ON THE ANATOMY OF POWER: BODIES OF KNOWLEDGE IN SOUTH AFRICAN SOCIO-MEDICAL DISCOURSE

Ву

ROBERT ALEXANDER BUTCHART

Submitted in accordance with the requirements for the degree of

DOCTOR OF LITERATURE AND PHILOSOPHY

in the subject

PSYCHOLOGY

at the

UNIVERSITY OF SOUTH AFRICA

PROMOTER: PROFESSOR W J JORDAAN

JULY 1995

SUMMARY

Derived from a marxist/liberal humanist view of power, conventional critiques and historical accounts of the socio-medical sciences in South Africa see only their power to repress and negate the true bodily attributes and authentic person of the African. In so doing, they ignore the productive capacity of these knowledges and practices as a manifestation of what Michel Foucault termed "disciplinary" power, by which the human body is manufactured and made manageable as an object of medical knowledge and industrial utilisation. Accordingly, this thesis offers just such a Foucaultian reading of western socio-medical knowledge in South Africa to demonstrate how it has operated to fabricate the bodies of Africans as visible objects possessed of distinct attributes that have provoked particular strategies for their surveillance, management, and government in health and disease.

KEY WORDS: South Africa; socio-medical science; the African body; Foucault; genealogy; sovereign power; discipline.

TABLE OF CONTENTS

Summary	i
Table of contents	ii
Declaration	ii
Acknowledgements vi	ii
PREFACE	i×
CHAPTER ONE	1
THE AFRICAN BODY IN HISTORY AND HISTORIES OF THE AFRICAN BOD	DY
Histories of Medicine as Achievement, Necessity and Repression .	3
Histories of Medicine as Achievement	4
Functional Histories of Medicine	6
Histories of Medicine as Repression	7
Historiography, Progress and the Present	10
The Genealogical Method and Histories of the Present :	12
Conclusion	17
CHAPTER TWO	20
POWER, KNOWLEDGE AND THE BODY	
The Individual as Invention	21
The Discovery of Discontinuity and the Episteme	23
The Gaze and the Problem of Human Anatomy	27
Spatialization	30
Power and the Body	37
Sovereignty and the Spectacle of Power	39
Panopticism and Disciplinary Power	42
The Means of Correct Training	45
Discipline as Power and the "Disciplined" Society	49
Analysing Power: Methodological Requirements	51

	Contents	3		iii
Conclusion			•	53
CHAPTER THREE				55
RENAISSANCE BODY MYTHS AND THE SPECTACLE OF STRANGER	NESS			
The Body as Prose and the Renaissance Episteme			-	58
Lifeless Bodies of the Living		•		63
Doctoring the Renaissance Body				68
Monstrous Men			•	71
The Spectacle of Strangeness and the Cape of G	ood Hope	е	-	75
The Eye of the Explorer and the Rise of Classificati	ion	•	-	81
CHAPTER FOUR			•	87
A BODY WITHOUT VOLUME: THE AFRICAN AS SUBJECT OF SO	ÆRE IGN?	ry a	ANI)
OBJECT OF TAXONOMY				
The Problem of the African Body as a Surface		. •		88
The Power of Punishment and the Sight of Sovereignty	<i>y</i>	•		96
Natural History: The African body as Surface, struct	ture and	i		
Character				102
Seeing the Body Surface Itself: The Invention	of			
Fantasy and Death of Imagination			•	104
Screening and Filtering the Seen: The African	body as			
Structure and Character			•	110
From Theatres of Punishment to Theatres of Healing		•	•	116
CHAPTER FIVE		. •	•	119
MISSIONARY MEDICINE, MORAL SANITATION AND FABRICATION	ON OF			
THE HEATHEN HEART				
Creation of the African with a Soul and a Body of O	rgans .			122
Moral Sanitation and the Medical Missionary Method		, •	•	261
Within the Theatre of Healing		•	•	129
Mission Hospitals and the Manufacture of Afric	an Mise	ry		134

	Contents	iv
From Revelation to Confession: The "Speaking" Subject	cts	
of Missionary Medicine		140
Conclusion		145
CHAPTER SIX		148
THE INDUSTRIAL PANOPTICON: MINING AND THE MEDICAL		
CONSTRUCTION OF MIGRANT AFRICAN LABOUR, 1900 - 1950		
The Heat Chamber as Punishment and Panopticon		150
Inventing an Economy of Bodies: Anatomical Pat	hology	
and Epidemiology		153
Debasement and Discipline: The Mine Medical Ex	amination .	161
A Therapeutic Operator: Compound Design and		
Disease Control		171
Conclusion		176
CHAPTER SEVEN		181
DISCIPLINE AND DANGER: A GENEALOGY OF THE AFRICAN PROPERTY.	RSONALITY	
Lunatics and Nervous Systems	• • • • •	183
Impulsive Insanity and the Perilous Black		187
Obsolete Machinery and the Poor White Problem		191
A "Better Native": Indirect Rule and the Cultivation	of Culture	196
Urbanisation and Surveillance of the African U	nconscious	198
The Imposition of Apartheid and Installation o	f Moral	
Surveillance		204
Projective Testing and Emergence of the Africa	n	
as Dangerous Individual		209
Black Consciousness and the Alienated African		215
A Liberatory Psychology and the Diffusion of Danger		219

Contents	v
CHAPTER EIGHT	. 222
PUBLIC HEALTH: I. SANITARY SCIENCE AND A SOCIO-PHYSICAL SPACE	
The Power of Space and Spaces of Power	. 223
Emergence of the Body-boundary Zone	. 225
The "Christianized Kaffir" as a Public Health Problem .	. 228
The New Hygiene of Location	. 232
The "Dressed Native" as Object and Problem	. 236
Policing Impurity: The Public Health Act of 1919	. 241
CHAPTER NINE	. 248
PUBLIC HEALTH: II. SURVEILLANCE MEDICINE AND	
INVENTION OF A PSYCHOSOCIAL SPACE	
Social Medicine	. 249
Surveying a Psychosocial Space: Problematisation	
of the Normal	. 252
To the Back of the Black Man's Mind: Educating	
the Individual	. 254
The Polela Native Health Unit	. 262
From Social Medicine to Community Health	. 267
Community Health	. 268
An Analysis of Resistance and the Emergence of Community	269
A Community Gaze	. 271
A New Public Health: The Socio-ecological Model	. 278
Conclusion	. 280
CHAPTER TEN	. 283
BIRTH OF THE BANTU CLINIC AND INVENTION OF THE AFRICAN PATIENT	
Birth of the "Bantu Clinic"	. 286
A Bantu Anatomy	. 287
The African Patient as a Lesion-Containing Body	. 292
An Emotional Patient	. 299

Contents vi
Urbanization and a Cross-Cultural Clinical Gaze 304
A Dichotomous Patient
The "Quest for Wholeness" and a Subjective Patient 316
Silence and Speech
CHAPTER ELEVEN
POSTSCRIPT: ON THE ANATOMY OF POWER
Rewriting the African Subject
Foucault and the South African Socio-medical Sciences 327
The Relevance of Foucault to Socio-medical Practice
in the Present
Conclusion
REFERENCES

I declare that:

ON THE ANATOMY OF POWER: BODIES OF KNOWLEDGE IN SOUTH AFRICAN SOCIO-MEDICAL DISCOURSE

is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

R A BUTCHART

ACKNOWLEDGEMENTS

Thanks are due to the following individuals and organisations who made this study possible:

David Armstrong of the Unit for the Sociology of Medicine at Guy's Hospital, London, for his encouragement, critique, and discursive generosity;

Martin Terre Blanche for his intellectual companionship;

Shula Marks and Hilary Sapire of the Institute for Commonwealth Studies, London, and Anthony Zwi of the London School of Tropical Medicine and Hygiene, for providing a critical audience to some of the chapters;

Andrew Weir and Roy Porter of the Wellcome Institute for the History of Medicine, London, for their bibliographic gifts;

Victor Nell, Mohamed Seedat and the Health Psychology Unit for maintaining a facilitative work environment;

The Centre for Science Development of the Human Sciences Research Council, whose funding supported a study period abroad;

Wilhelm Jordaan, of UNISA's Psychology Department, and my supervisor, for his support, encouragement and non-interference;

My family.

ix

PREFACE

This study applies some of the theoretical tools developed by Michel Foucault to the problem of the African body as it exists in the research and practice of western socio-medical science1 in South Africa. It was Foucault's thesis that all methods of knowing the human body stand in relation to it not as a means of discovery against an object waiting to be known, but as a productive power towards an object that is also its effect. The concept used by Foucault to define this productive relationship between method and object was that of "disciplinary power" (Foucault, 1977), which consists in the techniques by which human bodies are observed, analyzed and fabricated as knowable entities possessed of particular attributes and characteristics. Thus, each time it is the subject of clinical examination at the hands of the hospital doctor, or of physical inspection and radiography in the mine medical examination, the African body is not found but fabricated by these micro-powers of social science and medicine, not so much their discovery as an invention of their power.

On the Anatomy of Power is therefore a genealogical study in that it examines the relations between socio-medical practices as power and the knowledges of the African body that result: "The exercise of power perpetually creates knowledge and, conversely, knowledge constantly induces the effects of power" (Foucault, in Gordon, 1980, p.52). The consequence of this is a concern not with the issue of what is there but rather of what can be seen, and there is thus a close historical correspondence between the use of certain methods and the perceived nature of the phenomenon under investigation. This, in turn, makes it possible to analyze changes over time in the attributes and identity of the African body as an effect of this productive relationship, rather than a consequence of "discovery", the "lifting" of "oppression" and "ideological"

distortion, or any other such explanatory device drawn from the discourse of progressive humanism that informs conventional analyses of the socio-medical sciences in colonial - and indeed in other - contexts.

The assumptions and aims of this study derive therefore from a plane of cognition independent to that of humanism. This makes it possible to pose a variety of "strategic questions" (Armstrong, 1987) about particular objects and experiences - such as the body, the mind, and subjectivity - which because they form the philosophical foundations upon which humanism is built cannot be problematized from within the framework of humanism itself. For instance, how is it possible to speak of the human body in general and the African body in particular as distinct corporal entities? What made it possible to perceive the mind in the shape of the "African personality" and later "black consciousness" as the psychological component of identity? Or, how is it possible that medicine could first assert and later deny the fact of "racial" differences in physiology and disease susceptibility? And, what conditions of possibility had to be present for the ideas of culture and urbanisation to be invented and entered into the repertoire of socio-medical knowledge? Flowing from this space of strategic questioning, the aims of this study are threefold.

First, to describe the genealogical method of research by which this study has been produced, and articulate how the Foucaultian schema conceptualizes such terms as body, power, knowledge and the relationship between them. Second, to apply these concepts to an analysis of how the African body has been analyzed in western thought from the Renaissance² to the present day, and in so doing articulate the power implications attaching to changes in the ways it has been known and therefore what it has been seen to be. Third, to examine the implications of the study and the Foucaultian

method for South African socio-medical practitioners and scholars of medical history and the sociology of medicine.

Chapter 1 is a review of existing historical accounts of the association between the socio-medical sciences and the African body. This shows that despite its prominence in these traditional accounts (which range from whigh histories celebrating medicine to marxist histories that characterise it as a form of repression), there is no history of the African body itself, which is unproblematically assumed to be a given, an object there to be impinged upon by socio-medical practices and from which resistance to them originates. By then comparing these traditional accounts with the genealogical method it aims to explicate how genealogical explorations differ from more conventional modes of analysis.

Chapter 2 presents a theoretical elaboration of those

Foucaultian concepts concerning power, the body and medical knowledge that are relevant to this study. As argued here, the emergence of disciplinary power and the correlative constitution by medicine of the human body as a clearly differentiated collection of organs and tissues occurred with some suddenness and only towards the end of the eighteenth century. How then had the body been seen prior to this great and distinctive shift? By what languages was it read, and how did these ancient ways of knowing construct those beings believed to exist on and beyond the fringes of the known and explored world?

An attempt to answer these questions is presented in Chapters 3 and 4. Chapter 3 examines texts concerning the body, its properties, and its possible forms produced in the period of Renaissance thought from around 1500 to 1650. During this period human bodies were known not through their direct inspection but through the study of authoritative texts. These texts repeatedly confirmed the resonance of human bodies with astrological and

climatic forces, which along with the legends and virtues attaching to them were as much a characteristic of their description as any morphological features. More or less coinciding with European colonisation of the Cape of Good Hope, the age of Renaissance thought gave way from the mid-seventeenth century to the age of Classification.

Now, for the first time and as examined in Chapter 4, there commenced "a meticulous examination of things themselves" (Foucault, 1973, p.131), with the effect that living beings began to be ordered not according to their "imaginary" characteristics as of old, but in terms of their perceptible physical structures. It was thus at this point that the African body first emerged into the space of western knowledge in something approximating to the distinctively human form we now take for granted, as, along with the plants and animals of the Cape of Good Hope, it was made an object of natural history and installed in the botanical classification system of Linnaeus as "Afer Niger" under the category of "homo sapiens".

But while the Classical age produced the body of the African as the object and effect of its taxonomic vision to the surface of the body, it was only toward the middle of the 1800s and with the emergence of "missionary medicine" as a device of colonial expansion that it became possible to speak freely of this body as an object of medical practice possessed of an interior anatomy. This is examined in Chapter 5, which analyzes the medical missionary method and its fabrication of the relationship between African witchcraft and African illness as the primary target of an evangelising project (that would continue well into the 1960s) to "save" and "civilize" Africans by "weaning" them from "heathen" superstitions concerning the body and disease.

Because it is both target and effect of the socio-medical practices that sustain and transform it, the human body as an object

of disciplinary power can never be thought of as somehow "finished" or approaching "completion". On the contrary, its contingent status means that it is constantly being created and recreated as different components of the socio-medical apparatus negotiate and install different relationships between the body and the micro-powers of medical discipline. This is reflected in Chapters 6 to 10, which examine the African body - or, more accurately bodies - fabricated in four distinct domains.

In Chapter 6 the focus is upon the machinery of mining medicine and its production of the migrant labour force as a closely monitored economy of bodies, disease and deviance. Through the simultaneous deployment of procedures that penetrated deep within the body to fabricate the space of anatomical pathology, and of surveillance techniques directed to the gaps between bodies, this industrious medicine at once individualized the body of the African mine worker and encased it in a network of rules and regimens devoted to the training of conduct and regulation of bodily functions.

Chapter 7 considers the conditions that permitted invention of the African mind as an object of psychiatry and psychology. First within the asylum, and from the 1920s increasingly in the conflictual spaces of contact between Europeans and Africans in the towns and cities, the psychological sciences had by the 1930s crystallized the "African personality" as their object and effect. By the 1970s, and reflecting the irony of a progressive humanism that in its quest for "liberation" produced precisely the "authentic" African subject as its effect, rejection of the "African personality" as a myth of colonial ideology saw the emergence of a "liberatory psychology", which since then has continued to elaborate its repertoire of subjectifying techniques.

In Chapters 8 and 9, which explore the discipline of public health, the focus is upon how its technologies have operated to produce the African body not through direct inspection, but through problematization of the spaces between bodies and fabrication of the social body. Chapter 8 examines the period from the turn of the twentieth century to the mid-1930s, during which the social was produced by sanitary science as a series of gaps between bodies and the environment that because they were seen as a conduit for the transmission of germs and dirt required constant policing through an array of prohibitive strategies. By the 1930s, these repressive strategies were displaced by a set of positive techniques directed to recruitment of the African into a project for the creation of a healthy nation, as the new method of social medicine transformed the socio-physical space of old into a psychosocial one. This shift is examined in Chapter 9, which then goes on to analyze the emergence of community health in the 1960s, and the "socio-ecological" model of the new public health as it lays its lines of surveillance everywhere and throughout the body politic.

Chapter 10 examines the changes in what clinical medicine has seen and heard in relation to the body of the African. "Discovered" in the mid-1930s, the African patient as the passive and objectified effect of a specifically "Bantu" regime of clinical practice was confirmed until the 1960s, when a new strand entered the discourse of clinical medicine to enable recognition of the African patient's culture, beliefs, emotions and ideas as an important component of illness aetiology, diagnosis and treatment. The chapter ends with the current "quest for wholeness" and fabrication of the clinical encounter as a socially constructed ritual where doctor and patient are equally agentic participants in the negotiation of illness and its treatment.

Finally, Chapter 11 explores how it is possible from a Foucaultian perspective to understand the failure of South African social scientists³ to engage with and apply Foucault's ideas to the field of socio-medical practice and knowledge. Closely bound up with such notions as "ideology", "repression" and "liberation" that have to date dominated critical analysis of the South African social sciences, this failure is analyzed as an effect of and confirmation for the success of disciplinary power in fabricating the African body as an apparently transcendental entity and the socio-medical practitioners who see it as potentially platonic observers. In this way the post-script is concluded by illustrating some of the implications of this seemingly paradoxical relationship between power and knowledge for the critical analysis and practice of social science and medicine in South Africa.

Because this study is itself a component of the Foucaultian discourse that makes such an exercise possible, it cannot be viewed as independent of the domain it analyses. Indeed, precisely because there can be no objects of knowledge in the absence of methods for their production, this thesis is itself a productive component in the discursive context of post-modernism. As such it can make no claims to being more correct than existing explorations of the same domain. What is hoped, however, is that its analysis of the African body and socio-medical power will create in the reader a sense of the commonplace as strange, a destabilisation of what otherwise is experienced as certainty, and an appreciation of seemingly trivial practices as invested with a power that in penetrating and rearranging the objects of medical knowledge actively create and regulate the human body.

The African body - like every other subset of bodies produced by socio-medical power everywhere else - is not a static and fixed phenomenon waiting to be distorted by ideological filters or of which medical doctors gradually come to achieve a closer and more accurate understanding. Or, to be more accurate, the human body as a static phenomenon does exist, but only as the product of a particular discursive regime: that of modernism upon which both whig histories of scientific progressivism and marxist histories of liberal humanism rest. Thus, because these accord an a-historical essentialism to the body they must themselves be viewed as instruments of disciplinary power, in so far as they operate to obscure its contingent status as an end-product of the very force relations they construe as emanating from it. To explicate this observation it is to an examination of such histories and their comparison with the genealogical method applied in the present study that Chapter 1 now turns.

- 1. By the socio-medical sciences is meant all those disciplines clinical medicine, public health, psychology, psychiatry, and to a lesser extent anthropolgy and sociology that have at some point been deployed in South Africa as a means of managing the relation of Africans to disease, illness and the social context in which these occur.
- 2. Since the very idea of the African body as we now know it was not a possibility in the Renaissance, it is, strictly speaking, incorrect to speak as if there was such an entity in this period. However, and as shown in Chapter 3, there certainly was a class of bodies believed to exist in the geographical region we now know as Africa, and it is to this class of bodies that use here of the term "African body" refers.
- 3. To date, I have been unable to identify a single study by a South African scholar that applies the Foucaultian thesis concerning disciplinary power to the domain of the social sciences and medicine which in Europe and America has since at least the 1980s been the focus of extensive Foucaultian scholarship.

CHAPTER ONE

THE AFRICAN BODY IN HISTORY AND HISTORIES OF THE AFRICAN BODY

The African body appears everywhere in critiques and historical studies of South African social science and medicine. For instance:

The Government and the frontier colonists did all they could and at Kingwilliamstown (sic) droves of hungry and dying natives applied daily to Dr. Fitzgerald for help. His fame as a medicine-man spread like wildfire and by August, 1856 he could report enthusiastically on the treatment of 2,278 cases. (Burrows, 1958, p.182)

As well as appearing in historical studies, the African body continues to be a central focus of current socio-medical research and practice.

In Johannesburg a family of surveys has been conducted by the AIDS Virus Research Unit of the Medical Research Council at the National Institute of Virology. These sentinel surveys show that, in STD clinics, 14.6% and 20.4% of black males and females respectively are infected with HIV. This is in comparison to 4.2% and 1.8% of white males and females respectively. (Steinberg, 1993, p.90)

Despite its ubiquitous presence in historical accounts and contemporary research materials such as these, there does not appear to be any history of the African body. Or, to put it another way, while occupying a key role in the socio-medical enterprise as it unfolds in South Africa, the African body itself is only rarely the subject of historical analysis. Instead, it appears to have been assumed that the African body exists beyond history and is possessed of a transcendental ontological status.

Thus, what has been studied in some detail is how images and representations of the African body in western socio-medical

thought have changed over time (eg Dieterich, 1993; Gilman, 1985; Seedat, 1993), and how its differing treatment within the South African health care system has reflected the changing social, economic, and ideological make up of the state (eg De Beer, 1984). Precisely because they assume the pre-existence of the African body as an unvarying entity in an external reality around which these historically variable ways of representing and treating it circle, these conventional accounts are not therefore histories of the body, but instead are histories of ideas, images, policies and professions.

As an exploration of this hiatus, the present study does not therefore attempt to present yet another explanation in terms of an historical progression from the past to the present of why there appeared, developed and disappeared sub-branches of the social sciences and medicine specifically devoted to African health and illness. In fact, while many of the texts it draws upon as data are taken from times well before this study was started, it would be wrong to even think of it as a "history" in the conventional sense of the term. Rather, it aims to demonstrate how the African body has been created and transformed as an object of knowledge, how its attributes and capacities are contingent upon the methods applied to know it, and therefore how strategies of the state and industry, along with the various socio-medical sciences that assume its existence, are possible.

How is it that this question of the African body as a distinct object of socio-medical knowledge can have been so thoroughly ignored? An answer to this question is offered by distinguishing the genealogical method and the "histories of the present" it produces from the more conventional notion of the "history of the past".

Histories of Medicine as Achievement, Necessity and Repression

Existing histories of the socio-medical sciences in South Africa are all "histories of the past". That is, they involve projecting backwards from the present concepts such as "economy", "ideology" and "epidemiology" in an attempt to trace how patterns of disease and health care have been manipulated and transformed over time to produce the present situation. These histories can be classified into three broad classes on the basis of how they explain the emergence of the socio-medical disciplines in relation to Africans in particular and the socio-political order more generally.

