003, 2012, 2015, 2018); Haber & Shepherd in Hamilton & Skotnes (2014); Haber & Shepherd (2015).
- 25 Witz and Rasool are professors of History at the University of the Western Cape.
- 26 This was taken from the transcript of Rasool’s opening speech written for the book launch of *Miscast* at South African National Gallery. The document forms part of the *Miscast* archive at the Centre for Curating the Archive.
- 27 Rasool’s views about shedding ‘the literate and the archival (in the verbal sense) conventions’ was confirmed in a recent interview with Witz, who remembers how, as new lecturers, both he and Rasool were passionate about reimagining the field of history in their department, and how they looked at novel sources (outside of the academy) for material for their discipline, such as the Van Riebeeck festival, the Bushman diorama and tourism as a site for story-telling (L. Witz, personal communication, 9 February 2021).
- 28 See, for example, Abrahams (1996), Kozain (1996), Enwezor (1997), Littlefield Kasfir (1997), Coombes (2003).
- 29 For more on the social and political histories of botany in the Cape, see Van Sittert (2000, 2002, 2010), Boehi (2013), Boehi & Xaba (2021) and the work of Khan (2021).
- 30 See Robertson (2006).
- 31 A genus of frog endemic to sub-Saharan Africa.
- 32 The xenopus also played a role in developing pregnancy tests. Lancelot Hogben was chair of zoology at UCT in the 1920s/30s and worked on this research (F. Langerman, personal communication, 1 October 2021).
- 33 J. Peterson, personal communication, 8 July 2020.
- 34 Professor Reddy recently retired as the South African Research Chair in Computational Mechanics.
- 35 D. Reddy, personal communication, 9 July 2020.
- 36 C. de la Rey, personal communication, 8 July 2020. Prof. De La Rey is currently the vice-chancellor of the University of Canterbury in New Zealand.

- 37 I have subsequently encountered its residue in displays in the Physics department and as part of the UCT Works of Art collection. To view the catalogue, see https://issuu.com/cca.uct/docs/curiosity_for_web. After the exhibition had come to an end and the cabinets and vitrines had been unlocked and emptied and their objects had been returned to the multitude of departmental nooks and crannies they were sourced from, five works remained: 'Filing the archive', 'Place holders', '175 chalkboard dusters' and 'References' were created by the curators and donated to the UCT Works of Art collection; the fifth work was the paper cabinet or catalogue. Four of the cabinets curated by Langerman (one of them featuring the ballet tutu) were kept intact and found a new home in the Physics department foyer.
- 38 This last remaining cabinet continues to generate new insights into the objects and has been used as a teaching tool in the Honours in Curatorship programme since 2013.
- 39 The first was an interpretation of the periodic table constructed as 'a complex visual matrix of symbols, materials and objects', and the second consisted of two cabinets acknowledging P.D. Hahn's role in the admission of women to UCT and the history of chemistry at UCT. See <https://frithalangerman.com/pd-hahn/>.
- 40 The curators were also invited to curate Geology and Biological Sciences, but this did not come to fruition because of time and funding constraints (P. Skotnes, personal communication, 7 November 2020).
- 41 See Murray (2004), Rossouw (2004), AW (2004) and Mbana & Garner (2005).
- 42 The CCA started life as LLAREC (The Lucy Lloyd Archive, Resource and Exhibition Centre) in 1996, focusing on the material generated by the *Miscast* exhibition, before shifting to archives more generally and to the role of curatorship as a creative site of knowledge able to address and transform these materials. For more on its history and development, see <http://www.cca.uct.ac.za/cca/about>.
- 43 Instated as a research body, the APC was tasked to grapple with 'critical questions about history, memory, identity and the public sphere in South Africa' through interdisciplinary research projects exploring the workings of the archive in contemporary culture (APC 2019). For more information, see <http://www.apc.uct.ac.za/apc/about>.
- 44 Ndebele's quote is displayed as part of the banner situated at the bottom of the APC website. See <http://www.apc.uct.ac.za/>.
- 45 *The Mirror in the Ground*, undertaken by Prof. Nick Shepherd in collaboration with the CCA in 2013, also focussed on the visual aspects of an archive. Shepherd explored the photographic archive of the archaeologist John Goodwin to gain an understanding of the discipline through an aesthetic lens. The research took the form of a publication, an exhibition and a website. See <https://mirrorintheground.com/>.
- 46 See 'Depths of field: Photographs and early southern African music studies' in Hamilton & Skotnes (2014: 189–227).
- 47 Nixon's research into the materiality of these instruments can be viewed on UCT's Humanitec website, which ran from 2011 to 2014 as part of the Vice-Chancellor's Strategic Fund and raised awareness of UCT collections through digitisation. An essay by an insider of the department housing the objects accompanied each collection (of which the Kirby collection was one). See <https://digitalcollections.lib.uct.ac.za/humanitec/index> for more.
- 48 This reflects Nixon's awareness of the problematic nature of the collecting practices employed by the owners or field agents of these colonial collections worldwide.
- 49 The humidity level of the collection is still of pivotal importance for conservation purposes, and these seminar sessions enabled students to engage with the collection in smaller groups (M. Nixon, personal communication, 25 July 2020).
- 50 M. Nixon, personal communication, 25 July 2020.
- 51 M. Nixon, personal communication, 25 July 2020.
- 52 See Stacey 2017. Masters candidate Ola Adebola is also currently working on the Chinese instruments in the collection as part of his research.
- 53 An occasion for which James Elkins delivered a guest lecture, 'Visual practices across the university'.
- 54 See <http://www.cca.uct.ac.za/cca/arc/visual-university>.
- 55 Fritha Langerman, Joanne Bloch, Carine Zaayman and George Mahashe produced PhDs as part of this programme, while Claire Butcher, Jessica van Rensburg and Andrew Putter produced MFAs.
- 56 Dr Jane Yeats is a virologist and the current curator of the Pathology Learning Centre.
- 57 See <https://frithalangerman.com/subtle-thresholds-the-representational-taxonomies-of-disease/>.
- 58 Langerman, whose MFA was supervised by both Payne and Skotnes, worked as a printing assistant at the Axeage Press and assisted on the installation of *Miscast*.

- 59 The catalogue for *Subtle thresholds* is somewhat different to those produced for *Face value*, *Miscast* and *Curiosity CLXXV*. It does not collate essays from various practitioners but extends the additional methodology of the 'paper cabinet' of *Curiosity CLXXV*, relying on mostly visual content to extend the process first set in motion by the exhibition. The inclusion of visuals sourced from the exhibition itself in Langerman's catalogue (and materials relating to the research beforehand) continues the chains of references and networks of cross-referencing utilised in the exhibition. The catalogue anchors some of the chains of association with snippets of explanatory text, but these are always in service of her larger strategy, which embraces 'disorientation', 'ambiguity' and 'multi-referentiality' (Langerman 2010: 9).
- 60 The Covid-19 pandemic has also surfaced this entrenched relationship, with religious leaders in many countries warning their congregations that vaccinations are the 'mark of the beast' (Barlow 2021).
- 61 This frustration was felt by both the insiders of the museum (more versed in some of the specialised language co-opted by Langerman) and outside visitors looking for a continuation of the didactic experience offered by the galleries adjacent to the exhibition (H. Robertson, personal communication, 7 July 2020).
- 62 A mode with its foundation in Boyle's 'literary technology' first introduced in the 17th century (Shapin & Schaffer 2011: 25).
- 63 Dr Hamish Robertson was then Director of Natural History Collections at the South African Museum.
- 64 The inclusion of these works in the centre has taken on a more pronounced presence since the Covid-19 pandemic in 2020.
- 65 This has also become more evident in the Covid-19 pandemic and the ensuing race between pharmacological companies to secure vaccine patents.
- 66 The UCT Honours in Curatorship class visits the collection annually and critically engages with it as part of the 'Local Issues in Curatorship' elective, while students from the Orms Cape Town School of Photography have also visited the PLC as part of their practical modules.
- 67 Many of these are school children who 'spontaneously pick out bottles and ask us what they are, and lots of honest curious questions follow' (J. Yeats, personal communication, 9 March 2019). They provide a marked contrast to the medical students, who are presented with pre-selected bottles that they have to answer prescribed questions about as part of their curriculum. 'There's a very subtle difference in how they get to interact with the material, but the one is exciting and the other is deadening' (J. Yeats, personal communication, 9 March 2019). In an opening speech for an exhibition at the PLC in March 2019, Yeats confirmed that evoking curiosity remains one of the main reasons she continues to invite artists to engage with the collection.
- 68 The surgical photos that form part of the collection served as the research focus of a Master's student in visual studies from the University of Stellenbosch. Michaela Clark focussed on images of patients diagnosed with syphilis produced between 1920 and 1961, engaging 'the visual coding of syphilis in relation to Cape Town's medical history, and the developing conventions of photography within this scientific field' (Clark 2017: 2). Through her close readings of certain images in this collection, 'extra-clinical details, inconsistencies, and emotive qualities within the photographic frame are identified, allowing for considerations of how these photographs take part in a continuous meaning-making process that troubles any easy, fixed, or disinterested reading' (Clark 2017: 2). After attaining her degree, Clark assisted Dr Yeats to formulate a selection of online curations drawn from the collection. Her extended engagement with the collection and her consideration of the ethics involved (controversial because of the possibility of personal identification in the photos) resulted in a sensitive framing of each curation within this tricky terrain.
- 69 See 'Art in the PLC': <http://www.pathologylearningcentre.uct.ac.za/art-pathology-learning-centre>
- 70 See <http://blogs.uct.ac.za/digipathblog/2015/11/historical-descriptive-terms-in-pathology-do-they-just-cause-confusion/>.
- 71 See <http://blogs.uct.ac.za/digipathblog/2016/05/of-mushrooms-and-men/>.
- 72 As discussed, *Sound from the thinking strings* (1991) at the SAM introduced novel curatorial strategies and included archaeological, ethnographic and archival San materials in combination with Skotnes's own interpretations of San oral history expressed through a series of etchings and poems. Skotnes had previously been a student of archaeology in the late 1970s and registered in the department for an MA in the 1980s.
- 73 Based at UCT, John Goodwin was a formative figure in the development of South African and African archaeology, and a collection of material relating to his life and work is housed in the

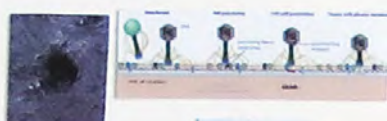
- Manuscripts and Archives division of the UCT Library (Shepherd 2015: 8)
- 74 For this installation, Skotnes again engaged the collaborative support of Jos Thorne, the architect with whom she worked on *Miscast*, as well as CCA project manager Thomas Cartwright.
- 75 See <http://www.cca.uct.ac.za/cca/projects/division-of-the-world>.
- 76 Nicholas Zachariou is a postdoctoral researcher in the Department of Archaeology.
- 77 The pins, buckles, buttons and ceramic shards collected in the archaeological dig of the washing pools was the subject of a short documentary film, *Fragments of an untold history*, screened as part of the *Under the dome* film festival, a collaboration between the CCA and Iziko Museums of South Africa. See also Jordan (2005).
- 78 The programme has graduated over 100 students, many of them now working in the museum and gallery sector, and was supported by former vice-chancellor Stuart Saunders, acting for the Andrew Mellon Foundation and who participated in the *Curiosity CLXXV* exhibition in 2004.
- 79 Ndlovu, B. 2019. Interview conducted by Karen Ijumba, 23 April.
- 80 See <https://www.objectecologies.co.za/category/iziko-museums/>.
- 81 Melissa Waters (who completed her Bachelor of Science degree at the Wits in 2017, majoring in Archaeology and Human Geography and minoring in Biology and Philosophy of Science) used the Steyn collection in 2018 to explore the complex relationship between birds and humans in her research project 'Prrrip-Prrrip, Tseeeepl: The silence of birds' eggs'. Initially struck by the silence of the collection, Melissa's research focus became sound. She explored its manifestation in birdsong and human language and the convergences and divides in vocal learning between humans and birds. The sensitive and poignant exhibition created an affective connection between the viewer and the lives of birds and suggested exciting and refreshing ways in which current natural history collections can be reimagined. In 2019, Nathalie Viruly (who completed her Bachelor of Social Science in Politics and Sociology) was similarly struck by the silence and loss evoked by the collection. Viruly honed in on the moments documented in the notebooks, which capture the loss of life in the reproductive life of these birds and reveal 'stories of avian tragedy': Young taken by predator; 1 young accidentally killed; 2 eggs failed to hatch; 2 infertile; Chick disappeared without a trace; Eggs disappeared; Literally cooked by the [corrugated] roof; Nest empty – egg collectors? (Viruly 2018: online). Her focus on these moments in the scientific journal poignantly reveals the conflation between science and emotion and invites the viewer to re-examine hierarchies of loss. See <https://www.objectecologies.co.za/2019/university-of-cape-town/notebook-2-nest-records-mainly-eggs-in-drawer-3/>.
- 82 See <https://www.objectecologies.co.za/2019/university-of-cape-town/carpobrotus-acinaciformis-l-l-bolus/>.
- 83 See https://www.objectecologies.co.za/2019/university-of-cape-town/a-large-green-steiff-bear-germany-reference-code-za-uct-bc1556_ak_ak5_ak5-23/.
- 84 A contemporary genre of electronic dance music that emerged in the early 2010s in Durban.
- 85 See <https://isigubuthroughgqom.wordpress.com/>.
- 86 Maledu's curation required the transport of the drum from the Kirby's light- and temperature-controlled venue to the Michaelis campus, where the exhibition was staged. As demonstrated in Chapter Two, the restoration of the instruments in the Kirby collection in 2008 rendered them historical artefacts subject to stringent conservation procedures. The logistics and negotiations necessary to orchestrate this move were thus complex and subject to the goodwill of the new curator, Dr Rick Deja. The request was granted, and loan forms drawn up by Special Collections (who loan their holdings on a more regular basis) were used to sign off the drum's exodus.
- 87 In February 2019, the Mellon-funded Re-Centering Afro-Asia Project (RAA) held a small symposium for 35 people that featured two student papers and a performance by Madosini and Pedro Espi-Sanchis; and in February 2020, a salon festival featured performances by Dizu Zungula Plaatjies and was attended by Kirby's granddaughter, Anthea van Wieringin. Following the salon festival, Inside Africa CNN did a segment on Dizu that included the Kirby collection and interviews with Dr Deja and fellow SACM lecturer Rebekka Sandmeier. In addition to opening the venue up to these engagements, Dr Deja has been approached by curator Steven Sack to collaborate on a project focussing on the Samuel Makonyane figurines (part of the Kirby Collection) for an exhibition in conjunction with Iziko Museums of South Africa. This project would also require working with the Stellenbosch University Fine Art department to recreate a particular clay drum featured in the collection.

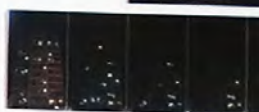
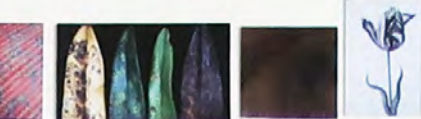
Taxonomies (2020)

An exercise in visually categorising a selection of my research material (accumulated since 2015).









$$F = \frac{GM_1M_2}{r^2}$$



Chapter Four:
Object-as-Virus to Object-as-Vaccine

There is another medicine case in my office in the Centre for Curating the Archive. Covered in black faded leather and about 50cm deep, 20cm wide and 30cm high, its oval top half has a leather handle and folds open on both sides when the clips on either side of the handle are unfastened. When opened, the case reveals two compartments on the left-hand side and one on the right, and a bottom section that stretches the full length and width of the chest. The three compartments fasten with clips, of which the left front one is broken, mended many years ago with a Band-Aid (now old and not very sticky). The case belongs to my father, who carried it with him as a medical student and, after graduating, as a doctor doing house calls. I did not know it in its mobile days – my first recollection of it is as a depository for medical paraphernalia in a cupboard in the home I grew up in. It contained the bright orange mixture of methylate that one had to blow on vigorously to alleviate the burn when applied to scratches, rolls of bandages, a bottle of sweet celestamine syrup for allergies and the hypodermic needles used when I needed an IV drip for my annual asthma attacks.

Rendered stationary, the medicine case stayed behind when I started joining my father on his rounds in the paediatric wards of the hospitals from the age of six onwards – Louis Leipoldt, Karl Bremer and Panorama – in the northern suburbs of Cape Town. These visits usually occurred on Sunday mornings and, after inspecting the newborns wrapped in blankets in the maternity ward – listening to heartbeats, taking temperatures, chatting to the nurses about the tiny, fragile ones in the incubators or those with jaundice – we visited the mothers, lying side by side in their wards, with jokes and reassurances. During the week, I sometimes joined him on an emergency call to attend to a girl or a boy brought in with an extremely high temperature, stiff neck and piercing headache, and I would stand in the corner and watch as my dad performed the always terrifying



Figure 1.
My father’s medicine chest.

procedure of inserting a needle into their spinal column to gauge whether they had meningitis by examining the liquid that drained from it. I even witnessed a few caesareans, donning full operating room regalia and scrubbing my hands till they were pink before entering into the theatre, where I would hug the wall at the back, taking in the surgical instruments, the lights, the green swaths of material covering almost everything in sight, and hear the hushed conversations and commands and the wail of the newborn. These were, perhaps, my first experiences of being an outsider in a highly specialised environment, and because I was under the protection and validation of my father while occupying this role, it was comfortable, extremely interesting and highly enjoyable.

During my undergraduate degree in Fine Art, I continued to pursue this outsider position, joining random large groups of students as they filed into lecture halls that were not part of the Fine Art curriculum to listen to lectures about economics or history or watch mathematical equations being scribbled on the blackboard. I am pretty certain I learned nothing about those disciplines from these sessions – it was more, I think, the novelty of being an outsider to the topics being discussed that interested me. Once removed from both my own discipline and the one being discussed in class, I experienced the opening of an intellectual space that enabled me to make connections between my artmaking and whatever topic was being taught. The artworks I made in those years took me into the recording studios of the Stellenbosch Conservatoire, the storerooms of the Chemistry department and once into the back garden of an entomologist, who helped me capture one of the *Pachnoda sinuate* beetles that were decimating her avocado tree. As a Master's student at the Michaelis School of Fine Art many years later, not much had changed.

I continued to hone my role as outsider in this period, producing a body of work that drew on the expertise of a wide variety of disciplinary insiders, most of them situated on the upper and middle campuses of the University of Cape Town (UCT) and practicing in the science faculties. These included chemists, radiographers, physicists, chemical engineers and botanists. The resulting body of work took its title, *Point counter point*, from an Aldous Huxley novel (1928), referencing the musical technique of counterpoint as a structural point of departure, avoiding a single central plot and choosing instead interlinked storylines and recurring themes. This structure was echoed in the exhibition, which used objects and text (in the catalogue and the labelling system) to create a dense network of connections across various disciplines, artworks and the fictional and personal narratives upon which I drew. By entangling the language and materials of science with these fictional and personal stories, my interest in what makes the world work in scientific terms was co-opted into a more personalised understanding of my own interior world. Mathematical and chemistry equations were used to represent an engagement ring, chemical engineering equipment was set in motion to reverse a biblical miracle, and an IV drip releasing saline solution onto a handkerchief became representative of flowing tears. These artworks rendered the materials I sourced from their various disciplines strange to their insiders when they encountered them on opening night. In producing this body of work, I started to develop many of the strategies I have used for the

practical components that form part of this research, such as using the view of the disciplinary insider to reveal occluded characteristics in outsider objects (those that do not form part of the viewing discipline's usual 'working set').

A singular example of this was a work titled *Forest* (2011), a selection of paintings made using *Echinacea angustifolia* tea. The *Echinacea angustifolia* plant combats caterpillar attacks by releasing the echinolone molecule, which prevents caterpillars who eat it from turning into butterflies. I used this tea to make a selection of tree ring paintings, which I took to dendrochronologist Edmund February in the Department of Biological Sciences, asking him to read them as if they were real felled trees.¹ Amongst other observations, February read the life of each 'tree' in terms of its age, water supply, orientation to sunlight and its sporadic fungal infections. This set in motion a working relationship with February upon which I depended for many works that developed thereafter, as well as a process I replicated with other practitioners. Another work that informed strategies used for this research was *The Experiment* (2011), a three-hour experiment and artistic performance that turned wine into water, reversing the first miracle Jesus performed at the wedding of Cana. For this, I worked closely with Clive Garcin² in the Chemical Engineering department, borrowing his expertise and a rotary evaporator, round-bottom flasks, beakers and electronic mixers to convert a bottle of red wine into water through repeated distillations and filtration. In terms of insider and outsider viewpoints, the methods and materials I used for this work would have looked familiar to the chemical engineering insider, but its motivation and outcome were somewhat strange. By collating the laboratory (its materials and its processes) and the story of the first 'empirical proof' generated by Jesus to encourage belief, the work highlighted the self-evidentiary attitude of science, revealing it to be just another form of belief.

My research in these years enabled me to build a network of connections across various UCT departments and – as a curator and artist and therefore an outsider – to identify connections in the research and objects in these various silos. When I started working at the CCA in 2012 on the Honours in Curatorship programme, these relationships were further developed as part of a range of exhibitions that formed part of the ARC programme, and they also fed into the teaching programme. I co-curated *Suspicious mind: Artists' exploration of mind and matter* with my colleague Fabian Saptouw to accompany a major international neuropsychology conference held on the Hiddingh campus in 2013, and it can also be credited for initiating some of the strategies utilised in my current research. In addition to a range of artworks by local artists that dealt with this theme, materials for this curation were gathered from different UCT departments and from further afield. Brain specimens were collected from the Pathology Learning Centre, educational anatomical models from the M.R. Drennan anatomy collection, old equipment from the Department of Chemistry and the Medical School, equipment from Tygerberg Hospital, X-rayed medicinal plant specimens from the Kirstenbosch National Botanical Garden, prints depicting Leonardo da Vinci sketches, phrenological charts and 1840 textbooks from UCT Special Collections. The project explored various strategies for engaging audience participation, from walls of free association, psycho-



Figure 2.

Nina Liebenberg. 2010. *Forest* (detail).
Echinacea angustifolia tea

A collection of *Echinacea angustifolia* tea rings read by botanist and dendrochronologist Edmund February: 'It would appear that the tree stood on a slope since there is more compression on the left-hand side, which indicates that side was under less tension. It could also be a branch of which the left-hand side would be its underside. The rings are uniformly wide which suggests plenty of soil and moisture availability. In comparison with the other two trees, the outer rings suggest less water or more competition.'



Figure 3.

Nina Liebenberg. 2010. *The experiment*.
An experiment in three parts that turned wine into water.

pharmaceutical dance moves (representations of the molecules of hormones known to help promote positive feelings – serotonin and oxytocin – converted into dance steps on the floor) and a screening room complete with Freudian couch, showing *Atomic brain invasion* (2010), *They saved Hitler's brain* (1968) and a range of other brain-related movies. During the period of conceptualisation and installation leading up to the conference, artist Katherine Bull contacted willing neuropsychology conference delegates from all over the world to sit for ambidextrously painted Skype portraits. These portraits filled a wall in the gallery and intrigued conference-goers on opening night. The exhibition formed part of the Honours in Curatorship programme, and students created multiple curatorial projects as part of the online exhibition catalogue and archive, focusing on the objects sourced from university departments as material for their curations and creating a depository of new interpretations for them based on, for example, personal associations, fiction or visual analogy.³

Visual analogy was also one of the many strategies Saptouw and I explored when choosing artworks for the show: a crochet embroidery by Pierre Fouché, *Psamma arenaria* (2007), which, though it looks like a brain, depicts a microscopic cross section of a blade of marram grass,⁴ and Kim Gurney's *The mother of all firewalls* (2012), a sculptural piece made from beeswax, gold glitter, bitumen, repurposed tiles, rabbit skin and glue, which again *seemed* to depict an EEG graph in its format (and by association with the other works in the room) but in reality referenced a graph plotted by Google Insights after Gurney inputted a range of new words that emerged from the 'Eurogeddon' of 2012, showing their incidence in news reports pertaining to this financial crisis between 2008 and 2012.⁵ In choosing these works, which only visually referenced the subject matter of the exhibition, Saptouw and I allowed their incongruous and strange conceptual content to enter the space, challenging the viewer to find relevant connections to these and other works on display.

Suspicious mind was the first project that allowed me to test the efficacy of artmaking and curatorship to address insider limitations in such a hands-on manner. Students, artists and delegates had the opportunity to meet and interact on opening night, and exhibition walkabouts were scheduled for the delegates in the following days. These events allowed the scientists to engage with the wide range of exhibition material representing the brain and mind (their objects of research) in strange and novel ways and offered some relief from the sessions they were engaged with during the conference proceedings, in which only the newest and most scientifically relevant research about their subject matter was presented. Dr Sasha Besharati, a lecturer in the Wits Department of Psychology and the NeuRL (Neuroscience Research Lab), attended the conference and recalls the immersive experience of 'moving in the brain' as she danced through the sequence representing the oxytocin molecule on the gallery floor.⁶ Dr Joseph Fernando, from the Toronto Institute of Psychoanalysis, remembers that the exhibition released 'a form of energy' in him, an occurrence he likened to Freud's theory on jokes and humour and their ability to similarly free pent-up energy 'because they allow some part of things usually repressed, a degree of access to consciousness'.⁷ UCT's Professor Mark Solms, then chairperson of the NPSA and one of the

main organisers of the event, highlights Katherine Bull's contribution as one that stood out for him. His interpretation of the portraits she painted of him reveals an insider's insight of an outsider object and shows how Bull's artistic process enables theories postulated in his field to manifest in unusual ways:

She painted my double portrait – with her left and right hand simultaneously – over Skype, and she did the same of my beloved (now deceased) colleague Jaak Panksepp on site at the exhibition. I am the grateful owner of both of those double portraits. They hang in my sitting room, so I am reminded daily of the conference and of my departed friend. It is fascinating to see how Bull's two hemisphere's processed both me and Jaak each in their different ways. In both of our cases, her left hemisphere painted us with heads that sloped slightly to the right and contained more precise detail; while her right hemisphere painted us more impressionistically, but I think captured our 'souls' more accurately.⁸

The exhibition had a second life when Comacare approached the curators to stage *Suspicious mind* as part of their World Design Capital Project, *Brainstorm the city*, the following year.⁹ Shown at the Iziko National Gallery Annexe, the new venue offered an opportunity to interact with the numerous school groups that visited the gallery on a weekly basis. As curators, we could reinvent the structure of the walkabout to engage with the schools and public in a manner that highlighted the difference between disciplinary perceptions. Led by the curators and a neuropsychologist from UCT, Dr Ross Balchin, the insights afforded by both disciplinary lenses trained on single artworks expanded on how the works on show (and the disciplines themselves) could be read and understood. Balchin's notes from the sessions reveal these dual interpretations.¹⁰ Discussing Fouché's *Psamma arenaria*, he noted:

The formal characteristics of this work remind me of a cell, and the fact that the brain consists of a 100 billion neurons, each having up to 10,000 connections. The detail of the plant that is depicted also references, for me, myelinated fibres, of which there are approximately 176,000 km worth in the brain of a human, enough to go roughly four-and-a-half times around the world.

Gurney's *Mother of all firewalls* and its emphasis on language prompted the following neuropsychological links:

Language is predominantly a left hemisphere (of the brain) function. The development of language has allowed us humans to raise thought processes to consciousness. It allows for an extremely efficient level of abstract thought, breaking us away from the concrete present, including thoughts about the future and what hasn't been seen. There is a clear evolutionary benefit to this ability, as it allows us to think through problems and their possible solutions in the virtual space of our minds rather than having to enact scenarios in the actual world.

I continued to explore the role of curatorship in addressing the insider perspective through a series of exhibitions and workshops from 2013 to 2020. *Where the wild things are* (2013), formulated for the Honours in Curatorship teaching programme, explored a site – UCT's Hiddingh campus, where the Michaelis



(top) Figure 4.

Pierre Fouché. 2007. *Psamma arenaria*

(bottom) Figure 5.

Kim Gurney. 2012. *The mother of all firewalls.*





(top) Figure 6.

Katherine Bull painting an ambidextrous portrait of neuroscientist and psychobiologist Jaak Panskepp. *Suspicious minds*. 2013. Michaelis Gallery, UCT.



(bottom) Figure 7.

A school group participates in pharma-psychological dance moves. 2014. *Suspicious minds*. Iziko Annexe, Iziko South African National Gallery, Cape Town.

School of Fine Art is located – as a discipline-specific (and therefore insider) space dedicated to the study of fine art, curatorship and drama. Though the campus is divided into workshops, studios, theatres and lecture halls dedicated to training in these disciplines, the history of the campus is in marked contrast to the Humanities activities it currently facilitates. The Egyptian Building (home to sculpture workshops and studios) was built on the site of a zoo established in the late 18th century that was replete with lion's dens and a small lake that supposedly housed a hippo. The campus was also the home to UCT's first Zoology and Botany building (now the Michaelis Building).¹¹ This historical perspective highlights both the site's colonial imprints and its early affiliation with the sciences. The UCT campus is divided into its main upper campus, a middle and lower campus, and a few satellite campuses, of which the Michaelis School of Fine Art and the South African College of Music form part. As a satellite campus, Michaelis students have limited interactions with students from the other campuses and thus rarely engage with outsider perspectives of their own practice. To address this isolation, I decided to activate the campus in terms of its history and draw attention to the characteristics that would have been relevant — and therefore visible – to the zoological and botanical students who had previously used the grounds.¹² As part of the conceptualisation stage, I invited Edmund February in his capacity as botanist and ecologist, and Hamish Robertson, then Director of the Natural History Collections of the SAM and an expert on biodiversity, to campus independently to launch the project, walking these outsiders through the space, taking account of their observations about its fauna and flora. Both February and Robertson's assessments were very dire and focused on the campus's lack of greenery, insects, birds and other forms of life. The resulting project consisted of various on-campus interventions that intersected with drawing and curatorial teaching modules running concurrently as part of the general teaching programmes of the school and sought to activate the presence and absence of its botanical and zoological life.

These ranged from a second-year drawing project that required students to adopt a campus tree and forge a relationship with it, to a walkabout in the herbal garden that drew attention to the history of the Cape as apothecary – a place for sailors to disembark and treat their ailments, assisted by the knowledge of indigenous healers.¹³ Students even walked around with binoculars and a bird guide on one of the days, identifying the different, albeit few, bird species they could find, under the guidance of Mell Tripp, a member of the Cape Bird Club who I invited to facilitate the activity. A small rotating exhibition staged on the landing outside one of the main exhibition spaces of the school featured a map of the campus, relaying its history and pinpointing all our interventions, and a small selection of daily rotated artworks that engaged the theme and served as further interpretive tools. The exhibition also featured a cabinet with a small selection of whistles from the Kirby collection, which, in their original context, were used for animal calling (their inclusion prompted by February and Robertson's dire account of our animal-less environment). In the context of this exhibition on the Fine Art campus, displaying these instruments facilitated an interpretation of their social function in the communities from which they were sourced, rather



Figure 8.

Where the wilds things are. 2014. Michaelis School of Fine Art, UCT.

than being regarded simply as the historic and silent wind instruments that they are presented as in the Kirby Collection.

In 2014, another exhibition sourced objects from departments on upper campus and displayed them on the Fine Art campus, inviting the interchangeability of insider outsider viewing. Incorporated into the Honours in Curatorship programme, *Appendix* supported the larger *Index* exhibition, staged in the Michaelis Gallery in celebration of the inauguration of Stephen Inggs as full professor. *Index* was a survey of his work across 25 years. Inggs employs an 'archaeographical' method of unearthing, collecting and photographing found objects. The works on display created associations and traces as indexes and indicators, linking our thoughts about the constructions of the past in relation to the present. In *Appendix*, staged upstairs in the Upper Gallery, students assembled pottery shards, soil samples and rocks from Hiddingh campus and combined them with specimens from the Archaeology department, applying methods of classification borrowed from the departments of both the Geological Sciences and the Biological Sciences. These objects and systems were subjected to the insider procedures of both departments: bones from archaeology were classified according to a whimsical system devised by one of the science-fiction mad curatorial students, as if the bones belonged to 'a time-travelling anthropologist – collecting samples across time and sometimes, across dimensions' and detailing all manner of fantastical beasts, aliens and mutants.¹⁴ Ceramic shards from the same department were submitted for analysis to a botanist in Biological Sciences, who was asked to identify the types of specimens depicted on the shards.

Here again was a conflation of insider and outsider views that extended the reading of an object beyond its disciplinary constraints and, in so doing, drew attention to the values ascribed to certain characteristics as opposed to others. These questions of value extended to the mixture of specimens presented in certain displays, such as the ordinary stones from Hiddingh campus that were displayed with specimens from the archaeological storerooms, flattening the disciplinary hierarchy by presenting them as visually similar.

As shown in these examples, the object collections of the university have served as a rich source of material for the Honours in Curatorship programme. Visits to these collections have formed part of both the annual workshops (in which they are used for curatorial exercises) and the teaching modules I have convened, in which students examine objects and pose questions to insiders. These running engagements have revealed naturalisations by introducing the outside perspectives of the curatorial students and, as in Maledu's curation of the drum, serve as an impetus to address naturalisations by subjecting objects to curatorial practice.

As briefly discussed in the introduction to this thesis, my research coincided with a major event in my institution in 2015, an event that has continued to exert its influence on staff, students and researchers and on my research and understanding of the chest and its role in the institution.

On 9 April 2015, the statue of Cecil John Rhodes, then displayed on the steps leading up to the main academic hall of the university, was removed following the initiation of the #RhodesMustFall movement. This and other



Figure 9.
Appendix (installation detail). Michaelis Upper Gallery, UCT.

events had many repercussions, but one in particular bears on this research – the urgent attention paid by members of the university community to how Western epistemic systems have excluded diverse knowledges. As this research has demonstrated, these systems form the foundation of most disciplines in the institution, and decolonising curricula has become a focus for much of the university since 2015. I was conducting the object-study on my chest at this time, and I was painfully aware of its prominent role in displacing indigenous healing practices and that the chest, as synecdoche, had facilitated the spread of Western influence. This caused me to question the chest's role and function in the institution. Locked up in its strong room, invisible to almost anyone else in the university, the chest took on the form of a virus to me, albeit, in its current location, a dormant one.

Manufactured in empire, it travelled to colonial outposts, was picked off a shelf and was transported into the interior of the continent where, throughout its journey, it embodied ideas of empire, infecting and spreading and undermining local medical practices even as they were appropriated. Like a virus hijacking a cell's DNA factory to produce its own, my object-study showed how Burroughs, Wellcome and Co. (BWC) did not obscure the fact that they found inspiration from local practices, admitting that many (if not most) of their medicines were either derived from outside Europe or had been in use for decades, if not centuries (Johnson 2008b: 261). However, this admission was only made in service of their larger claim that the real benefits of such remedies had only truly been discovered when recast through Western science and the laboratory (Johnson 2008b: 261).

The chest's status as a virus was supported not only by its overt ties to the colonial project, but also by its invisibility within its home department and facility. As the object-study demonstrated, the limiting scope of the library's taxonomic system rendered the chest invisible and unfindable. These same limitations actively kept the virus dormant and, remaining unseen, it continued to pose an invisible threat to its host.

The threat of this invisibility was treated in 2004, when, facilitated by artist-curators who selected it from the library and exhibited it on another campus as part of the *Curiosity CLXXV* exhibition, the chest surfaced for an extended period of time. Its inclusion in this exhibition amongst a selection of diverse objects hinted at a range of new meanings that it might also represent. Through this process it became apparent that curatorship offered a means of attenuating its viral characteristics and inoculating it against the threats they posed. Greenblatt (1991) posits that active curatorship can enable and celebrate diverse interpretations of objects in many instances, deflecting attention away from objects onto the systems that gave rise to them in the first place; this methodology therefore offered a means to continue weakening the chest-as-virus by making it ever more visible and displaying it with a diverse range of objects to encourage different interpretations. Facilitating a proliferation of meaning is a means of treating its Western hegemonic symptoms, and curatorship thus represented a means of weakening the chest-as-virus and converting it into a chest-as-vaccine – a conversion that took on a material form in the exhibition I staged as part of the practical component of this thesis.



Figure 10.

Chest: A botanical ecology. 2018. Object ecologies. South African Museum, Cape Town.



Figure 11.

Chest: A botanical ecology. 2018. Object ecologies. South African Museum, Cape Town.

Chest: A botanical ecology (2018–2019)

On 3 November 2018, the medicine chest appeared in an exhibition in the Iziko South African Museum. Wheeled into the San rock art gallery of the museum,¹⁵ the chest formed part of a mobile exhibition that consisted of a variety of artworks and objects sourced from various UCT departments in response to the medicine chest.

Structurally, the exhibition consisted of 15 modular interlocking cabinets constructed from the repurposed cabinets of *Curiosity CLXXV*. The new cabinets were of differing sizes and rested on top of one another, making up the front of the display. The cabinets were stacked against a wooden wall composed of four large individual rectangular sections that slotted into one another and contained a hidden display board, which could be pulled out of the sides of the cabinet to display additional information. There were no display cases on the other side of the wall units, and this space was used to hang (and lean) a small selection of artworks and objects. The whole exhibition rested on a large, industrial, steel turntable trolley of the sort regularly used on UCT campus to transport heavy loads from one location to another, and which similarly enabled the exhibition to be wheeled to different locations.

Situated slightly off-centre and to the left, the medicine chest occupied one of the many display cabinets. Because the interlocking cabinets made up the wall display, viewers were confronted by all 15 displays simultaneously and had to exercise their own discretion as to which cabinet they would investigate first. The structural make-up of the exhibition correlated with many of the formal characteristics of the medicine chest – from its mobility and hidden sections to the compartmentalised housing of its contents. It also embodied the shift from object-as-virus to object-as-vaccine and destabilised its Western hegemonic narrative by presenting the chest as one of many perspectives on healing and treatment.

To generate these multiple viewpoints, I drew on the array of intersections between the chest and the work of other departments in the institution that were revealed by the object-study – particularly the intersection with botany, because of the origin of much historic pharmaceutical material. I also drew on some already-forged relationships and ones that the object-study highlighted, presenting the chest to key insiders, who separated out and distilled individual characteristics of the chest. This process countered the sense of the chest as a powerful, integrated whole and slowly released it from the limiting categorisation and classification system of its host facility. The treatment also proved effective in combating the chest's invisibility, as each session lavished attention on it and each of the engagements contributed to the expansion of its meaning.

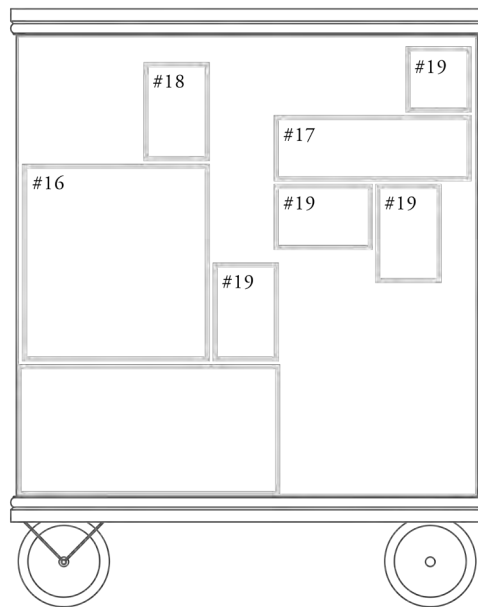
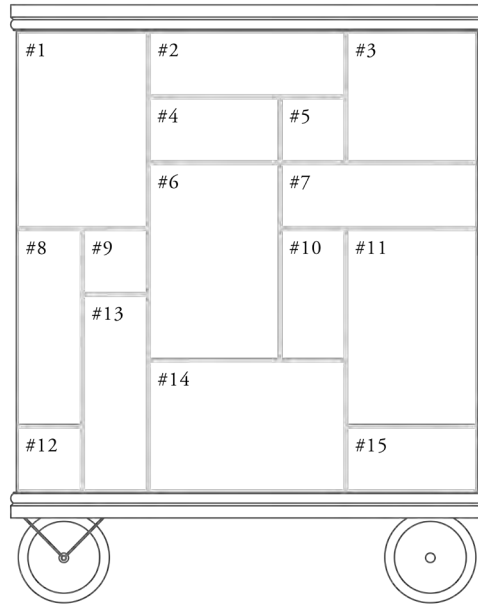
The revelation of my object-study that the chest was a lacuna in terms of local botanical medicinal remedies and practices served as inspiration for the first department I approached. By engaging with insiders of the Department of Biological Sciences, I reasoned that I could supplement the chest's Western content with local botanical knowledge. As the first viewing session, it was also the one that initiated the weakening of the chest's imperial viral load through an

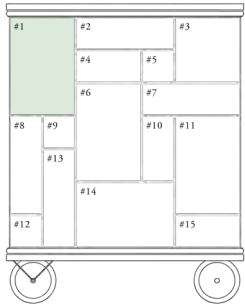
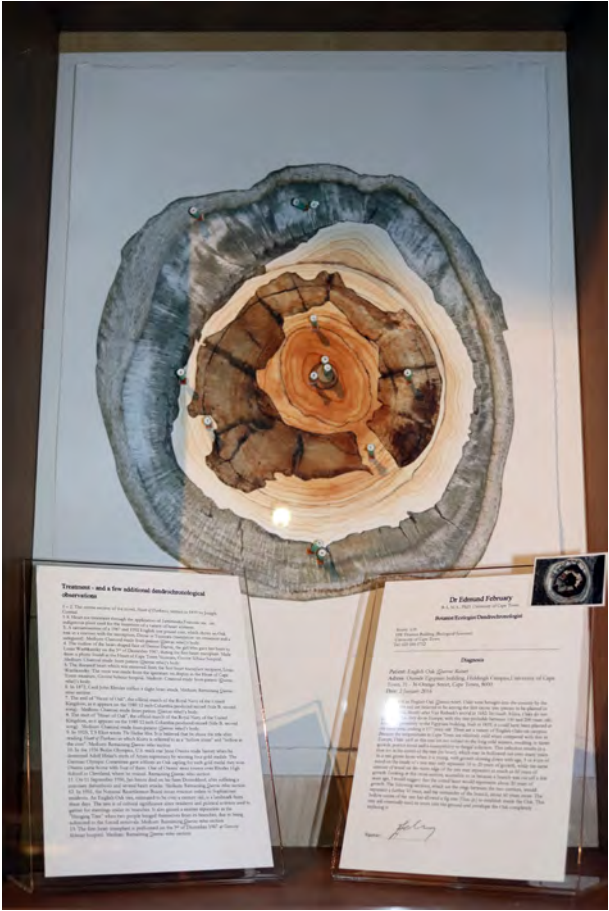


inoculation of additional meaning – a treatment with a surprising side-effect.

On presenting the chest to other disciplinary insiders afterwards (to Pathology and the College of Music, for example), I noticed characteristics that also resonated with the field of botany within these disciplines and their collections. These botanical resonances accrued as my disciplinary engagements increased and diversified, leading me to embrace this side-effect and to use botany as the central theme of my exhibition. The resonances generated in the different departmental viewing sessions resulted in new links with the chest but also in connections surfacing between disciplines such as zoology, dermatology, pharmacology and sound studies, for example. I drew on these visits and their outcomes to create a range of artworks that materialised the inoculation of the chest by manifesting how intersecting with diverse fields expanded its meaning, and I sourced objects from the collections that encouraged new interpretations.

The following section (based on the accompanying charts) details the contents of each of the 15 cabinets and the objects and artworks displayed on the back – and demonstrates the inoculations.





Situated in a cabinet at the top left of the display was an artwork titled *Quercus robur* (#1). Conducting an object-study on the medicine chest and exploring its ties to illness and disease led me to notice an old English oak (*Quercus robur*) growing on Hiddingh campus. This oak was first planted sometime in the 1830s and caught my attention because of its hollow trunk and the fig tree that had taken root in one of its side branches – a strange symbiosis that I have followed over the years. To learn more about this tree, I invited UCT dendrochronologist, ecologist and botanist Edmund February back to Hiddingh campus to share his views on the tree and its condition.