On the one hand, what can be termed "histories of medicine as achievement", owing to their portrayal of the discipline's unfolding as one of linear progression driven by factors internal to the medical profession and the scientific method. On the other hand, what can be termed "histories of medicine as repression", because they emphasise the place of the socio-medical sciences in relation to Africans as instrumental components of the state and industrial capitalism, and tend to interpret the achievements paraded by the first class of historical analyses less as triumphs than as markers of colonial tyranny. In between these two extremes, an intermediary class of medical histories that construe the socio-medical sciences as having developed into their present configuration because there was so much disease that required treatment. Following Nettleton (1992, p.2), this last class of histories can be referred to as reflecting a "functional approach".

Histories of Medicine as Achievement

And so down the ages these 'mighty medicine men', ... have helped push the boundaries of medical knowledge further forward. Their achievements brought enlightenment and inspiration to succeeding generations, for the work of the present and future is based always on that of the past. (Krige, 1939, p.72)

In 1939, The Leech devoted one entire edition to an historical review of the technological advances underlying the development of medicine in Europe, and how these had enabled the expansion of medical services in South Africa. The motivation for doing so lay in the idea that a knowledge of the past could in some way limit the possibility of erring in the present. "Medical history ... prevents us from losing our sense of proportion; its kindly light leads us back to the world of practical realities, and assists us in gaining a proper perspective on health and disease" (Editorial, 1939, p.7).

Some 15 years later, the idea that medical history could help retain a "proper perspective" on the practice and problems of medicine found its first sustained expression in relation to South African medical history with the publication of three books devoted to the topic (Burrows, 1958; Menko, 1954; Hattersley, 1955). Perhaps best defined as "whig" histories in that they were written for the medical profession, these texts drew heavily upon biographical accounts of who their authors considered key players in the profession to produce heroic accounts of how these individuals succeeded in establishing western medicine in the barren and hostile context of a new continent and African antipathy toward biomedicine. "A record of the development of medicine in a young country depends upon the origins of its people and the sources of its civilization" wrote Burrows in 1958 (p.3).

Elaborating this theme, he said of "the solid achievements of the early pioneers of medical organization" that:

It was ... they who planted the germ of medical politics and professional union in South Africa; and it was they who were responsible for the emergence of a medical public opinion in the Cape Colony. Without continual pressure of voluntary associations of doctors ... the Colonial Government would probably have delayed its health legislation to the present century ...; certainly the profession would have been a great deal poorer in their absence. (Burrows, 1958, p.367)

In 1959, a special supplement to a Natal newspaper celebrated the centenary of a King William's Town Hospital with a review of its history to "honour the memory of those who went before, those who by faith, courage and fortitude gave a living example in the greatest of all lessons - man's humanity to man" (Mercury, 1959, p.4). Utilising iconography to produce a similar image of South African medicine as the triumphal product of remarkable medical

p.4). Utilising iconography to produce a similar image of South African medicine as the triumphal product of remarkable medical pioneers, the dust jacket to Laidler and Gelfand's (1971) volume superimposed sketches of important doctors upon images of boer trek wagons to connote the unstoppable march of medicine and "civilization". A similar theme ran through Gelfand's (1984) Christian Doctor and Nurse, which by examining the role played by various churches and particular missionaries set out the struggle

Commencing in the mid-1970s, a second wave of whig medical histories that attributed its development less to the agency of particular individuals and more to the inevitable progress of science began to appear (eg Brink, 1988; James, 1975; Malan, 1988). Epitomising this tradition was the dedication to Malan's (1988) The Quest for Health, where he portrayed a medicine that "through observation and research" rose "out of the abyss of

involved in bringing "God's Medicine" to the African.

tradition, myth, superstition and philosophy into the light of scientific understanding" (Malan, 1988, dedication). Of course, not all histories of the socio-medical sciences can be as easily categorised. One such history was Searle's (1965) history of nursing in South Africa. Here, she first cited the words of one time state president S.J.P Kruger to the effect that the nursing profession should "seek in the past for the good and the beauty which will then be your ideal in the future" (frontespiece)² - thus casting the profession as achievement driven - and then concluded that its development was the outcome of functional demands: "The story of nursing is one of demand and supply, a demand created by the extent of man's failure to achieve a positive approach to good health, and a supply created to meet that demand" (Searle, 1965, p.386).

Functional Histories of Medicine

The cardinal feature of functional histories of medicine in South Africa is their emphasis upon disease and epidemics, which are viewed as provoking the establishment of medical services and health legislation (eg. Cartwright, 1970; Friedlander, 1974; Murray, 1963; Phillips, 1984; Van Heynignen, 1989).

The tenor of these functional histories is well illustrated by examining how Phillips (1984) traced the course of the Spanish influenza pandemic of 1918-1919 as it "struck" South Africa in October 1918. First, the text minutely detailed the piecemeal reactions of health authorities, private doctors and the public to the influenza epidemic in three major cities. Next, this was used to reveal the inadequacies of the then existing public health apparatus, and, following Chevalier (1973), to expose the otherwise veiled fabric of society at the time. Finally, the data and interpretations were marshalled to argue that in the absence

of the epidemic South Africa's first substantive public health act - the Public Health Act No. 36 of 1919 - would probably not have come into being until much later. Thus, Phillips could write of November 1918 that:

By this time the need for comprehensive public health legislation had been made undeniably clear by the gross failure of the existing organisation to deal with the epidemic. Throughout the country the demand for rapid and concrete action in this direction was clamorous. The Friend was one of several newspapers to express this sentiment, pointing out that the calamity of the 'flu "affords as terrible an object of the need of a Public Health Act administered in the main by central authority as Nature in her most maleficent mood could have devised". (Phillips, 1984, p.373)

In like fashion, but adding an economic factor into the complex of needs, Murray (1963, p.391) argued that the South African Institute for Medical Research grew in response to "the need for research into diseases which were of vital economic importance to the mining industry".

Histories of Medicine as Repression

Histories of the development of South African medicine that explain it as achievement or as a functional response to overwhelming need do not, in general, lend any special focus to the African. Certainly, Africans are present in these texts, but their role and status in these stories is a peripheral and marginalised one, subordinate to the heroic deeds of white doctors (the achievement approach) or swept up along with Europeans in the all-engulfing tide of disease (the functional approach). In sharp contrast, it is primarily upon the African that histories of South

African medicine as repression (which began to appear in the mid-1970s) are focused. For instance, Swanson (1977) in his paper on bubonic plague and urban native policy in the Cape Colony between 1900 and 1909, argued how:

... [M]edical officials and other public health authorities at the turn of this century were imbued with the imagery of infectious disease as a societal metaphor, and that this metaphor powerfully interacted with British and South African racial attitudes to influence the policies and shape the institutions of segregation ... Overcrowding, slums, public health and safety, often seen in the light of class and ethnic differences in industrial societies, were in the colonial context perceived largely in terms of colour differences. Conversely, urban race relations came to be widely conceived and dealt with in the imagery of infection and epidemic disease ... In this context the accident of epidemic plague became a dramatic and compelling opportunity for those who were promoting segregationist solutions to medical problems. (Swanson, 1977, p.387)

Placing an equivalent emphasis upon state manipulation of medical and health care resources in the service of African oppression, the introduction to the World Health Organization's 1983 volume Apartheid and Health stated that "apartheid has shown itself to be a veritable racist ideology ... And it is this racist ideology which guides all health action in South Africa" (p.6). Extending this theme, a chapter on the origins of South African society and its health care system cited evidence to show how:

The patterns of disease and health care relate directly to the nature of its (South Africa's) industrialization and the unequal distribution of resources rather than to any lack of "development" among the black population. Health care policies

are directly related to more general government strategies of control through reform. (WHO, 1983, p.77)

Sharpening the image of medical policy and public health practices as weapons wielded by the state in its systematic oppression of Africans, Marks and Andersson (1988) delineated government responses to typhus epidemics between 1917 and 1950 as revealing "the concerns of the state and the ruling class in society, both with their own safety and with the reproduction of the labour force" (p.259), an interpretation that was closely echoed in Packard's (1988) analysis of the relationship between capitalism, racism and the epidemiology of tuberculosis.

At the core of these histories of medicine as repression is the idea that, wittingly or unwittingly, the actions of medical practitioners and policy makers were inevitably imbued with the exploitative interests and ideology of imperialism and later apartheid. Thus, Arnold could write of the 1988 volume Imperial Medicine and Indigenous Societies that it was concerned "not so much with disease and medicine as such as with their instrumentality - what they reveal about the nature and process, the ambitions and methods of an encompassing imperialism" (Arnold, 1988, p.ii). Throughout, the emphasis of these histories of medicine as repression has therefore been upon the equation of socio-medical power with a physical and symbolic force concentrated in the hands of the ruling elite who use it to coerce, constrain, block and negate the authenticity and freedom of those it is turned upon.

The (South African) health service is the prisoner of this country's political history, ... the prisoner of Apartheid. The homelands and their health services are there because of Verwoerd's grandiose vision of partition. The own and general affairs divisions are there because of the tightening of the

Apartheid noose under the Botha government. (De Beer, 1990, p.8)

Historiography, Progress, and the Present

This brief historiography of the socio-medical sciences in South Africa clearly demonstrates how explanations for the discipline's emergence are relative to the author's historical context, professional affiliation and political persuasion. This in itself is a far from remarkable observation, the very method of historiography having arisen precisely in response to the observation that "histories of the past" inevitably reveal as much, if not more, about the author's historical and political context as they do about the subject matter at hand. But there is another, more fundamental point to be taken from this review. This concerns a conceptual commonality regarding socio-medical power that effectively renders what are ostensibly politically polarised versions of the past components of a single discursive formation.

This commonality is twofold. First, all three types of history subscribe to an idea of history as one of continuity and progression. For histories of achievement, these developments are internal to the socio-medical professions, involving a combination of increasing altruism on the part of doctors and of inevitable scientific progression as new techniques of medical research make possible the abandonment of older and 'erroneous' beliefs. For functional histories, this human agency and intra-scientific development is subordinate to the external press of epidemic and endemic disease. This forces the expansion and development of the medical enterprise to mean that its shape today is the product of past disasters and current needs. For histories of medicine as repression, the shape of the enterprise at any given point reflects the historical outcome of repression and resistance,

through which the strategic concentration of medical power and control in the hands of the white state and medical professionals is continually usurped and replaced by a more egalitarian system. In their preoccupation with progress, all three types of history thus reproduce what Foucault described as among "the most harmful habits in contemporary thought ..., the analysis of the present as ... a presence of rupture, or of high point, or of completion or of a returning dawn" (Foucault, in Kritzman, 1988, p.35).

The second facet of this commonality derives from the first. Because all three types of history privilege accounts of how individuals and groups managed to seize socio-medical power or were systematically debarred from access to it, they all fail to problematize the African body itself which is assumed to exist independently of the practices and disciplines of socio-medicine. For only if it is taken to have an existence independent of these practices, can there be any progress toward more adequately treating, understanding and responding to the African body; or from the repressionist perspective, away from its oppression and objectification toward its liberation and subjectification. In terms of the Foucaultian schema of power, they all thus speak in one way or another to the idea of "sovereign power" (Foucault, 1977) alone, the idea that power exists as a commodity or weapon there to be grasped and wielded, fought for and won over. Consequently, they fail to grasp the significance of such apparently innocent and seemingly trivial functionings of disciplinary power as the routine clinical examination or school medical inspection.

Look at the lines of medical surveillance: 'What is your complaint?' 'How do you feel?' 'Please tell me your troubles.' See the routine clinical techniques: the rash displayed, the

hand applied to the abdomen, the stethoscope placed gently on the chest. (Armstrong, 1987, p.70)

As explicated in Chapter 2 of this thesis, these are the stuff of disciplinary power, repetitive, ritualised and no matter how repressive the more encompassing socio-political context it enables, strategies to which the entire population at times must yield.

Using the theoretical tension between sovereign and disciplinary power, the present study aims to provide a different perspective. It problematizes the African body itself, rather than the legal enactments, professional power plays and political struggles that constantly envelop and therefore take its existence for granted. To paraphrase Nettleton (1992, p.6) it has no interest in whether the Health Act No. 63 of 1977 did or did not represent a move away from discrimination toward a progressive politics (WHO, 1983, p.99). It is not concerned to establish whether it really was "with the arrival of white settlers that our people fell prey to a host of diseases" (WHO, 1983, p.14); and it has no interest in trying to recreate the machinations through which the apartheid state was able to suppress public knowledge concerning the true extent of cholera epidemics in the early 1980s (Marks & Andersson, 1988, pp. 257-258). In short, it does not attempt to reconstruct the past through the conceptual and political lens of the present, but rather to produce a "history of the present" that examines socio-medical objects, concepts and practices within their own temporal specificity.

The Genealogical Method and Histories of the Present

In his paper on the use of the genealogical method in the exploration of chronic illness, Armstrong (1990) distinguished the genealogical approach from quantitative and qualitative methods.

Quantitative methodologies enable us to trace the extent and range in society of a given phenomenon or object of interest such as income, age, or disease. Qualitative methods provide a means of demonstrating the subjective impact and meaning that having a particular income, being of a certain age, or suffering from a particular disease have upon and for a person or group. However, by elevating to primacy their objects of study and ignoring their own presence in the analytic field, both approaches thus eliminate themselves from this field. The result is that their objects of enquiry appear as 'given', their existence and form independent of the methods used to define, describe and explain them. The corollary of this is that changes in the way an object of enquiry appears are attributed either to forces inherent in the object itself (society has evolved, a person has developed, the disease has mutated), or to scientific progress that by improving methods of investigation (more sophisticated methods of recording and counting events, microscopes with a higher resolution) reveals what was always there, but before such improvements were hidden by darkness (Armstrong, 1990). Either way, observers are saddled with the explanatory problem that whatever they may posit cannot be separated from the contemporary universe of explanation and methodology in which the idea is produced and which it therefore reproduces - a recent explanatory category cannot be used to explain itself.

It was in response to this problem of explanatory anachronicity that Foucault drew upon Nietzsche to formulate the concept of genealogical analysis. Two ideas - descent and emergence - are central to the notion of genealogy. Descent, following Foucault, makes no pretensions to going back in time so as to restore "an unbroken continuity" (Foucault, in Bouchard, 1977, p.146) or establish any particular present as "the unique or

fundamental or irruptive point in history where everything is begun or completed again" (Foucault, in Kritzman, 1988, p.35). Instead, descent "disturbs what was previously considered immobile; it fragments what was thought unified; it shows the heterogeneity of what was imagined consistent within itself" (Foucault, in Bouchard, 1977, p.147), and so reveals the present as never particularly momentous or portentious but always "a time like any other time, or rather, a time which is never quite like any other" (Foucault, in Kritzman, 1988, p.36).

Methodologically, this means that genealogy avoids making the assumption that any concepts (such as life, the body, consciousness or sexuality) are static, in favour of documenting the profusion of events in which such concepts are formed and outlining the discursive regimes by which they become formalized objects of knowledge and targets for intervention. Hence it is possible to conceive of life, the human body, disease, population or the psyche as the foci of descent, lacking in themselves any stability and all the effects rather than the origins of the play of historical forces.

The analysis of the way the body is seen, described, and constructed ... might be called 'political anatomy'. It is political because the changes in the way the body is described are not the consequences of some random effects or progressive enlightenment but are based on certain mechanisms of power.

(Armstrong, 1983, p.2)

Because they do not presuppose the existence of their objects, these mechanisms of power that covary with the way the body is described cannot be identified with the works of great men and women or the impact of legal enactments and ideological forces, all of which impinge upon and so take for granted the existence of the human body and human interests. Instead, the mechanisms of

power delineated by descent are those at the extremity of power, "those points where it becomes capillary" (Foucault, in Gordon, 1980, p.96) - such as "the single unencumbered gaze of one doctor to an inflamed joint or diseased lung of an individual patient" (Armstrong, 1990, p.1226). For it is here, as the doctor or psychologist studies the body or the mind, that power has its immediate effects in creating the objects of investigation - the body with certain attributes or the personality of a particular type.

Following from the concept of descent is the type of data considered germane to the genealogical analysis. In the case of the present study, this meant that rather than the biographies and memoirs of great medical personages or the government gazettes setting out public health acts, the search was for texts detailing the actual procedures applied to African bodies, records of the minutiae by which the body was handled by doctors and moulded by architecture, and accounts of what was seen when it was opened up during anatomical investigations. As well as privileging accounts of the minutiae of socio-medical practice, the genealogical method also differs from conventional historical methods in that it makes no distinction between primary and secondary sources. Instead, all sources - whether diaries, textbooks or transcriptions of spoken interviews - are considered primary for their own period of authorship. This is because all texts manifest a temporal specificity in that they can only draw upon the conceptual and discursive repertoire available to their authors at the time of production. For example, since it does not enter South African socio-medical discourse until the early 1900s, it is impossible to speak of a distinctive African anatomy and physiology before this time.

If descent disturbs our sense of continuity from the past to the present by fragmenting what was considered immutable, then emergence, or the entry into discursive existence of particular objects of knowledge, upsets all assumptions that seek for the origins of things in a neatly ordered ensemble of indexical events: "Historians have been accustomed to a history which takes in only the summits, the great events" (Foucault, in Gordon, 1980, p.37). Against this preoccupation with "great events", emergence casts the effective forces of history as continuous responses to haphazard conflicts, an eternal play of dominations, subjugations and struggles, and the formal centres of power in any society simply as concentrations of disciplinary power within this generalised force field. Thus, the human body is constantly appearing and vanishing, changing and continuously being renegotiated as the crystallization of disciplinary power in the shape of medical procedures "discovers" new objects and domains of illness (Armstrong, 1985, p.112).

The genealogical method thus inverts the approach of conventional history, enabling us to examine the notion of power from the assumption that it works not only through constraint, repression and inhibition, but also as a creative³ force in the sense that it fabricates not only the human objects of social reality, but the social itself: "Power produces; it produces reality; it produces domains of objects and rituals of truth. The individual and the knowledge that may be gained of him belong to this production" (Foucault, 1977, p.192). Hence, as Nettleton (1992, p.124) points out, where conventional histories of the past find continuity, absolutes, stability and noble origins, the genealogical analysis finds discontinuity, no absolutes, instability and mundane events.

Conclusion

As this Chapter was being written in late 1994, South Africa had already celebrated its first 100 days of democratic government. Among the human sciences, that of history had been propelled in this context of 'liberation' to a position of prominence as academics, politicians and ordinary people strived to transcend the discourse and politics of oppression embedded in nearly 400 years of colonial and apartheid rule. Underlying the perceived importance of history was the belief that through a critical review of the past it was somehow possible to learn from it and so avoid repeating earlier patterns interpreted from the vantage point of the present as morally corrupt and evil.

In Johannesburg, the newly opened "Museum Africa" had on simultaneous display the "Anne Frank in the World Exhibition" and a photo-documentary installation tracing the visual history of apartheid's repressive practices. By instructing viewers to appreciate the violent parallels between these two regimes, the concept of sovereign power as the only form of power and its overthrow as 'liberation' was sensationally focused. Less dramatically, but still subscribing to and thereby fabricating the idea that the continuity of history means we can learn from it, a 1993 history of South African public health initiatives had this to say:

As South Africa undergoes rapid social, economic, and political change, the rich heritage of public health and primary health care that has long been overlooked is being rediscovered ... The article ... critically assesses what South African public health professionals could learn from the past while planning for the future. (Yach & Tollman, 1993, p.1043)

18

Concerning the psychosocial sciences, an equally confident claim that careful scrutiny of the past will somehow enhance the possibility of a better present.

The history of psychology's complicity with apartheid and oppression cannot simply be wished away. This does not mean either that we have to stay stuck in the shame or guilt of the past. The complex task of transforming psychological theory and practice in terms of a more social liberatory discipline, requires a thorough analysis of the past, so that the lessons of that antipathetic time ... can be properly learnt, and not repeated ... A self-conscious remembering of our history will facilitate an understanding of what constraints and what spaces are available to us. (Hayes, 1993)

From the Foucaultian perspective, such appeals to history as a means of learning from the past how to escape from the grip of power in the present are themselves components of disciplinary power. For by presenting subjectivity as an immanent of the human condition that, because it was denied must now be liberated, they in fact conceal its invention, fabricating the autonomous and whole person which they so desire to liberate. The fault of such appeals is that they speak only to sovereign power, repeating the error of Parisian students in 1968 who believed that following de Gaulle's flight from France the state would vanish. To their bewilderment, the state continued without its head. "Their mistake was to believe that power could be seized from the person who apparently held it; but power simply ran through their fingers" (Armstrong, 1985, p.113). The body itself is at once object, effect and a conduit of power, the fist raised in defiance of the soldier or the state a sign of the beginnings of a self-existence for the nascent individual. Hence Foucault's famous claim that "we need to cut off the king's head: in political theory this still

has to be done" (Foucault, in Gordon, 1980, p.121). Sovereign power does exist, it does inscribe the marks of pain, torture and deprivation on the surface of the skin and in the workings of the body. But this body, so visible a target for the repressive regime, and its abuses so scrupulously documented by the custodians of human rights and civil liberty (eg Silove, 1990; Swartz & Levett, 1989; Zwi, 1987), is itself a fabrication of these practices. For from far below the tumult of sovereign force their arises disciplinary power which is everywhere, not because it embraces everything, but because it comes from everywhere. As we shall see in Chapter 2 where Foucault's theoretical conceptualisations of body, power and knowledge are examined, sovereign power cannot easily be grasped by everyone, but disciplinary power is within the grip of us all.

^{1.} The first published examinations of medical history in South Africa would appear to be those of Laidler (1937, 1938, 1939), in which he examined such things as the "Proclomations" governing the practice of physician or surgeon, and the first use of anaesthetics in the Cape of the early nineteenth century.

^{2. &}quot;Zoekt in het verleden al het goede en schoone dat daarin te ontdekken valt en vormt daamaar Uw en Uw kracht voor de toekomst" (Kruger, cited in Searle, 1965, frontespeice).