According to February, English oaks were first brought into the country by early settlers and were one of the first exotic tree species to be planted in South Africa, shortly after Van Riebeeck's arrival in 1652. February explained that in South Africa these trees do not grow as old as they would in Europe. Our high temperatures cause them to grow faster than those back home, and their centres consequently rot and their hearts are hollowed out over time. On hearing this diagnosis, I set out to treat the tree through various artistic interventions acted out on a digital print of the tree: I filled the heart cavity with paint made by boiling the leaves of the *Sutherlandia frutescens* bush, an indigenous plant used locally for the treatment of heart disease (Van Wyk & Albrecht 2008: 626), an action which I viewed as remedying the lacunae present in both the medicine chest (with its disavowal of local botanical remedies) and the tree. In addition to filling the cavity with new tree rings, I inserted hypodermic needles into selected tree rings, marking the years in which political, cultural and social events relating to hearts or oaks occurred. These seemingly disparate and arbitrary events gain significance and synchronicity when anchored and contextualised by this specific tree and its campus. The heart attacks that Cecil John Rhodes and Jan Smuts suffered in 1872 and 1950 respectively seem, for instance, to manifest the tree's state in the human domain, while a marker on tree ring 1936 references the year U.S. track star Jesse Owens made history and destroyed Adolf Hitler's dream of Aryan supremacy by winning four gold medals at the Berlin Olympics – where the German Olympic Committee gave athletes an oak sapling for each gold medal they won (Saito 2011). One of Owens's trees now towers over Rhodes High School in Cleveland, where he trained.

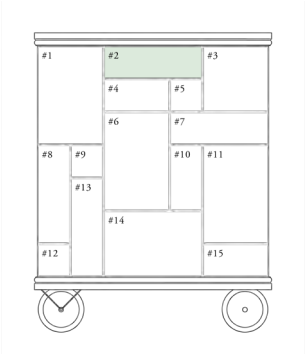
Markers reference ring 1967, the year Chris Barnard performed the first heart transplant at Groote Schuur hospital, and 1925, the year T.S. Eliot wrote *The hollow men*, which some believed he titled after reading Josph Conrad's *Heart of darkness*, in which Kurtz is referred to as a 'hollow sham' (Conrad 1988: 67) and 'hollow at the core' (Conrad 1988: 58). Ring 1951 marks the year in which the National Resettlement Board issued eviction orders to Sophiatown residents, which led to two residents hanging themselves from the branches of a local English oak tree – a tree that served as a meeting place for political activists and residents over the years.

These are only a few examples. I also used charcoal made from the tree's fallen twigs to add tree rings, circumnavigating certain objects relevant to my newly formulated botany- and cardiology-themed 'curriculum'. The new rings were generated by tracing the outlines of, for example, a 1987 and 1992 English

one pound coin, which on one side depict an oak tree in a coronet; an outline of the diseased heart removed from the first heart transplant recipient, Louis Washkansky, on display in the Heart of Cape Town museum at Groote Schuur hospital; and a ring that corresponds to the circumference of the ‘Heart of oak’ (the official march of the Royal Navy of the United Kingdom) track as it is positioned on a 1989 12-inch Columbia-produced record.

In performing these treatments and drawing attention to these events and occurrences, the work demonstrates the capacity of a single object – in this instance, an ill tree – to resonate and intersect with diverse fields, from history and politics to culture and science.

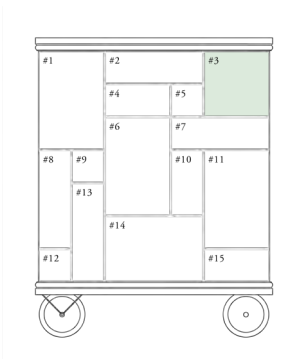




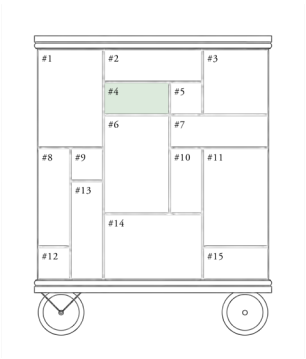
The cabinet (#2) next to *Quercus robur* displayed a selection of glass slides of the insects, ticks and worms that are the primary or intermediate hosts or carriers of human diseases. These slides also featured in the *Curiosity CLXXV* and *Subtle thresholds* exhibitions, sourced from the Pathology Learning Centre (PLC), where they were originally donated by the secretary of the Department of Microbiology. Dr Yeats identified them as glass photomicrographs and speculated that they were probably made for a special projector used for teaching many years ago.¹⁶ These slides relate to many of the bottles in the medicine chest, such as the Iron and Arsenic, the Quinine Bisulphate, and the Quinine and Cinnamon.

Diseases such as malaria, trypanosomiasis, relapse and yellow fever were a significant obstacle to European penetration of large parts of Africa (Headrick 2014). Insects such as the mosquito and the tsetse fly set the boundaries for European occupation for many years until the development of these medicines. Armed with these chests, Europeans could venture further into the interior and occupy the coastal areas that were pivotal to securing trade routes. Africans were displaced from their homes and forced into the tsetse-infested lands they had hitherto avoided – with devastating effects on their health and livelihoods (Headrick 2014).

The slides in *Chest: A botanical ecology* were mounted on mirror, its reflective qualities raising awareness in visitors of their potential implication in the spread of disease, particularly in terms of the history of the African continent, where the introduction of certain diseases by outsiders ravaged local populations with no resistance to these strains (Headrick 2014).

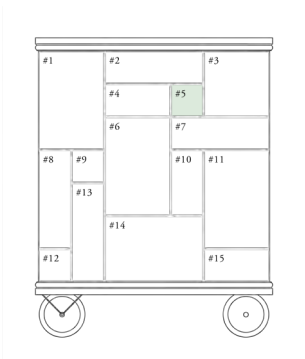


The bottles and pipettes in *Forest* (#3) were originally sourced from the storage rooms of the Chemistry department, where they awaited disposal, and responded to the lacuna of indigenous material represented by the chest. I addressed this imbalance by filling the bottles with teas made from local medicinal plants. Staging the bottles and pipettes to simulate a forest references the prejudice of Burroughs, Wellcome and Co. (BWC) against these natural remedies, ‘purifying’ them through laboratory processes before they were deemed trustworthy and marketable. This process also occluded the original source of the remedies and sowed the seeds of biopiracy. The various items of glassware in this cabinet were filled with a selection of infusions made from *Balotta africana*, *Sutherlandia frutescens*, *Agathosma crenulata*, *Melianthus major*, *Mentha longifolia*, *Petroselinum crispum*, *Hypoxiz villosa* and *Salvia officinalis*.



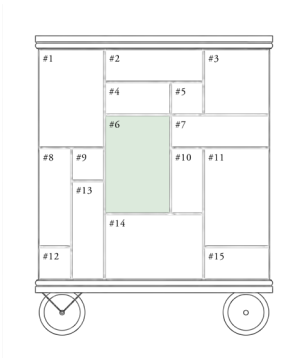
Made from oak, the object in this display cabinet (#4) was used to support a cadaver's neck during post-mortem examinations at UCT's mortuary. My first encounter with it was in Dr Yeats's office in the PLC many years ago. Heavy in weight and invested with the traces of hundreds of individuals, it somehow seemed more representative of disease than the 3,500 specimens floating in formaldehyde displayed in the surrounding rooms. The medical insiders handle and view the formaldehyde bottles to identify the visual markers of disease on the surfaces of the specimens – signs which, to me as an outsider, remain abstruse. However, I can read and understand the multiple discolorations and the hundreds of scalpel incisions on the surface of this piece of oak, representing the wounded, traumatised and fatally ill body in a far more pronounced and affective manner than the official specimens. This affective experience facilitated by an inanimate object contrasts the clinical way medical students utilise their insider knowledge when viewing a diseased organ that once belonged to a particular individual. As the patient's individuality and history are only ever brought into consideration when they are relevant to specific markers on the specimen, such as the lungs of a smoker, the subjective experience of disease remains absent. As a curiosity and a leftover of the department, this affective encounter with an inanimate object suggests this absence and highlights the disjuncture between clinical analysis and subjective experience and its repercussions for adequate patient care and treatment.

The marketed associations of the medicine chest with impossible feats and indestructability also provide a juxtaposition with this oak neck support that represents fragility, fallibility and the circumstantial shortcomings of medicine.

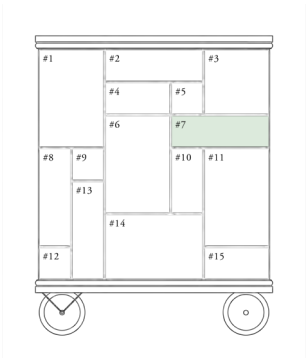


This cabinet (#5) displayed a round-bottomed flask that broke during the installation of the exhibition, and which I attempted to mend. The accompanying BWC medicine chest manual highlights the qualities the company wanted to portray as unique to the Tabloid medicine chest and that they believed would set them apart from competitors – such as the longevity of the medicines they sold and the indestructability of the chests (BWC 1925: 2–3).

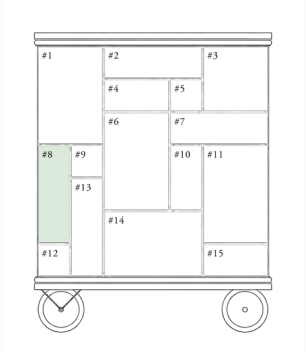
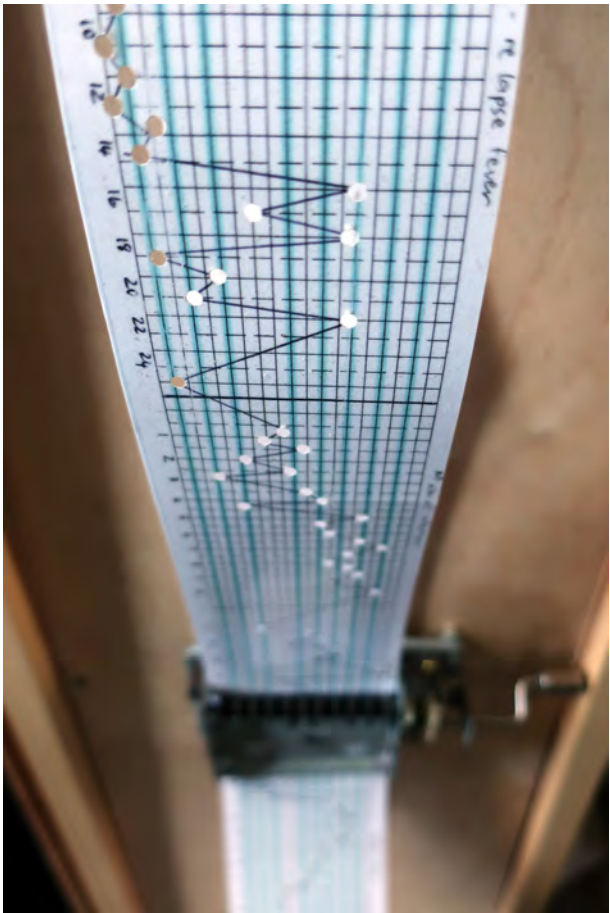
Addressing the supposed indestructability of the chest by focusing specifically on the wide array of glass-stoppered bottles that form a large part of its overall contents and which, according to BWC, ensured the longevity of the medicines, this exhibit displayed a laboratory bottle of similar material, but in a state that demonstrates its fragility. As such, it subverts BWC's grand claims of indestructability and thereby throws the rest of its claims into doubt. The broken bottle also resonates with the oak post-mortem neck support, visually alluding to the fragile state of the diseased body and to processes of care exerted by health practitioners on the ill and by curators on objects.



The medicine chest was displayed in this cabinet (#6). Made from japanned metal with a leather strap, its contents are: a Tabloid guide listing the various medicine cases manufactured by BWC and their applicability to different journeys and destinations, as well as common ailments and their treatments; paper packages of chlorate of potash, toothstoppers and medicine droppers; a cylindrical black container labelled 'idodoform'; smaller glass bottles filled with opium, phenacetin compound and calomel; and a selection of bigger bottles containing blaud pills, hazeline, quinine bisulphate, soda-mint, ginger essence, ammonium bromide, Dover powder, corrosive sublimate, quinine and rhubarb compound (Livingstone rouser), laxative vegetable, tonic compound, pepana, chloroform and morphine, quinine and cinnamon, iron and arsenic compound, tannin, zinc-sulphate and ipecacuanha.



This cabinet (#6) extended the ideas of fragility and fallibility represented by the broken glass laboratory bottle, displaying four ‘breath sculptures’ made by the five individual breaths of children who suffer from asthma: Thaakira Salie (aged 8), Ziyaad Small (aged 10), Blake Leppan (aged 9) and Jessie Allot (aged 11). Working in collaboration with the Allergy Foundation of South Africa and Andre de Jager, UCT’s resident glass blower in the Department of Chemistry, I facilitated a workshop in which the children were taught the practice of blowing glass and then produced their own sculptures by breathing into molten glass. The breath sculptures made by these children were far removed from the functional bespoke glassware usually produced in the workshop for chemical experiments or for those conducted for physics and chemical engineering (A. de Jager, personal communication, 20 August 2018). By using breath associated with struggle and impairment to produce an object of wonder, these sculptures acknowledge and celebrate the preciousness of a single breath – easily taken for granted by others. In the mobile exhibition, the sculptures were placed on a glass shelf with the backdrop of a eucalyptus tree (used in the treatment of respiratory problems) and trembled ever so slightly as visitors walked past throughout the day.

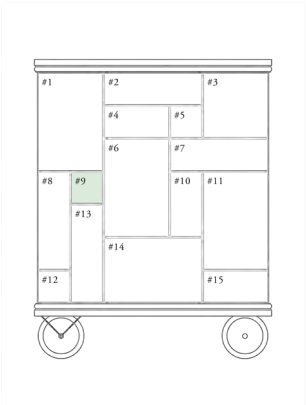


In this work (#8), the temperature graphs of individuals suffering from malaria, yellow fever, trypanosomiasis and tickborne-relapse fever – all viewed as ‘tropical’ and treatable by the contents of the medicine chest – were converted into a musical score. I punched the strips of paper of a hand-cranked musical box mechanism with holes that corresponded to the graphs – the vertical axis representing temperature variations and the horizontal axis representing the approximate number of days the fever is said to last. The translation of these graphs into notes seems nonsensical, as we do not listen for a temperature; we measure it by feeling a forehead or taking a reading with a thermometer. The practice of listening has, however, been part of the history of medicine since the days of Hippocrates (c.460–c.370 BC), when physicians performed auscultations of the lung and heart by placing their ear directly on the patient’s chest (Montinari & Minelli 2019: 184).

Hippocrates described the first thoracic sounds, such as the friction rub of pleuritis (‘a creak like new leather’) and a range of other medical sounds (Montinari & Minelli 2019: 184), while in his 1616 ‘visceral lectures’, Harvey compared heart sounds to ‘two clacks of a water bellows to rayse water’ (Wright in Montinari & Minelli 2019: 184). The process of using the sound from internal organs to diagnose disease was fine-tuned in the 19th century by the French physician and musician Laënnec, who, to avoid the embarrassment of placing his ear on a girl’s breasts, used a tightly rolled sheet of paper, applying one end to the woman’s chest and the other to his ear (Montinari & Minelli 2019: 185) – a procedure that led to the development of the stethoscope, still in use today and one of the first instruments acquired by any medical student in training.¹⁷

Laënnec occupied two insider (or outsider) positions, of physician and musician, and was uniquely placed to understand the subtleties of sound and its enhancement through the application of the cylindrical shape present in the make-up of many instruments he would have been familiar with. I would argue that his default fashioning of a piece of paper into this shape to save embarrassment was informed by his insider knowledge of music and sound; applied to an outsider field, this action led to discovery.

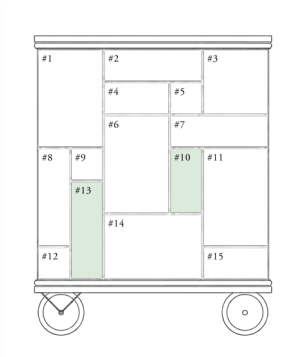
Translating fever graphs from the medical domain into a musical score suggests similar possibilities by conflating representational systems, rendering each insider set of data strange and opening them up to outsider considerations.



A *'jungle'* consisted of a selection of pathological specimens from the Pathology Learning Centre that had been affected by typhoid fever, ascaris adult worms, yellow fever, amoebic ulcerations, tuberculosis and malaria (#9). The diseases that afflicted these specimens were regarded as 'tropical'.

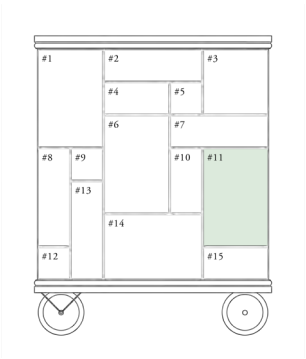
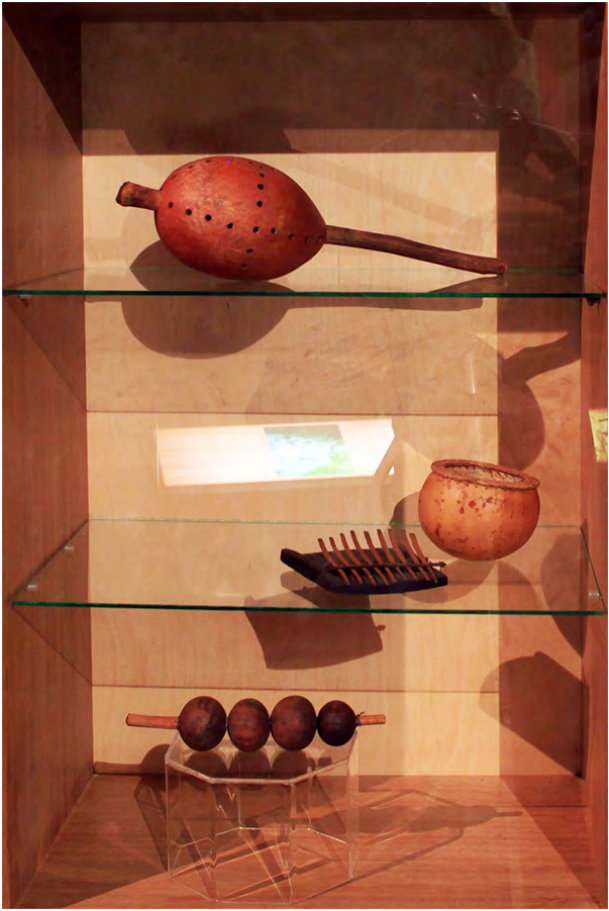
As described in Chapter One, BWC used the jungle as a significant terrain that called for a medicine chest to combat pathogens: 'Whether you were valiantly saving your compatriot in war, traversing a dark African jungle, navigating one of the world's first flying machines, exploring the most desolate place on earth, ascending the highest mountain in the world, or simply enjoying the windswept British coast, the chest would be there, ready for any ailment' (Johnson 2008b: 255). BWC promoted their chests as the ideal antidote for a tropical landscape 'at once full of potential wealth for imperial Britain, but simultaneously rife with disease' (Johnson 2008b: 258) and claimed that the tropical colonies were 'by far the most dangerous regions for travellers' (BWC 1934: 8). It was here that 'desolating ailments' were encountered, all 'particularly fatal to the so-called white man who originates in temperate climates' (BWC 1934: 8). Creating a visual link between the UCT specimens and the history of these diseases surfaces the occluded racial undertones of these understandings.

I adapted the colour of the images of afflicted intestines, livers, stomachs and brains and used them as material to construct a dense jungle that referenced this aspect of the medicine chest's history. Printed on separate glass sections that fit into the cabinet at spaced intervals to create an illusion of depth and three-dimensionality, the work draws on the cross-sectional display technique used in many anatomy museums worldwide, in projects such as the Visible Human Project (1995)¹⁸ and in the work of artist Damien Hirst¹⁹.



For *Planthology* (*Bulbine frutescens* and *Lessertia frutescens*) I sourced two medicinal plant specimens from Kirstenbosch National Botanical Garden and x-rayed them at Groote Schuur Hospital (#10 and #13). These two local plants offer a wide variety of healing properties and address the lacuna of the chest. The fresh leaves of the *Bulbine frutescens* produce a jelly-like juice that can be used for burns, rashes, blisters, insect bites, cracked lips, acne, cold sores, mouth ulcers and areas of cracked skin, while an infusion of these leaves in a cup of boiling water can be taken for coughs, colds and arthritis (Harris 2003: online). The *Lessertia frutescens* is used as an immune booster in the treatment of HIV/AIDS, as a medicine in the treatment of chicken pox, internal cancers, colds, asthma, TB, bronchitis, rheumatism, rheumatoid arthritis and osteoarthritis, liver problems, haemorrhoids, piles, bladder and uterus problems, diarrhoea, dysentery, stomach ailments, heartburn, peptic ulcers, backache, diabetes, varicose veins and inflammation (Xaba & Notten 2003: online).

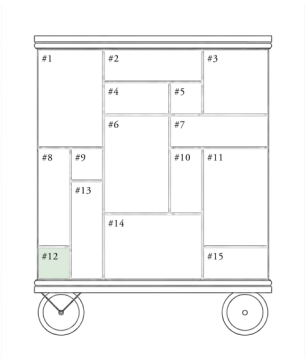
These works originally formed part of a series I made when I worked as a creative consultant in the PLC in 2011 and 2012. A conversation with Yeats revealed that most of the plants she introduced to the environment had mysteriously died. In response, I x-rayed a selection of indigenous plant specimens – the starting point of many diagnoses in human medicine. In subjecting the plants to this process and placing the x-ray images in a space that foregrounds the diagnosis of human disease, I intended to create a heterarchical shift in this relationship, considering a world in which the degree of care directed toward human ailments might be replicated in treating diseases manifest in the botanical world.²⁰



The presence of the chest in the Kirby collection activated three of the instruments as antibodies or counter-narratives. These instruments – two gourd rattles and an iodophone (#11) – undermined the chest and resonated with the first botanical viewing session to which it was subjected. The instruments were used in Venda healing rituals to exorcise evil spirits – practices disavowed by the colonial insider's view of the objects and the insider's view of the host department. The instruments resonate with the Department of Biological Science (Botany) because of their organic materiality, and here I saw an opportunity to apply one of the strategies I developed during my MFA research: inviting insiders to train their eyes on an object outside their discipline. I invited Edmund February to the Kirby collection to view the instruments and learn his thoughts on them from a botanical perspective.