^{3.} Use of the terms "creative" and "productive" in relation to disciplinary power is intended to show only that this is a power which fabricates objects. It does not imply (as the almost unambiguously positive connotation leant to such terms in their common usage would suggest) that its functioning is "good", or for that matter, "evil".

CHAPTER TWO

POWER, KNOWLEDGE AND THE BODY

It is at the outset important to delineate the boundaries of what will be discussed in this theoretical chapter, so as to clarify its aims and establish the place of this study within the general field of Foucaultian scholarship.

This field consists of two categories of work involving reference to Foucault. The first is colloquially known as the 'Foucault industry'. This consists in studies that engage in academic reflections upon Foucault's work, often attempting to plumb the philosophical depths and origins of what he thought, or else offering a critique of his theories of power and governmentality by comparing these with those of other theorists and philosophers of the social and the subject (eg Hinkle, 1986; Lemert & Gillan, 1982; Paternek, 1987; Rorty, 1986). The second category of Foucaultian scholarship is made up of studies that do not so much reflect upon as apply the tools of Foucaultian thought to particular problems, such as the chronic patient (Arney & Bergen, 1983), the profession and practice of obstetrics (Arney, 1982), "the mouth with teeth and the profession of dentistry" (Nettleton, 1992, p.vi), the emergence and functioning of the psychological sciences in Britain (Rose, 1985), and the relationship between medicine, the individual and the social more generally (Armstrong, 1983; Arney & Bergen, 1984)1. To date however, only Megan Vaughan's Healing their Ills: Colonial Power and African Illness (1991) - which "stopped short of a full scale constructionist approach, and commits "what, for the social constructionist, is the cardinal sin of assuming some material reality to which medical constructs ... refer" (p.7) - approaches a Foucaultian analysis of western medical practices in relation to the African.

It is squarely within this second category of work that the present study belongs, and the material selected for discussion in this theoretical chapter is as a consequence restricted to that which articulates those theoretical and methodological aspects of Foucault's work applicable to its concern with western socio-medical practice and the African body. Given the extensive and diverse qualities of Foucault's work, it must however be stressed that the conceptual and methodological apparatus I have derived from it cannot be thought of as illustrating the Foucaultian method. For, as both Nettleton (1992) and Vaughan (1991) have cautioned, and as attested to by the divergency between the ways in which they deploy Foucault, a range of methodologies could and have been derived from the Foucault schema.

The Individual as Invention

As shown in Chapter 1, existing histories of the socio-medical sciences in South Africa presuppose a human subject along the lines suggested by the model of classical philosophy, endowed with a consciousness which power is then thought to seize upon.

Accordingly, standing at the centre of these studies - whether as dominator or dominated, observer or observed - is the knowing, seeing, feeling and acting person, for this is always the point from and at which these analyses are constrained to begin.

The human body and the person as a subject are also prominent in the Foucault schema. Not, however, as points of departure for the human and socio-medical sciences, but instead as the very opposite, as the result of these sciences and therefore the very locus of insertion of their knowledge.

The individual is not a pre-given entity which is seized on by the exercise of power. The individual, with his (sic) identity and characteristics, is the product of a relation of power exercised over bodies, multiplicities, desires, forces. (Foucault, in Gordon, 1980, p.74)

In short, Foucault inverts the human body by viewing it not as the origin of force or source of any answers, but the effect of forces and a problem demanding explanation. How is it possible to conceive of "the individual"? Or, even more perplexing, how was it possible that until the end of the eighteenth century the individual did not exist in the sense we know today? The human body and human subjectivity as problems requiring explanation rather than objects awaiting scientific or philosophical elaboration are therefore at the core of Foucaultian theory and its notion of genealogical analysis; which Foucault described as:

A form of history which can account for the constitution of knowledges, discourses, domains of objects etc., without having to make reference to a subject which is either transcendental in relation to the field of events or runs in its empty sameness throughout the course of history.

(Foucault, in Gordon, 1980, p.117)

This refusal to accept the presence of a transcendental, unchanging subject as an explanatory device has led certain readers of Foucault's work to define him as the "author of a philosophy of history based on discontinuity" (Kritzman, 1988, p.99). Such readings of his thought are mistaken, for, far from a Foucaultian explanatory fiction, the contingent and historically variable subject is in fact a discovery of the genealogical method, and the attendant notion of discontinuity a problem calling for its resolution and not an answer.

The Discovery of Discontinuity and the Episteme

Foucault began the preface to his great genealogical study The Order of Things by reflecting upon a passage in Borges that quoted a "'certain Chinese encylopaedia'" (Foucault, 1973, p.xv). An unexpected coupling of ordinary and not so ordinary things, the passage produced in Foucault a laughter:

... (T) hat shattered ... all the familiar landmarks of my thought - our thought, the thought that bears the stamp of our age and our geography - breaking up all the ordered surfaces and all the planes with which we are accustomed to tame the wild profusion of existing things, and continuing long afterwards to disturb and threaten with collapse our age-old distinction between the Same and Other. This passage quotes a 'certain Chinese encylopaedia' in which it is written that 'animals are divided into (a) belonging to the Emperor, (b) embalmed, (c) tame, (d) sucking pigs, (e) sirens, (f) fabulous, (g) stray dogs, (h) included in the present classification, (i) frenzied, (j) innumerable, (k) drawn with a very fine camelhair brush, (1) et cetera, (m) having just broken the water pitcher, (n) that from a long way off look like flies'. In the wonderment of this taxonomy, the thing we apprehend in one great leap, the thing that, by means of the fable, is demonstrated as the exotic charm of another system of thought, is the limitation of our own, the stark

impossibility of thinking that. (Foucault, 1973, p.xv)

Foucault's concern in presenting this passage was to induce in readers a sense that our contemporary way of knowing and the forms of knowledge peculiar to it are bound and limited by what he called the "conditions of possibility", or "episteme" within which they emerge and reproduce. For when we try to think out of this epistemic space, we are, as it were, tugged back in by a subterranean current,

an unthinkable force that prevents us from conceiving of the "Chinese encyclopaedia" as anything other than a quaint taxonomic game.

Various definitions of an "episteme" were attempted by Foucault, and consistent with the idea of a subterranean force, we see from them that the term refers to a strata or plane of force buried well below the level of such constructs as epistemology, paradigm or philosophy. For instance, an "episteme" is the "total set of relations that unite, at a given period, the discursive practices that give rise to epistemological figures, sciences and possibly formalised systems" (Foucault, 1972, p.191). Or, an "episteme" consists in:

... (T)he fundamental codes of a culture - those governing its language, its schemas of perception, its exchanges, its techniques, its values, the hierarchy of its practices - (which) establish for every man, from the very first, the empirical orders with which he will be dealing and within which he will be at home. (Foucault, 1973, p.xx)

Given the obscurity of these definitions it is perhaps more useful to clarify what Foucault tried to delineate with the term by briefly outlining the contours of the three epistemes he identified: one dominated Renaissance thought, one covered the Classical period, and the last and most recent is that which has governed Modernist thought in the nineteenth and twentieth centuries.

Each episteme was therefore synonymous with a great swathe in history, and the gaps between them contiguous with the "massive disjunctions in knowing that their change implied" (Armstrong, 1987, p.13). These Foucault delineated by identifying and then comparing how Langauge, Life and Labour were cognitively ordered within each episteme. Take, for instance, the question of 'life'. In the Renaissance, it was not, strictly speaking, even possible to think

of living things as possessed of 'life', since it was only with the modern episteme that the science of biology became possible and 'life' began to be seen as immanent in a living thing's biological constitution. By contrast, living things in the Renaissance owed their animate existence to the great cosmic web of which they were mere nodes of interdependence, and through which there emerged the legends and virtues that were as much a characteristic of their description as any morphological features. With the advent of the Classical episteme from around the mid-seventeenth century onwards, the natural world was transformed by a new way of seeing that ordered living things according to their perceptible physical structures. Within the Classificatory age, the 'imaginary' characteristics of plants, animals and people - which previously were paraded for public and royal edification and entertainment in the circular procession of the show - were jettisoned, and in place of the show living things were grouped according to their perceptible physical resemblances and arranged for scrutiny by natural scientists in the abstract space of charts and tables, such as exemplified by the great botanical taxonomy of Linnaeus, or the complex disease classification of Sydenham. Yet another disjunction occurred towards the end of the eighteenth century, when the taxonomic gaze of the Classificatory age to the surface of living things was replaced by a deep gaze to the analysis of internal structure and its relationship to function. Functions - such as photosynthesis and metabolism - are, of course, invisible, yet their identification to thought marked the emergence into science of the phenomenon of life, which in its turn became the principal object of the new biology.

Just as the natural history of the Classificatory age gave way to the modernist science of biology, so the analysis of wealth was replaced by economics, and the study of general grammar by linguistics.

These three new knowledges were a part of a complete reorganization of knowledge in the late eighteenth century; but, more significantly, these three new sciences of Life, Labour, and Language defined a new central object for the modern episteme, namely what Foucault calls 'Man'; and with the advent of Man arose the specific studies of man in the form of the human sciences. (Armstrong, 1987, pp.62-63)

What Foucault's epistemic archaeology therefore reveals, is that when not artificially projected back into time by conventional histories of the past, a point is reached on the genealogical line of descent down the surface of a continuous present where not only the human subject as the throne of consciousness vanishes but also the very idea of life as an immanent of the body's organisation. As a consequence, it is impossible (without being anachronistic) to explain this same epistemic space and the disjunction between epistemes through recourse to the human subject as a given and the human body as a constant. Hence Foucault's concern to make clear that rather than any kind of explanation, discontinuity was a problem demanding solution.

In Les Mots et les choses I set out ... from this self-evident discontinuity and tried to ask myself the question: is this discontinuity really a discontinuity? Or, to be precise, what was the transformation needed to pass from one type of knowledge to another type of knowledge? For me, this is not at all a way of declaring the discontinuity of History; on the contrary, it is a way of posing discontinuity as a problem and above all a problem to be resolved. (Foucault, in Kritzman, 1988, p.100)

In so far as it dealt with how Language, Labour and Life were ordered in each episteme to reveal how the human sciences only became possible in the late eighteenth century, The Order of Things (1973) had already begun to suggest the historical contingency of biology and human anatomy. It was, however, in The Birth of the Clinic: An Archaeology of Medical Perception (1976) that the genealogical method first found specific application to the problem of human anatomy, for it was here that Foucault traced for the first time how in western history the concrete individual was invented as an object of positive knowledge and opened up to the language of rationality (Foucault, 1976, p.xiv).

The Gaze and Problem of Human Anatomy

"The gaze" is a term that appears frequently in this and other Foucaultian studies of power and medical knowledge. It refers both to the way that things have appeared to medicine, and to the techniques by which medicine has made things appear, and so comes to have a particular knowledge of the human body. As such, and as set forth in the Birth of the Clinic, the gaze is not to be thought of as merely some cognitive or perceptual skill waiting to be grasped by the doctor and cultivated through medical training. On the contrary, while it certainly is through the medium of training in the socio-medical sciences that the gaze is reproduced, it is the gaze as technique that makes possible the very idea of the doctor as an observer of the interior of the body, and it is the gaze as limit that circumscribes how the doctor is taught, how the doctor practices and hence what the doctor can see.

The great biological image of a progressive maturation of science still underpins a good many historical analyses; it does not seem to me to be pertinent to history. In ... medicine ... up to the end of the eighteenth century one has a

certain type of discourse whose gradual transformation, within a period of twenty-five or thirty years, broke not only with the 'true' propositions which it had hitherto been possible to formulate but also, more profoundly, with the ways of speaking and seeing, the whole ensemble of practices which served as supports for medical knowledge. These are not simply new discoveries, there is a whole new 'regime' in discourse and forms of knowledge. (Foucault, in Gordon, 1980, p.112)

To illustrate this crucial point concerning the temporal specificity of the gaze and how it operates to produce the doctor and in turn the human body as its object and effect, Foucault began the Birth of the Clinic by juxtaposing two contrasting images of what was seen by two physicians, one writing in the eighteenth and the other in the nineteenth century. First, Pomme's eighteenth century description of the treatment of a female hysteric, which relied upon ideas of nervous pathology and derived its description of the body from the study of texts. Assuming the cause of hysteria to be dryness and "desiccation" of an 'overheated' nervous system, treatment consisted in "making her take 'baths, ten or twelve hours a day, for ten whole months'" (Foucault, 1976, p.ix), with the result that:

'... membranous tissues like pieces of damp parchment ... peel away with some slight discomfort, and these were passed daily with the urine; the right ureter also peeled away and came out whole in the same way'. The same thing occurred with the intestines, which at another stage, 'peeled off their internal tunics, which we saw emerge from the rectum. The oesophagus, the arterial trachea, and the tongue also peeled in due course; and the patient had rejected different pieces either by vomiting or expectoration'. (Foucault, 1976, p.ix)

Second, and produced less than 100 years after Pomme's description,
Bayle's nineteenth century account of the anatomical detail of the

brain, produced through direct inspection of the body, and relying upon the idea of anatomical pathology.

Their outer surface, which is next to the arachnoidian layer of the dura mater, adheres to this layer, sometimes very lightly, when they can be separated easily, sometimes very firmly and tightly, in which case it can be very difficult to detach them. Their internal surface is only contiguous with the arachnoid, and is in no way joined to it The false membranes are often transparent, especially when they are very thin; but usually they are white, grey, or red in colour, and occasionally, yellow, brown, or black. This matter often displays different shades in different parts of the same membrane. The thickness of these accidental productions varies greatly; sometimes they are so tenuous that they might be compared to a spider's web ... (Foucault, 1976, pp.ix-x) this juxtaposition reveals is the gaze itself, since had they

What this juxtaposition reveals is the gaze itself, since had they witnessed the same event neither physician could have seen what the other saw.

Arising from our contemporary embedment in a world that is seen according to Gray's Anatomy, the inclination is to dismiss Pomme's description as either fanciful or mistaken, for unlike Bayle's account of the brain it fails to confirm the contemporary belief in the truth of disease as residing within the body itself. But the real mistake is precisely to assume that the earlier vision could be mistaken. For, and as confirmed by their convergence with the epistemic shifts identified in The Order of Things (1973), these two visions of the body simply reflect and reproduce two incommensurable worlds. Accordingly, to cast the first vision as mistaken is to create the illusion that the body of modern medicine has always existed as the only body there ever was, and of death and disease as always having inhabited this same anatomical space.

In the history of medicine, this ... illusion functions as a retrospective justification: if the old beliefs had for so long such prohibitive power, it was because doctors had to feel, in the depths of their scientific appetite, the repressed need to open up corpses. There lies the point of error, and the silent reason why it was so constantly made: the day it was admitted that lesions explained symptoms, and that the clinic was founded on pathological anatomy, it became necessary to invoke a transfigured history, in which the opening up of corpses, at least in the name of scientific requirements, preceded a finally positive observation of patients; the need to know the dead must have already existed when the concern to understand the living appeared. So a dismal conjuration of dissection, an anatomical church militant and suffering, whose hidden spirit made the clinic possible before itself surfacing into the regular, authorized, diurnal practice of autopsy, was imagined out of nothing. (Foucault, 1976, pp.125-126)

To identify this history as one that had been imaginatively conjoured out of nothing through its fiction of the body as an unvarying entity, independent of anatomical practice, required that Foucault demonstrate the alternative, that in fact it was only in the actual practice of the doctor to the patient that the anatomized body of the individual could have emerged at all.

Spatialization

Commenting upon the gaze of pathological anatomy to the inner space of the body, Foucault wrote:

The exact superposition of the 'body' of the disease and the body of the sick man is no more than a historical, temporary datum. Their encounter is self-evident only for us, or,

rather, we are only just beginning to detach ourselves from it. The space of configuration of the disease and the space of localization of the illness in the body have been superimposed, in medical experience, for only a short period of time - the period that coincides with nineteenth-century medicine and the privileges accorded to pathological anatomy. (Foucault, 1976, pp.3-4)

A device by which to analyze the play of the gaze at any given point in the history of the present, the concept of spatialization refers (following Armstrong, 1995) to the interdependent triumvirate of cognition, perception and practice that configure disease and determine the space of the location of illness. The cognitive component refers to what Foucault called "primary spatialization", and addresses the conceptual ordering of the elements of illness, such as sign, symptom and lesion. The perceptual component corresponds to "secondary spatialization", and refers to the location of illness in relation to the body of the patient. The practical component was called by Foucault "tertiary spatialization" and consists in the concrete practices, techniques and institutional arrangements that constitute health care activity.

To illustrate the notion of spatialization and indicate how it operates to dissolve the certainty of the solid and visible body laid down in the anatomical atlas, it is useful to analyze how changes in the spatialization of illness made possible the displacement of "bedside medicine" by "hospital medicine" (cf Ackernecht, 1967), or the medicine of the clinic. For it was precisely with this respatialization of illness that the body of the disease and the body of the patient first came to inhabit the same space, to invent the anatomized body of the individual as the cardinal object and effect of what remains the dominant model of medicine in the western world.

Under the regime of bedside medicine, primary spatialization made illness coterminous with the symptoms reported by the patient, so a headache or abdominal pain was the illness. This, therefore, was a medicine for which there was no lesion, and secondary spatialization thus located illness to a point beyond the body where it hovered around it until such time as coinciding with it to induce the symptoms experienced by the patient. Because all diseases were autonomous, and would in the course of their natural progression move through the body until leaving it, the physician's diagnostic task consisted in capturing this mobility by closely monitoring the sequence in which symptoms occurred. "Presence in an organ is never absolutely necessary to define a disease: thus disease may travel from one point of localization to another ... while remaining identical in nature" (Foucault, 1976, p.10). In this way diseases could be classified after a "botanical model" into the families, genera and species that made up "god's garden of pathology". Within this garden illnesses sharing similar symptoms were evidence that they shared a common root or "essence". For instance, that paralysis, apoplexy (stroke) and syncope (fainting) all result in the abolition of voluntary movement, confirmed them to be manifestations of the same disease: "when they become dense enough, these similarities cross the threshold of mere kinship and accede to the unity of essence" (Foucault, 1976, p.7). Since each disease itself determined when and where it would appear and disappear, tertiary spatialization demanded that the doctor avoid extracting the patient from the natural locus of the disease, and treatment was, ideally, accomplished at the bedside of the patient by the physician whose task was less to intervene than to wait patiently and watch as the disease ran its autonomous course through time and the body. "The natural locus of disease is the natural locus of life - the family: gentle, spontaneous care, expressive of love and a

common desire for cure, assists in its struggle against the illness, and allows the illness itself to attain its own truth" (Foucault, 1976, p.17). Primary, secondary and tertiary spatialization thus confirmed and reproduced a medical space in which the body of the patient existed only as a subsidiary problem, and indeed, even a barrier to proper diagnosis.

In order to know the truth of the pathological fact, the doctor must abstract the patient: 'He who describes a disease must take care to distinguish the symptoms that necessarily accompany it, and which are proper to it, from those that are only accidental and fortuitous, such as those that depend on the temperament and age of the patient'. (Foucault, 1976, p.8)

Where bedside medicine had to subtract the patient and so failed to see the interior of the body, the tertiary respatialization of illness that marked the rise of hospital medicine at the end of the eighteenth century made possible a gaze for which the individual body of the patient and its interior were cardinal. Emphasizing the significance to this shift of tertiary over secondary and primary spatialization, and so underlining the primacy of hospital practice to the invention of the body, Foucault argued that:

... for this very reason, it (the hospital) is the point of origin of the most radical questionings. It so happened that it was on the basis of this tertiary spatialization that the whole of medical experience was overturned and defined for its most concrete perceptions, new dimensions, and a new foundation. (Foucault, 1976, p.16)

For the great desecration of hospital medicine was to move the body of the sick man from the home as the temple of life and shrine of disease, to the neutral domain of the hospital - regarded at its inception as a "temple of death" - and there to subject it to the

practice of physical examination. Because these practices denied the truth of a medicine directed to essential diseases located beyond the body by crowding them together in a space where their purity was corrupted through "cross-breeding", they provoked in their beginnings a marked resistance, as instanced by one physician who noted that it would require a very skilful hospital doctor: "'to avoid the danger of the false experience that seems to result from the artificial diseases to which he devotes himself in the hospitals. In fact, no hospital disease is a pure disease'" (cited in Foucault, 1976, p.17).

But, such is the power of practice to overturn the truth of one age and replace it with that of the next, that through its sheer repetition the new medicine of the hospital had by the first half of the nineteenth century (already by 1858 it was possible to publish the first edition of Gray's Anatomy) imprinted the reality of a new anatomy on the social conscience. The origins of this new anatomy lie at a point following the French revolution when there occurred in Parisian hospitals a revolution of a very different kind, an institutional transformation whereby medical research and teaching began to be conducted in "teaching hospitals". The effect of this shift in tertiary spatialization was to insert the body of the sick man into a space of ordered and systematic observation where patient could be compared with patient and disease with disease. As a consequence, the old locus of learning which had resided in authoritative texts was replaced by the new classroom of the ward round, in which the doctors as pupils took their instruction from the very bodies of the patients they surveyed.

... (T) here one would learn not what the old masters thought they knew, but that form of truth open to all that is manifested in everyday practice: 'Practice will be linked to theoretical precepts. Pupils will be practised in chemical

experiments, anatomical dissections, surgical operations, and in the use of machinery. Read little, see much and do much'". (Foucault, 1976, p.70)

Since the body was now isolated to the practices of close inspection by sight, touch and smell, it became possible to reconfigure the cognitive order of illness into a three-dimensional framework involving symptom, sign and pathology. As under bedside medicine, the symptom remained an index of how patients experienced their illness. But added to this was now the sign. The sign being "an intimation of disease elicited by the attentive physician" (Armstrong, 1995, p.3) - such as the pulse that betrays the invisible strength and rhythm of the circulation - neither it nor the symptom in itself was the illness. Together though, they offered the points of reference by which to triangulate the position and nature of the underlying lesion within the body that was the disease. A new relationship between surface and depth was therefore established by this 'clinico-pathological correlation', to dispel the earlier notion of disease as an autonomous and mobile entity. Now, instead of roaming freely through the body, disease was located to a fixed point within it, demanding that innovative perceptual techniques be developed that would allow the doctor to see into the three-dimensional corporal container and locus of disease that the body had now become. Hence, contemporaneous with the installation of hospital medicine were invented the classical techniques of clinical examination - percussion, palpation, auscultation and inspection each a means of extending the sensory apparatus of the doctor so as to penetrate and render transparent the opaque depths of the body and reveal to the light of the gaze the contours of the lesion within it.

Confirming this secondary spatialization of illness to the interior of the body was the new privilege accorded the place of death. Within the space of bedside medicine, disease had departed the body with the death of the patient, and so it was futile to search in the corpse for signs and traces as to its nature and characteristics. Accordingly (and as set out in Chapter 3), while dissection did occur, its aim was not to observe the interior of the body directly as much as it was to illustrate the schemas set out in authoritative texts about its 'humoural' systems, 'members' and 'virtues'. In contrast, the postmortem was under hospital medicine an essential component of the gaze, for it enabled the exact nature of the hidden lesion to be incontrovertibly identified.

Life, disease, and death now form a technical and conceptual trinity. The continuity of the age-old beliefs that placed the threat of disease in life and of the approaching presence of death in disease is broken; in its place is articulated a triangular figure the summit of which is defined by death. It is from the height of death that one can see and analyse organic dependences and pathological sequences. Instead of being ... the night in which life disappeared, in which even the disease becomes blurred, it is now endowed with that great power of elucidation that dominates and reveals both the space of the organism and the time of the disease ... It is no longer that of a living eye, but the gaze of an eye that has seen death - a great white eye that unties the knot of life. (Foucault, 1976, p.144)

Where the interplay of the three levels of spatialization under bedside medicine had abstracted the body of the patient from medical space, so hospital medicine fabricated through its respatialization of illness a gaze for which it was the body itself that was ill, and therefore the body itself that had to be known in all its fleshy and intimate detail: through the probing fingers to the abdomen; the listening ear of the doctor to the chest of the living, and the penetrating knife of the anatomist to the bodies of the dead.

Either side of this shift from bedside to hospital medicine can be discerned the very different objects and effects of very different spatializations, and, as demonstrated in the chapters that follow, there is good reason to conclude that it is never in what is seen and who does the seeing that the forces governing these shifts are to be found, but rather in the principle of spatialization and the gaze itself. "The order of the solid, visible body is only one way - in all likelihood neither the first, nor the most fundamental - in which one spatializes disease. There have been, and will be, other distributions of illness" (Foucault, 1976, p.3). But if there is no transcendental unchanging human anatomy or subject to know and be known over the course of history, how then is it possible that there can be any knowledge of the body and the person at all? Foucault answered this problem in Discipline and Punish (1977), which by placing knowledge in a productive relationship to power demonstrated how: "It is not the activity of the subject of knowledge that produces a corpus of knowledge, useful or resistant to power, but power-knowledge, the processes and struggles that traverse it and of which it is made up, that determines the forms and possible domains of knowledge" (Foucault, 1977, p.28).

Power and the Body

At the time of writing the Birth of the Clinic and The Order of Things Foucault had yet to conceptualise the link between power and the great disjunctions in knowing the body that these analyses had revealed. With Discipline and Punish this missing piece of the puzzle was, so to speak, found and inserted to complete the diagram of power and knowledge with which the adjective Foucaultian has

become synonymous.

When I think back now, I ask myself what else it was that I was talking about, in Madness and Civilization or The Birth of the Clinic, if not power? Yet I'm perfectly aware that I scarcely ever used the word and never had such a field of analyses at my disposal then. (Foucault, in Gordon, 1980, p.229)

For in analyzing the transformations from the middle ages to the early twentieth century in the strategies deployed to exercise control over people, Discipline and Punish (1977) identified a framework in which the emergence of particular ways of knowing the body could be seen as correlated with changes in the way that these control strategies were organized and operated. Thus, the late eighteenth century discovery of pathological anatomy by which diseases became localisable to the interior of the body as it lay in the neutral and strictly ordered space of the hospital, could now be seen as contemporaneous with a change in the regime of criminal punishment. From being subjected to torture, pillorying and public display, the criminal now became incarcerated and subject to continuous surveillance in the closed and cellular space of the prison. Changes in two disparate, and indeed, even opposing domains of practice - the one devoted to healing the sick, the other to punishment of the bad - thus converged around the common pole of isolating the body as the object and effect of an increasingly sustained, intimate and penetrating surveillance.

Foucault defined this moment not as one of humanistic enlightenment and the abandonment of ancient rites and superstitions, but rather as that where power was reconfigured, the point at which what could now be known as sovereign power gave way to what from here on would be seen as the practice of disciplinary power.

Sovereignty and the Spectacle of Power

Symbolized by the majestic visibility of the sovereign, it is not difficult to appreciate the mechanism of what Foucault termed "sovereign power", since in addition to its dramatic prominence it is precisely of and to sovereign power that conventional analyses of control continue to speak when they refer to power as if it were something that is "acquired, seized or shared, something that one holds on to or allows to slip away" (Foucault, 1979, p.94).

Functioning through being visible to those on whom it had its effects, the force of sovereign power is epitomised in Foucault's famous description of the public torture and execution of Damiens the regicide.

On 2 March 1757 Damiens the regicide was condemned 'to make the amende honorable before the main door of the Church of Paris', where he was to be 'taken and conveyed in a cart, wearing nothing but a shirt, holding a torch of burning wax weighing two pounds'; then, 'in the said cart, to the Place de Greve, where, on a scaffold that will be erected there, the flesh will be torn from his breasts, arms, thighs and calves with red-hot pincers, his right hand, holding the knife with which he committed the said parricide, burnt with sulphur, and, on those places where the flesh will be torn away, poured molten lead, boiling oil, burning resin, wax and sulphur melted together and then his body drawn and quartered by four horses and his limbs and body consumed by fire, reduced to ashes and his ashes thrown to the winds'". (Foucault, 1977, p.3)

Analogous with the less bloody but equally ostentatious displays of monarchial might embodied in rituals, palaces, processions, and public displays signifying the royal presence, such ceremonies of torture and execution spoke to a power that constituted the public

as an extension of the monarchial body with the king as its head. "In a society like that of the seventeenth century, the King's body wasn't a metaphor, but a political reality. Its physical presence was necessary for the functioning of the monarchy' (Foucault, in Gordon, 1980, p.55). In short, and abstracted as a relationship of visibility, sovereign power was a massive and capricious force dependent for its functioning upon the visibility of itself. It was, accordingly, a regime where the only 'individuals' it produced were those - famous and infamous - inscribed on the conscience of the public through privilege, ritual, heroics and ceremony. It was, moreover, a power that because it depended on its being seen by the unseen eyes of the faceless crowd demanded that this presence be constantly restored and renewed. "The public execution, however hasty and everyday, belongs to a whole series of great rituals in which power is eclipsed and restored (coronations, entry of the king into a conquered city, the submission of rebellious subjects)" (Foucault, 1977, p.48). As we shall see in Chapter 3 where the knowledge implications of this sovereign power are explored, it found its principle of exertion over bodies to bend them into an homogenous mass mirrored in its constitution of living things as formed from the outside by the equally capricious and massive forces of God, the planets and the climate.

Against sovereign power - but never really instead of it, since the two forms of power continue to coexist - there began to occur towards the end of the eighteenth century a displacement in the point of application of power. For it was at this point that the visibility of sovereign power in the great theatres of punishment began to have an effect opposite to its intended consequences. Instead of uniting the masses in sympathy with the king against the offender, the spectacle of the scaffold began to create a solidarity between the condemned and the watching crowd against the king

(Foucault, 1977, p.63). Accordingly, the moment that these techniques started to give way to the discipline of imprisonment, when the scenic and public model of sovereignty was displaced by the solitary and secretive device of the prison, marked not the rise of a new humanism in justice, but rather the switch to a more efficient practice of social control, "a tendency toward a more finely tuned justice, ... a closer mapping of the penal body" (Foucault, 1977, p.78).

Appearing as a complex tissue of events, "often minor processes, of different origin and scattered location, which overlap, repeat or imitate one another" (Foucault, 1977, p.139), this was the shift to disciplinary power that was both produced by and productive of the new gaze of pathological anatomy and its spatialization of disease to the once irrelevant and unknowable interior of the body. For, just as the gaze of medicine found the individual anatomy as its new point of application, so too did the regime of criminal punishment begin to give way to the novel practice of the penitentiary.

Through its physical assault upon the body sovereign power had made and taken the body as a surface for the inscription of pain.

Now, it was not the surface of the body that mattered to the functioning of power, but rather its interior, its rhythms of sleep and waking, eating and hunger, social intercourse, and tolerance for solitude. Gone were the great theatres of pain, and in place of that compressed and focused force situated above the many:

... a new 'economy' of the power to punish, to assure its better distribution, so that it should be neither too concentrated at certain privileged points, nor too divided between opposing authorities, so that it should be distributed in homogenous circuits capable of operating everywhere, in a continuous way, down to the finest grain of the social body.

(Foucault, 1977, p.80)

In the late eighteenth century it was therefore the body of the ordinary person that replaced the body of the king as the effect of power, as all those rituals that had served to restore the corporal integrity of the monarch made way for remedies and therapeutic devices deployed towards the bodies of everyone, such as the segregation of the sick, the monitoring of contagions, and the exclusion of delinquents.

Panopticism and Disciplinary Power

Known collectively as "disciplinary power" these devices directed to the ordering and analysis of the bodies of everyone were epitomised in the architectural form of Bentham's design (in 1843) for an ideal prison, the Panopticon. Disciplinary power inverted the principle of visibility that had informed the mechanism of sovereignty, for its functioning demanded not the visibility of itself but of its target, "and that target was the individual body which became at the same time both object and effect of the disciplinary gaze" (Armstrong, 1983, p.4). Hence the mid-nineteenth century possibility for Bentham to conceive of the Panopticon and Panopticism as "a way of obtaining from power 'in hitherto unexampled quantity', 'a great and new form of government'" (Bentham, 1843, cited in Foucault, 1977, p.206).

Exemplifying the principle of discipline as a power that works through surveillance, the Panopticon was a circular building divided into cells and built as a ring around an observational tower at its centre. Each cell had two windows: an outer one illuminating the inmate, and a shuttered inner one allowing a guard in the central tower to observe the inmates, but not the inmates to observe the guard. The side walls of each cell prevented the inmate from communication with other inmates, and so each inmate was "seen but

does not see; he is the object of information, never a subject of communication" (Foucault, 1977, p.200). Each cell was thus like a small theatre in which the solitary actor was perfectly individualised and constantly visible, yet never certain of actually being watched and so perpetually subject to the gaze of the guard. "In short, the principle of the dungeon is reversed; daylight and the overseer's gaze capture the inmate more effectively than darkness, which afforded after all a sort of protection" (Foucault, in Gordon, 1980, p.147). Hence the major effect of the Panopticon, which was to make the operation of power continuous by inducing in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power (Foucault, 1977 p.201). Conceived of by Bentham as a prison, the mechanism of the Panopticon was not restricted to the convict, but could also be fixed upon the lunatic, the schoolchild, the patient, the worker, or, for that matter, the entire population.

Indeed, it was precisely to this "swarming" of techniques devoted to the monitoring and making calculable of the gestures, capabilities, behaviours, illnesses and ideas of not only the sick and the bad, but also the well and the good, that Foucault referred to as the point where the political axis of individualization that had underlain sovereignty found its reversal, to allow the emergence of discipline. Under sovereign power, individualization had been "ascending", such that the closer bodies were to the king the more they were marked off by ceremony or immortalized in literary accounts. In the disciplinary regime, on the other hand, individualization is "descending", for as power increases in its anonymity and functionality, so those on whom it is exercised are more strongly individualized. Not by ceremony, but by surveillance, and not by commemorative accounts with ancestry as their referents, but by comparative measures against a 'norm'.

The moment that saw the transition from historico-ritual mechanisms for the formation of individuality to the scientifico-disciplinary mechanisms, when the normal took over form the ancestral, and measurement from status, thus substituting for the individuality of the memorable man that of the calculable man, that moment when the sciences of man became possible is the moment when a new technology of power and a new political anatomy of the body were implemented. (Foucault, 1977, p.193)

Discipline is thus a mechanism or power that invests the body of whoever is subject to surveillance, transforming an incoherent and unorganized being - whether at the level of the population or of the individual - into an efficient and manageable structure, something docile that can be subjected, used, transformed and improved. While maximized where new innovations in architecture laid down particular places for particular individuals, the exercise of discipline was not restricted to these concrete domains, and in its manifestations appeared in a multitude of different sites wherever the techniques of bodily surveillance emerged to prominence in the eighteenth and nineteenth centuries. In schools, pupils began to be tested to ascertain their scholastic proficiency; in the army, the new routine of drill and parade-ground inspections operated to create a disciplined soldier, and in workshops, schools and hospitals the timetable - long used in monastic communities to prevent idleness - was widely introduced to subject bodies to temporal ordering through the establishment of rhythms and regulated cycles of repetition. These, then, were some of the "means of correct training" necessary to a power that abolished the homogenizing effect of the crowd under the regime of sovereignty and replaced it with a collection of separate individualities. This it fabricated through three simple instruments of surveillance:

hierarchical observation, normalizing judgement, and their combination in the procedure that epitomised disciplinary power, the examination.

The Means of Correct Training

Inherent in the Panopticon's arrangement and deployment of lights, lines of sight and barriers, were the three instruments by which discipline expanded beyond the constraints of institutionalized practice to become continuously distributed within the most minute and intimate elements of the social and the individual.

The first of these instruments was hierarchical observation. This refers to the elementary principle of concretising surveillance through eyes that see without being seen in the very way that built space is configured around the problem of who can see and who can be seen. For instance, how should the tents of a military camp or dwellings in a working-class housing estate be arranged so that each occupant comes to be part of a network of gazes that supervise one another? Or, what is the optimal layout in the classroom that will ensure that the scholars know they can be seen while allowing that the teacher who watches over them remains the discrete observer? Or, when the number of bodies to be supervised becomes too great to be seen by a single eye, how to install further observational relays? Each time such questions are asked it is, therefore, to the instrument of hierarchical observation that they speak.

The second instrument of disciplinary surveillance is that of normalizing judgement, by which individuals can be assessed and measured through their comparison with others. As the term implies, normalizing judgement refers to all those procedures - even that as simple as having people stand in a line according to their height - which in creating a field of comparison between different

individuals allows the generation of a norm against to which to hierarchize the capacity, attributes or performance of the subjects involved. It therefore contains within it an element of correction and the correlative concept of deviance, which together permit disciplinary power to at once fabricate and bring within its remit "the whole indefinite domain of the non-conforming" (Foucault, 1977, p.179). Hence what Foucault termed the "infra-penalty" of discipline that partitions and exercises itself over that whole mass of behaviours and bodily functions left unattended by the law. For instance:

The workshop, the school, the army were subject to a whole micro-penalty of time (latenesses, absences, interruptions of tasks), of activity (inattention, negligence, lack of zeal), of behaviour (impoliteness, disobedience), of speech (idle chatter, insolence), of the body ('incorrect' attitudes, irregular gestures, lack of cleanliness), of sexuality (impurity, indecency). (Foucault, 1977, p.178)

If it was in the bloody rituals of public torture and execution that the pulse of sovereign power found its repeated renewal, then epitomising discipline was the silent and subdued practice of the examination. Synthesizing the mechanisms of hierarchical surveillance and normalizing judgement, in the examination:

... are combined the ceremony of power and the form of the experiment, the deployment of force and the establishment of truth. At the heart of the procedures of discipline, it manifests the subjection of those who are perceived as objects and the objectification of those who are subjected. (Foucault, 1977, pp.184-185)

Functioning in three crucial ways, the examination to which Foucault referred is precisely that "tiny operational schema", so widely

spread from psychiatry to education, and from the diagnosis of disease to the hiring of labour, that almost every member of the population must at some or other time participate in its ritual and so be recruited into the wider diagram of discipline that this most capillary form of surveillance enables.

First, it is analogous to a cell of the Panopticon, and is therefore a functional site that transforms the economy of visibility into the exercise of power. For in the examination it is not the examiner that emerges to visibility, but the subject being examined, who once a participant in this minute ritual of surveillance carries forever "the fact of constantly being seen, of being always able to be seen that maintains the disciplined individual in his (sic) subjection" (Foucault, 1977, p.187).

Second, intrinsic to the examination is the procedure of recording, the power of inscription by which the identity and attributes of the individuals it first fabricates through surveillance are then traced in a network of writing and mass of documents (or computer databases), that capture and fix them in a permanent analytic space. The examination thus functions not only at the level of the individual but also at that of the collective, for through their aggregation the records of individuals can be sorted and seriated, to make possible the individual as a calculable entity within the tabular order of an arithmetic collectivity.

Third, in fusing the power of surveillance with its documentary techniques of notation, registration and filing, the examination "makes each individual a case, ... a case which at one and the same time constitutes an object of knowledge and hold for a branch of power" (Foucault, 1977, p.191). Limited only by these parameters particular to its functioning, the infinite flexibility of the examination marks its status as the quintessential disciplinary device, a compact and portable Panopticon that

requires no walls, towers or guards for its successful operation, and which through its properties of recording can interlink every point in the disciplinary regime to every other, so making the distribution of power continuous and autonomous of any 'control centre'.

To summarize, in the spectacle of punishment and the ritual of the examination are displayed the principles of two very different diagrams of power, and alongside them the equally distinct domains of possible objects and effects that they produce.

- (1) Where sovereignty exerts control through violence and restraint, discipline does so through surveillance alone.
- (2) Where sovereign power is dependent on the visibility of itself, the unseen force of discipline makes visible the individual as object, effect and target of power.
- (3) Where sovereign power emanates from a central point, disciplinary power is relational, a force that is constantly and permanently distributed in each and every gap between bodies.
- (4) Where sovereign power is subject to sporadic eclipse and restoration, discipline functions constantly and automatically through recruitment of the individual as its relay.
- (5) Where sovereign power destroys and conceals beneath its weight, disciplinary power is creative and makes visible its points of articulation in the objects, effects and knowledges that crystallize to indicate its functioning.

Despite these clear distinctions between sovereignty and discipline, it is mistaken to assume that their operation is mutually exclusive. Indeed, and as demonstrated in the substantive chapters of this study (especially Chapters, 5, 6 and 7), the shift from sovereignty to discipline was, at least in South Africa, one of emphasis. For while the mid-nineteenth century demise of the public

execution as a legal means of exercising justice marked the point at which sovereignty formally bowed to discipline, this inversion in the relationships of visibility between colonial power and the African body enabled a new complex of calculable sovereignty to emerge. In this, the analytic gaze of discipline served to produce as visible objects those individuals and groups on whom the dramatic spectacles of sovereignty could then be selectively visited: in the shape of the missionary doctor's theatres of healing aimed at demonstrating the power of 'God's medicine' to the watching witch doctors; in the form of the heat chamber as a spectacle of the mining industry's might over the body of the African; and in the technique of the projective psychological test and its isolation of the African nationalist as a 'dangerous individual' to be targeted by the tactics of violent repression.

Discipline as Power and the "Disciplined" Society

How then are we to read this theory of power, especially in a society such as South Africa, where every day we witness the mob against the spectacular might of the army or police, where its conventional history over even the last fifty years is punctuated by burning barricades and brutal acts of state violence towards those who defy the pass laws, deny their labelling along racial lines, and refuse to become "docile" participants in "Bantu education"? Certainly, this speaks to a society that is not "disciplined" in the sense of consisting in people who mechanically obey the dictates of the state and meekly conform to their politically and economically allocated place in the social order. But, and precisely because this notion of a "disciplined" society reflects the idea that certain groups could hold power and exert it over others, this has no bearing upon whether South Africa is or is not a disciplinary society. For, and as made abundantly clear in the chapters that

follow, South African society has, since at least the turn of the twentieth century, been constructed and organized in ways that starkly reflect the programmatic structure of the Panopticon, confirming that while it is not "disciplined" it most definitely is a disciplinary society.

What then is to be made of the resistance that has and continues to constitute so much a part of day-to-day life in South Africa? Surely, in refuting precisely the tactics of repression and subjectification aimed at inducing acceptance of their place as the 'dominated', black South Africans have given the lie to discipline? But, such critique assumes that resistance is contrary to disciplinary power, that where there is resistance there is no power, or at least a sufficient weakening or even hiatus to let the 'authentic' person emerge from beneath its crushing weight. But this too is mistaken, for not only do such arguments speak to sovereign power alone - which can and must be resisted - but also to the idea of 'freedom', which in its modern guise is itself a product of disciplinary power. For freedom today means the freedom of the individual, but since it is the individual who is a product of disciplinary power, the struggle to defend the 'rights of man' reveals itself as no more than another facet of Panopticism. Thus, far from being antithetical and a threat to the disciplinary regime, resistance is precisely that through which it ceaselessly expands and reproduces itself: "Disciplinary power...provokes and works through resistance: an up-raised hand to avert the gaze of surveillance marks the beginning of a self-existence for the nascent individual" (Armstrong, 1987, p.69).

Analyzing Power: Methodological Requirements

Flowing from the Foucaultian analysis of power into its sovereign and disciplinary manifestations and their contingent domains of objects and knowledge are a number of methodological requirements.

First, that analyses avoid thinking of power as having a substantive form, for it is only through the very particular set of practices outlined above that it finds its manifestation in the political diagrams of sovereignty and discipline. Hence "it is necessary to be a nominalist: power is not a stricture, or a certain force with which people are endowed; it is a name given to a complex strategic relation in a given society" (Foucault, in Gordon, 1980, p.27). Second, because it creates itself in concrete practices, analyses should address power not at its formal centres in society which are simply points of concentration within a generalized force field - but "at its extremities, ... those points where it becomes capillary" (Foucault, in Gordon, 1980, p.96), such as where the pincers are applied to tear the flesh, or, in a disciplinary regime, the gaze of the doctor to the lung of the patient. The Foucaultian analysis is therefore an ascending one, moving from these capillary points of application up to the more general mechanisms - like the monarchy, the economy, the state, or the liberation struggle - that require the human objects and subjects that power invents.