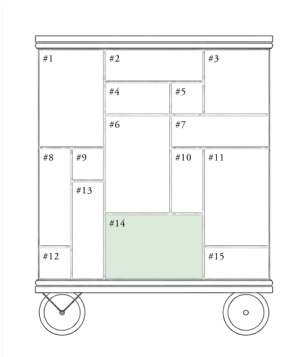
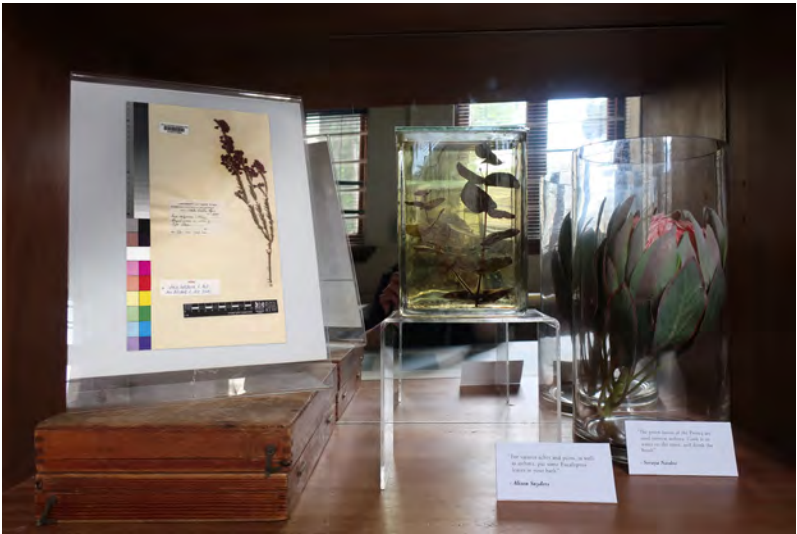
February identified the dancing rattles as being made of the seed pods of *Oncoba spinosa* (Venda: *mutuzwa*) and the seed pod of *Adansonia digitata* (Venda: *muvhuyu*). The wood of the iodophone was, however, unrecognisable as a result of its handling. February also contacted colleagues in the Department of Zoology and the School of Mathematical & Natural Sciences at the University of Venda, who connected me to a Venda diviner, Muanalo Dyer, who uses similar baobab rattles (and other materials from that tree) in her healing practices.

This interdisciplinary engagement showed that these instruments, supposedly frozen in their early 20th century understanding of being on the brink of extinction, remained very much functional in the present.²¹



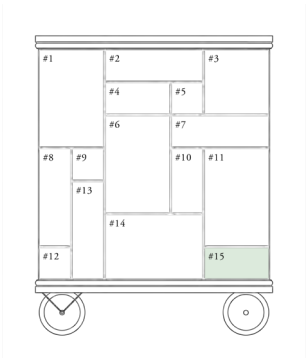
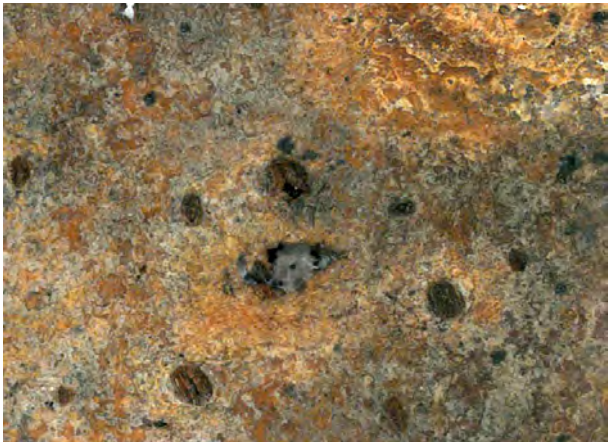
In this small corner cabinet, a small wooden chip from the same object collection as the medicine chest was balanced on top of one of the bottles from the chest (#12). The treatment, the Livingstone rouser, was formulated by Dr Livingstone, who, after an attack of malaria in 1853, patented this mixture of quinine and purgatives (calomel, rhubarb and jalop) mixed with opium (Barrett & Giordani 2017: 1655–1666). The chip balanced on its lid is said to be from the almond tree under which he proposed to Mary Moffat in 1844. The juxtaposition of these two objects, one representing the quantifiable and the other the poetic, draws the viewer to consider the conflation of these two realms. Livingstone, revered as a heroic explorer of the ‘Dark Continent’ well into the 20th century, occupies a somewhat more complex status locally and in 21st century post-colonial scholarship, where his geographical exploration of the African continent is viewed as preparing the way for colonial conquest (Bloch 2016: 156). His instrumental role thus coincides with that of the medicine chest, which also enabled the spread of colonialism by easing access to geographical areas previously viewed as disease-ridden and dangerous.

The chip of wood also casts an outsider view on botany and its strange relationship with colonial history, evident in the ‘robust global trade’ in different-sized pieces of wood from this particular tree conducted from about twenty years after Livingstone’s death well into the 1930s. There was demand for sections of wood associated with other areas of Livingstone’s life, too, such as the mvula tree under which his heart was buried in Ilala, Zambia in 1873, the mango tree under which Livingstone met Henry Morton Stanley in Ujiji, Tanzania, and the baobab tree under which his wife, Mary, was buried in Shupanga, on the banks of the Zambezi River, in 1871 (Bloch 2016: 154–155).



This display consisted of two botanical specimens – a twig of eucalyptus and a protea – floating in ethanol (#14). The plants were bought from the Adderley Street flower market in central Cape Town and are used by the sellers for medicinal purposes to treat chest and respiratory problems, with the leaves of the eucalyptus added to a bath and those of the protea infused in hot water and drunk as a broth.²² The flower sellers trading in Trafalgar Place and along Adderley Street have been doing so since at least the mid-1880s but became viewed as threats to the local flora by the European settlers at about the same time the medicine chest was first introduced to the city at the beginning of the 20th century. The settlers initially preferred to cultivate plants imported from their home countries to indigenous varieties, introducing many species to South Africa for nostalgic or practical reasons (subsequently problematic for local biodiversity) (Van Sittert 2002: 103). In the wake of the emerging nationalism of the white settlers in the 1890s, interest in indigenous plants gained momentum and was deployed to create a sense of belonging to the ‘foreign’ land (Boehi 2013: 133). A botanical discourse was mobilised to underscore ideas about identity and belonging, such as ‘roots’ and ‘ideas of rootedness’, and laws regulating flower picking (which usually occurred on the mountain) were passed in this period and were secured by the Wild Flower Protections Act in 1905 and an amendment thereto in 1908 (Boehi 2013: 133).

The cabinet also displayed a printed copy of a botanical specimen (K000225239) found in the Royal Botanic Gardens of Kew that was donated to the Gardens by UCT. Described in pen in the notes section, the specimen is of the local *Erica latiflora* and was collected in 1908, when it was ‘bought fresh in the streets of Cape Town’. The insider details noted on this specimen reveal much to outsiders such as Boehi (2013) and Van Sittert (2010) – scholars who have written about the colonial history of botany in the Cape and the unofficial presence of the flower sellers in the provenance of many specimens from the Cape kept in international herbaria.

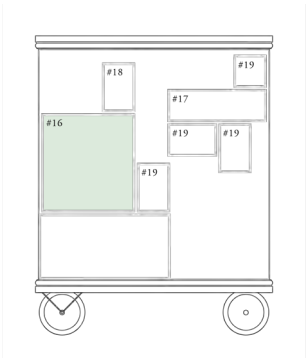


For this display (#15), I collected leaves from the gardens around Groote Schuur Hospital and gave them to UCT dermatologist Ranks Lehloenyia for analysis.²³ Using the strategy of directing insider focus to an outsider object, Lehloenyia treated these specimens as sections of skin and read them accordingly, highlighting sections that showed signs of nummular eczema, acne, ageing, miliary tuberculosis and melanoma, to name a few. He followed this session up with a request that I conduct a similar open session with the dermatology registrars, as he believed these exercises could enhance their perception of pattern recognition by exposing them to images that are not as naturalised as the textbook examples used in training.²⁴

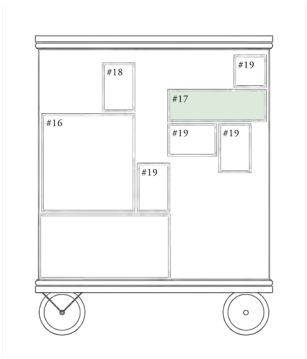
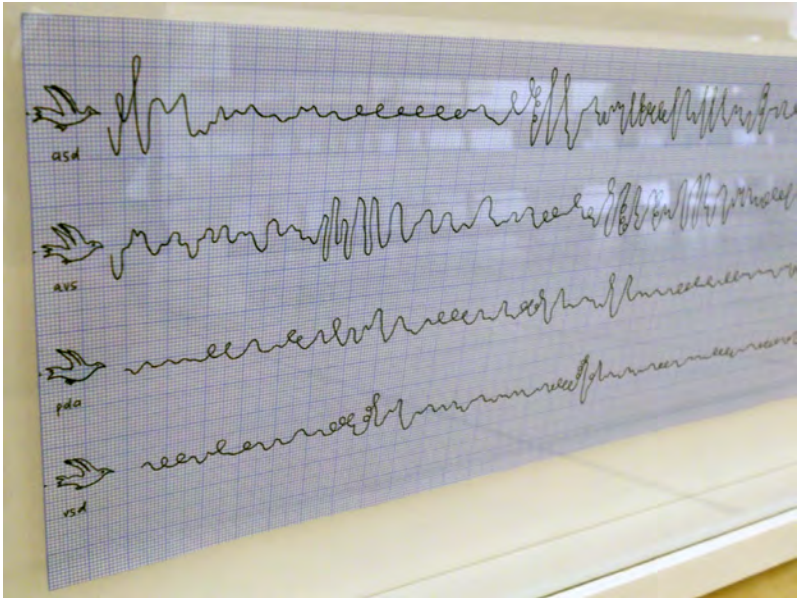
This section (bottom example) shows characteristics which could point at various causes. The darker raised sections could be blackheads as seen in acne (note the darker central area reminiscent of an open pore); villous hair cysts (a condition in which hair follicles are trapped under the skin to form pimple-like structures with the hair giving a dark hue in the centre; syringomas (non-cancerous proliferation of sweat glands); infections such as chicken pox or miliary tuberculosis in which the infection spreads from the blood onto the skin (miliary means it looks like a millet seed). It could also be metastatic melanoma that has spread from another area onto this skin.

The nonsensical activity of reading the epidermis of a leaf for signs that correlate to dermatological markers references the nonsensical activities performed not so long ago in the broader context of the country, when an individual's skin was read and judged according to apartheid prejudices. Sourced from Groote Schuur Hospital, well-known as the venue in which the first heart transplant was performed in 1967, these specimens, now activated in terms of their racial connotations, also spoke to more occluded histories in the space, such as the lesser-known racial politics that formed part of the first heart transplant.²⁵

In 2017, while walking down Hospital Street, the main connecting passageway of the hospital, I investigated the object and textual displays that relay the history of the hospital. Reading the label of one of these displays – an unassuming collection of white crockery (plates, teacups, saucers and bowls) with different bands of colour around their edges – revealed a sinister past. The cutlery was acquired during apartheid, when each coloured band corresponded to the race to whom it should be given. As such, these markings, which seem like simple circular lines on a white background, become the unsettling markers of past injustices.



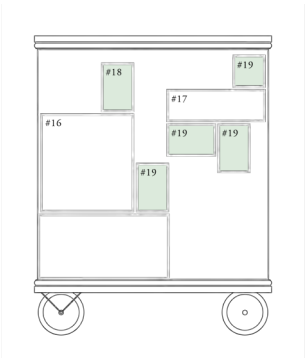
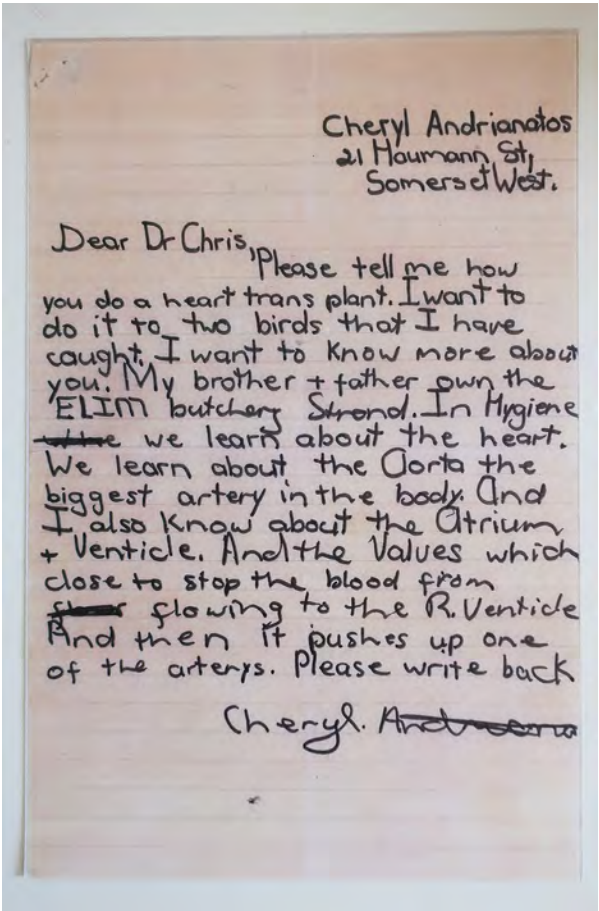
This work, *1975 (Invasive species)*, is a cross section of cluster pine with a ring of R4 assault rifle bullets lodged inside it (#16). The work materialised and conflated historical and botanical insider views of this specimen, whose bark has many medicinal qualities (it contains proanthocyanidins, which improves blood circulation and the effects of allergy and protects the skin from sunlight). In 1975, after attaining independence from Portugal, civil war broke out in Angola. That same year, South African Prime Minister B.J. Vorster authorised the South African Defence Force to intervene – part of a continuing period of conflict in South African history known as the Border Wars. From a botanical point of departure, the cluster pine (or *Pinus pinaster*) is native to Portugal. In South Africa it is seen as invasive, competing with and replacing indigenous species. I used the cross section of cluster pine for target practice, aiming a ring of R4 assault rifle bullets at ring 1975. This brutal wounding reflects and marks the time and activities of a particular human history on both a conceptual and affective level.



Flight is a work in two parts (#17). The first, a pen and ink drawing on graph paper, plotted the heartbeats of children affected by various heart abnormalities: atrial septal defect (ASD), ventricular septal defect (VSD), patent ductus arteriosus (PDA) and aortic valve stenosis (AVS). The abbreviations of the medical terms were inscribed at the start of each graph line, accompanied in each case by a small drawing of a bird. In the second work, the recorded heartbeats were transposed to a higher frequency to simulate birdsong. A QR code enabled the viewer to listen to the piece.²⁶

Many of the BWC medicine chests were used in ‘first flights’ across the world and, as stated in its accompanying manual, aided in ‘the struggle to add the air to man’s dominion’ (BWC, 1925: 12). In ‘balloon, airship and aeroplane, they have been, and are being used by men whose initiative, resources and daring we owe it, that today the “conquest of the air” is no longer a vision but a reality’ (BWC 1925: 12–13). Listing the ‘pioneers in the world of flight’ – Andrée’s historic attempt to reach the North Pole by balloon, Chávez’s first flight across the Alps and Paulhan’s flight from London to Manchester – the manual emphasises the appeal of these chests in their ‘portability’ and ‘unique utility’ to these great ‘men of the air’ (BWC 1925: 12–13).

The narratives of these men’s superhuman feats are juxtaposed with the material that forms the focus of *Flight* – the heartbeats of four sick children recorded by advanced auscultation technologies. The initial impetus for this work stemmed from research conducted for my MFA research, in which I drew on Barnard’s written account of the heart transplant. Barnard equates the jagged line on the ECG of Washkansky’s faltering heart with a bird struggling to take flight and crashing down every time it manages to lift off.²⁷ The association of the human heartbeat with birdsong has a long history, both in medical discourse and in romantic poetry. In older medical textbooks it is often said that a systolic murmur may have a ‘cooing dove’ or ‘seagull quality’. This ‘seagull’s murmur’ is caused by ruptured chordae tendineae, aortic stenosis or mitral regurgitation (Murthi 2013: 400).





In addition to the larger works, the smaller *Foxglove* (#18) was perched near *Flight*, a botanical specimen of this flower used to remedy weak hearts.²⁸ Made up of surgical gloves, Band-Aids, syringes and IV-tubing (with an infusion of foxglove leaves in its stem) the work mimicked the language of the herbarium specimen, drawing a viewer in to examine the content they were expecting, only to surprise them with its incongruous materials. A selection of children's letters written to Dr Barnard after he performed the first heart transplant (#19) was also hung on this wall, sourced from the Heart of Cape Town Museum in Groote Schuur Hospital. In one, a little girl asks how to perform a heart transplant on the dead dove she found in her garden, while in another a girl relates how she caught a fish she thought was dead, but whose heart started beating again a few hours later ('Can you explain that?' and 'If a doctor says you're dead and they take out your heart but it is still beating, are you dead or alive?')

Chest: A botanical ecology manifested the conversion of the object-as-virus into the object-as-vaccine by utilising a variety of strategies. In the next section, I discuss these strategies as a series of attenuations and elaborate on how each one weakens the viral characteristics of the object.

Attenuations:

Mobility

This strategy was represented as a physical manifestation – by a mobile set of cabinets that could be wheeled into different spaces and by my movements between or across spaces in the university, both physically and conceptually, as an artist-curator outsider since 2010. I moved physically between university departments to assemble artworks; encouraged visitors to the exhibitions I staged to traverse these spaces in order to navigate the connections alluded to in labels or in formal choices; and constructed an entire exhibition that could be wheeled into any context. Curation became instrumental in working with the objects and in engagements between the different departments and their researchers, as evidenced in the strategies that trained insider views on outsider objects or in the convening of workshops that invited a range of disciplinary speakers to the Fine Art campus to engage with the curatorial cohort about their discipline. Objects facilitated this mobility through their materiality and their affordances, which extend beyond any single disciplinary understanding and were used as material for workshop exercises and for artworks and curations.

Vulnerability

In *Chest: A botanical ecology*, the proclamations made and advertised by BWC about the indestructability of their chests (and by default, their empire) were undermined in various ways to attenuate their viral properties. The wall text accompanying the exhibition stated that ‘Illness and disease affect us all’. These conditions are by no means devoid of political, social and cultural content (as illustrated by Foucault’s biopolitics (1979) and the pandemic of 2020, which has been linked to discrimination and racism in its effect on minorities (Ro 2020)), but they generally elicit sympathy and can function as common denominators across cultures. Though the medicine chest has been understood in terms of its colonial ties, its allowances – as an object representative of disease and its assault on the body – make it relatable to a wider audience and make it capable of generating an affective response. Themes such as fragility (in opposition to endurance) and heterarchy are explored in many of the works on display. The materiality of the chest also becomes a tool with which to illustrate some of the points raised thus far.

Drawing on the proposed indestructability of the chest and focusing specifically on the wide array of glass-stoppered bottles that form part of its

contents and which, according to BWC, ensured the longevity of the medicines it carried, the exhibition used glass to suggest the opposite: a glass bottle that broke during the installation process and was painstakingly glued back together ‘to the best of the artist’s ability’ (as stated on its label), and the very fragile glass vessels formed and shaped by the breaths of the five children suffering from asthma, which trembled when anybody passed the cabinet.

Many works in the exhibition referenced juvenile diseases or childhood. The inclusion and creation of these works and objects drew attention to the fragile body – children being the first to succumb to disease because of their less-developed immune systems – but also to the state of abundant curiosity exhibited when still young. For writer and eco-feminist Donna Haraway, curiosity is intimately tied to care and a disarming form of knowledge: ‘Caring means becoming subject to the unsettling obligation of curiosity, which requires knowing more at the end of the day than at the beginning’ (Haraway 2008: 36). To be curious is to care, to feel concern for and to become implicated with.

The relationship between care and curiosity is particularly evident in letters written to Dr Chris Barnard by children after the first heart transplant in 1967. Two in particular evoke curiosity and care, though in relation to animals rather than people: a little girl asks him how to perform a heart transplant on the dead pigeon found in her garden and another one writes how she found the heart of the fish she caught and killed still beating two hours later – a distressing discovery that leads her to ask very intelligent questions about when a person or animal is really dead. The latter question has plagued science for centuries and became very prevalent in the lead up to the first heart transplant.

With its references to juvenile heart diseases, *Flight* also emphasised the fragility of the young, while the materiality of the oak neck support references the fallibility of the human body and the failure of medicine.

Many of the works conflated the occurrence of disease in human and plant life to evoke an empathic response that embraced both parties. Plants were treated as patients in many works, as in *Quercus robur* and *Planthology* (where plant specimens were X-rayed). Other works were geared toward evoking an initial emotive response in the viewer, followed by surprise that this initial response should be directed at a botanical, not a human party (or vice versa). These included leaf samples collected from the gardens of the Groote Schuur Hospital that were diagnosed by Prof. Lehloenyia as if they were skin, and the ‘jungle’ of pathological specimens affected by typhoid fever, ascaris adult worms, yellow fever, amoebic ulcerations, tuberculosis and malaria.

Digression and diversion

This strategy subverts the systematic collecting, classifying and ordering of nature discussed in Chapter Two of this thesis through its insistence that everything and anything is significant and worthy of consideration and inclusion and that no limitations should be exercised. It dispenses with Jackson’s *How to observe* and the many faulty instruments that took inaccurate readings, and it rejoices in

formulating fifteen different names for the same flower specimen. It is evident in *Chest: A botanical ecology*, where a medicine chest for treating illness relates to an ill English oak the artist-curator walked past and decided to treat herself; that process in turn causing her to notice a cross section of wood at the side of the road a few months later that made her consider cross sections in anatomical displays; identifying the wood as an invasive species led to an enquiry into its country of origin and that country's role in the invasion of a West African country – which was later invaded by *her* country.