Third, since power is not the product of human interests, desires and motives but rather that which produces these as its effect, analyses must not concern themselves with power at the level of conscious decision or intention.

It should refrain from posing the labyrinthine and unanswerable question: 'Who then has power and what has he (sic) in mind?' ... Instead, it is a case of studying power at the point where its intention, if it has one, is completely

invested in its real and effective practices. (Foucault, in Gordon, 1980, p.97)

This emphasis upon "real and effective practices" is important also because it serves to underline the point that the Foucaultian analysis of power avoids any kind of linguistic reductionism. Thus, when it uses the term "discourse" - as in the title of the study what is referred to is not the meaning of the body created through language and dialogue, but the very practices involved in the sociomedical sciences and their application to the body (such as the way the doctor's hands palpate it, or how the sanitary inspector subjects to surveillance and so invents the space between one body and the next). Related to this concern with avoiding the projection of intentionality into the analysis of power is the vocabulary of Foucaultian analysis. This is given over to the use of spatial and strategic terms like field, domain, installation, deployment and region, the use of which has the effect of eliminating the linguistic construction (as typified by conventional historical analyses) of "a great collective consciousness as the scene of events" (Foucault, in Gordon, 1980, p.69).

Fourth, the question of 'ideology', which because it forms so central a theme in the contemporary discourse around colonialism, apartheid and the socio-medical sciences in South Africa, is more fully addressed in the postscript (Chapter 11). Suffice here to note that in the Foucault schema power is never to be thought of as ideological.

It is both much more and much less than ideology ... It is the production of effective instruments for the formation and accumulation of knowledge - methods of observation, techniques of registration, apparatuses of control. All this means that power ... cannot but evolve, organise and put into circulation a knowledge, or rather apparatuses of knowledge, which are not

ideological constructs. (Foucault, in Gordon, 1980, p.102).

Conclusion

Through this review of Foucaultian theory, an analytic framework has been established by filtering the ideas set forth in The Order of Things (1973) and the Birth of the Clinic (1976) through the concepts of power and knowledge established in Discipline and Punish (1977). The result is a theoretical and methodological apparatus able to problematise the existence and transformations of the human body as an object and effect of sociomedical power by disrupting all humanistic assumptions concerning the idea of it as a transcendental, unchanging entity, and, reciprocally, of knowledge as something that progressively accrues to steadily enhance the truth of what we know.

Instead, a continuous present is set in place in which the body is always and only contingent upon the constant play of force relations that concretise themselves in the procedures deployed to know it and the bodies of socio-medical knowledge that result. Substitute for the Panopticon as prison the hospital or clinic; replace the unseen but all seeing guard with the doctor or nurse; see the silent, mystifying experience of the medical examination as the side walls prohibiting communication among the inmates, and construe the ever-expanding archives of disease statistics and patient files as the raw material from which the ambient infrapenalties of normalizing judgement silently form themselves. The seemingly unambiguous object language of textbook medicine metamorphoses, as do the actions of the researcher, clinician, and health administrator, into the components of a finely wrought Panopticism, geared to the surveillance and subtle modulation of the interior and the exterior of the body, of the relations between different bodies, of the social itself.

Turning now from this abstract and general anatomy of power, Chapter 3 commences its application to the production of a specifically South African anatomy of power, by turning to a present where how the body was understood and became an effect of power confirmed the existence of bodies in Africa that in their shape and form are today unimaginable to conventional historians, except as bizarre and grotesquely prejudiced distortions of the 'truth' as it appears in *Gray's Anatomy*.

^{1.} Many other examples could be cited to illustrate the range of topics to which Foucaultian analysis has been applied, and some of these will be referred to in the body of this study as sources of argument and material for comparative evaluation of its findings.

CHAPTER THREE

RENAISSANCE BODY MYTHS AND THE SPECTACLE OF STRANGENESS

Consider the following descriptions of human bodies and the inhabitants of "Ethiopia". The first is taken from a late sixteenth century version of Isidore of Seville's sixth and seventh century "medical writings" and occured in a section of his Etymologies labelled "On Men and Monsters" (Sharpe/Isidore, 1964, p.38).

- 12. Just as among individual races there are certain members who are monsters, so also among mankind as a whole, certain races are monsters, like the giants, the cynocephali, the Cyclopes, and others ...
- 17. It is believed that the Blemmyae in Libya are born as headless trunks, that they have both eyes and mouth in their chests; and that there are others, born without necks, having eyes in their shoulders ...
- 20. The Artabitae in Ethiopia are reported to walk on all fours like beasts, and none of them passes the fortieth year of age ...
- 23. The race sciopedes is said to exist in Ethiopia, with only one leg but marvelous speed withal: the Greeks call them SKIOPEDES because in the summertime they stretch out on their backs, covering themselves with the shadows of their huge feet.
- 24. The Antipodes in Libya have their soles turned around behind their legs, and have eight toes on their soles.

 (Sharpe/Isidore, 1964, pp.51-53)

Some 200 years later, in the first edition of *Systema Naturae* by the natural historian Linnaeus (1735), there appeared the following classification of "homo sapiens" into six varieties.

- a. Wild man four-footed, mute, hairy.
- b. Europaeus albus white, sanguine, muscular, long blond hair, blue eyes, gentle ingenious inventive, governed by law.
- c. Americanus rubesceus liberty-loving, copper-coloured, choleric, obstinate, governed by customs.
- d. Asiaticus Luridus yellowish, melancholic, dark hair and eyes, proud, avaricious, greedy, governed by opinion.
- e. Afer Niger black, phlegmatic, black frizzled hair, silklike skin, ape-like nose, thick lips, the breasts of women distended, crafty, lazy, governed by caprice.

f. Monstra - divided into two categories, namely those so by

nature, such as dwarfs and giants, and those so by custom, such as eunuchs. (Linnaeus, 1735, cited in Pratt, 1992, p.75) The essential difference between the lists of Isidore and Linnaeus lay in what there was missing from that of Linnaeus. Gone from his classification (or rather relegated to the tail end, as it were, under the heading "monstra") were the legends and fabulous qualities that constituted the very stuff of Isidore's marvellous bestiary. These removed, all that remained was a mechanical listing of the essential attributes and characteristics of each human type, presented in uniform order so as to enable their comparison. Between Isidore and Linnaeus then, "the whole of animal semantics has disappeared, like a dead and useless limb. The words that had been interwoven in the very being of the beast have been unravelled and removed: and the living being, in its anatomy, its form, its habits ... appears as though stripped naked" (Foucault, 1973, p.129). Isidore's description was clearly the more fantastic, drawing as it did on myths and legends resurrected from the Greeks and Romans, and perhaps inducing a sense of wonder in the contemporary reader at how it was possible for anyone to believe in such a patently absurd set of fictions.

By contrast, that of Linnaeus is likely to create in the reader a sense that despite being distorted by a heavy veil of prejudice and unfamiliarity, it had within it traces of at least some direct observation of actual bodies in the real world.

But such an evaluation speaks, as Foucault put it, to "what the historians say" (1973, p.125) where they ascribe the transformation from "myth" (Isidore) to classification (Linnaeus) to a synthesis of curiosity and desire "that caused them if not to discover the sciences of life, at least to give them a hitherto unsuspected scope and precision" (Foucault, 1973, p.125). On the one hand, this is made possible (say the historians) by origins located within science itself, and in particular the new privileges accorded to observation in the seventeenth and more especially the eighteenth centuries. For instance, the enhancement of observational acuity as epitomised by invention of the microscope, or the then recently attained privilege of the physical sciences, which in permitting analysis of the laws of movement and of light through theory, experimentation and observation, offered a model of rationality by which to analyze the adjacent realm of living beings and strip away the opaque veneer of myth that clouded them from "true" apprehension. On the other hand, a variety of new interests - such as an economic attitude toward agriculture - that incited a curiosity toward exotic plants, animals and peoples. Which were useful, which could be acclimatized to Europe and thus domesticated for European use?

But, writes Foucault, running through such conventional analyses is a thread of "progress" that for the history of the present is as mythic as the legends it devalues, itself the application of a modernist category that is strictly anachronistic to these obsolete knowledges and the shift between them. This category is "life" itself, or the idea that life is immanent in

living things.

Historians want to write histories of biology in the eighteenth century; but they do not realize that biology did not exist then, and that the pattern of knowledge that has been familiar to us for a hundred and fifty years is not valid for a previous period. And that, if biology was unknown, there was a very simple reason for it: that life did not exist. (Foucault, 1973, pp.127-128)

What is meant by this seemingly unlikely claim that before the birth of biology at the end of the eighteenth century "life did not exist"? How is it possible to argue that to take such an assertion seriously can contribute to understanding the African body as the object and effect of power and knowledge? It is the aim of this and the following chapter on the African bodies of knowledge produced from around the 1400s to the turn of the nineteenth century to answer these questions, and so contextualise the emergence of disciplinary power by highlighting its discontinuity with the knowledges and practices made possible by the epistemes that preceded it. These epistemes were, in order of appearance and following Foucault's terminology, the Renaissance and Classical epistemes. The introductory quotation from Isidore of Seville's medical writings was chosen as illustrative of the former, that from Linnaeus as exemplifying the latter.

The Body as Prose and the Renaissance Episteme

The mother in a woman is a singular member, disposed as a bladder, and kind has ordained that member to take and receive the humour seminall ... The mother hangeth between the spleen and the bladder, but somewhat higher than the bladder, the bottom of hollowness is extended into the navell, and is the place of the first Fragma, of conception called Embrion,

because of carnal copulation. (Batman, 1582, p.62)

Until the middle of the seventeenth century, a scholar such as Batman exploring the qualities and attributes of the human body could make such assertions secure in the knowledge of their truth because its investigation proceeded not through use of a cold cadaver and the scalpel, but rather parchment, a pen and the "book wheel". Indeed, the book from which Batman reproduced his description of "the mother" - Bartholomew Anglicus' On the Properties of Things, "first set forth in 1360" (Batman, 1582, p.1) - was perhaps itself penned using a "book wheel", for as Batman's introduction informed the reader it drew upon such authorities as Aristotle, Pliny, Hippocrates, Isidore of Seville, Cicero, Galen, Theophrastus and Zeno.

In both its form and function the "book wheel" (see Grafton, 1992, pp.117-118) spoke to what Greenblatt has termed the "circular system of authentication" (1992, p.35) that prevailed in Renaissance thought, and by which the absence of anything new in a text - no matter how remarkable its content might seem to us today - was a sign not of its intellectual sterility but of its truth. The "book wheel" was a massive construction consisting of a large wheel (somewhat like a scaled down ferris-wheel), the circumference of which was partitioned into shelves each containing a number of volumes which could thus be opened and read without removing them from the shelves. To turn the device, an elaborate system of cranks, cogs and gears activated by a foot pedal. Whenever a new compartment on the wheel was to be selected, depressing the pedal and engaging the machinery would result in the chosen texts whirring into place before the reader's eyes. The "book wheel" thus permitted its user to move throughout his library - and, by extension, the universe - while he remained sitting at his desk in the calm posture appropriate to scholarly

contemplation, for this was a world in which all knowledge already existed in the pages of authoritative texts². By spinning from text to text, authority could be compared with authority, and the object of interest confirmed as a component of knowledge by assembling all that had been seen and heard, and everything that was recounted of it, "either by nature or by men, by the language of the world, or by tradition" (Foucault, 1973, p.40).

Moving closer to the "book wheel", we may peer, as it were, over the shoulder of the Renaissance scholar to read what he read, and, more importantly, see what he saw in the way the words and sections of his text are physically arranged on the page. Perhaps the text under scrutiny was Batman's (1582) rendition of The Properties of Things. Examining the "catalogue" of the matters dealt with, we see that it was not arranged according to the arbitrary order of the alphabet3, but instead that it juxtaposed seemingly unrelated topics. Take, for instance, the following sequence of matters: "man's fasting spittle kills serpents; the harmony of the elemental humours; carnall lust; corruptions of the flesh; man's body is spirit, humour and members" (Batman, 1582). But this arrangement was in fact far from random, for like the "book wheel" that was perfectly closed in its circularity upon itself, the way in which words were linked together and the "matters" arranged in the space of the printed page reconstituted the very order of the universe. For within this episteme "the names of things were lodged in the things they designated" (Foucault, 1973, p.36), and it was therefore the encyclopedist's ideal:

to spatialize acquired knowledge both in accordance with the cosmic, unchanging, and perfect form of the circle and in accordance with the sublunary, perishable, multiple, and divided form of the tree. (Foucault, 1973, p.38)

For instance, arranged according to just this principle, the Nuremberg Chronicle (Schedel, 1493) arranged all of history into seven ages, each age a different section of the text, and each analogous to the first week in which God created the universe. Language was far from the neutral element we now take it to be, and because of this pressed itself in upon the scholar. Every thing was connected to every other thing in a complete cosmic web, the constructive principle of which was resemblance as it repeated and replicated itself through the play of the four "similitudes".

The first of the similtudes was "convenience", which spoke to the idea that like things would tend to occur in juxtapostion with one another, and that things which were adjacent would through their mere proximity tend to become similar. "Convenience" thus linked the world together in the form of an endless chain where at each point of contact there began and ended a link that resembled the one before it and the one after it (Foucault, 1973, pp.18-19). "Emulation" referred to a power of resemblance by which things could imitate one another in the absence of the physical proximity required by "convenience". For instance, the human face emulated the sky and man's wisdom that of God, and through emulation things widely dispersed throughout the universe were able to resonate with and answer one another. "Analogy" was a mode of interconnection between things that made possible not only resemblances between visible and substantial things, but between entire sets or patterns of relationships. Thus, and as we shall see later, the human body was analagous to the universe, for the pulse beat in the veins as the stars circled the sky, and the seven orifices of the head were to the face what the seven planets were to the sky (Foucault, 1973, pp.21-23). Finally, the "sympathies", which spoke to a capricious power of resemblance and assimilation emanating from the sameness of the interior and

invisible virtues of things. Thus, it was sympathy that attracted what was heavy to the heaviness of the earth, and it was its warmth and light that attracted fire into the air. Preventing, however, the merging of everything to form an undifferentiated mass was the antithesis of sympathy, "antipathy". This maintained the isolation of things, preventing their assimilation into others by enclosing each within its own impenetrable difference. So, the olive and the vine "hated" the cabbage, just as Nature had ordained that the rat and the crocodile should be eternal enemies (Foucault, 1973, pp.23-24).

Folded in upon itself in a chain of relentless duplication, the similitudes that maintained the Reniassance universe were indicated on the surface of things in the shape of visible marks, or "signatures", of the invisible analogies that linked them.

Thus, the signature of bravery was the presence of large and well developed extremeties to the limbs, so marking the affinity between the lion and the soldier or the gladiator. Bristling with the linguistic truth of itself, it was the task of the scholar to scrutinise each and every thing so as to decode its "signature" and in this way establish its rightful place in the order of things. In short, the Renaissance episteme was a mode of knowing in which the connection between the eye that looked and the properties of the beings it saw:

... was that being itself, within the whole semantic network that connected it to the world. The division, so evident to us, between what we see, what others have observed and handed down, and what others imagine or naively believe, the great tripartition ... into Observation, Document and Fable did not exist, because ... signs were then part of things themselves. (Foucault, 1970, p.129)

In this age of authority and kingdom of resemblance where things and words were undivided, to know something was to gather together the entire semantic complex or web through which it existed, as had Pliny where he stated in the preface to book one of his Natural History that "by perusing about 2 000 volumes, very few of which ... are ever handled by students, we have collected in 36 volumes 20,000 noteworthy facts obtained from 100 authors" (Pliny, cited in Friedman, 1981, p.7).

But was Foucault correct in asserting that under the Renaissance episteme "life did not exist" because it was not immanent in living things? If so, then we must expect to find through the genealogical method texts that: (1) reveal the absence of life in living things such as the human body; (2) localise the place of life to some ensemble of forces other than those chemical, organic and physical processes we now take for granted as emergents of the body and the determinants of life; (3) demonstrate how the practice of doctors was constitutive of the living body without life, and (4) explicate how the bodies conceived of by Renaissance knowledge as existing in Africa were contingent upon and only possible within this episteme.

Lifeless Bodies of the Living

The soul, anima, was so called by the pagans because they took it to be wind. Whence also "wind" is ANEMOS in Greek, because we seem to live by taking in air with our mouths, but this is most likely false since the soul arises long before air can be taken in by the mouth, and is already alive in its mother's womb. (Sharpe/Isidore, 1964, p.38)

When the soul departs, what is left is no longer an animal, and that none of the parts remain what they were before,

excepting in mere configuration. (Barnes/Aristotle, 1984, p.997)

The soul withdrawn, its temporary corporal container the body collapses - like a heavenly glove puppet from which the celestial hand has been withdrawn - into a heap of blood, bones and skin.

All the arteries pulsing blood, the ventricles coursing humours and the lungs bellowing air were in themselves bereft of the power of life, empty skeins until breathed into by the "vital virtue".

The lifeless bodies of the living were repeatedly confirmed through the practice of dissection, since because the animate body was merely the temporary vessel of the soul, to search for signs of the mechanisms of life in the dead body was unthinkable. As an exercise in medical education, the practice of dissection was akin therefore to other forms of textual illustration – such as "trees", "wheels" and "wound men" representing the theory of temperament and diagramming humoural systems – in that its purpose was to help scholars achieve a grasp of organizing schemes rather than to enable naturalistic description of the body itself.

The goal of physiological or anatomical study was, in many instances, a better understanding of texts ... The academic environment in which the dissection of a human cadaver was regularized integrated the occasional presentation of the body itself as the object of study with frequent and habitual attention to learned texts on the subject. (Siraisi, 1990, pp.80-82)

But if life was not an immanent of the body's structure and functioning, how was it possible to explain the living body? The Renaissance means of answering this question was to treat the body as a puzzle to be deciphered, a complex jigsaw of outward signatures (such as the shape and positioning of bones and organs) that expressed to the observing eye the invisible web of analogies

by which the living was spatialized in the sympathetic interplay of everything.

'These links proceed so strictly that they appear as a rope stretched from the first cause as far as the lowest and smallest of things, by a reciprocal and continuous connection; in such wise that the superior virtue, spreading its beams, reaches so far that if we touch one extremity of that cord it will make tremble and move all the rest'. (Porta, 1650, cited in Foucault, 1973, p.19)

And so to Purchas, for whom the human body "is a microcosme, and created after the rest, as an Epitome of the whole Universe, and truest Mappe of the World, a summarie and compendious other world" (Purchas, 1619, pp.25-26). Because all things existed in the human body, and just as the universe was explicable in terms of 'Man', so 'Man' was explicable in terms of the universe.

O Man, Know thy selfe, and know all things ... Thou hast thy Body, a Booke of Nature, and carriest a little Modell of the greater World continually about thee. In thy composition, thou seest the foure Elements; the elementarie qualities in thy complexions; all the ranks and classes of creatures in thy growth. Is not the Haire as grasse? the flesh as Earth? the Bones as Mineralls the Veines as rivers? the liver a Sea? Are not the lungs and Heart Correspondent to the ayrie and fierie elements? the Braines, to the clouds and Meteors ..., the Eyes, to starres, or those two Eyes of Heaven, the greater lights? and the circular frame of the Head, to the globositie of the heavens? (Purchas, 1619, pp.29-31)

To explain how this play of the similitudes could result in so perfect a symmetry between the body and the universe required there to be some medium, some infinitely plastic "force" that could at once invest both the animate and the inanimate with the

properties and form proper to themselves. Following Anglicus (Steele/Anglicus, 1893) this "force" consisted in the "elements" or "substances" common to all things, the cosmic template, so to speak, by which all things retained and reproduced their proper place and function in the universe.

True it is that after the noble and expert doctrine of wise and well learned philosophers, ... we know that the properties of things follow and ensue their substance. Herefore it is that after the order and distinction of substances, the order and the distinction of the properties of things shall be and ensue. (Steele/Anglicus, 1893, p.11)

Explanations of the living body thus privileged this elemental force. Subdivided into four, the elements in turn explained the principle properties of every thing.

Elements are four, and so there are four qualities of elements, of which every body is composed and made as of matter. The four elements are Earth, Water, Fire, and Air ... Four be called the first and principal properties, that is hot, cold, dry, and moist: they are called the first qualities because they slide first from the elements into the things that be made of elements. Two of these qualities are called Active, heat and coldness. The others are dry and wetness and are called Passive. (Steele/Anglicus, 1893, p.23)

Reading the Renaissance human body thus involved tracing the manifestations and transmutations of the elements in its "members" (arms, legs, organs, and collections of organs), and following their minglings through the different "offices" conferred upon each member and group of members by the cosmic template. "Avicen says that members are bodies made of the first meddlying of humours". Each member "is ordained to some special office", and each office was, in turn, ordained by the soul. "Because the soul

has diverse virtues, so are diverse members needed" (Batman, 1582). Thus, Batman divided the body through his classification of its members into those that "make ready", "purge", "cleanse"; "defend", and "bear about". Similarly, de Liuzzi's Anatomy (cited in Siraisi, 1990, pp.107-108) segmented and explained the body in accordance with how the vital, animal, and natural virtues were localized. Animal virtues (such as motion, sensation and thinking) produced "animal members" - the skull and its contents. Spiritual" or "vital" virtues (breathing, the pulse, the heartbeat), produced "spiritual members" - the thorax and its contents. "Natural virtues" (growth, nutrition, reproduction, excretion), produced "natural members" - the abdomen and its constituent organs.