The processes of digression and diversion have much in common with what the writer Ross Chambers (1999) calls 'loiterature'. Chambers investigates the digressive, category-blurring genre of writing found in works such as Nicholson Baker's *The mezzanine*, Paul Auster's *City of glass* and Laurence Sterne's *Tristram Shandy*. Loiterly writing, according to Chambers, disarms criticism by providing a moving target, shifting as its own divided attention constantly shifts. Criticism depends on the opportunity to discriminate and hierarchise, determining what is central and what is peripheral (Chambers 1999: 9), which this form eludes by resisting contextualisation or singular categorisation. Loiterature promotes sites of endless intersection, where attention is always divided between one thing and some other thing, always willing and able to be distracted, contrasting 'the disciplined and the orderly, the hierarchical and the stable, the methodical and the systematic' (Chambers 1999: 10). In contrast to methods of science that seek to stabilise objects within taxonomic systems or that require the formulation of hypotheses to provide direction for experimentation and a basis for concrete outcomes, the processes of curatorship and artmaking revel in rerouting and redirecting and in diversion and digression – as aptly illustrated in Langerman's *Subtle thresholds*, which diverted and rerouted the viewer ad infinitum. Associations abound through these methods, and no hierarchy of relevance is applied. Digression and diversion offer a means to critique systems and categories that have become naturalised and essentialised through the structured curricula of their disciplines and open up a means both to identify them and to address them through playful experimentation with new inclusions. This strategy is a necessary precursor to the next strategy, resonance.

Resonance

'Resonance' refers to both Greenblatt's discussion (1991) about the exhibition of works of art and objects and to the field of physics, where an object vibrating at the same natural frequency of another object forces that object into vibrational motion. In the Greenblattian sense, an object can be examined within the larger context of all the influences that have helped shape it – a process that can intimate 'a larger community of voices and skills' and create 'an imagined ethnographic thickness' (Greenblatt 1991: 27). Object-studies are an efficient means of exploring this concept because they encourage the development of object 'thickness' through the proliferation of interpretations. As interpretations grow in quantity, particular themes usually recur, and these themes or nodes become

more weighted over time, eventually enabling connections and comparisons across vastly different fields. In this sense, Greenblatt's resonance cross-references its manifestation in physics, where disparate qualities echo and reverberate with each other while remaining anchored in the object. The process of diversion and digression becomes a very effective means of generating content about an object, which can then be evaluated in terms of the connections it offers. Resonance abounded conceptually and materially in *Chest: A botanical ecology*: sound was denied the Kirby instruments, enforced on the temperature graphs and translated in the heartbeats; breath is used as a tool for sculpting, is treated by botanical remedies when bronchial passages narrow and refers to both a medicine chest and the cavity in which the lungs are situated; the heart is listened to as if it were a bird, stops in two instances marked on the tree-rings of an ill English oak, is treated by a flower and is written about in letters to a surgeon who transplanted the first one. As a strategy that addresses the viral qualities of the medicine chest and the naturalisations manifest in disciplinary objects, resonance enabled a proliferation of outsider views to act on the viral qualities and enabled an abundance of occluded characteristics to surface.

Mimicking

I used the strategy of mimicking in many of the works in the exhibition to trick the insider into considering the objects as familiar before revealing them as strange on closer inspection. I wanted to highlight the naturalisations that developed in these insiders' interactions with their objects and their systems of representation and to create a space for reflection. Examples of this strategy can be viewed in many of the works, such as *Foxglove*, which used medical paraphernalia to mimic a herbarium specimen; *A 'jungle'*, which used pathological specimens to mimic a botanical environment; and the leaf samples that were read as dermatological case studies. In addition to creating a jarring experience for the insider, many objects – sourced from the collections or created as artworks – revealed anthropomorphic qualities that mimicked the humans in their disciplines and activities. Objects like the post-mortem neck support called to mind the cadaver and the activities performed on it by the forensic pathologist, while the broken/mended bottle becomes a manifestation of a healed body. These objects encouraged empathic engagement, which, in the context of the pathology centre and the medical school at large, is a valuable addition to a curriculum that almost exclusively promotes clinical engagement.

Chest: A botanical ecology manifested the conversion of the object-as-virus into the object-as-vaccine, being wheeled into the Iziko SAM's San gallery, which contextualises the images of rock art as shamanistic and implicated in healing. Here, in what used to be the African Cultures gallery, the museum continues to portray San healing processes in isolation and as static, limiting broader views of these practices. The cabinet contrasts the museum's isolation of San ideas of healing, visually attesting to the chest as one form of healing in the face of many, none occupying more importance than another and all connecting

and supporting each other in a variety of ways. As such, the cabinet also visually represents a university in which no department is isolated or propagates only insider views, but where different knowledges exist in conscious relation to each, connecting and collaborating in an ever-changing, mobile manner.

Endnotes

- 1 February was then a lecturer in the Department of Biological Sciences and retired as an associate professor in 2020.
- 2 Garcin was a post-doctoral researcher in UCT's Bioprocess Engineering Research Unit.
- 3 These curations formed part of the 'Virtual display' elective, available to students as part of the Honours in Curatorship programme.
- 4 For Fouché, the work references scientific enquiry, fragility and self-preservation, seen in how the plant curls up on itself to combat dehydration during windy, dry periods (P. Fouché, email correspondence, 6 August 2013).
- 5 The term Eurogeddon emerged in late 2011 in reference to the then near collapse of the European economic system. Gurney plotted phrases such as 'taking a haircut', 'firewalls' and 'bigger bazookas'. See <http://www.kimgurney.com/fine-art/mother-of-all-firewalls/>.
- 6 S. Besharati, email correspondence, 7 September 2020.
- 7 J. Fernando, email correspondence, 19 September 2020.
- 8 M. Solms, email correspondence, 7 October 2020.
- 9 Comacare is a non-profit organisation based at Groote Schuur Hospital that works with disadvantaged individuals and communities in and around Cape Town, supporting traumatic brain injury survivors and their families, from the acute stage of injury to the recovery process.
- 10 R. Balchin, email correspondence, 2 October 2020.
- 11 See the 'Visual University': <http://www.arc.uct.ac.za/cca/arc/visual-university/hostoric-hiddinhg>. For more information on the history of the UCT and Hiddingh campus, see Ritchie (1918).
- 12 This project drew on many of the methodologies first introduced by artist-curator Mark Dion in projects such as *The Department of Marine Animal Identification of the City of New York (Chinatown Division)* (1992), *Thames big dig* (1999) and the *Institute for Invertebrate Marine Biology* (2017).
- 13 See <http://www.cca.uct.ac.za/cca/projects/where-the-wild-things-are>.
- 14 See cca.uct.ac.za/cca/projects/appendix-a-response-to-index#lg=1&slide=1.
- 15 Opened in 2003, the permanent exhibition |Qe: *The power of rock art* replaced the controversial Bushman diorama, which was closed in 2001.
- 16 The slides found in the PLC are part of a long line of optical devices developed in the 17th and 18th centuries, such as the magic lantern and the solar microscope. Both were precursors to the 20th century slide projector and turned viewing into a collective activity, which, particularly in the case of the solar microscope, opened up the laboratory to different publics. For more on the development of these devices see Hankins & Silverman (1999).
- 17 Auscultation has developed into a specialist field in medicine, with evermore advanced listening technologies being developed to detect abnormalities in the acoustics of the body. *Flight*, another work in *Chest*, draws on the sounds captured by these devices.
- 18 See https://www.nlm.nih.gov/research/visible/visible_human.html.
- 19 Hirst has used cross-sectioning in works such as *Some comfort gained from the acceptance of the inherent lies in everything* (1996) and *Mother and child (divided)* (1993).
- 20 By seeing disease as a common denominator, it undermines the hierarchy between plants and humans.
- 21 Rattles are used in various Venda tribes by people who are possessed and considered as gods, called *midzimu* or *vhakalanga* (Mabogo 1990: 26). These individuals speak *tsbikalanga* (a language related to Shona) and are asked about their names and complaints in that language, after which they instruct the people on what to do to please them (Mabogo 1990: 27). The *vhakalanga* spend from one to ten days dancing to the accompaniment of drums, rattles and ululations, for reasons ranging 'from tribal or kin-group misfortunes to death of a group member' (Mabogo 1990: 27).
- 22 'For various aches and pains, as well as asthma, put some Eucalyptus leaves in your bath' (A. Snyders, personal communication, 28 June 2018). 'The green leaves of the Protea are used to treat asthma. Cook it in water on the stove, and drink the broth' (S. Naidoo, personal communication, 28 June 2018).
- 23 Prof. Lehloenyia is a Consultant Dermatologist at Groote Schuur Hospital, Senior Lecturer in the Division of Dermatology at UCT and the Managing Director of the Dermatology Treatment and Phototherapy Centre in Century City.

- ²⁴ One of the many strengths of scientific and artistic collaboration is the rendering of scientific data and imagery into new forms. In 2004, the collaborative research project *A blueprint for bacterial life* by artist Prof. Elaine Schemilt and scientists from the Scottish Crop Research Institute Dr Ian Toth and Dr Leighton Pritchard represented the full genome sequence of the bacterial potato plant pathogen (*Erwinia carotovora* subsp. *atroseptica* (Eca) through a series of prints and animations in two and three dimensions for projection. These artistic reinterpretations of scientific data contributed to new insights by the insiders of the field. By translating the data into novel representations in new mediums, screen prints and animations revealed the presence of other genes (previously occluded) also present in the bacteria, possibly revealing genes essential to all forms of bacteria. See <https://www.elaineshemilt.co.uk/expositions/a-blueprint-for-bacterial-life/>.
- ²⁵ To avoid being accused of experimenting on a subjugated minority, Groote Schuur Hospital had decided not to proceed with a transplant operation for a black recipient. In the month leading up to his transplant, Washkansky was on the verge of receiving the heart of a black man, but a medical excuse was fabricated by the hospital and the procedure was cancelled. As the eventual donor, Denise Darvall, was white, her heart was used a month later. Her kidney donation was more controversial at the time, as they were given to a 10-year-old boy of mixed race (Francis 2017).
- ²⁶ It can be heard at http://www.pathologylearningcentre.uct.ac.za/sites/default/files/flight_air.mp3.
- ²⁷ Barnard writes: 'The ventricular peaks would shoot up as in wild flight, and their intermediate planes would begin to jumble against one another like the sudden crashing of cars on a freight-train. The heart's beautiful symmetry would then be reduced to an erratic green line of wild jerks until it entered the final isoelectric phase resembling a sawtooth – jagged lines of the heart seeking to rise like a dying bird, fluttering upward, only to fall once again onto its flat plane of death' (Barnard in Young 2002: 79–80).
- ²⁸ Called variously foxgloves, witch's gloves, dead men's bells, fairy's gloves, bloody fingers, gloves of our lady, fairy caps, virgin's gloves or fairy thimbles, *Digitalis purpurea* is popular with children, who pluck the tempting bell-shaped blooms and wear them like thimbles, admonished not to lick their fingers afterwards for fear they will go blind (Young 2002: 57). While the flower can be lethal if ingested, the drug digitalis derived from foxglove is most commonly used as a heart stimulant. Digitalis has been prescribed since the 17th century, perhaps earlier, as a diuretic and to slow the pulse and is still the drug of choice for atrial fibrillation. In the 1770s, William Withering got an old family recipe, a herbal infusion for treating swollen legs, from a Shropshire woman and identified digitalis as the active one of the twenty ingredients. Many more antiarrhythmic drugs now exist (Young 2002: 57).

Conclusion

This thesis has argued that the various attentional subcultures cultivated by a university's respective academic communities can lead to blind spots that not only limit the scope of knowledge these disciplines are exposed to, but can occlude ethical considerations, hinder discovery and perpetuate negative aspects of the hegemonic Western foundations of many of these disciplines. These subcultures are fostered through curricula that promote discipline-specific research materials and processes and impart to students the taxonomies applicable to the objects and subjects studied within each field. In the different departments, students are taught to notice those details in the world around them considered relevant to their particular academic community and to ignore those deemed irrelevant. In so doing, they become the disciplinary insider – naturalised to a discipline's biases, habits, norms and conventions and consequently unaware of the blind spots and their effects. I have argued that these consequences make it imperative for academic communities to become aware of these limitations and to address their naturalisations.

Using the University of Cape Town (UCT) as a case study and my position as an outsider to many of its departments as a strength, this thesis set out to investigate how insiders render certain knowledge invisible by focusing on discipline-specific characteristics of the objects and subjects they study, thereby obstructing the wider resonance of these materials. The Tabloid medicine chest listed as part of collection BC666 in UCT's Manuscripts and Archives department became an object of intense study and offered an opportunity to investigate how blind spots develop and to understand the importance and opportunities presented in recognising them. The chest also served as the prompt to search for similar occurrences elsewhere in the institution.

I first encountered the chest in an exhibition catalogue and presumed

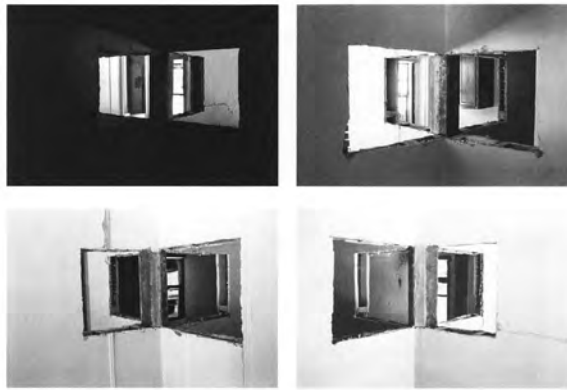


Figure 1.

Gordon Matta Clark. 1974. *Bronx floors: Four way walls*.

it to be sourced from the medical departments of the institution (kept perhaps as a curiosity that spoke to past pharmaceutical practices). However, the caption specified that its home was in the Manuscripts and Archives department, part of the university's library facility. As this section of the library generally houses printed and audio-visual materials and collections of manuscripts and personal papers, the object's presence in the collection seemed incongruous. The difficulties involved in locating the physical object in its host facility, the result of taxonomies implemented by its insiders, led me to title the chest 'the mascot of institutional blind spots' and to consider it as a prompt and a provocation to look for other instances in the institution where knowledge was rendered similarly invisible by insider methods.

By undertaking an object-study of the chest, I investigated the specific circumstances that led to its invisibility in the facility. As the categories the library employs when processing its holdings do not readily allow for the assimilation of three-dimensional objects (though these types of materials exist in many libraries worldwide), the chest was unfindable when using the facility's search engines, and its academic value was significantly reduced. These engines allow access to the library's vast selection of diverse research holdings by mimicking the taxonomies of the university's many departments to ensure accessibility of discipline-specific research materials to the insiders who search for and utilise them. The chest's status as invisible and unfindable within this system thus applied to the larger institution as well and led to a further consideration: if a classification system that facilitates multi-disciplinary engagement can facilitate the development of blind spots, how much more would this occur in other departments of the university, where disciplinary classification systems are under no obligation to offer access to anyone beyond their own insiders? In addition to revealing the circumstances that led to the invisibility of the chest in the library and understanding from these findings that similar processes were likely at work in departments further afield, the object-study in this first chapter revealed wider findings about the chest.

The chest was implicated in a range of international and local developments during the period it was produced and promoted. In the 20th and early 21st centuries, Tabloid chests were viewed and marketed as pivotal accessories to famous explorers such as Scott, Shackleton and Hillary, carried with them as they scaled the highest mountains and ventured to the furthestmost regions of the Earth. In parallel, their presence was shown to be influential in displacing local indigenous practices, fuelling racist colonial agendas and carrying fraught ideologies in this same period. As these chests were considered necessary equipment for early explorers collecting data and specimens in the field for their institutions, the chests were found to be surprisingly instrumental in facilitating the development of many of the disciplines practiced in the departments of this university. In a Greenblattian sense, the object-study revealed the wider resonance of the chest and highlighted the systems that gave rise to it in the first place. The study also suggested a string of relationships between the chest and the many departments associated with its contents within the larger institution. Taking these extended findings into account, the chest, rendered invisible and useless

by the classificatory systems of the library, became a prompt and a provocation to search for other institutional examples of where the limitations exercised by insiders on their objects of study and their collections have obstructed the wider resonance of the material.

Chapter Two of this thesis provided a survey of various objects and collections in the institution that form part of academic communities, revealing that the convening of objects is not uniform in nature. Based on the function of objects in relation to their host department's insider methods, I identified two categories within which to group these objects and collections: those used in teaching and research and therefore representative of the current insider methods being utilised in their departments; and those that had previously occupied the former status but had fallen out of date, were viewed as redundant, or that otherwise related to the history of the discipline or the host department. If the medicine chest were housed in a medical department instead of the library, it would fall into this second category, outside of current research but speaking to, for example, the (largely ignored) history of pharmaceutical developments.¹ To understand the different limitations exercised by the various academic communities on these categories of collections and to trace their effect, I conducted two case studies, one from each category. The first case study was of the M.R. Drennan anatomical collection, currently used in curricula facilitated by the Health Sciences faculty.

My enquiry into this collection revealed that while these prepared specimens, anatomical models and skeletal remains offered insights into a variety of questions posed by faculty insiders, these enquiries disregarded the social and historical life of the objects. Science curricula do not generally address the history of collections or collecting (particularly in how they pertain to human remains)² and their insiders consequently remain oblivious to the potentially problematic origins of the teaching materials utilised in their programmes and the contribution they could make to contemporary discourses. At UCT (the case study for this thesis), these issues were shown to be imperative when considering the role of these materials and their disciplines (such as anatomy and physical anthropology) in providing evidence that supported the racist agendas of the 19th to the 21st centuries. Robert Thomson and Matthew Drennan's roles were specifically discussed in this section, addressing the unethically sourced human remains they accepted as part of the collection in its foundational stages and the racial typologies they then imposed on the materials, which supported a classification system driven by the apartheid agenda well into the second half of the 20th century. While these classifications have been addressed post-1994, until recently the provenance of these materials has remained largely invisible to the insiders using the collection. Outsider debates about these collections have surfaced, such as ethical concerns raised in the humanities, publicised local debates around events such as the Prestwich Memorial and the Sutherland reburials and issues raised by activists such as the RMF movement. These have all helped insiders become aware of the blind spots resident in their departments and to consider the wider issues implicated by those, including the political and social dimensions usually omitted from undergraduate curricula.



Figure 2.

The Tacoma Narrows bridge on 7 November 1940. Washington.



Figure 3.

“Devils Bridge” sketched by Lister on his travels through Europe, showing a bridge crossing the Gotthard Pass, northern approach, Switzerland.’ N.d. Wellcome Collection.

The Prestwich Memorial highlighted the divide between the 'objective' view promoted by the university's scientific insiders of the skeletons that were unearthed and those of local community members, who argued for recognition of the historical, social, cultural and political contexts represented by these same materials. On the other hand, the Sutherland reburials directly addressed the problematic provenance of the skeletons that formed the basis of the Drennan collection and was initiated following insider Victoria Gibbens' engagement with ethical debates in the humanities about these types of collections. The RMF movement also highlighted how Western patterns of thought and classification still influence and affect how curricula are taught across the institution. Science in particular was addressed at one of the many sessions convened by activists with different university faculties in 2016, at which the disavowal of other African forms of knowledge was discussed. These discussions have continued and expanded within the larger movement under the ScienceMustFall hashtag. These occurrences, all facilitated by outsider perspectives brought to bear on insider materials, have helped expose the limits imposed on these materials by insiders and, based on the reactions and debates, illustrate how imperative it is to find new ways to address and redress these collections.

The Kirby collection of indigenous musical instruments housed at the South African College of Music (SACM) provided an example of the second category of university collections. My research into this collection revealed that a number of factors have led to its relatively invisible status to the insiders of its host department. These factors include the process of conservation undergone by the instruments after first being acquired by the university, muting the instruments and making them objects to be looked at but no longer to be touched or played. The current curation of the collection performed by Michael Nixon, an insider of the department, was shown to still be representative of the views of the early 20th century ethnomusicologist who collected the instruments and imposed a Western taxonomy on them. Such modes of display disregard the social function of the instruments in the communities from which they were sourced, but their typological arrangements also promote the Social Darwinist views of its collector. Kirby's notes offer many insights into the rich and diverse life of the instruments in their source communities and into the range of materials that were used to construct them, but this information is not incorporated into any of the curated displays. While Kirby described the collection to be representative of the music of all the indigenous peoples and their influences of this period, it also represents omissions. By Kirby's own admittance, the collection largely disavows any Indian or Chinese instruments from the area, as he believed the local presence of these cultures exercised no influence on the indigenous population at the time of his collecting. Taking all these factors into account, the collection as it is currently curated represents a variety of limitations because of the insider methods of the department. Because most of the SACM's curricula are sound-based and the instruments' conservation has rendered them mute, it has also rendered them invisible to insiders. The current curation, which continues to impose a Western taxonomy on the instruments, further denies them the agency of their origins and exacerbates this invisibility.

In examining UCT collections and two specific case studies, this section of the research revealed that invisible objects in departments across the university have much to impart about the insider methods of their practitioners and about their resident biases. Surprising insights can be generated when such materials are exposed to outsider perspectives, and the process was instrumental in illustrating how insider methods limit a broader understanding of these objects. In many instances, the insights generated by outsider perspectives can refer to aspects of these objects that have a critical bearing on the way disciplines are taught and how disciplinary knowledge is publicly received.

Drawing on the insights of the previous chapters, the next section of the thesis detailed the development of curatorial practice and teaching at UCT's Michaelis School of Fine Art and the opening up of university collections to outsider perspectives through curatorship. Starting in the early 1990s, two lecturers working in this department, Pippa Skotnes and Malcolm Payne, embraced their roles as outsiders in relation to the departments and collections with which they engaged. They used the format of exhibition-making to introduce an array of methods to combat the disciplinary limitations exercised by insiders on their objects, surfacing blind spots within both the university and its affiliated museums and further opening these collections up to outsider perspectives.

Exhibiting in the South African Museum (SAM) and the South African National Gallery (SANG), these lecturers and artist-curators (a term generated in this period) introduced a very specific methodology of exhibition-making, characterised by the display of a range of objects from different disciplinary fields alongside artworks created by the artist-curators. The objects were accompanied by text that served as an interpretive tool, combining the disciplinary insights of a wide range of practitioners whose fields of research pertained to the theme of the exhibition. The exhibitions of note curated during this period – *Sound from the thinking strings*, *Face value* and *Miscast* – utilised all these elements, and their staging in either a natural history museum or an art gallery jarred with the taxonomies of the objects around them and highlighted the categories utilised by the insiders of the host institution.

This was important at the time, as these shows overlapped with the end of the apartheid regime. Allowing outsiders to engage with national collections signalled the willingness of these institutions to address the materials within their collections and the modes of their taxonomy and to address the insider methods that had promoted the apartheid ideologies of the past in overt and covert ways. *Sound from the thinking strings* and *Miscast* dealt with and drew on the archive of the colonial period and its contemporary resonance and, by displaying material sourced from scientific and medical fields, enabled disciplinary insiders familiar with these objects to come to terms with the role played by their communities within this history – a historical engagement outside the scope of their curricula at the time that they were students. The artist-curators also co-opted insider ordering devices and visual representations to create a false sense of familiarity, which on closer inspection revealed the hidden biases and occluded historical details of these disciplines.

Chapter Two of this thesis showed that research conducted within



Figure 4.

Gabriel Orozco.1993. *Breath on a piano.*

disciplines developed along trajectories that caused them to become increasingly hermetic, resulting in contemporary research being published in discipline-specific journals and being disseminated at conferences attended almost exclusively by fellow insiders – a process that further entrenches naturalisations and encourages disciplines to develop blind spots. The exhibitions addressed these issues in multiple ways: engagements between the artist-curators and disciplinary insiders opened dialogues about the materials they sourced from these academic communities already during the development stages of these exhibitions, while the curatorial strategies they utilised rendered these materials strange and even unrecognisable to their insiders when they visited the exhibitions. The exhibitions were staged in either the SAM or the SANG, public institutions that guaranteed large and diverse audiences. Moreover, *Miscast* generated such a public sensation that it was written about in all the major newspapers, and many of the issues raised by the exhibition were discussed at a public forum after the opening, facilitating discussions between museum insiders and outsiders who felt they had a stake in the content being presented.

By displaying the disciplinary objects alongside texts written by insiders from a variety of disciplines, the exhibitions also illustrated the limitations of a single, dominant view and celebrated the insights available by bringing diverse views to bear on a single theme. In addition to collating different insider views, the artist-curators also conflated the different stages of the research methodologies practiced in these insider communities by exhibiting the primary materials and end text in the same space. This was especially prominent in *Sound from the thinking strings*, in which academic texts were displayed as prominently as Skotnes's etchings and the museum and university objects. As primary material is usually gathered and studied at the start of the research process and is then packed away, and a text is generated as the end-product (and may or may not offer images of the display materials), these exhibitions enabled outsiders to engage with the components that make up the insider processes and opened them up to critique and to wider considerations. Objects offer affordances because of their materiality, and it is these affordances that are at times aggressively managed by insiders to enable objects to supply the answers their practitioners propose. In these disruptive exhibitions, however, objects such as the Lydenburg Heads or the skin bags and stone tools were free from these restrictions and were released to generate meanings beyond their disciplinary confines. The artworks (and found objects) exhibited alongside these materials, such as the Mafikeng Heads, the shopping trolleys and the etchings, served as prompts and encouragements for the visitor *and* the insider to contemplate these limitations and to embrace the multiplicity of meaning that the materials could generate.

These exhibitions posited curation as a powerful tool with which to interrogate insider methods and their objects, where curatorial strategies that rendered seemingly familiar objects strange to their practitioners enabled the naturalised assumptions connected with these materials to surface. This was evidenced in the academic papers written by insider practitioners who visited the exhibitions and through interviews I conducted as part of this research. The strategies these exhibitions introduced to address disciplinary naturalisations and

blind spots were amplified in the next exhibition discussed in this thesis.

Whereas the previous exhibitions discussed displayed objects representative of only a few of the university's disciplines, *Curiosity CLXXV* drew on all the collections housed in the university's departments. Many fell into the second category of objects formulated in Chapter Two of this thesis, those not actively used in teaching and research. The exhibition was staged in Hiddingh Hall, on the campus where the university originated. The space functioned as a symbolic one in which the boundaries between disciplinary silos could be made to implode – or be made invisible – through the curatorial strategies utilised by insiders of the Fine Art department. Liberated from their host departments and their insider limitations, objects were grouped according to a range of idiosyncratic new taxonomies formulated by the artist-curators of the exhibition. These new taxonomies highlighted previously ignored characteristics of the objects on display and revealed surprising overlaps between the different disciplinary materials now grouped together. They proposed novel ways of how these materials could be understood to their insiders – a process that combated insider naturalisations. Because insider materials were dispersed across the exhibition, practitioners had to engage with unexpected juxtapositions and relationships with their materials and had to consider what characteristics might govern the new taxonomy. Like the SAM and SANG exhibitions, *Curiosity CLXXV* was open to the broader public, who could interact with materials made more accessible by the insider methods of the artist-curators. Featuring objects and privileging the visual to encourage a proliferation of interpretations allowed multiple points of access to outsiders and insiders alike.

As the exhibition traced the historical development of knowledge and teaching at the university and critically engaged with various forms of university categorisations, many of the displays combined materials from both categories formulated in Chapter Two. In most of the displays, this resulted in juxtapositions between old research materials and tools and current ones. As demonstrated in *Miscast*, scientific insiders are rarely confronted by the history of their disciplines or their political, social or cultural dimensions. By exhibiting disciplinary-insider objects that spoke to current and past research, such as the Von Luschan skin chart and the anthropometric measuring devices displayed alongside scalpels and cameras, insiders were confronted by the political and social features of their disciplines and were invited to consider not only how these related to the past but also to the present.

The exhibition left an indelible mark on the institution, and I have shown how it influenced teaching methods and was praised for its ability to provoke reflection and dialogue. Following its staging, various departments began to re-evaluate their category-two objects, particularly those marked for disposal, keeping them aside for possible use in displays. In the years that followed, the artist-curators were approached to curate permanent displays within a number of UCT departments. These materialised in the departments of Psychology, Archaeology, Chemistry and Pathology, using outsider methods to render insider materials strange to its staff and students, with some displays even being incorporated into the curricula of these departments. The engagement with staff from across

the university in the staging of *Curiosity CLXXV* and departmental installations (and for the shows at SAM and SANG) did much to raise the status of the Fine Art department and its staff and students to the insiders of other departments. It promoted collegiality and rapport and a willingness to allow outsiders access to departments and storerooms, where discussions about how their objects were studied and understood took place. This became especially evident when the Honours in Curatorship programme was convened, which incorporates site visits and discussion with insiders and their collections in its curriculum.

These exhibitions promoted the use of curatorial strategies as a way of addressing naturalisation and blind spots within the institution and led to several strategic focuses across the university, of which the Archive and Curatorship programme (ARC) was one. This was a collaboration between the Centre for Curating the Archive (CCA) and the Archive and Public Culture Research Initiative (APC) and included exhibitions and curations and offered funding for a cohort of masters and PhD students. Its projects used curatorship as their methodology and utilised disciplinary objects and images as their main material. Its alternate name, 'the visual university', speaks to its focus on visual methodologies rather than the predominant textual and numerical methods, and it fostered the use of the outsider's perspective to generate alternate understandings of disciplinary materials. This programme helped researchers like Michael Nixon, curator of the Kirby collection of instruments, to expand his investigation of the collection by focusing on its photographic archive and the instruments' materiality, delivering novel insights into the history of musical practices in South Africa that have led to a renewed focus on the collection by the insiders of its host department. In addition to these developments, the instatement of an Honours in Curatorship programme run by the CCA provided perhaps the most pronounced evidence of the acceptance of curation as a method that can facilitate outsider perspectives and challenge insider views.

In its almost nine-year run, the interdisciplinary cohort of students who are accepted into this programme have engaged with the object collections of both the university and its affiliated museums. Insiders from both institutions have observed how the outsider views brought to bear on their local materials have exposed their own assumptions and revealed novel insights into the collections and their own disciplinary methods. As the students are from different disciplinary undergraduate backgrounds, the programme also challenges students to engage with the wide variety of insider views offered by their classmates. A focus on objects and curation helps them learn to negotiate different views and formulate ways in which disciplinary limits can be confronted and traversed.

I concluded this research by returning to the start of the inquiry and the object that served as the original prompt and provocation for this exploration. I considered the evidence I had accumulated in my case studies of exhibitions that addressed insider views and that liberated objects from their disciplinary limitations, and I trained this newfound knowledge back onto the chest in the library. Through a combination of strategies, many of these newly formulated, I subjected the chest (the invisible object representative of all knowledge rendered invisible by the blind spots of the insiders around it) to a range of procedures to

test whether curatorship and artmaking could address the limitations imposed on it by the classification system of a particular discipline.

Many of the strategies addressed what I had identified as the main causes of the chest's invisible status and worked toward resisting these effects. These included lavishing the chest with attention by subjecting it to a wide range of disciplinary views. As the chest had been the most invisible object in the institution (unsearchable even using a system that facilitates the taxonomies of all the institution's disciplines), it would now become the most visible, subjecting it to the disciplinary views of the departments around it and of the visitors to the museum in which it was displayed. And while most departmental objects remain stationary, those kept in the M&A department are especially immobile as a result of conservation protocols. For the exhibition, however, the chest not only travelled to the Iziko SAM but was displayed in a set of mobile cabinets. I also addressed the chest as a cipher for the superhuman feats of the early explorers (as a necessary accessory) and Western science. Many of the objects and artworks in *Chest* thus emphasised fragility and vulnerability and invited an affective response (specifically sympathy and empathy) in viewers. Another strategy addressed its role in facilitating the academic project of collecting and classifying objects according to a selective and ever more limiting process that enabled disciplines to stake their research grounds. My methodology sought instead to embrace diversion and digression, in stark contrast to the disciplined and the orderly, the hierarchical and the stable, and the methodical and the systematic.

This research, which commenced in 2015, coincided with much political upheaval within the institution and my department. In this time, objects disappeared from the UCT campus, from statues being removed to artworks being burned. Targeted by students as markers of oppression and remnants of colonialism, their presence in the university became a heavily debated issue. As this research has revealed, these connotations are carried by more than the prominent markers of statues and artworks. Objects in every department are imbued with similar inferences because of the colonial legacies on which the institution was founded and, as this research has shown, that influenced the development of many of the disciplines practiced in its departments. Debates about the Prestwich Memorial and the Sutherland reburials provide powerful examples and demonstrate the urgency with which the institution must address these blind spots.

These various debates influenced my own understanding of the medicine chest and led me to question its value within an institution grappling with the idea of decolonising its curricula. Understanding the chest as a virus, albeit a dormant one, and curatorship as a methodology able to convert it into a vaccine helped me move forward with this project. The exhibition staged at the Iziko SAM and discussed in Chapter Four visualised this shift from object-as-virus to object-as-vaccine and enacted the destabilisation of its prominent Western hegemonic narrative (as revealed in Chapter One) and materialised it as only one of many relevant perspectives on healing and treatment.

Chest: A botanical ecology drew on the research I conducted for Chapter One, which revealed an array of potential intersections between the chest and the



Figure 5.

Jellyfish (detail from an X-ray of my jaw).

work of other departments in the institution (most notably Botany, because of the origins of much pharmaceutical material). It also drew on my engagements with the various UCT collections described in Chapter Two. I presented the chest to key insiders and sourced a selection of objects that related to it from various collections to represent the richness of the newly inoculated object released from its facility and classification systems, celebrating its newfound ability to speak to the intersections between disciplines, their histories and the politics and poetics of their practices. These interactions also served as inspiration for the artworks included in the other cabinets around the chest, which encouraged more associations and potential meanings.

Presenting the chest to different departments also curatorially highlighted and celebrated resonance. As the chest intersected with the work of various departments, qualities highlighted in the initial object-study, many of them historical, began to resonate with material in these departments. As demonstrated, many object characteristics are occluded by the naturalisations produced by insider curricula that privilege one set of characteristics over another. As the object-study conducted on the chest focused to a large extent on its history, these associations remained attached to it, even as it started to proliferate new meanings in new departments, enabling these qualities to resonate with similar (and in many instances, hidden) qualities in other departments. Taking this process of resonance into account, object-studies realised curatorially carry with them much hope and promise. As objects can invite a wide variety of perspectives, particularly when subjected to curatorship, they can become carriers of new meaning and carry that resonance with them as they are reassimilated into their established disciplinary curricula. Moreover, they can be offered to the public for further outsider scrutiny.

Writing in 2021, my early analogy of the virus and vaccine has taken on unexpected significance. The force of an invisible pathogen has been demonstrated across the globe, devastating lives and livelihoods every day over the last year and a half. Vaccinations are underway, but various factors have hindered their rollout (Mbembe (2020) argues that this unequal access is due to economic inequality) and the future as it pertains to this virus remains uncertain. The last six years at UCT have been similarly characterised by turbulence and upheaval. Many deeply entrenched blind spots have been surfaced and discussed, but the process remains tentative and exploratory. This research has highlighted the need for departments in the university to confront and address their own oversights, and, based on its development and effect in the institution to date, it proposes curatorship as a treatment.

Of course, the discipline of curatorship is not without its own blind spots. The artist-curators discussed in this thesis are, however, practitioners who occupy a somewhat outsider status even within their own department because of their overt interdisciplinary and collaborative methods of working and their focus on the curatorial as opposed to the traditional fine arts. In addition to the fluid roles of the artist-curators discussed in this research, the field of curatorship is a relatively new one that has not settled into a bounded discipline as yet, and it is therefore still relatively (though, of course, not entirely) free from naturalisations

(some of which I am no doubt blind to myself). Even so, the public showing of curated work invites rather than eschews criticism, even as it hopes to garner new insights.

I understand that the nature of a doctoral dissertation is to record a conclusion that is a consequence of the research. It demands that I filter through all I have thought, read, observed and argued for and present the reader with a conclusion that justifies the study. The very nature of curatorship opposes this procedure, however. Its open-endedness is the very quality that seems to guard it, for the time being, from the development of the infections this research has demonstrated as being detrimental. In celebrating the quality that resists these developments, the final conclusion of this stage of my research takes the form of a self-navigable digital component that further exemplifies the potential of research in the making (as opposed to research conducted in the past). I return to the library and its search engines, co-opting these tools to amplify the chest's visibility in the library and in the larger institution. Incorporating the range of novel metadata generated by the chest's intersections with the disciplines it was exposed to during this research demonstrates its wider resonance and its newfound applicability to different fields of research. This component celebrates the proliferation of its meanings and hints at connections that have not yet even been imagined.

The medicine chest: Navigating the website

The website, titled *The Medicine Chest*, is part of the digital libraries showcase of UCT called Ibali. A range of components are listed in the menu, all geared towards highlighting not only the presence of the chest within the library, but its relevance to the larger institution. Consisting of a large selection of items (video clips, photos, text and audio files) gathered during this research, each item is described using the metadata fields traditionally applied in library archiving. However, these categories are expanded through the inclusion of non-traditional data that trouble disciplinary boundaries. In addition to title, description and source, each item is supplied with a list of 'Resonances' – words or phrases that represent disciplinary intersections, interdisciplinary connections and, at times, my own subjectivity. These terms form part of each item entry but are also part of a searchable list in the menu ('Resonances'), highlighting the relevance of certain entries by listing the number of times they apply to an item. Clicking on any one of these will showcase the group of items to which it applies – a process that further complicates definitive categorisation of any one item. Each item is also categorised according to the university department they belong to ('Is Part Of') and is identified on a map of the institution. This allocation refers to the department from which the item was sourced but also to those to which it might apply in an interdisciplinary sense. Again, these allocations are searchable as separate lists in the menu – the first lists the 'Departments' and the second shows the maps ('Locations') that situate each item in the relevant building (or buildings) on the UCT campus.

Items can be browsed as a collection ('Browse') or as materials that form part of four new interdisciplinary curricula ('Materials'). Borrowing their titles from scientific publications, most of the 18th century, the 'Materials' and 'Lesson plans examples' listed under each curriculum subvert the very process of taxonomy initiated during this period, supplying the visitor with a wide range of tools with which to understand and explore each item on the site and its infinite connections.

An example of this process might manifest as follows:

- *Enter the site and click on the 'Textbook' item in the menu to access each page of the Tabloid guide mentioned in Chapter One of this thesis.
- *Click, for example, on page 12 and 13 (pages that reference the chest's role in gaining 'dominion of the air' by supplying pilots with first aid).
- * On the page that opens (the 'Item' page), scroll down to the term 'bird', listed as one of its 'Resonances', and click on 'See all items with this value' next to it.
- * The page that opens will list all the items generated by the research to which 'bird' can apply by association: a letter displayed in the Heart of Cape Town Museum from a young girl to Barnard referencing a bird; Sethembile Msezane's performance piece of the Zimbabwe bird on the day of the Rhodes statue removal; a bateleur egg in the Peter Steyn collection; an extract from Peter Pan; a reference to the Eagle moon landing; and more.
- * Click, for example, on Msezane's performance ('Chapunga – The day Rhodes fell')
- * On its 'Item' page, a metadata field called 'Is Part Of' will list the UCT departments this 'Item' could be applicable to, such as 'Ornithology', 'African Studies', 'History' or 'Fine Art'.
- * Click on 'Ornithology' to view a newly configured list that groups all the items sourced from or deemed relevant to the department during this research.
- * Select 'Crows on the playground (*The Birds*)' and watch a snippet of the actress Tippi Hedren smoking while flocks of crows gather quietly on the school playground behind her.
- * Click on any of the metadata listed for this 'Item' and continue exploring.

To start this journey, visit: <https://ibali.uct.ac.za/s/LBNNIN001-medicinechest/page/landing-page>.³

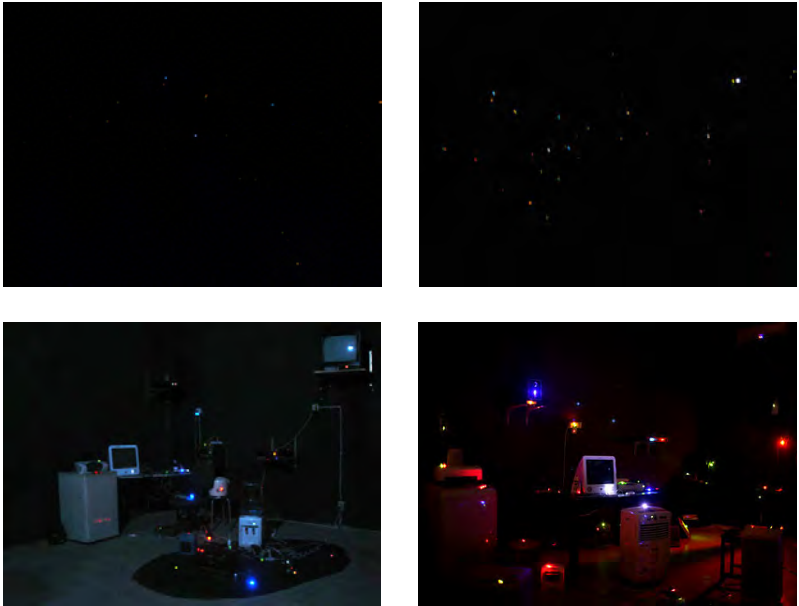




Figure 6-10.

Chu Yun. 2009. *Constellation no. 3*.

Endnotes

- ¹ Current displays in UCT's Clinical Pharmacology department support this assumption and feature outdated medicines similar to those found in the medicine chest.
- ² A survey of the UCT Science and Health Sciences faculty handbooks from 2013 onwards confirms this.
- ³ Alternatively, access the website here: <https://doi.org/10.25375/uct.17121230>

References

- Abrahams, Y. 1996. Miscast. *South African Review of Books* 44: 15–16.
- Ally, Y. & August, J. 2018. #Sciencemustfall and Africanising the curriculum: Findings from an online interaction. *South African Journal of Psychology* 48(3): 351–359.
- Alvargonzalez, D. 2011. Multidisciplinarity, interdisciplinarity, transdisciplinarity, and the sciences. *International Studies in the Philosophy of Science* 25(4): 387–403.
- Andrews, M. & Lomas, J. 2018. *A history of women in 100 objects*. Stroud, Gloucestershire: The History Press.
- Arnold, D. 1996. *The problem of nature: Environment, culture, and European expansion*. London: Blackwell.
- Arnold, D. 2000. ‘Illusory riches’: Representations of the tropical world, 1840–1950. *Singapore Journal of Tropical Geography* 21: 6–18.
- AW. 2004. Curiosity CLXXV – curating the university. *Monday Paper* 23(30): 5 [Online]. Available: <https://frithalangerman.com/wp-content/uploads/2004/02/monday-papervol22-26.jpg> (31/10/2021).
- Bailey, P. 2008. Henry Wellcome, the collector. *Wellcome Trust* (archived) [Online]. Available: <https://web.archive.org/web/20120216185031/http://www.wellcome.ac.uk/About-us/History/WTX051562.htm> (05/10/2020).
- Baker, A. 2012. ‘Precision’, ‘perfection’, and the reality of British scientific instruments on the move during the 18th century. *Material Culture Review* 74 [Online]. Available: <https://journals.lib.unb.ca/index.php/MCR/article/view/20446>. (13/05/2019).
- Barlow, M. 2021. Christian nationalism is a barrier to mass vaccination against COVID-19. *The Conversation* [Online]. Available: <https://theconversation.com/christian-nationalism-is-a-barrier-to-mass-vaccination-against-covid-19-158023> (16/80/2021).
- Barrett, M. & Giordani, F. 2017. Inside Doctor Livingstone: A Scottish icon’s encounter with tropical disease. *Parasitology* 144(12): 1652–1662.
- Battersby, C.F.H. 1900. Medicine chests. *Climate* 2: 26–27.
- Bennett, T. 1995. *The birth of the museum: History, theory, politics*. London: Routledge.
- Bennett, T. 2018. *Museums, power, knowledge: Selected essays*. Abingdon, Oxon: Routledge.
- Bickford-Smith, V., Van Heyningen, E. & Worden, N. 1999. *Cape Town in the twentieth century: An illustrated social history*. Cape Town: David Philip.
- Bierbaum, E.G. 1990. Beyond print: Object collections in academic libraries. *Collection Building* 10(1/2): 7–11.
- Birkhead, T.R. & Montgomerie, R. 2018. Rare red eggs of the common guillemot (*Uria aalge*): Birds, biology and people and Bampton, Yorkshire, in the early 1900s. *Archives of Natural History* 45: 69–79.
- Bishop, K.M. 2010. *The nature of medicine in South Africa: The intersection of indigenous and biomedicine*. Tucson: University of Arizona.
- Bloch, J. 2016. Letting things speak: A case study in the reconfiguring of a South African institutional object collection. PhD dissertation, University of Cape Town.
- Boehi, M. 2013. The flower sellers of Cape Town: A history. In *Veld & Flora*, September: 132–136.
- Boehi, M. & Xaba, P. 2021. Decolonising Kirstenbosch: Confronting the violent past of South Africa’s botanical gardens. *The Architectural Review* [Online]. Available: <https://www.architectural-review.com/essays/decolonising-kirstenbosch-confronting-the-violent-past-of-south-africas-botanical-gardens> (15/08/2021).
- Bourguet, M, Licoppe, C. & Sibum, H.O. (eds). 2002. *Instruments, travel and science: Itineraries of precision from the seventeenth to the twentieth century*. London: Routledge.
- Bowker, G. & Star, S. 1999. *Sorting things out: Classification and its consequences*. Cambridge, Mass: MIT Press.
- Bredenkamp, H. 2006. Transforming representations of intangible heritage at Iziko (national) museums, South Africa. *International Journal of Intangible Heritage* 1:76–82.
- Brown, J. 2015. Ethics of the dust: On the care of a university art collection. University of Cape Town. Masters Dissertation.