Animating this microcosmic human template of the macrocosm was the "vital spirit", "by whose benefits and continual moving, both wits and virtues in beasts are ruled to work and do their deeds" (Steele/Anglicus, 1893, p.26). The "vital spirit", continued Anglicus, was heated by the liver (following de Liuzzi, a spiritual member) to form a smoke. This smoke was then "made subtle" by the liver's veins until it became "the natural spirit" (p.27). In turn, this moved the blood and brought the heart together, by which it was "more pured, and turned into a more subtle kind" (Steele/Anglicus, 1893, p.27). This was the "vital spirit" and by its means:

The soul is joined to the body ... And therefore if these spirits be impared, or let of their working in any kind, the accord of the body and soul is resolved, the reasonable spirit is let of all its works in the body. (Steele/Anglicus, 1893, p.28)

This, then, was the human body of Renaissance thought, a complex interplay of invisible elements, virtues and spirits that united it to the irreducible "soul" and inscribed their signatures in the

shapes and groupings of the body's members. Far from being a purely intellectual abstraction, it was precisely this body that was produced through the diagnostic and therapeutic arts of the Renaissance doctor.

Doctoring the Renaissance Body

Since it existed only in and, indeed, was the finely balanced space where the elements coincided, the living human body of Renaissance thought was a particularly resonant link in the great web of reciprocal and continuous cosmic connection identified by Porta. It was, therefore, always open to and reflective of trembling and change anywhere on this web, and so continuously in sympathy with it. Hence the necessity that the Renaissance doctor be conversant with all the scholastic disciplines, and hence the manner of diagnosing and treating the sick.

- 1. Some ask why the study of medicine is not included among the other liberal disciplines. It is because whereas they embrace individual subjects, medicine embraces them all. The physician ought to know literature, grammatica, to be able to understand or to explain what he reads.
- 2. Likewise also rhetoric, that he may delineate in true arguments the things he discusses; dialectic also so that he may study the causes and cures of infirmities in the light of reason. Similarly also arithmetic, in view of the temporal relationships involved in the paroxysms of diseases and in diurnal cycles.
- 3. It is no different with respect to geometry because of the properties of regions and the locations of places. He should teach what must be observed in them by everyone ...
- 4. Finally also, he ought to know astronomy, by which he should study the motions of the stars and the changes of the

seasons, for as a certain physician said, our bodies are also changed with their courses. (Sharpe/Isidore, 1964, p.64) As the body reflected within itself every thing within the universe, so every thing could influence its working. The art of diagnosis thus consisted in deciphering the signatures of this resonance as they were encoded in the texture, colour and smell of bodily excrements (such as faeces, phlegm and urine), the rhythm of the heartbeat and pulse, the texture and colour of the skin, the appearance of the face, and the sick man's telling of his illness. Then, to complete the puzzle, this complex of signs was to be mapped onto the macrocosm through devices such as the horoscope, astrolabe, inspection of the weather and knowledge of the climate. Thus the comparison drawn by Crollius between apoplexy and tempests extended the correspodence identified by Purchas of "the Braines to the clouds and Meteors" (1619, p.30) by illustraing their emulation.

'The storm begins when the air becomes heavy and agitated, the apoplectic attack at the moment when our thoughts become heavy and disturbed; then the clouds pile up, the belly swells, the thunder explodes and the bladder bursts; the lightning flashes and the eyes glitter with a terrible brightness, the rain falls, the mouth foams, the thunderbolt is unleashed and the spirits burst open breaches in the skin; but then the sky becomes clear again, and in the sick man reason regains ascendancy'. (Crollius, 1624, cited in Foucault, 1970, p.23)

In other cases, the immediate cause of illness (which was almost always humoural imbalance) might lie not in the weather but in astrological events, discernable through scrutiny of the sick man's horoscope. Likewise, the corruption of the air through which epidemic illness was spread would be ascribed to unfavourable planetary conjunctions (Siraisi, 1990, p.187). Yet another class

of illness could come into being simply through the contact of things, as with "mourning roses which have been used at obsequies", and which as a consequence of their adjacency to death leave all those who smell them "sad and moribund" (Porta, 1650, cited in Foucault, 1973, p.23).

Just as the play of such sympathies could cause infirmity, so too the opposite, and it was through the establishment of sympathies between plants or minerals and the afflicted members of the body in question that remedies could be established and applied. Because the seeds of aconite are tiny dark spheres set in white, skin-like coverings that resemble in appearance the eyelids covering an eye, they were good for treating diseases of the eye. Analogously, the affinity between walnuts and the human head was signalled by the fact that their shells (like the pericranium) enclosed the nut itself, "which is exactly like the human brain in appearance" (Crollius, 1624, in Foucault, 1973, p.27). Thus, the shells helped heal wounds of the skull, and the nuts repaired the sick or damaged brain.

The soul, elements, humours, spirits, affinities and sympathies. All invisible and ephemeral in themselves, yet only too obvious to the eye able to decode their signatures in the prose of the Renaissance body, and all powerful in their production of it as an animate being. All only words, yet words that because they were contiguous with the forces they designated were those forces themselves. It is, therefore, incorrect to speak of the Renaissance body as if it was anything other than these words that were it. Correspondingly, it is correct to say of the monstrous and marvelous beings set around it at the edges of this episteme that they were just as real (or just as mythical) as it was.

Monstrous Men

Ethiopia, blue men's land, had first that name of colour of men. For the sun is nigh, and roasteth and toasteth them. And so the colour of men showeth the strength of the star, for there is continual heat ... In this land be many nations with divers faces wonderly and horribly shapen ... Also there be great cockatrices and great dragons, and precious stones be taken out of their brains ... The men of Ethiopia have their name of a black river, and that river is of the same kind as Nilus ... Some oft curse the sun bitterly ... for his heat grieveth them full sore ... Troglodites dig them dens and caves ..., and they eat serpents and all that may be got. (Steele/Anglicus, 1893, pp.74-75)

It is perhaps ironic that to understand the emergence of the Renaissance body through the radiation of similitudes one should commence at the centre of the great semantic network which was the Renaissance episteme. For it was at its edges, where the cords of resemblance were, so to speak, most tautly stretched, that its power to produce bodies of prose was most clearly evidenced in the variety and virtues of the men and monsters that crystallized along this periphery.

Bizarre as the "diverse faces wonderly and horribly shapen" to which Anglicus alluded were, the possibility of knowing and representing these monstrous men lay in the omnipresent play of the similitudes. For, as d'Ailly said in his *Imago Mundi* (printed c.1480-1483, and cited in Flint, 1992, pp.25-26), to know all of the earth's inhabitants was simply to proceed as would a doctor seeking to understand the sick man. First, deduce the disposition of the sky, planets and stars in relation to the area of the earth in question. Which planet was it "governed" by? Where was it in relation to the sun? Then, deduce from this how the humours would

be constellated, and whether the "vital spirit" so produced would be of a kind to induce activity or torpor. Third, examine the presence of seas, rivers or deserts, so as to establish the terrestrial conveniences at play. Finally, with this cosmic template complete, sketch the shapes of men, monsters and marvels that, if it be inhabited, must and can only be there.

Indeed, just such a system of knowing and representing the earth's inhabitants was epitomised by the Macrobian "zone map" (see Friedman, 1981). Such maps were ordered according to the impress of the world's division into horizontal layers according to temperature and natural harmony. Of these zones, only the middle climatic zone (Europe) was sufficiently temperate and balanced to permit the emergence of the body in its familiar human form, because, as Hippocrates had argued:

Growth and freedom from wildness are most fostered when nothing is forcibly predominant, but equality in every respect prevails ... For the seasons which modify a physical frame differ; if the differences be great, the more to are the

differences in shape. (Hippocrates, in Friedman, 1981, p.52)
This was therefore an episteme for which the principles that
determined the shape, form and functioning of the body resided not
within it but outside of and beyond it, in the space delineated by
the intersection of place, climate and astrological forces.
Contingent upon the interplay of these external forces, the
boundaries of the Reniassance body were blurred and indistinct,
creating the possibility that when located in a zone lacking
"equality" it might dissolve or distort. Hence the correctness of
Al-kindi's statement concerning the "Zanj" of North Africa that:

His country being very hot, the heavenly bodies exert their influence and draw the humours to the upper part (of his body). Hence his bulging eyes, his drooping lips, his big,

flat, nose, the flaccidity of his head resulting from the abundance of humours drawn to the top of his body. Thus the mixture (of humours) in his brain is no longer in balance, and the soul cannot exert its full influence upon him; his discernment is altered, and the acts of the intelligence desert him. (al-Kindi, cited in Devisse, 1979, p.218)

In Mandeville, whose Travels⁵ (Seymour/Mandeville, 1967) exemplified Foucault's description of the Renaissance as "the age of the theatre" (Foucault, 1973, p.131), it was emulation that fabricated the world and its inhabitants. The centres of Christian power (owing to their adjacency to Jerusalem and therefore God) were shining places of mild and pleasant climate inhabited by people of beauty, gentleness and wealth. "Mancy", for instance, was a "good and great country" with "many Christians and Saracens", and its inhabitants "ben fulle faire folk, but thei ben alle pale, ... and men clepen that land Albanye because the folk ben white" (Seymour/Mandeville, 1967, p.149). In those places most distant from these centres extremes dominated and there appeared "fulle cursed peple" (Seymour/Mandeville, 1967, p.143), and "wylde men that ben hidouse to loken on" (Seymour/Mandeville, 1967, p.198). Planetary and other natural forces intermingled with God's will to shape the destiny of nations, the proclivity of their peoples for exploration, and their bodies. "India" was a land of numberless people, because living under the slowing and nearly motionless "climate" of Saturn they "han of no kynde no will for to move ne stere to seche strange places", and so never "gon out of here owne contree" (Seymour/Mandeville, 1967, p.119). By contrast, Europe lay within the "climate" of the moon, which because it orbited the earth faster than the other planets and moved the waves, conferred upon those within its aura the skills and will "to meve lightly and for to go dyuerse weyes and to

sechen strange thinges and other dyuersitees of the world"
(Seymour/Mandeville, 1967, p.120). On an island of the "Great See
Ocean" it was so hot that traders' "ballokkes hangen down to here
knees for the gret dissolucoun of the body", a difficulty avoided
by the "natives" through binding and anointing the testicles with
special ointments to prevent such dissolution (Seymour/Mandeville,
1967, p.120). And, once more in "India", life alongside a great
river containing giant eels of 30 feet or more in length led
bodies to "ben of euylle colour, grene and yalow"
(Seymour/Mandeville, 1967, p.119).

Indeed, whether we consider these secular texts of scholars and travel writers such as Mandeville, or turn to the more theologically inclined "T-O" maps and "mappa-mundi" (see Flint, 1992; Friedman, 1981), the answer was always the same. As the distance from the centre increased, so too did the mutability of the body and thus the variety of human and monstrous forms. Consider the Hereford map, made in or near 1300 by an English canon (see Flint, 1992). At the centre of this circular map appeared Jerusalem. Just below Jerusalem converged three inland seas which took the form of a rough "T" that symbolized Christ on the cross and divided the land into three unequal proportions or continents: To the left, Europe, at the top Asia and on the right Africa. Following biblical tradition, each continent was associated with one of Noah's sons - Asia with Shem, Africa with Ham, and Europe with Japhet. Superimposed upon this land mass were icons and illustrations depicting the wonders and peoples to be found at the point of their insertion, and moving outwards from Jerusalem toward the circumference so occured increasing numbers of anatomical freaks and human monsters, with their greatest frequency in the narrow bands along the edge of the world where there clustered the freaks and monsters produced by the fiends of

hell copulating with Cham's son, Membroth, which: "engendred on hem dyuerse folk, as monstres and folk disfigured, summe withouten hedes, summe with grete eres, summe with on eye, summe geauntes, sum with hors feet, and many other of dyuerse schapp ayenst kynde" (Seymour/Mandeville, 1967, pp.160-161)⁶.

The Spectacle of Strangeness and the Cape of Good Hope

Foucault described the Renaissance as an episteme in which the strangeness of living beings "was a spectacle: it was featured in fairs, in tournaments, in fictitious or real combats, in reconstitutions of legends in which the bestiary displayed its ageless fables" (1973, p.131). Due, as we have seen, to a tradition of knowing things not through their direct inspection but through the collation of the words and myths that were synonymous with them, the effects of this fascination with the marvellous were nowhere more apparent than in the practice of exploration and the reports of the "new worlds" brought back by voyagers to the Americas, Asia and Africa.

In The Imaginative Landscape of Christopher Columbus the medievalist Valerie Flint (1992) confirms this by analyzing the books that composed his library and which Columbus may well have studied in preparation for the voyage that took him in 1492 to what we now know as the Americas. By comparing these with his reports of what he saw - which included the Hispaniola Indians as "well made men" alongside descriptions of other peoples that were hairless, had tails, and the heads of dogs - she concludes that: "This old world held great power ... Thus, though some of it could later ... be described as fanciful, it was so real at the time that it had a decisive impact upon the establishment of 'objective reality'" (Flint, 1992, p.xxi). "Discovered" by Vasco da Gama between 1497 and 1499, the Cape of Good Hope was no exception to

this power of the fabulous, the eyewitness accounts of voyagers from then until well in the 1600s repeatedly confirming its indigenous inhabitants as the embodiment of Renaissance mythography. For far from puncturing this self-sealing semantic universe where a knowledge of the world was coterminous with the words that were part of it, the great voyages of exploration that commenced in the late 1400s were analogous to the role of dissection in Renaissance medicine, serving less to enable naturalistic description of the unexpected lands and people encountered, than to annotate and embellish the ancient texts that had populated the unknown corners of the world with headless monsters and cannibals. As Flint notes, it was as though the further back the boundaries of geographical knowledge were driven, the more zealous were the makers of maps and authors of travelogues in their attempts to create a sense of the marvellous (1992, p.23).

What historians consider to be the first account of the Cape and its inhabitants was recorded by da Gama following an encounter at Saint Helena during his first voyage between 1497 and 1499.

The inhabitants of this country are tawny-coloured. Their food is confined to the flesh of seals, whales and gazelles, and the roots of herbs. They are dressed in skins, and wear sheaths over their virile members. They are armed with poles of olive wood to which a horn, browned in the fore, is attached. Their numerous dogs resemble those of Portugal, and bark like them. (Da Gama, in Ravenstein, 1898, p.6)

Remarkable in its restraint, this bland portrait was produced in the course of a voyage propelled by the very power of Renaissance mythology, for da Gama had been commissioned to find the fabled land of Prester John, said to be an earthly paradise that harboured precious jewels and minerals, the fountain of eternal youth, and, in addition to ordinary people, nearly all the marvellous and monstrous creatures ever described. Thus, some 50 years later Sebastian Munster could in his Cosmographiae of 1550 draw a map of Africa showing a "monoculi" on the coast where Cameroon is today, Prester John's kingdom in the region of modernday Ethiopia, and the "Caput bone Spei" as inhabited only by wild beasts. Commenting upon the region, he wrote:

Only the coastline of this region has been explored, since it is very hot and so sandy that nobody could ever live there. It is mainly situated between the tropic of Capricorn and the tropic of Cancer, which is the hottest area and neither human beings nor animals would like to live there, only dragons, snakes and other dangerous animals. And if there were to be found people there, then they must be like animals, living underground and not coming together in the way that others do. (Munster, 1550)

For Linschoten (cited in Hirschberg, 1967), it was the hardy myth of the cannibal - Mandeville, for instance, told of no fewer than seven different groups of cannibals (Seymour/Mandeville, 1967) - that was pressed into the service of his highly stylized depiction of 1596, where he said of the "Kaffers" inhabiting the region from Mozambique to the Cape of Good Hope that:

Some of them are cannibals ... They cut off the penis of their prisoners but let them go afterwards. They bring the dried pieces of flesh to their king as proof of bravery. They go before the King in the presence of the highest dignitaries of the village, put one penis after another in their mouth and spit them out in front of the king. (Linschoten, 1596, in Hirschberg, 1967, p.38)

In addition to its high dramatic value and confirmation of the Noachid myth concerning the distribution of mankind following the flood, the figure of the cannibal perhaps reflected in symbolic form a fear that the body boundaries of the European - who, after all, came from a climate of harmony and balance - would be absorbed into the bodies of those who against all reason existed where the secular theories of Reniassance medicine and geography said they could not. For the spectacle of the Cape as home to cannibal hordes - often with a particular preference for Christian flesh - was repeated like a litany in the reports of many other Renaissance explorers (for these texts in English transsation, see Raven-Hart, 1967). Thus, as if it were the land "beyond the Valley Perilous" - where Mandeville had talked of a people that "han no clothinge but of skynnes of bestes that thei hangene upon them. And thei eten more gladly of mannes flesch than any other flesch" (Seymour/Mandeville, 1967, p.205) - Downton could in 1610 describe the inhabitants of the Cape as:

... very brutish and savage, as stupid as can be and without intelligence, black and mis-shapen, with no hair on their heads, their eyes always running. They cover their privy parts with the hairy skins of beasts and their backs with an entire large skin which they tie below the chin, leaving the tail hanging so that from a distance one might say that they had tails. The women have very long breasts, and dress like the men. They eat human flesh and entirely raw animals, with the intestines and guts without washing them, as do dogs.

(Downton, 1610, in Raven-Hart, 1967, p.47)

Sharpening the notion of body boundary dissolution and reminiscent of an isle in Mandeville where female virgins contained in their bodies serpents which stung mens' penises and killed them (Seymour/Mandeville, 1967, p.206), Tavernier could as late as 1649

describe "the women of the kaffers (as) ... so hot blooded that when they have their menses and make water, if a European passes over it he at once gets a head-ache and fever, and even sometimes the plague" (in Raven-Hart, 1967, p.181). For de Beaulieu, writing around 1620, it was perhaps to the Mandevillian knowledge of Ethiopia where men and women lay together in the rivers or buried in the sand to avoid the heat (Semour/Mandeville, 1967, p.120) that he spoke where he recorded how:

... some of our men met them with their wives and children at the place where they had gone to pass the night, where they had no shelter other than bushes and some skins stretched on two crossed sticks, with another in the middle to thrust into the ground like a parasol, under which their wives and children set themselves, buried to the waist in sand. (De Beaulieu, 1620, in Raven-Hart, 1967, p.101)

Of course, the Cape was not merely a repository of the bestial and bizarre, but also of the more wondrous and desirable things befitting a region that for some explorers was the the land of Prester John.

In this Land of Prester John ther was seene by our Men Lyons and monkeyes, Babownns a multid, with divers other Strange beastes as Antilops and many other deformed creattures verie strange to be Sene ... The Bay of Soldania and all about the Cape is so healtfull and frutfull as might grow a Paradise of the World; it wll agrees with English bodies ... The Countrey is mixed, Mountianes, Plaines, Medowes, Streames, the woods as if they were artifically planted for order. (Best, 1612, in Raven-Hart, 1967, p.59)

However, while such visions of the Cape as a land of plenty were by no means uncommon, it was time and again accounts of its human inhabitants that took centre stage, as exemplified by the section on the Cape of Good Hope in Herbert's highly popular and much reprinted *Travels into Africa and Asia* (Herbert, 1638, in Hirschberg, 1967).

The Natives being propogated from Cham, both in their Visages and Natures seem to inherit his malediction. Their colour is ugly black, are strongly limbd, desperate, crafty and injurious. Their heads are long; their haire, woolly and crisp, no apparell in any place shewing more variety. Some shave one side and leave the other long and curled. Another cuts all away, a little tuft atop, excepted; a third ... shaves here and there, the bald scull appearing in many places; and othersome ... shave away all save a lock before, of no use, save ornament ... Their ears are long, made longer by ponderous Bables they hang there, some using links of brasse, of iron, others have glasse-beads, chains, blew stones, bullets or Oyster-shells ... Their noses are flat, crusht so in their infancie; great lips, description cannot make them greater; quick, crafty eyes; and about their necks (in imitation of the Dutch Commandores chains) have guts and raw puddings, serving both for food and complement, eating and speaking both together ...

Most of the men are Semi-Eunichs, one stone ever being tane away by the Nirse, either to distinguish them from ordinary men, or that Mistresse Venus allue then not from Pallas. The women also excise themselves, not from a Notion of religion but as an ornament: Both sex, hideously cut, and gash, and pink in sundry works, their browes, nose, cheekes, armes, brest, back, belly, thighes and legges in Acherontick order.

Antra lares, dumeta thoros, canacula rupes; They have no houses, Caves and holes they delight to dwell in, or Lyons

dennes, unfurnished, but perfum'd I warrant you, a whole Tribe commonly keeping together, equally villanous, coupling without distinction, the name of wife or brother unknowne among these incestuous troglodites: feeding, sleeping, speaking all together without order or law; in the night sleeping round a fire, a Centinell regarding the Lyons their adversaries, 'twixt whom is such hate and strategems, Vivitur exrapto that one eat other, the Lyon suddenly tearing some of them, and they other times trayning the Lyons over cover'd pits, which catches them, and so retaliating ... Solinus calls the tawny Africans, Agriophagi (or Panther and Lyon-eaters) we now call them Icthio and Anthropophagi ... These Savages eat men alive or dead Which when they faile of, dead Whales, Seales, Pengwins, grease or raw Puddings diet them. Safety is scarce among themselves, for when the frost of old age benums their vigour, unapting them to provide their owne food; they either eat them, or leave them destitute of defence upon some Mountain pittied by none. (Herbert, 1638, in Hirschberg, 1967, pp.16-17)

The Eye of the Explorer and the Rise of Classification

Clearly, the African body (exemplified in Herbert's account) that was the object and effect of this late Renaissance knowledge was somewhat more substantial than the purely 'imaginative' monsters such as the Blemmyae and cynocephali described by Isidore of Seville and popularised by Mandeville. For, while we have seen from traveller's accounts how this body was heavily interwoven with myth and legend even into the middle of the seventeenth century, such accounts nonetheless create the impression of an increasingly stable corporal form that is more than and thus autonomous of the words that describe it. This transformation begs

the question as to what effects the very practice of exploration must have had upon the Renaissance episteme. More specifically, to what extent did these practices constitute the conditions of possibility for emergence of a classificatory gaze to the surface of the body?

The practice of exploration involved the respatialization of knowledge formation from the library to the space of situated observation in Africa and other unknown regions of the world. Analagous with the late eighteenth century's movement of the patient from the home to the hospital that enabled fabrication of a three-dimensional anatomy to demand the invention of new devices for seeing into it (such as the stethosocope), this respatialization of exploration required the deployment of new observational techniques able to regularize what was seen and how such observations were recorded. Thus, even as the practice of exploration served to confirm the ancient myths and legends of Renaissance thought, so it operated to install a new vision of the universe and a new way of seeing the human body.