- Burroughs Wellcome & Co. 1912. *The application of science to industry: Souvenir of the congress of the universities of the empire of London*. London: Burroughs Wellcome & Co.
- Burroughs Wellcome & Co. 1925. 'Tabloid': *Brief medical guide for explorers, missionaries, travellers, colonists, planters and others*. London: Burroughs Wellcome & Co.
- Burroughs Wellcome & Co. 1934. *The romance of exploration and emergency first aid from Stanley to Byrd*. London: Burroughs Wellcome & Co.
- Callahan, D. 2014. *A history of birdwatching in 100 objects*. London: Bloomsbury Publishing.
- Candlin, F. & Guins, R. 2009. *The object reader*. London: Routledge.
- Cedras, R. 2016. In the halls of history: The making and unmaking of the life-casts at the ethnography galleries of the Iziko South African Museum. University of Cape Town. Masters Dissertation.
- Chambers, R. 1999. *Loiterature*. Lincoln & London: University of Nebraska Press.
- Chatterjee, H. & Duhs, R. 2010. *Object-based learning in higher education: pedagogical perspectives on enhancing student learning through collections*. London: UCL, Centre for Excellence in Teaching and Learning through Design.
- Chatterjee, H. 2011. Object-based learning in higher education: The pedagogical power of museums. *Humboldt-Universität* [Online]. Available: <https://edoc.hu-berlin.de/handle/18452/9349> (28/04/2021).
- Chatterjee, H. & Hannan, L. 2016. *Engaging the senses: Object-based learning in higher education*. London: Routledge.
- Chatterjee, H. Jandl, S., & Gold, M. 2012. *A handbook for academic museums: Beyond exhibitions and education*. Edinburgh: MuseumsEtc.
- Church, R.Y and Tansey, E.M. 2007. *Burroughs Wellcome & Co.: Knowledge, trust, profit and the transformation of the British pharmaceutical industry, 1880–1940*. London: Crucible Books.
- Clark, M. 2017. Syphilis, skin, and subjectivity: Historical clinical photographs in the Saint Surgical Pathology Collection. Masters thesis, Stellenbosch University.
- Cloete, K. 2018. Khoisan skeletons to be returned home. *University of Cape Town News* [Online]. Available: <https://www.news.uct.ac.za/article/-2018-10-12-khoisan-skeletons-to-be-returned-home>. (29/07/2019).
- Coan, S. 1996. Confronting SA's own Holocaust. *The Natal Witness*, 20 June [Online]: 13–14. Available: <https://drive.google.com/file/d/18-eDxSSZjVDk08-HmjB9dxJYWPNJas4P/view>. (18/10/2020).
- Conrad, J. 1988. *Heart of darkness*. London, New York: W.W. Norton & Company.
- Coombes, A. 2003. *History after apartheid: Visual culture and public memory in a democratic South Africa*. Durham, London: Duke University Press
- Craciun, A. 2011. What is an explorer? *Eighteenth-century studies* 45(1): 29–51.
- D'Arcy, P.F. 1999. *Laboratory on the Nile: A history of the Wellcome tropical research laboratories*. New York: Haworth Press.
- Daston, L. 2004. Type specimens and scientific memory. *Critical Inquiry* 31(1): 153–182.
- Daston, L. & Galison, P. 1992. The image of objectivity. *Representations* 40: 81–128.
- Daston, L. & Galison, P. 2007. *Objectivity*. New York: Zone Books.
- Davison, P. 2005. Museums and the re-shaping of memory. In G. Corsane (ed). *Heritage, museums and galleries: An introductory reader*. New York: Routledge. 184–194.
- Davison, P. 2018. The politics and poetics of the Bushman diorama at the South African Museum. *ICOFOM Study Series* 46: 81–97.
- De Clercq, S.W.G. 2003. Museums as a mirror of society: A Darwinian look on the development of museums and collections of science. *UMAC proceedings*: 57–65.
- Deacon, H. 2001. Racism and medical science in South Africa's Cape Colony in the mid- to late nineteenth century. *Osiris* 15, Nature and Empire: Science and the Colonial Enterprise: 190–206.
- Digby, A. 2005. Self-medication and the trade in medicine within a multi-ethnic context: A case study of South Africa from the mid-nineteenth to mid-twentieth centuries. *SHM* 18 (2005): 439–57.
- Digby, A. 2006. *Diversity and division in medicine: Health care in South Africa from the 1800s*. Oxford and Berlin: Peter Lang.
- Driver, F. 2001. *Geography militant: Cultures of exploration and empire*. Oxford: Blackwell Publishers.
- Driver, F. & Martins, L. 2005. *Tropical visions in an age of Empire*. Chicago: University of Chicago Press.
- Dubow, S. 1989. The idea of race in early 20th Century South Africa: Some preliminary thoughts. PhD dissertation, University of the Witwatersrand.

- Dubow, S. 1995a. *Scientific racism in modern South Africa*. Johannesburg: Witwatersrand University Press.
- Dubow, S. 1995b. *Illicit union: scientific racism in modern South Africa*. Cambridge: Cambridge University Press.
- e-flux. 2021. Allan Sekula and Noël Burch. *The forgotten space | Part One | Socioeconomic systems (Hatred for capitalism)* [Online]. Available: <https://www.e-flux.com/video/401989/allan-sekula-and-nol-burch-the-forgotten-space/> (09/03/2020).
- Elkins, J. 2000. *How to use your eyes*. London; New York: Routledge.
- Elkins, J. (ed.). 2007. *Visual practices across the university*. Leiden: Wilhelm Fink.
- Enwezor, O. 1997. Reframing the black subject: Ideology and fantasy in contemporary South African representation. *Third text* 40: 21–39.
- Ernst, W. 2002. *Plural medicine, tradition and modernity, 1800–2000*. London: Routledge.
- Flint, K. 2008. *Healing traditions: African medicine, cultural exchange, and competition in South Africa*. Athens: Ohio University Press and Scottsville: University of KwaZulu Natal Press.
- Francis, R. 2017. Chimps, racism and the definition of death: The heart transplant story. *The Conversation* [Online]. Available: <https://theconversation.com/chimps-racism-and-the-definition-of-death-the-heart-transplant-story-84864> (18/8/2021).
- Gan, E. 2021. Rice child (Stirrings), 2011/2014. *Elaine Gan*. [Online]. Available: <http://elainegan.com/riceDarc.html>. (19/11/2021).
- Golinski, J. 1998. *Making natural knowledge: Constructivism and the history of science*. Cambridge: Cambridge University Press.
- Goudie, A. 1978. Colonel Julian Jackson and his contribution to geography. *The Geographical Journal* 144(2): 264–270.
- Greenblatt, S. 1991. Resonance and wonder. In I. Karp & S.D. Lavine (eds). *Exhibiting cultures: The poetics and politics of museum display*. Washington: Smithsonian Institution Press. 161–183.
- Haber, A. & Shepherd, N. 2015. *After ethics: Ancestral voices and post-disciplinary worlds in archaeology*. New York: Springer.
- Hahn, R. 1971. *The anatomy of a scientific institution: The Paris Academy, 1666 - 1803*. Berkeley, Los Angeles: University of California Press.
- Hall, M. 2009. New knowledge and the university. *Anthropology Southern Africa: Knowledge Contents, South Africa* 32(1–2): 69–76.
- Hamilton, C., Modisane, L. & Bester, R. 2020. Tracing public engagements in visual forms. In L. Cowling & C. Hamilton. (eds). *Babel unbound: Rage, reason and rethinking public life*. Johannesburg: Wits University Press.
- Hamilton, C. & Skotnes, P. (eds). 2014. *Uncertain curature: In and out of the archive*. Johannesburg/Cape Town: Jacana.
- Hankins, T. & Silverman, R. 1999. *Instruments and imagination*. New Jersey: Princeton University Press.
- Hannan, L., Chatterjee, H., & Duhs, R. 2013. Object based learning: A powerful pedagogy for higher education. In A. Boddington, J. Boys, & C. Speight (eds). *Museums and higher education working together: Challenges and opportunities*. Farnham: Ashgate Publishing. 159–168.
- Haraway, D. 1991. *Simians, cyborgs, and women: The reinvention of nature*. New York: Routledge.
- Haraway, D. 2008. *When species meet*. Minneapolis & London: University of Minnesota Press.
- Hardiman, D. 2006. *Healing bodies, saving souls: medical missions in Asia and Africa*. Amsterdam: Rodopi.
- Hart, L., Digby, S. & Rapp, J. 2010. *Collection development policy. Manuscripts & Archives Department*. University of Cape Town.
- Hart, L. & Lydall, S. 1981. The Floyd papers [unpublished document]. University of Cape Town.
- Headrick, D. 1981. *The tools of empire: Technology and European imperialism in the nineteenth century*. Oxford: Oxford University Press.
- Headrick, D. 2014. Sleeping sickness epidemics and colonial responses in East and Central Africa, 1900–1940. *PLOS Neglected Tropical Diseases* 8(4): 1–8.
- Henning, M. 2006. *Museums, media and cultural theory*. Maidenhead, England: Open University Press.
- Hill, J. 2006. Globe-trotting medicine chests: Tracing geographies of collecting and pharmaceuticals. *Social and Cultural Geography* 7: 365–384.
- Holzhauzen, E. 1991. New lease of life for extinct bushmen [newspaper cutting]. *The Cape Times*. n.d. Sound from the thinking strings archive. Centre for Curating the Archive.
- Honigman, A.F. 2014. An interview with Joanne Bloch. *Re: Sculpt* [Online]. Available: <https://>

- web.archive.org/web/20160603022936/https://blog.sculpture.org/2014/01/06/interview-with-joanne-bloch/ (07/10/2020).
- Hooper-Greenhill, E. 1992. *Museums and the shaping of knowledge*. London: Routledge.
- Huxley, A. 1996. *Point Counter Point*. London: Dalkey Archive Press.
- I.B. 1992. Sound from the thinking strings (Review). *African Notes News* 30(2): 8.
- Illing, N. & Sloan, A. 2016. Science and decolonisation: A way forward. *GroundUp* [Online]. Available: <https://www.groundup.org.za/article/science-and-decolonisation-way-forward/> (21/03/2020).
- Iziko Museums of South Africa. 2021. Social history centre [Online]. Available: <https://www.iziko.org.za/museums/social-history-centre> (16/08/2021).
- Jackson, J. 1841. *What to observe; or, the traveller's remembrancer*. London: John Murray. [Online]. Available: <https://archive.org/details/whattoobserveort00jack>. (20/11/2021).
- Jackson, S. & Robins, S. 1999. Miscast: The place of the museum in negotiating the Bushman past and present. *Critical Arts* 13(1): 69–101.
- Johnson, R. 2008a. Commodity culture: Tropical health and hygiene in the British Empire. *Endeavour* 32(2): 70–74.
- Johnson, R. 2008b. Tabloid brand medicine chests: Selling health and hygiene for the British tropical colonies. *Science as Culture* 17 (3): 249–268.
- Jordan, E.G. 2005. 'Unrelenting toil': Expanding archaeological interpretations of the female slave experience. *Slavery & Abolition* 26(2): 217–232.
- Kashe-Katiya, X. 2010. Biography of a colonial music archive: The Percival Kirby Collection. *The Archival Platform* [Online]. Available: <http://www.archivalplatform.org/blog/entry/recording-traditional/> (20/04/2020).
- Kennedy, D. 2007. British exploration in the nineteenth century: A historiographical survey. *History Compass* 5(6): 1879–1900.
- Kennedy, D. 2013. *The last blank spaces: Exploring Africa and Australia*. Cambridge, MA: Harvard University Press.
- Khan, Z. 2021. Work. *By Zayaan Khan* [Online]. Available: <https://www.byzayaankhan.com/exhibitions>. (15/08/2021).
- Kirby, P. 1934. *The musical instruments of the native races of South Africa*. London: Oxford University Press.
- Kirby, P. 1964. *The musical instruments of the native races of South Africa*. 2nd ed. Johannesburg: Wits University Press.
- Kirby, P. 1982. The musics of the black races of South Africa. In J.P. Malan (ed). *South African Music Encyclopedia*. 11: 267–293.
- Kirby, P. 2013. *The musical instruments of the indigenous people of South Africa*. 3rd ed. Johannesburg: Wits University Press.
- Klein J. 2013. The transdisciplinary moment(um). *Integral Review* 9: 189–199.
- Klein J. 2017. Typologies of interdisciplinarity: The boundary work of definition. In R. Frodeman, J. Klein & R. Pacheco (eds). *The Oxford handbook of interdisciplinarity*. New York, NY: Oxford University Press.
- Kozain, R. 1996. Miscast. *South African Review of Books* 44: 14–15.
- Kuhn, T.S. 1970. *The structure of scientific revolutions*. Chicago: University of Chicago Press.
- Kumar, K. & Nair, N. 2015. The new historical parameters: Genesis, theory and practice. *International Journal of English Language, Literature and Humanities* III(V): 111–127.
- Laidler, P.W. & Gelfand, M. 1971. *South Africa: Its medical history 1652–1898. A medical and social study*. Cape Town: C. Struik.
- Lane, P. 1996. Breaking the mould: Exhibiting Khoisan in southern African museums. *Anthropology Today* 12(5): 3–10.
- Langerman, F. n.d. Curiosity. *Fritha Langerman* [Online]. Available: <https://frithalangerman.com/curiosity/> (05/10/2019).
- Langerman, F. 2010. *Subtle thresholds: The representational taxonomies of disease – an exhibition. July 2009–August 2010*. Iziko South African Museum, Cape Town. Cape Town: Centre for Curating the Archive.
- Larson, F. 2009. *An infinity of things: How Sir Henry Wellcome collected the world*. New York: Oxford University Press.
- Larson, F. 2010. The things about Henry Wellcome. *Journal of Material Culture* 15(1): 83–104.
- Latour, B. 1987. *Science in action*. Cambridge, MA: Harvard University Press.
- Latour B. 1988. The politics of explanation: an alternative. In S. Woolgar (ed.). *Knowledge and reflexivity: New frontiers in the sociology of knowledge*. London: Sage. 155–176.
- Lewis, C.S. 1994. *The lion, the witch, and the wardrobe*. London: HarperCollins Publishers.

- Liebenberg, N. 2011. Point Counter Point. Masters dissertation, University of Cape Town.
- Littlefield Kasfir, S. 1997. Cast, miscast: The curator's dilemma. *African Arts* 30(1): 1–93.
- Lourenço, M. 2005. Between two worlds: The distinct nature and contemporary significance of university museums and collections in Europe. PhD dissertation, Conservatoire National des Arts et Métiers, Paris.
- Mabogo, D. 1990. The ethnobotany of the Vha Venda. Masters thesis, University of Pretoria [Online]. Available: <http://www.ethnopharmacologia.org/prelude2020/pdf/biblio-hm-58-mabogo.pdf> (19/10/2020).
- Maggs, T. & Davison, P. 1981. The Lydenburg Heads. *African Arts* 14 (2): 28–88.
- Maledu, A. 2018. Isigubu through qgom: The sound of defiance and Black joy. BAHons (Curatorship) research project, University of Cape Town.
- Marstine, J. 2006. Introduction. In *New museum theory and practice: An introduction*. Oxford: Blackwell Publishing. 1–36.
- Martin, M. 2019. *Between dreams and realities: A history of the South African National Gallery, 1871–2017*. Cape Town: Print Matters Heritage.
- Mbana, N. & Garner, J. 2005. History in the making. *Big Issue* 92(9): 31 [Online]. Available: <https://frithalangerman.com/wp-content/uploads/2004/02/Big-Issue-March-2005-issue-92-vol9.pdf> (31/10/2021).
- Mbembe, A. 2020. 'The universal right to breathe'. *Critical Inquiry* 13 (April) [Online]. Available: <https://critinq.wordpress.com/2020/04/13/the-universal-right-to-breathe/> (09/08/2021).
- McClintock, A. 1995. *Imperial leather: Race, gender and sexuality in the colonial contest*. London: Routledge.
- McEwan, C. 1998. Gender, science and physical geography in nineteenth century Britain. *Area* 30(3): 215–223.
- Miller, M. & Boix-Mansilla, V. 2004. *Thinking across perspectives and disciplines*. Boston, MA: Harvard Graduate School of Education.
- Minnaar, M. 1996. Fresh display of long-neglected San artefacts stirs cauldron of emotions [newspaper cutting]. *The Cape Times*. n.d. [Online]. Available: <https://drive.google.com/file/d/18-eDxSSZjVDk08-HmjB9dxJYWPJas4P/view>. (18/10/2020).
- Montinari, M. & Minelli, G. 2019. The first 200 years of cardiac auscultation and future perspectives. *Journal of Multidisciplinary Healthcare* 12: 183–189.
- Morphet, T. 1994. Face value (Review). *Southern African Review of Books* 31(May/June) [Online]. Available: <http://web.archive.org/web/20040108105210/http://uni-ulm.de/~rturrell/antho4html/Morphet.html> (13/08/2021).
- Morris, A. 1984. An osteological analysis of the protohistoric populations of the Northern Cape and Western Orange Free State, South Africa. PhD dissertation, University of the Witwatersrand.
- Morris, A. 1987. The reflection of the collector: San and Khoi skeletons in museum collections. *South African Archaeological Bulletin* 42(145): 12–22.
- Morris, A. 2008. Searching for 'real' Hottentots: The Khoekhoe in the history of South African physical anthropology. *Southern African Humanities* 20(1): 221–233.
- Morris, A. 2012. Biological anthropology at the southern tip of Africa: Carrying European baggage in an African context. *Current Anthropology* 53(S5): S152–S160.
- Moshabela, M., Zuma, T. & Gaede, B. 2016. Bridging the gap between biomedical and traditional health practitioners in South Africa. *South African Health Review* 2016.1 (2016): 83–92.
- Murray, P. 2004. Curiosity preserved by UCT collections. *Cape Times*. n.d. [Online]. Available: <https://frithalangerman.com/wp-content/uploads/2004/02/cape-times.jpg> (31/10/2021).
- Murthi, R. 2013. *Heart in fours: Cardiology for residents and practitioners*. New Delhi: Jaypee Brothers Medical Publishers Ltd.
- Ndlovu, B. 2019. Interview. Conducted by Karen Ijumba. 23 April 2019.
- Nhemachena, A., Hlabangane, N. & Matowanyika, J. 2020. *Decolonising science, technology, engineering and mathematics (STEM) in an age of technocolonialism: Recentering African indigenous knowledge and belief systems*. Mankon, Bamenda: Langaa Research & Publishing CIG.
- Nixon, M. 2013. Introduction. In P. Kirby. *The musical instruments of the indigenous people of South Africa* (3rd ed). Johannesburg: Wits University Press. ix–xiv.
- Nixon, M. 2015. An orchestration across time. *Humanitec*. University of Cape Town [Online]. Available: <https://digitalcollections.lib.uct.ac.za/humanitec/kirby> (12/06/2020).
- Nobel Prize. 2010. Graphene – the perfect atomic lattice (press release) [Online]. Available:

- <https://www.nobelprize.org/prizes/physics/2010/press-release/> (11/03/2021).
- Nordling, L. 2018. How decolonization could reshape South African science. *Nature* 554: 159–162.
- Op den Kamp, C. & Hunter, D. 2019. *A history of intellectual property in 50 objects*. Cambridge: Cambridge University Press.
- Opoku, M.J. & James, A. 2021. Pedagogical model for decolonising, indigenising and transforming science education curricula: A case of South Africa. *Journal of Baltic Science Education* 20(1): 93–107.
- Papper, E.M. 1995. *Romance, poetry and surgical sleep: Literature influences medicine*. Westport, Conn: Greenwood Press.
- Parkington, J. 1976. Follow the San: An analysis of seasonality in the prehistory of the south western Cape, South Africa. Ph.D. dissertation, University of Cambridge.
- Pathology Learning Centre. 2020. *Pathology Learning Centre: About*. University of Cape Town [Online]. Available: <http://www.pathologylearningcentre.uct.ac.za/> (10/10/2019).
- Payne, M. (ed.) 1993. *Face value: Old heads in modern masks. A visual archaeological and historical reading of the Lydenburg Heads*. Cape Town: Axeage Private Press.
- Penn, N. 2005. The forgotten frontier: Colonist and Khoisan on the Cape's northern frontier in the 18th century. Athens: Ohio University Press.
- Pickthall, B. 2016. *A history of sailing in 100 objects*. London: Bloomsbury Publishing.
- Pieterse, J.N. 1992. *White on black: Images of Africa and blacks in western popular culture*. New Haven: Yale University Press.
- Preziosi, D. & Farago, C. 2004. *Grasping the world: The idea of the museum*. Aldershot: Ashgate.
- Putnam, J. 2001. *Art and artifact: the museum as medium*. London: Thames & Hudson.
- Renfrew, C. & Bahn, P. 2005. *Archaeology: The key concepts*. London: Routledge.
- Richards, T. 1990. *The commodity culture of Victorian England: Advertising and spectacle, 1851–1914*. Stanford, CA: Stanford University Press.
- Ritchie, W. 1918. *The history of the SA College: 1829–1918* (2 volumes). Maskew Miller: Cape Town.
- Ro, C. 2020. Coronavirus: Why some racial groups are more vulnerable. *BBC* 21 April (Online). Available: <https://www.bbc.com/future/article/20200420-coronavirus-why-some-racial-groups-are-more-vulnerable> (15/8/2021).
- Roberts, J. 2017. Western medicine in Africa, Part II: Ethiopia, East and southern Africa to 1900. *History Compass* 15(8) [Online]. Available: <https://onlinelibrary-wiley-com.ezproxy.uct.ac.za/doi/epdf/10.1111/hic3.12393> (15/8/2021).
- Robertson, B. 2006. Curiosity cabinets, museums, and universities. In C. Sheehy. *Cabinet of curiosities: Mark Dion and the university as installation*. Minneapolis/London: University of Minnesota Press.
- Robins, S. 1996. As museumgoers literally walk over the brutal fate of the Bushmen, they seem to miss the point. *Sunday Independent*, 26 May: 23.
- Rossouw, H. 2004. Love letter to a university. *The Chronicle of Higher Education* (December): 76 [Online]. Available: https://frithalangerman.com/wp-content/uploads/2004/02/Chronicle-of-Higher-Education-Dec-17-2004_small.pdf (31/10/2021).
- Ryan, M. 1986. A history of organised pharmacy in South Africa. Masters thesis, University of Cape Town.
- Said, E. 1979. *Orientalism*. New York: Vintage.
- Saito, M. 2011. Jesse Owens' legacy, and Hitler's oak trees. *National Public Radio (Morning Edition)* [Online]. Available: <https://www.npr.org/2011/07/27/138590488/jesse-owens-legacy-and-hitlers-oak-trees> (18/8/2021).
- Shapin, S. 1988 The house of experiment in seventeenth-century in England. *Isis* 79(298): 373–404.
- Shapin, S. 1994. *A social history of truth: Civility and science in seventeenth-century England*. Chicago: University of Chicago Press.
- Shapin, S. 1995. Here and everywhere: Sociology of scientific knowledge. *Annual Review of Sociology* 21: 289–232.
- Shapin, S. & Schaffer, S. 2011. *Leviathan and the air-pump: Hobbes, Boyle, and the experimental life*. Princeton, N.J.: Princeton University Press.
- Shepherd, N. 1998. Archaeology and post-colonialism in South Africa: the theory, practice and politics of archaeology after apartheid. PhD dissertation, University of Cape Town [Online]. Available: <https://open.uct.ac.za/handle/11427/11702>. (10/06/2020).
- Shepherd, N. 2003. When the hand that holds the trowel is black...: Disciplinary practices of self-representation and the issue of 'native' labour in archaeology. *Journal of Social Archaeology*

- 3(3): 334–352.
- Shepherd, N. 2012. The uncreated man. A story of archaeology and imagination. *Archaeological Dialogues* 19(2): 171–194.
- Shepherd, N. 2015. *The mirror in the ground: Archaeology, photography and the making of a disciplinary archive*. Jeppestown: Jonathan Ball Publishers.
- Shepherd, N. 2018. Epistemic decolonization. *ECHOES: European Colonial Heritage Modalities in Entangled Cities* [Online]. Available at: <http://keywordsechoes.com/> (14/08/2021).
- Silver, S. 2016. Hooke, Latour, and the history of extended cognition. *Eighteenth Century: Theory & Interpretation* 57(2): 197–215.
- Simson, H. 1985. *Zambia: A country study*. Uppsala: Scandinavian Institute of African Studies.
- Skotnes, P. 1991. Dreams of Bitterpits and the genesis of a book. *Artworks in progress: the yearbook of the staff of the Michaelis School of Fine Art*. Cape Town: University of Cape Town: 26–30.
- Skotnes, P. 1996. *Miscast: Negotiating the presence of the Bushmen*. Bellville: Institute for Historical Research, University of the Western Cape.
- Skotnes, P. 2007. *Claim to the Country: The archive of Lucy Lloyd and Wilhelm Bleek*. Johannesburg: Jacana.
- Skotnes, P. 2019. *Centre for Curating the Archive: Self-review portfolio 2013–2019*. University of Cape Town.
- Skotnes, P., Langerman F. & Van Embden, G. 2004. *Curiosity CLXXV: A paper cabinet*. Cape Town: LLAREC Series in Visual History.
- Skotnes, P. & Payne, M. 1995. The art of the curator: Exhibiting art in contemporary South Africa. *Social Dynamics* 21(1): 83–95.
- Stacey, C. 2017. The Makhweyane bow of Swaziland: Music, poetics and place. PhD dissertation, University of Cape Town.
- Stepan, N.L. 2001. *Picturing tropical nature*. London: Reaktion Books.
- Stewart, L. 2000. Black South African urban music styles: The ideological concepts and beliefs surrounding their development 1930–1960. PhD dissertation, University of Pretoria [Online]. Available: <https://repository.up.ac.za/handle/2263/22921> (10/06/2020).
- Stichweh, R. 1984. *Zur entstehung des modernen systems wissenschaftlicher disziplinen: Physik in Deutschland 1740–1890*. Frankfurt am Main: Suhrkamp.
- Sturken, M. & Cartwright, L. 2018. *Practices of looking: An introduction to visual culture*. New York: Oxford University Press.
- Taylor, S. 2006. *Culture and customs of Zambia*. Westport, Conn: Greenwood Press.
- Thogersen, J., Hammond, G., Simpson, A., Janiszewski, L. Guerry, E. 2016. Creating curriculum connections: A university museum object-based learning project. *Education for Information* 34(2): 113–120.
- Thompson, A. 2015. *Hunting Africa: British sport, African knowledge and the nature of empire*. United Kingdom: Palgrave Macmillan.
- Thorne, J. 2003. The choreography of display: Experiential exhibition in the context of museum practice and theory. Masters thesis, University of Cape Town.
- Tilley, H. 2011. *Africa as a living laboratory: Empire, development, and the problem of scientific knowledge, 1870–1950*. Chicago: University of Chicago Press.
- Tobias, P.V. 1990. The role of R.B. Thomson and E.P. Stibbe: Brief heralds of the science of anatomy in South Africa. Pt. 1. R.B. Thomson. *South African Medical Journal* 78(6): 330–335.
- Twentyman-Jones, L. 1981. *Sorting collections of manuscripts* [Document]. University of Cape Town.
- University of Cape Town. 2016. Faculty focus [Online]. Available: <https://www.news.uct.ac.za/publications/facultyfocus/>. (14/04/2016).
- University of Cape Town Libraries. 2013. *Guide to the manuscripts in the University of Cape Town libraries* [Document]. University of Cape Town.
- Van Heyningen, E.B. 1989. Agents of Empire: The medical profession in the Cape Colony, 1880–1910. *Medical History* 33(4): 450–471.
- Van Sittert, L. 2000. ‘The seed blows about in every breeze’: Noxious weed eradication in the Cape Colony, 1860–1909. *Journal of Southern African Studies* 26(4): 655–674.
- Van Sittert, L. 2002. From mere ‘weeds’ and ‘bosjes’ to a Cape Floral Kingdom: The re-imagining of indigenous flora at the Cape. *Kronos* 28: 102–26.
- Van Sittert, L. 2010. The intimate politics of the Cape Floral Kingdom. *South African Journal of Science* 106(3/4) [Online]. Available: <https://journals.sajs.aosis.co.za/index.php/sajs/article/view/162/229> (15/08/2021).
- Van Wyk, B. & Albrecht, C. 2008. A review of the taxonomy, ethnobotany, chemistry and

- pharmacology of *Sutherlandia frutescens* (fabaceae). *Journal of Ethnopharmacology* 119(3): 620–629.
- Vaughan, M. 1991. *Curing their ills: Colonial power and African illness*. Stanford, CA: Stanford University Press.
- Viljoen, R. 1999. Medicine, health and medical practice in precolonial Khoikhoi society: An anthropological-historical perspective. *History and Anthropology* 11(4): 515–536.
- Viruly, N. 2019. Notebook 2 – Nest records. Object ecologies. Centre for Curating the Archive, University of Cape Town [Online]. Available: <https://www.objectecologies.co.za/2019/university-of-cape-town/notebook-2-nest-records-mainly-eggs-in-drawer-3/> (02/02/2019).
- Wehmeier, S. 2000. *Oxford advanced learner's dictionary*. New York: Oxford University Press.
- Weingart, P. 2010. A short history of knowledge formations. In R. Frodeman, J.T. Klein & C. Mitcham (eds). *Oxford handbook of interdisciplinarity*. New York: Oxford University Press. 3–14.
- Wilson, F. 2001. Minerals and migrants: How the mining industry has shaped South Africa. *Daedalus* 130 (1): 99–121.
- Withers, C.W.J. 2013. Science, scientific instruments and questions of method in nineteenth-century British geography. *Transactions of the Institute of British Geographers* 38(1): 167–179.
- Witz, L., Rasool, C. and Minckley, G. 2017. *Unsettled history: Making South African public pasts*. Ann Arbor: University of Michigan Press.
- Xaba, P. & Notten, A. 2003. *Lessertia frutescens*. *SANBI PlantzAfrica.com*. [Online]. Available: <http://pza.sanbi.org/lessertia-frutescens>. (15/10/2021).
- Young, L. 2002. *The book of the heart*. London: Harper Collins Publishing.
- Zank, S. & Hanazaki, N. 2017. The coexistence of traditional medicine and biomedicine: A study with local health experts in two Brazilian regions. *PLoS One* 12(4): e0174731 [Online]. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5393556/> (07/10/2020).
- Zerubavel, E. 2015. *Hidden in plain sight: The social structure of irrelevance*. New York: Oxford University Press.
- Zimmer, N. 2015. Percival Kirby's wax cylinders: Elegy on archiving a deaf spot. *Social Dynamics* 41 (1):101–123.

List of figures (not documented by the researcher)

INTRODUCTION

Figure 1.

Francis Alÿs. 2001. *Looking up*. From: <https://francisalys.com/looking-up/> (10/11/2021).

Figure 2.

Pierre Huyghe. 1995. *Or*. From: Barikin, A. 2012. *Parallel presents: The art of Pierre Huyghe*. Cambridge, Massachusetts: MIT Press. 15.

Figure 3.

Joseph Wright. 1768. *An experiment on a bird in an air pump*. From: https://en.wikipedia.org/wiki/An_Experiment_on_a_Bird_in_the_Air_Pump#/media/File:An_Experiment_on_a_Bird_in_an_Air_Pump_by_Joseph_Wright_of_Derby,_1768.jpg (10/11/2021).

Figure 4.

Miscast (installation detail). 1994. From: CCA Miscast archive.

Figure 5.

Miscast (installation detail). 1994. From: CCA Miscast archive.

Figure 6,7.

Skotnes, P., Langerman, F. & Van Embden, G. 2004. *Curiosity CLXXV: A paper cabinet*. Cape Town: LLAREC Series in Visual History. 159.

Figure 8.

Skotnes, P., Langerman, F. & Van Embden, G. 2004. *Curiosity CLXXV: A paper cabinet*. Cape Town: LLAREC Series in Visual History. 76 – 77.

Figure 9.

Tom Friedman. 1992. *Untitled*. From: Hainley, B., Cooper, D. & Searle, A. 2001. *Tom Friedman*. New York & London: Phaidon. 41.

Figure 10.

Cornelia Parker. 1977. *Measuring Niagara with a teaspoon*. From: <https://www.tate.org.uk/art/artworks/parker-measuring-niagara-with-a-teaspoon-t07430> (10/11/2021).

Figure 11.

Simon Starling. 2008. *Silver particle/bronze (after Henry Moore)*. From: http://www.artnet.com/magazineus/reviews/mandarino/magazine-rack-february2-23-10_detail.asp?picnum=13 (10/11/2021).

Figure 12.

Elaine Gan. 2011/2014. *Rice child (stirrings)*. From: <https://elainegan.com/riceDarc.html> (10/10/2021).

Figure 13.

Lewis Carroll. 1891. Ocean chart. From: Carroll, L. 1891. *The hunting of the snark: An agony in eight fits*. New York: Macmillan and Co.

CHAPTER ONE

Figure 5.

The medicine chest. 2018. *The Landis Museum*, curated by Chapter Thirteen. Glasgow International. (Drawing of box based on an audio description of the object). Photograph courtesy of James Hutchinson.

Figure 10.

Situations in which a Tabloid medicine chest made by BWC might be useful. 1909. Wellcome Collection. From: <https://wellcomecollection.org/works/kamxfreh> (14/11/2021).

Figure 11.

The swamp of sadness. Film still from the *Neverending Story* (1981), directed by Michael Ende.

Figure 12.

Tabloid medicine chest issued to the Scott Polar Expedition, found with their bodies. Wellcome Collection. From: <https://wellcomecollection.org/works/uvruhtwc> (13/11/2021).

Figure 13.

Line drawing of the Burroughs Wellcome & Co. offices, Cape Town, South Africa. N.d. Wellcome Collection. From: <https://wellcomecollection.org/works/b9hkuqb2> (11/11/2021).

Figure 21.

Mrs Glover attending to an ill African chief. 1934. From: Burroughs Wellcome & Co. 1934. *The romance of exploration and emergency first aid from Stanley to Byrd*. London: Burroughs Wellcome & Co. 16.

Figure 23.

Harold Copping. 1916. *The healer*. Wellcome Collection. From: <https://wellcomecollection.org/works/u4hc2hwe> (11/11/2021).

Figure 25.

Jenny Kendler. 2016–2017. *Music for elephants*. From: <https://jennykender.com/artwork/4098088-Music-for-Elephants-Detail-of-the-perforated-player-piano-roll.html> (11/11/2021).

Figure 30.

Skotnes, P., Langerman F. & Van Embden, G. 2004. *Curiosity CLXXV: A paper cabinet*. Cape Town: LLAREC Series in Visual History. 81.

Figure 31.

Joanne Bloch. 2015. *Hoard* (detail). Photograph by Dave Southwood.

CHAPTER TWO

Figure 2.

Skotnes, P., Langerman F. & Van Embden, G. 2004. *Curiosity CLXXV: A paper cabinet*. Cape Town: LLAREC Series in Visual History. 171.

Figure 3.

James Elkins. 2007. Deductions from smooth rocks. Visual practices across the university. University of Cork. From: Elkins, J. (ed.). 2007. *Visual practices across the university*. Leiden, The Netherlands: Wilhelm Fink. 74.

Figure 4.

Nina Liebenberg. 2011. *Planthology*. From: <http://www.pathologylearningcentre.uct.ac.za/planthology-nina-liebenberg> (12/11/2021).

Figure 5.

Marcel Duchamp. 1927. *Door, 11 rue Larrey*, New York. From: https://www.toutfait.com/unmaking_the_museum/Door.11%20rue%20Larrey.html (12/11/2021).

Figure 6.

Lucy and the wardrobe. Film still from *The lion, the witch and the wardrobe* (2005), directed by Andrew Adamson. From: [https://electricliterature.com/i-just-want-to-hang-](https://electricliterature.com/i-just-want-to-hang-out-in-the-wardrobe/)

[out-in-the-wardrobe/](https://electricliterature.com/i-just-want-to-hang-out-in-the-wardrobe/). (24/11/2021).

Figure 7.

Information found on a botanical specimen (K000225239) in the Royal Botanic Gardens of Kew, donated by the University of Cape Town. From: https://plants.jstor.org/stable/10.5555/al.ap.specimen.k000225239?searchUri=si%3D0%26ff%3Dps_type__ps_collection_name_str%26fq%3DcHNfcmVwb3NpdG9yeV9uYW1lX3N0cjooIlJveWFsIEJvdGFuaWMgR2FyZGVucywgS2V3IChLKSIp%26filter%3Dname%26so%3Dps_group_by_genus_species%2Basc%26Query%3DErica%2Blatiflora (12/11/2021).

Figure 11.

Skotnes, P., Langerman, F. & Van Embden, G. 2004. *Curiosity CLXXV: A paper cabinet*. Cape Town: LLAREC Series in Visual History. 79.

Figure 12.

Miscast (cabinet with scientific instruments sourced from the M.R. Drennan collection). 1994. The South African National Gallery, Cape Town. From: CCA Miscast archive.

Figure 15.

Skotnes, P., Langerman, F. & Van Embden, G. 2004. *Curiosity CLXXV: A paper cabinet*. Cape Town: LLAREC Series in Visual History. 65.

Figure 18.

Miscast (installation detail). 1994. The South African National Gallery, Cape Town. From: CCA Miscast archive.

Figure 19.

A watercolour of a whirring instrument by Tammé, painted in 1881. *Digital Bleek and Lloyd*. Centre for Curating the Archive. UCT. From: http://lloydbleekcollection.cs.uct.ac.za/drawings/Iziko_SAMLB_TaBook1_012.html (12/11/2021).

Figures 20,21.

A section on the suffragettes storming the Houses of Parliament from a 14 October 1908 *Cape Argus* newspaper clip that Floyd saved for photographs of the Alfred Rowing Club's Annual Regatta. BC666 A1.22. Special Collections, UCT.

Figure 22.

How to observe the aurora borealis. From: Jackson, J. 1841. *What to observe; or, the traveller's remembrancer*. London: John Murray.

Figure 23.

Nina Liebenberg. 2018. *The northern lights*. From: <https://vimeo.com/264215248> (12/11/2021).

CHAPTER THREE

Figure 1.

The artist-curator in the South African museum. 1993. Photograph by Geoff Grundlingh. From: Payne, M. (ed.) 1993. *Face value: Old heads in modern masks. A visual archaeological and historical reading of the Lydenburg Heads*. Cape Town: Axeage Private Press.

Figure 2.

Sound from the thinking strings (installation detail). 1991. South African Museum. Cape Town. From: CCA archives.

Figure 3.

From: Skotnes, P. et al. 1991. *Sound from the thinking strings: A visual, literary, archaeological and historical interpretation of the final years of |xam life*. Cape Town: Axeage Private Press.

Figure 4.

Sound from the thinking strings (installation detail). 1991. South African Museum. Cape Town. From: CCA archives.

Figure 5.

From: Skotnes, P. et al. 1991. *Sound from the thinking strings: A visual, literary, archaeological and historical interpretation of the final years of |xam life*. Cape Town: Axeage Private Press.

Figure 6.

Sound from the thinking strings (installation detail). 1991. South African Museum. Cape Town. From: CCA archives.

Figure 7.

Face value. 1993. South African National Gallery. Cape Town. Photograph by Malcolm Payne.

Figure 8.

Malcolm Payne. 1988. *The Mafikeng Heads* (Nos. 8 & 10). From: <http://www.cca.uct.ac.za/cca/arc/visual-university/face-value> (13/11/2021).

Figure 9.

Face value. 1993. South African National Gallery. Cape Town. Photograph by Malcolm Payne.

Figure 10.

Fred Wilson. 1992. *Mining the museum* (installation detail). Maryland Historical Society, Baltimore. From: <https://bmoreart.com/2017/05/how-mining-the-museum-changed-the-art-world.html> (13/11/2021).

Figure 11 - 20.

Miscast (installation detail). 1994. The South African National Gallery. Cape Town. From: CCA Miscast archive.

Figure 21.

Skotnes, P., Langerman, F. & Van Embden, G. 2004. *Curiosity CLXXV: A paper cabinet*. Cape Town: LLAREC Series in Visual History. 135.

Figure 22.

Skotnes, P., Langerman, F. & Van Embden, G. 2004. *Curiosity CLXXV: A paper cabinet*. Cape Town: LLAREC Series in Visual History. 38–39.

Figure 23.

Skotnes, P., Langerman, F. & Van Embden, G. 2004. *Curiosity CLXXV: A paper cabinet*. Cape Town: LLAREC Series in Visual History. 97.

Figure 24.

Skotnes, P., Langerman, F. & Van Embden, G. 2004. *Curiosity CLXXV: A paper cabinet*. Cape Town: LLAREC Series in Visual History. 151.

Figure 25.

Skotnes, P., Langerman, F. & Van Embden, G. 2004. *Curiosity CLXXV: A paper cabinet*. Cape Town: LLAREC Series in Visual History. 127.

Figure 26.

Skotnes, P., Langerman, F. & Van Embden, G. 2004. *Curiosity CLXXV: A paper cabinet*. Cape Town: LLAREC Series in Visual History. 56–57.

Figure 27.

Skotnes, P., Langerman, F. & Van Embden, G. 2004. *Curiosity CLXXV: A paper cabinet*. Cape Town: LLAREC Series in Visual History. 85.

Figure 28.

Skotnes, P., Langerman, F. & Van Embden, G. 2004. *Curiosity CLXXV: A paper cabinet*. Cape Town: LLAREC Series in Visual History. 175.

Figure 29.

Amogelang Maledu. 2018. *Isigubu through ggom: the sound of defiance and Black joy*. UCT Honours in Curatorship. From: <http://www.cca.uct.ac.za/exam-exhibitions-2018> (13/11/2021).

Figure 30.

The sanxian. Kirby collection of musical instruments. South African College of Music, UCT. From: <https://digitalcollections.lib.uct.ac.za/collection/islandora-20380> (13/11/2021).

Figure 31 – 34.

Subtle thresholds (installation detail). 2009–2010. South African Museum, Cape Town. Photographs by Fritha Langerman.

Figure 36.

Viral lightboxes in the Pathology Learning Centre, UCT. 2011. Photograph by Fritha Langerman.

Figure 40.

Nathalie Viruly. 2019. An oologist's note on grief. *Object ecologies*. UCT Honours in Curatorship. From: <https://www.objectecologies.co.za/2019/university-of-cape-town/notebook-2-nest-records-mainly-eggs-in-drawer-3/> (13/11/2021).

Figure 41.

Melissa Waters. 2018. *Prrrip-Prrrip, Tseeee! The silence of birds' eggs*. UCT Honours in Curatorship exhibition. From: <http://www.cca.uct.ac.za/exam-exhibitions-2018> (13/11/2021).

CONCLUSIONS

Figure 1.

Gordon Matta Clark. 1974. *Bronx floors: Four way walls*. From: <https://integrated4x.wordpress.com/2012/06/30/gordon-matta-clark-4-way-wall/> (13/11/2021).

Figure 2.

The Tacoma Narrows bridge on 7 November 1940. Washington. From: <https://www.re-thinkingthefuture.com/architectural-facts/a2573-10-things-you-did-not-know-about-the-tacoma-narrows-bridge/> (13/11/2021).

Figure 3.

“Devils Bridge” sketched by Lister on his travels through Europe showing a bridge crossing the Gotthard Pass, northern approach, Switzerland’. N.d. Wellcome Collection. From: <https://wellcomecollection.org/works/u6jmkpvu> (13/11/2021).

Figure 4.

Gabriel Orozco. 1993. *Breath on a piano*. From: <https://whitehotmagazine.com/articles/2011-gabriel-orozco-tate-modern/2237#:~:text=Possibly%20the%20most%20famous%20in,surface%20of%20the%20black%20piano> (13/11/2021).

Figure 6.

Chu Yun. 2009. *Constellation no. 3*. From: <https://artsbeat.blogs.nytimes.com/2009/06/05/venice-biennale-flashing-lights/> (13/11/2021).