As early as 1575 there thus began to appear a new kind of text devoted not to describing the wonders and marvels of the world, but to fabricating and calibrating the eye of the explorer as itself an object of knowledge and target of power. Among these was The Traveiler of Jerome Turler (1575). "A notable discourse on the manner, and order of traveiling oversea, or into strange and forrein countreys", this advocated that the traveller "make down suche things in strange countries as they shall have neede to use in the common trade of life" (Turler, 1575, p.3). In 1578, Bourne's "tresure for traveillers" problematised the act of seeing itself by warning how "banketting, and play, and gaine, and dauncing and dalying with women" were apt to inflame the passions and so distract the traveller as to dampen his observational

acuity, thus demanding their strict avoidance. Meirus' (1578)
"speciall instructions for gentlemen, merchants, students,
souldiers, mariners, and c." aimed at enrolling every traveller
and explorer in the "catalogue of Homer" as "seers of many Regions
and of the manners of many nations" (Meirus, 1578):

If in our peregrinations and travels, we shal observe and note in our tables those things which do occurre and seeme worthie of regard, we shall make our journies and voyages in great measure, pleasant and delectable unto us: not thinking that our diligence can search and mark any thing in any place ..., but to discourse and recorde any thing, rather than to passe the way, and spend the time in idelnesse: and with by all this means, this commoditie is reaped, that whatsoever the eye seeth, is the easier and the better remembered, if it once be written. (Meirus, 1578, p.22)

As for Meirus, so in Lipsius (1592), who argued that nothing was more likely to ensure wisdom and sound direction: "than the sight, consideration and knowledge, of sundry rites, manners, pollycies and governments".

All instructing the gaze of the explorer and eye of the traveller in somewhat broad and global terms, it is nonetheless apparent that these textual tools of observation represented the nascent beginnings of a new way of knowing, the rise of a classificatory and comparitive gaze directed in its seeing not by the semantic force of myth and legend but by the very bodies of people and things themselves. They exemplify, therefore, what Foucault describes as having come surreptitiously into being between the age of the theatre and that of the catalogue: "not the desire for knowledge, but a new way of connecting things both to the eye and to discourse. A new way of making history" (Foucault, 1973, p.131).

The documents of this new history are not other words, texts, or records, but unencumbered spaces in which things are juxtaposed: herbariums, collections, gardens; the locus of this history is a non-temporal rectangle in which, stripped of all commentary, of all enveloping language, creatures present themselves one beside another, their surfaces visible, grouped according to their common features, and thus already virtually analysed, and bearers of nothing but their own individual names. (Foucault, 1973, p.131)

Epitomising the tabular and taxonomic space in which this new knowledge was to form itself was the observational grid devised in 1666 by the Royal Society and directed to systematizing the order and content of information recorded by the "labours of the ingenious in many considerable parts of the world" (Royal Society, 1665-1666). Under its "general heads for the natural history of a country" were instructions for the classification of flora, fauna and geology, and a special section on how to see "both Natives and Strangers":

And in particular their Stature, Shape, Colour, Features, Strength, Agility, Beauty (or the want of it), Complexion, Hair, Dyet, Inclination, and Customs that seem not due to Education. As to their Women (besides other things) may be observed their Fruitfulness, or Barrenness; their hard or easy labour, etc. And both in Women and Men must be taken notice of what diseases they are subject to. (Royal Society, 1665-1666)

"Between 1550 and 1650 Western thinkers ceased to believe that they could find all truths in ancient books" (Grafton, 1992, p.1). On the one side of this massive disjunction in knowing, the "book wheel" and the great compilations of documents and signs enabled by its use; on the other, the empty observational template of the Royal Society that created a gaze to the strictly transected

surface of the body. It was precisely this transformation in the underlying base of knowledge that made possible the African body as an object of positive knowledge, and the Cape a site for the installation of a sovereign power directed to its surface.

- 1. In the volume from which this translation is taken, Sharpe (1964) states that the first three printed editions containing Isidore's works on medicine appeared in Paris (1580), Madrid (1590) and Cologne (1617).
- 2. As Bentham's Panopticon is to disciplinary power in the Modernist episteme, so the "book wheel" was to the Renaissance episteme. In the former, it is the bodies of all who are rendered visible to the omnipresent gaze; in the latter it was to better seeing the texts of ancient wisdom containing the legends, virtues, and fables characteristic of things that technology was bent.
- 3. Foucault (1973, p.38) notes that except in regard to the study of languages since the alphabet is its raw material use of the alphabet as a means of creating encyclopedic order only appeared in the second half of the seventeenth century, suggesting therefore that it was only then that linguistic signs became disengaged from things themselves and hence imbued with the power to order things.
- 4. As we shall see, "correspondence" in the sense used by Purchas does not connote only a metaphorical resemblance, but speaks to corespondence in the literal sense, like the way in which the strings of one instrument will vibrate in sympathy with the chord played on another.
- 5. Historians tell us that the frequency with which Mandeville's Travels was reprinted, translated, and used as a source for subsequent texts, point to it being among the more popular of Renaisance travelogues:

Mandeville's influence on the literature of the sixteenth century was profound. Many of his stories and most of his monsters, as depicted by his artists, found their way into the Nuremberg Chronicle and Munster's Cosmographia (1544). Like the Nuremberg Chronicle, Munster's book was extremely popular, there having been as many as forty-seven editions in seven languages before 1650" (Letts. 1949, p. 38)

having been as many as forty-seven editions in seven languages before 1650". (Letts, 1949, p.38)
While not the province of this study to debate wether what Mandeville wrote was really taken to be the truth or not, the historian Newton argued that because it was written into a vacuum of comparative information by which to disentangle "the true wonders from the false, both made an equal appeal and had an equal aspect of reality" (Newton, 1950, p.160). Thus:

For most contemporary readers the book had to rest on its own foundations, and as the marvels which Mandeville sets down as sober facts can be capped and even outrivalled by other writers...the reading public of the fourteenth and fifteenth centuries probably swallowed their Mandeville whole. Bale, who published his Catalogue of British Writers in 1548, had no doubt about the authenticity of the 'Travels', and his contemporary Leland (who died in 1552), goes even further, for he placed Mandeville above Marco Polo, Columbus and Cortez and other travellers. (Letts, 1949, p.34)

6. Speaking to the endless cycle of telling and retelling by which the epistemic base of Renaissance knowledge folded in upon itself, Letts (1949) suggests that Mandeville's Travels can just as well be read as a textual annotation of the Hereford "mappa mundi", for the one is in effect supplemental to the other:

Detach some thirty-five or forty pictures from the Map, reproduce them separately, and they become a set of illustrations for Mandeville, so apt for their purpose that all that is necessary is to fit them into their places in the text.

(Letts, 1949, p.106)

7. The myth of Prester John dates to the twelfth century when there appeared the Latin text of a letter addressed to the Byzantine emperor Manuel Comnenus and purportedly written by Prester John. Eager to discover his wondrous realm, European monarchs and and travellers mounted many an expedition to search for it. Some travellers succeeded in returning, such as an Englishman by the name of Edward Webbe, who in 1590 reported that he had visited the court of Prester John and seen there a monster. Kept chained to prevent its devouring human beings, the monster was fed human flesh only after executions. Its geographical location variously conceived, the realm of Prester John was initially in or near India, and later in Abyssinia (see Malefijt, 1968, pp.115-116).

CHAPTER FOUR

A BODY¹ WITHOUT VOLUME: THE AFRICAN AS SUBJECT OF SOVEREIGNTY AND OBJECT OF TAXONOMY

Contemporaneous with the mid-seventeenth century emergence into travel writing of a discursive strand that problematised the act of observation, the Cape of Good Hope was in 1652 established as a "refreshment station" for European ships passing on their way to the East Indies, and in 1671 raised to a government to formalise its status as a colony. Predictably, this new context of situated interaction between the European colonists and the Africans emerged to visibility as continuous settlement of the Cape coincided with a massive surge in the production of formal and informal texts that recorded the practices and perceptions of the Europeans in relation to the Africans. For instance, writing in 1655, Heeck described how:

Behind the Table Mountain we came into a village of the inhabitants, called Hottento and Hottento: Broqua because they thus sing of themselves for a little bread ... Their clothing is nothing but the skins of wild beasts and seals, the men wearing one skin only, not longer than to their waist, and the women 2, 3, or more skins, somewhat longer, and all also covering their privities with a small skin. The men are tolerably tall and well built, and exceptionally fast runners, but by nature cruel, sly and rascally: the women are quite short of stature and very ugly ... They ... plait some little shells in their hair, smearing this, as also their whole body, with every sort of fat that they can get, and from this they stink exceptionally foully (as do most of the black peoples in general), and otherwise they would be yellow rather than black because of the cold climate of this land. They also cut and burn many signs in their body for ornament, and go barefoot

... In hair and all else they resemble the Caffers of Guinea, Angola and Monzembicque (sic), their neighbours; but since (as aforesaid) they live far further to the southwards, they are nothing like so black of skin, and somewhat better built. In a word, it is almost impossible, and quite unbelievable by those who have never seen such people, to realize their wild, strange, and altogether beast-like manners. (Heeck, 1655, in Raven-Hart, 1971, pp.34-38)

Clearly, and despite its appeal to the bizarre where it invoked the "wild, strange, and altogether beast-like manners" of the Hottentots, the African body that emerged in this account was distant from the fully fabulous creatures of Renaissance imagining such as the "cynocephali" of Isidore's Etymologies (Sharp/Isidore, 1964) and the "Icthio" or "Anthropophagi" of Herbert (1638). For where such accounts had constituted the African body through recourse to tradition and mythology, this did so in a language of the senses - through the voice as it was heard by the ear, through the eye as it scanned the face and the body's stature and ornamentation, and through the nose as it received the stench of fat applied to the skin.

The Problem of the African Body as a Surface

This chapter is concerned with the 180 years between 1650 and 1830 when as an object of knowledge and target for power the African body was divested of its fabulous qualities and for the first time became visible as a collection of overtly perceptible external organs - noses, teeth, hands, the skin, the hair, the feet, the genitalia, the breasts, and so on. How was this possible? What force relations had to be present for a knowledge that allowed the African body as a surface of skin and a topography of corporal proportions to emerge from the thickly

deposited layers of words and myth which for so long had sustained its fabulous properties? Or, to state the problem in negative terms and from a Modernist perspective that takes the anatomised interior of the body for granted, how did this regime fail to see the African as a three-dimensional anatomical interior possessed of organs such as the heart, the lungs, the spleen, the kidney, or the brain? For, to search the record of this time for any account of a systematic gaze that saw beneath the skin of the African is to toil under a delusion, since the African quite simply failed to exist as a body with volume.

It is true that in his 1686 Account of the Cape of Good Hope where he described the peculiarities of the genitalia of the Hottentot women - "most of them have dactyliform appendages, always two in number, hanging down from the pudenda" (p.115) - Ten Rhyne mentioned that "a surgeon of my acquaintance lately dissected a Hottentot woman who had been strangled". But what was seen on this occasion marked this report as no more than an exercise in the Renaissance preoccupation with the exotic, since:

He observed these finger-shaped prolongations of the Nymphae falling down from the private parts, two nipples in one breast, and various stones in the pancreas. What is more, the Governor, whose word can be absolutely relied upon, added the following: "I too owned a remarkable stone. It was cut from the middle of a man's testicle, and, on account of its diamond-like brilliance I had it set in a ring. But I made a present of it to the King of the Negroes, a superstitious fellow, who displayed a profound belief in its power as an amulet". (Ten Rhyne, 1970/1686, p.115)

It is also true that a century later, Sparrman, a professor of physic at Stockholm and inspector of the Swedish Royal Society's cabinet of natural history, could expiate his curiosity concerning the appearance of "negro flesh" by undertaking to oversee the cure of a slave with an ulcer in the leg.

A young Madagascar slave, who had an inveterate ulcer in his leg two inches broad, and of three years standing, was sent to the warm bath under my care ... Being curious to examine a negro's flesh, I had for some weeks before we set off, undertaken to look after the sore myself. In general the discharge from it was very trifling. The raw flesh looked exactly of the same colour with that of an European. After the proud-flesh was suppressed, the ulcer began to heal, by throwing out fresh fibres in the same manner as ours do, with something whiteish on the side of the skin, which otherwise was of a dark colour. (Sparrman, 1786, p.143, vol. 1)

But these two instances², even if they are to be counted as such, were exceptions which proved this regime as one ruled by a constellation of power and perception for which the African body as a surface - without internal organs, tissues, and systems - was all that existed to the gaze of the European.

However, while it would have to wait until the mid-nineteenth century to begin being invested with an anatomical interior, what did change across the 200 years that this chapter explores was the nature of this surface. At first, the African body was no more than a random collection of external organs, while later and toward the end of this regime it began to be defined as much by these elements themselves as by the pattern of relationships between them. Thus, the "build of the Kaffirs or Hottentots" seen by Dapper in 1668 was little more than a listing of separate surface features.

In build and shape of the body the Hottentots ... are on the average people of medium stature, but slender, with ill-formed bodies and insignificant appearance, and yellowish in colour

... The hair on the head is ... short and curly, like the wool of lambs, but thicker in the women than in the men ... The forehead is reasonably broad, but wrinkled; the eyes beautifully black, and as clear and pure as those of the hawk. But men, women and children all have flattened noses, more marked in some than in others; and in addition their lips are almost always thick, especially the upper, which is turned up and out. The mouth is well shaped and of normal size and proportions, with teeth beautifully clean and white, like ivory, and hard, so that the bite is firm. The neck is moderately long, shoulders narrow, and arms rather long but quite slender and lean at the wrists ... The belly with almost all of them is lean and slender and the buttocks protrude, with the result that the body, when stripped or lightly clad, is not evenly balanced. (Dapper, 1970/1668, pp.43-45)

In Barrow (1801), writing 133 years later, the gaze to the surface of the body was more systematizing, with the result that the body of the Hottentot which it fabricated was no longer a mere enumeration and evaluation of external features, but now a morphological structure that emerged from the composition and arrangement of the pieces in their relation to one another.

The person of a Hottentot while young is by no means void of symmetry. They are clean-limbed, well-proportioned, and erect. Their joints, hands, and feet are remarkably small. No protuberance of muscle to indicate strength; but a body delicately formed as that of a woman marks the inactive and effeminate mind of a Hottentot. The face is in general extremely ugly; but this differs very materially in different families, particularly in the nose, some of which are remarkably flat and others considerably raised. The colour of the eye is a deep chestnut: they are very long and narrow and

removed to a great distance from each other; and the eyelids at the extremity next the nose (sic), instead of forming an angle, as in Europeans, are rounded into each other exactly like those of the Chinese ... The cheek-bones are high and prominent, and with the narrow-pointed chin form nearly a triangle. Their teeth are beautifully white. The colour of the skin is that of a yellowish brown or faded leaf, but very different from the faded hue of a person in the jaundice, which it has been said to resemble. The hair is of a very singular nature: it does not cover the whole surface of the scalp, but grows in small tufts at certain distances from each other, and, when kept short, has the appearance and feel of a hard shoebrush, with this difference, that it is curled and twisted into small round lumps about the size of a marrowfatpea. (Barrow, 1801, p.157)

This, then, is the problem of the African body as a surface, a collection or assemblage of external organs without an interior anatomy to unify them.

For conventional twentieth century historians such as Pratt (1985) and Dieterich (1993) the way that the African body of this period was seen and analyzed had the effect of repressing and negating its 'authentic fullness', and was "bound up with the sociopolitical, economic, and cultural events of (the) ... time and shaped by visual traditions and aesthetic ideologies" (Dieterich, 1993, pp.4-5). Or, in Pratt's words where she comments upon a fragment of Barrow's (1801, pp.283-284) account of the Bushmen, such descriptions:

... (C) ould serve as a paradigmatic case of the ways in which ideology normalizes, codifies, and reifies ... As Catherine Belsey puts it in her lucid study *Critical Practice*, "the task of ideology is to present the position of the subject as fixed

and unchangeable, an element in a given system of differences which is human nature and the world of human experience, and to show possible action as an endless repetition of 'normal' familiar action". (Pratt, 1985, pp. 120-121)

Against this juridco-liberal perspective, and while certainly agreeing that the African body of the seventeenth and eighteenth centuries was contingent upon that time, the Foucaultian answer to the problem posed by this body as a surface is somewhat different.

First, it recognises this body without volume as the outcome of a power regime quite distinct from that of the late twentieth century that takes for granted the interior of the body and individual subjectivity. This, of course, was the diagram of sovereign power. For (and as argued in Chapter 2), when abstracted as a relationship of observation the requirement that sovereign power be visible to those over whom it is exercised has the reciprocal effect of preventing its subjects from crossing the threshold of visibility into the domain of describable individuality, to sharply delimit the extent to which they may be seen and analyzed. From this perspective, the question is therefore not so much why the African body of the seventeenth and eighteenth centuries was never more than the sum of its external organs, but how it was possible for this corporal topography to emerge at all.

The second component to the conditions of possibility for its existence must therefore be located to some productive counterpoint to the limiting effects on visibility imposed by the exercise of sovereignty. This appeared with the new space of seeing and describing that opened up with emergence of the Classificatory episteme and its attendant discipline of "natural history". Preoccupied with the "meticulous examination of things themselves", this at the same time was a method of seeing that

restricted itself to the description and analysis of visible surfaces only. Natural history was thus a discipline of seeing that deflected the lines of observation away from the thickness of the body, dovetailing thereby with the demands of sovereign power in much the same way as the deep gaze of pathological anatomy does with disciplinary power.

Needless to say, this interpenetration of sovereign power and classificatory knowledge meant that disease was never coterminous with the individual body. Indeed, quite the reverse was true, sickness serving primarily to map not the nature of the body but rather the characteristics of the places in which it occurred. First, the great strategies of quarantine, which preoccupied with keeping the sick apart from the healthy divided geographical space into places that had to be kept separate so as to prevent the movement of infected bodies between them (cf Armstrong, 1993). For instance, an outbreak of smallpox in 1748 was seen to have radiated from the linen and clothes of infected sailors. Hottentots employed to wash these items were rapidly infected, and to prevent the infection from spreading, the Hottentots:

... contrived to draw lines round the infected part of their country, which were so strictly guarded, that if any person attempted to break through them, in order to fly from the infection, he was immediately shot dead. (Mead, 1748, p.10) Similarly, in 1796 La Vaillant could describe how to prevent the spread of smallpox:

... (T)he Company's surgeons are always sent to examine with the utmost care such ships as arrive in the roads. On the least appearance of infection, the crew are rigorously interdicted from having any communication with the town or its inhabitants; and an embargo is laid on the goods, no part of which, however small, is suffered to be brought on shore. (La

Vaillant, 1796, p.24, Vol.1)

Second, the analysis of endemic diseases such as "colds, cattarh and fluxions of the chest" (Mentzel, 1921/1785, p.255), which served to make visible the characteristics of the extracorporal space from which they emerged and impinged upon the body. Accordingly, in Kolben (1731), as in Mentzel (1970/1785), La Vaillant (1796, pp.22-24) and Stavorinus (1798, p.567), the probability of such diseases waxed and waned with the changing of the air.

While the South-East winds blow, the Air is serene and very wholesome; and that in the Time of the North-West winds the Air is heavy and unwholesome ... For the Summer-Air, when the wind is still, becomes corrupt and sickly. The ... Reeds they call Sea Trumpets, and the Sea-Grass driven ashore, rot and fill the Air with most offensive stenches ... The Air is darken'd with swarms of Flies, Gnats, and C, which are exceedingly troublesome: And 'tis ragingly hot. When the Wind rises again, the Air becomes again serene and wholesome:

Offensive stenches are no longer felt in it. The Inhabitants recover quickly of their Disorders; and flies and Gnats are immediately driven out of the Region. (Kolben, 1731, pp.326-327, Vol. 2)

Correlated with this medical gaze that illuminated not bodies but the nature of places, airs and climates, was a force regime that epitomised the diagram of sovereign power. For within it the body of the African was certainly visible - not, however, as an object of surveillance, but instead as a relay in the great rituals of punishment by which a sovereignty, momentarily injured by the crime of the offender, reconstituted itself through spectacular shows of the physical might of the monarch, "who seizes upon the body of the condemned man and displays it marked, beaten, broken"

(Foucault, 1977, p.49).

The Power of Punishment and the Sight of Sovereignty

Whenever an execution takes place, a military display is made in the following manner. After the guard for the day has been changed, the remaining available men - about 99 in number are assembled in the market place and divided into 3 companies of 33 men each. Two of these companies, are armed with muskets, the third, which is carefully selected from the best physical specimens, is armed with long pikes (about 7yds. long). The pikemen are drawn up between the files of infantry. The battalion marches in this formation to the Governor's house ... The convicted men who are doomed to suffer death that day are closely quarded by a corporal and 6 rondegangers armed with short pikes; the executioner and his minions are on the spot as well. The Secretary to the Council of Justice then mounts the "Katt", and reads out the sentence of the condemned. The troops now march to the place of execution, with band playing (sic) and form a ring with their pikes in such a way that each man can grasp his own pike and the end of his neighbour's pike at the same time. The musketeers take up a position immediately outside this ring formed with the pikes, with orders to keep the area enclosed free of encroachment. The executioner, with his assistants, under strong guard, now brings up the criminals ... Next comes the court messenger, bareheaded, carrying a silver-tipped staff of office. He is escorted by the sergeant, corporal and 12 grenadiers of the guard, and represents the majesty of the law. A clergyman ... offers a short prayer and the executioner does his work. (Mentzel, 1921/1785, pp.72-73, Part 2)

In this 1785 description of the ritual prescribed for public executions in the Cape of Good Hope was present all the elements of drama that composed the sovereign theatres of punishment by which this power renewed itself in the eyes of the anonymous onlookers set around the spectacle. Confirming the African body without volume as the outcome of this force field that impelled the lines of visibility away from the bodies of all and towards the "majesty of justice", the dissolution of this body as a surface was roughly coterminous with the legal abandonment of public execution in South Africa. The last occasion on which sovereignty was seen in its marking of the criminal's body thus occurred in Grahamstown in 18613, a decade or so after the emergence of missionary medicine (see Chapter 5) had begun to surround the African body with a new strategy of attention that in apprehending its anatomical interior marked the beginnings of a shift from unalloyed sovereignty to a nascent disciplinary power.

Prior to this point, and with the effect of strictly limiting the field of corporal observation so as to maintain an unencumbered space for its ostentatious displays, the castle, the ceremonials, the looming machinery of the gallows, the wheel and the whipping post served as constant indicators of sovereignty's ubiquitous presence. Among the devices for its display was the "New Castle Good Hope" that was built in 1666, and which as a concrete spectacle of the sovereign's hold over other bodies was illuminated in the following verse.

Thus more the kingdoms are extended;

Thus more and more are black and yellow spread,

Thus from the ground a wall of stone is raised,

On which the thundering brass can no impression make.

For Hottentoos the walls were always earthen,

But now we come with stone to boast before all men,

And terrify not only Europeans, but also
Asians, Americans and savage Africans.
Thus holy Christendom is glorified;
Establishing its seats amidst the savage heathens.
We praise the Great Director, and say with one another:
"Augustus's dominion, nor Conquering Alexander,
Nor Caesar's mighty genius, has ever had the glory
To lay a corner stone at earth's extremist end! (Anon, 1666, cited in Leibbrandt, 1901, p.170)

If the castle offered a constant sign of the sovereign presence to the "savage heathers" set about it, then it was through the public execution as a theatre of punishment that the surface of the body was inducted into this same service as a screen on which the wrath and justice of the king could be inscribed for all to see. In a 1772 extract of the "Colonial Office Journal" dated December 31, the sentence for nine Hottentots involved in the murder of a Dutch "burgher" and a shepherd was:

... (T)o be brought to the place where criminal sentences are usually carried into execution here, and being there delivered over to the executioner, the first Kleyne Booy bound to a cross, and broken thereon alive, from under upwards, with the coup de grace, as also the second Kleyne Jantje Links, to be punished on the gallows, with the rope, until death ensues, and thereupon their dead bodies dragged to the Bytengeregt, and there that of the first laid upon a wheel, and that of the second being again hung upon the gallows, thus to remain a prey to the air and to the birds of the heavens; and, further, the remaining seven, ... one after the other, bound to a post and severely flogged with rods upon the bare back; and then the 3d, 4th, 5th, and 6th to have the sinew of the heel cut asunder, and be banished for life to the public works, at the

Honorable Company's slave lodge. (cited in Moodie, 1960, p.17, Part III).

Exemplifying the careful calibration of the punishment so as to fit the nature of the injury inflicted on the body of the sovereign by the criminal, blasphemers were bored through the tongue; those who fought with knives were punished by lashing and being forced to stand with the knife driven through the hand into the post; and, as a precursor to banishment and working in chains, sheep stealers were flogged with rods and made "to stand as a public spectacle with a sheep's skin upon their head and shoulders" (in Moodie, 1960, p.143; pp.382-383, Part I). Similarly, a 1782 "resolution" prescribing the rates of pay for a Cape executioner could recognise no less than 15 permutations of torture to the surface of the body.

Breaking limbs R	ds4	12
Pinching with red-hot tongs	Ħ,	4
Burning	11	12
Decapitating	TF-	8
Hanging	**	8
Strangling	tr .	6
Scorching	11	2
Quartering and hanging up the pieces	17	6
Transporting body to "outside place" of executi	on	3
Torturing	**	10
Chopping off the hand	17	4
Scourging	11	3
Branding with red-hot iron	17	1
Placing a rope around the neck under the gallow	s	2
Putting in the pillory		2
(cited in De Kock, 1950, p.167)		

As already noted, while it was only in 1861 that the last public execution took place to confirm the subordination of sovereignty to disciplinary power, it was toward the end of the eighteenth century that, at least to the eyes of some observers, the spectacles of pain by which sovereign power periodically renewed its grip over the body began to have an effect opposite to their intended function of making the masses bow to the might of the king. Thus, Sparrman's comment of 1786 on the impression left when he encountered the gallows.

Heus Viator! Here we stopped a little to contemplate the uncertainty of human life. Above half a score wheels placed round it, presented us with the most horrid subjects for this purpose; the inevitable consequences, and at the same time the most flagrant proofs of slavery and tyranny; monsters, that never fail to generate each other, together with crimes and misdemeanours of every kind, as soon as either of them is once introduced into any country. The gallows itself, the largest I ever saw, was indeed of itself a sufficiently wide door to eternity; but was by no means too large for the purpose of a tyrannical government, that in so small as town as Cape, (sic) could find seven victims to be hanged in chains. (Sparrman, 1786, pp.52-53, Vol.1)

Dramatic as it was, the display of its power to punish was not the only manner in which sovereignty invented itself to the eyes of its subjects. For, complementing these violent strategies of majestic visibility were the less bloody but at times equally spectacular tactics by which the truth of monarchial might was fabricated in the course of those more placid rituals where the African was approached by the European for the purposes of observation and inquiry. Thus, and epitomising the manner in which the economy of sovereign visibility invested even the act of

observing the African, was the procedure adopted by the French naturalist Le Vaillant, who in 1796 described his preparations for the contemplation of an "interesting horde" of Africans he had chanced upon in the course of his "travels into the interior parts of Africa".

After arranging my hair, I dressed myself in the most magnificent manner I could. Among my hunting frocks I had one of a dark brown colour, ornamented with steel buttons, cut facet-wise; this I made my dress of ceremony; as the rays of the sun, falling upon the different facets, would by their reflection form a splendour very proper for exciting the admiration of these savages ... When I was within two hundred yards of the horde, I discharged both my shot, and ordered my four hunters to do the same ... (A)nd this was to the whole horde the signal for a general shout of joy. I shall not make any reflections upon this affecting scene: the tender reader will share in the emotions of my heart. (Le Vaillant, 1796, pp.18-21, Vol.2)

As captivating of the attention as they may be, it would be tedious to extend this catalogue of strategies for the manufacture of sovereign visibility, the point of its presentation having been to establish this regime as one dominated not by a gaze to the body of the African, but by precisely the reverse - the gaze of the African to the sovereign might of colonial power as it was produced through the rituals of the European. Accordingly, and leaving La Vaillant as he examines the "savages" as they "examined (him) ... with the utmost attention, even to the minutest part of my dress" (La Vaillant, 1796, p.21, Vol.2), this chapter now turns to an analysis of how the African body was made known in the slender space of Classificatory observation that was all which remained for its formation as an object of knowledge.

Natural History: The African Body as Surface, Structure and Character

It is no coincidence that of all possible perceptual strategies by which the nature of living things may be apprehended, that of natural history should have surfaced at the middle of the seventeenth century as the knowledge side of the sovereign power coin. For in the concern of the Classificatory age to classify, order, and distribute living things on the basis of their perceptible physical structures, the world of nature that it invented emerged as a world of excess, a teeming plenitude of minute variations between things. For them to be seen and described in a way that reflected their natural ordering thus demanded an observational technology able to shut down this confused wealth of representation, by abstracting all possible differences and resemblances between things into a great taxonomic schema that precluded the possibility of seeing the individual as anything other than a bearer of those attributes which emanated from the classes to which it properly belonged and which conferred upon it their characteristics.

In order to establish the identities and differences existing between all natural entities, it would be necessary to take into account every feature that might have been listed in a given description. Such an endless task would push the advent of natural history back into an inaccessible never-never land, unless there existed techniques that would avoid this difficulty of making so many comparisons. (Foucault, 1973, p.139)

Hence the conditions of possibility for the discipline of natural history, and hence its affinity with sovereign power, for as the latter was concerned with maintaining the visibility of the king, so the former offered itself as a technology for systematically

restricting the space of what could be seen.

Natural history did not become possible because men looked harder and more closely. One might say, strictly speaking, that the Classical age used its ingenuity, if not to see as little as possible, at least to restrict deliberately the area of its experience. Observation, from the seventeenth century onward, is a perceptible knowledge furnished with a series of systematically negative conditions. (Foucault, 1973, p.132)

Accordingly, where conventional histories of the past view seventeenth and eighteenth century representations of the African body as fictions produced by the deposition of layer after layer of 'ideology' upon an a-historical body the authenticity of which was thus concealed, it is no surprise to find that for the history of the present this body was the very real outcome of a perceptual process premised not on a strategy of accretion but on one of depletion.

First, the systematic stripping away of all the obscure similitudes that for the Renaissance episteme had been the truth of its fabulous identity. Second, installation of the theories of structure and character as limits and filters of the visible, by which natural history strived to invent and secure the African body as a morphology in its taxonomic grid. Thus, in the same way as it was not the outcome of 'ideological' distortion, neither was this African body the product of a better way of seeing that replaced the 'mythology' of the Renaissance, but merely the object and effect of a new way of seeing, "a new field of visibility being constituted in all density" (Foucault, 1973, p.132).

Seeing the Body Surface Itself: The Invention of Fantasy and Death of Imagination

For living things to be revealed to the eye of meticulous examination demanded that the old Renaissance techniques of knowing themselves be identified and eliminated to create a clear epistemic space for the installation of a taxonomic gaze. The first signs of this nascent transformation in relation to the African body were therefore to appear with the fabrication of fantasy as itself an object of knowledge, for only with isolation of the fantastic could the play of imagination give way to the technology of examination. Crystallization of the Classificatory episteme as a new descriptive space in which the African body could emerge as a precisely transected morphology thus occurred over a span of some 100 years between 1650 and 1750, during which time the old ways of knowing and the fabulous attributes that had invested it were themselves elevated into the field of classificatory visibility, analyzed, and discarded.

By the 1660s the many accounts describing the Africans of the Cape of Good Hope had stabilised into a consistent structure that closely resembled the observational categories laid down in the Royal Society's instructions for the classification of "natives and strangers" (see Chapter 3, p.84). Thus, and in all respects formally identical to those of contemporary writers, Dapper's 1668 account of Kaffraria or Land of the Kaffirs, also named Hottentots (Dapper, 1970/1668) divided into 18 sections under the following heads. "The build of the Kaffirs or Hottentots; clothing of the men; clothing of the women; ornamentation; weapons; food; industry; subsistence; marriage; death; punishments of theft; incest; punishment of homicide and assault; dwellings; language; trade; government, and religion". However, while this grid operated to regiment what was seen and recorded of the bodies,

manners, and customs it invented, its filtrative properties as a screen for the delimitation of how things should be seen was restricted by its very coarseness, for, in Dapper's case as in those of his contemporaries, it permitted the entry of "hearsay" into the constitution of its objects. Indeed, Dapper's descriptions derived "as far as these have come to knowledge from some reports recently sent over by men who have dwelt in these parts for some time" (Dapper, 1970/1668, p.7), his account was all hearsay.

The effect of this failure to filter out heresay was to sustain, albeit in a less substantial and rapidly fading form, the African as an object of the great circles of similitude that had shaped Renaissance knowing. In 1686 Ten Rhyne could thus note of the Cape of Good Hope how "the place delighted us by its strangeness" (p.91), and that the build, character and "temper" of the Hottentots "afford a clear proof that even a mild climate can produce monstrous dispositions" (Ten Rhyne, 1970/1686, p.125).

They have the temper of wild animals (I am quoting the words of Florus) and bodies more than human. But it has been found by experience that as their ardour is at first fiercer than that of men, so it dwindles till it is feebler than that of women. The bodies of a mountain folk bred amidst moist clouds have a resemblance to their native snows: they warm at once to the battle, fall immediately into a sweat, and are dissolved by a slight effort, as if by the sun. But the flinty rocks and shuddering woods match their real fierceness. For the Hottentots hang about the mountains, scouring every part of them by night and day. (Ten Rhyne, 1970/1686, p.133)

By 1695 the antipathy of the classificatory gaze to all knowledge not derived through direct observation was further confirmed in Grevenbroek's astonishment "that Rumour, never

bearing a clear report, should have acquired such strength in her course and proved so tenacious of falsehood that those half truths spread abroad about our Africans should have reached even you ears" (Grevenbroek, 1970/1695, p.173). Despite this protestation, his "rough sketch, embodying matters of hearsay as well as information gathered from reliable witnesses, written records, authentic documents and my personal observations" (p.299), was still able to contain in its description of the Hottentots the assertion that:

Those who live near our Cape are of middle height; but the inhabitants of the remote parts of the region are shaggy fellows, with taller and sturdier frames, and with frizzy hair. Among them has been seen a king, Longurio, twelve foot high, with hair all over his body thicker than a water spaniel's. (Grevenbroek, 1970/1695, p.175)

In 1731 an English translation from the original German of Kolben's The Present State of the Cape of Good Hope: or A particular account of the several nations of the Hottentots was published. For Dieterich (1993), this marked a turning point of some significance, where he observes that with the publication of Kolben's work the Hottentots were for the first time presented "as cultural beings who share essential human qualities with Europeans, although they are not equal to them" (Dieterich, 1993, p.130). What this progressive-humanist interpretation conceals, however, is the genealogically more important observation that Kolben's text marked a new intensification in the ingenuity of the classificatory gaze to identify those barriers to its meticulous observation of things themselves.

First, the minimal commentary that earlier texts had offered upon the problems of hearsay and rumour was now substantially expanded, the translator's preface to this edition offering an

eight page essay concerning "some Reflections on History and Historical writers" (Medley, in Kolben, 1731, p.ii, Vol.1). This recognised three classes of barriers "to Pursuit of Historical Truth ... Ignorance, ... Knavery, and the Constitutions of writers" (iii). Noting that enough had already been said by others on ignorance and knavery as sources that "plague the World with mutilated Fact and Historical Fiction" (vii), this focused on "how Truth may be injur'd by the Melancholic, the Phlegmatic, the Choleric, and the Sanguine Tempers of Men" (Medley, in Kolben, 1731, p.viii, Vol.1). The writer of Sanguine temper was prone to over-emphasising the virtues of what he liked; the Choleric to making everything he disliked infinitely worse, and the melancholic as reporting "Shadows for Substances, and airy Suspicions for the best grounded Truths in the World" (ix). The Phlegmatic, however, could be recognised as excelling "all others in Accounts of Fact" (p.xv), precisely because such writers saw only to the surface of things.

The *Phlegmatic* have no Eyes, indeed, for the *Inside* of Things; but they have excellent ones for the *Outside*; and give a Detail of a Thousand Particulars there which escape Men of other Complexions ... They are neither ravish'd with beauty, nor frighted at Deformity; neither elated with Success, nor depress'd with Misfortune. They are subject to none of those Flurries of Imagination that transport and bewilder other Men. (Medley, in Kolben, 1731, pp.xv-xvi, Vol.1)

Not surprisingly, it was "of the Class of *Phlegm*" (xvi) that Medley reckoned Kolben to be.

Accordingly, the second reason for singling out Kolben's text as a turning point in the solidification of the taxonomic gaze to the body of the African is to be found in the text itself. Here, appearing wherever what the eye saw did not square with what

rumour had claimed or temper had fantasised, was both what could now be isolated as the imaginative error and its attendant classificatory correction. Thus, in his account of "the Shape, Stature and Features of the Hottentots", Kolben could write:

They are by no Means so Hideous as the Press has hitherto made them. The Worst of 'em is their Nastiness (among other tokens of which, they leave their Hair to mat together with Dirt, so that it look like [sic] black Wool clotted with Treddles) and their offensive Smell ... The worst Features they have are their large flat Noses, and their thick Lips, especially the uppermost; in which, however, they resemble but the Generality of Negroes. But, as I have told the Reader already, the Flatness of their Noses is not natural to 'em. How they make them flat I shall tell him hereafter. What a frightful Picture has Anderton drawn of this People in his Travels! After saying, the Features of the Hottentots are monstrously ugly, he adds, their Faces are shrivell'd. Yes, those of Old People ... But the Face of a young Hottentot is as smooth and plump as that of any Youth in Africa, or even in Europe. For a general Description of the Persons of the Hottentots, they are not so small of Stature as we have been told, most of the Men being from 5 to 6 Foot high. The Women are a great deal less. Both sexes are very erect and well made, keeping a due Medium between Gross and Meagre. Their Heads being generally large, their Eyes are so in Proportion. The Noses of both Sexes are flatted, & their Lips thick. Their Teeth are white as Ivory. And their Cheeks have Something of a Cherry; but, by Reason of their continual Dawbings, it is not easily discern'd. Their Hair is like that of Negroes, short, and black as jet. The Men have large broad Feet: The Women have them very small and tender. Neither Men nor Women cut the Nails of their Fingers

or Toes. (Kolben, 1731, pp.52-53, Vol. 1)

Regarding the reputation of the Hottentots as the "Filthiest

People in the World" owing to their eating the entrails and

excrement of beasts, Kolben could dismiss this by noting that "I

have spent many whole Days among them in several Parts of the

Country, and took every opportunity to observe their Manner of

preparing and eating their Victuals, and never could discover any

good ground for this" (pp.47-48). Dapper is shown to be "out"

where he reported the Hottentots as eating whale fat, and of the

reports "by several Authors" that the Hottentots are "black from

their Birth" was noted: "What a mistake is Here! ... I have seen a

great many new-born Children of the Hottentots, and always found

them of a bright olive" (Kolben, 1731, p.54, Vol.1).

While the truth of the African as constituted in Kolben's account would last out the next 50 years, its appearance coincided with the recognition by natural history of a new class of barriers to its taxonomic task. Until Kolben, the primary difficulty had consisted in stilling the play of imagination to clear the perception so that it could be imprinted upon by the surface of things themselves. The very success of this strategy of attention, however, brought with it the new problem of excess. For, as Medley had noted, the down side to nature as revealed by "the exactest Relaters of the World of what they See" (in Kolben, 1731, p.xvi, Vol.1) was its "dullness" and "tediousness" since: "they relate every Thing they see and hear, with most religious exactness, not omitting the smallest or most indifferent Matter or Circumstance, they remember, tho' it be of neither Use nor Entertainment, nor any Thing at all to the Purpose (Medley, in Kolben, 1731, p.xv, Vol.1). Accordingly, the next great refinement in Classificatory perception occurred with elaboration of the theories of structure and character as mechanisms by which to filter out from the newly

apprehended mass of the visible only those few things which could be analyzed, recognized by all, and hence given a name that everyone would understand.

Screening and Filtering the Seen: The African Body as Structure and Character

As the period in which it finally achieved coherence as a formal discipline, the years between 1735 and 1760 were of some significance to natural history. For it was in 1735 that Linnaeus published his famous system of botanical classification Systema Naturae, in 1751 his Philosophia Botanica, and in 1753 his Speces Plantarum. Buffon's Histoire Naturelle appeared in 1749 and Adanson's Famille des Plantes in 1763 (cf. Foucault, 1973; Pratt, 1992, p.25).

While occupying different positions in the debate over classificatory method, these authors were united in a common concern with providing to natural history a theory and technique of seeing and describing that would at last enable it to engage with its proper object. This object was known as the structure of any living thing, and was:

the extension of which all natural beings are constituted - an extension affected by four variables. And by four variables only: the form of the elements, the quantity of those elements, the manner in which they are distributed in space in relation to each other, and the relative magnitude of each element. As Linnaeus said, in a passage of capital importance, 'every note should be a product of number, of form, of proportion, of situation.' (Foucault, 1973, p.134)

In the theory of structure was thus articulated the ideal object of natural history, the effect of a gaze strictly screened to admit the visual alone and then only certain components of what was seen. Now, the earlier system of screening by which hearsay had been so assiduously excluded was extended to eliminate taste, smell, and even touch, leaving sight with an almost exclusive privilege. As Buffon noted, "'the method of examination will be directed towards form, magnitude, the different parts, their number, their position, and the very substance of the thing'" (In Foucault, 1973, p.135). As a strategy of perception the theory of structure thus enabled a new precision to be entered into the act of describing what was seen. First, number and magnitude could be quantified through the act of counting or measuring. Second, the specification of form and arrangement could be done through the qualitative method of identification with geometrical figures or by the strictly clarified use of analogies.

If structure was the natural history method of seeing by which its possible objects were restricted to surfaces and lines, the theory of character was a device of secondary sifting by which these objects were rendered classifiable through the selection of a particular structure that could then serve as an index of comparison between individuals. Given the practical impossibility of comparing and classifying things by taking into account every feature listed in a given description, the theory of character prescribed that a particular structure be selected as the locus of identities and differences. For instance, the structural locus advocated by Linnaeus for the comparison and classification of plants was the pattern formed by their organs of reproduction the stamens, fruits, seeds, and so on. Thus, "the character should be composed of 'the most careful description of fructification of the first species. All the other species of the genus are compared with the first, all discordant notes being eliminated; finally, after this process, the character emerges'" (Foucault, 1973, p.140).

In outline, this then was the taxonomic gaze through which the body of the African as invented by Kolben was towards the close of the eighteenth century consigned to the now extensive cabinet of accounts of the curious: "Kolbe's 'Caput Bonae Spei' was from the beginning received with great favour and was eagerly devoured by lovers of the marvellous. At that time no one found cause to doubt its accuracy or to pick holes in it" (Mentzel, 1921/1785, p. 21). In its place, the tentative outlines of a new African body as a structure which began to crystallize in the first formal natural history of the Cape, Sparrman's (1786) A Voyage to the Cape of Good Hope.

Sponsored by no less than "the late Archiater LINNAEUS (who) ... in his own name drew up a petition for the voyage to be made" (p.xii, Vol.1), Sparrman observed that his description - "never relying on the relations of others, ... he sees every thing with his own eyes, and trusts only to the report of his own senses" (vi) - would in part disappoint the reader expecting "accounts ... of a most entertaining and wonderful import".

Nature has presented herself to me in various shapes, ever worthy of admiration, often enchanting, and sometimes terrible, and clothed with horror. But at the same time I must apprise the reader, that a great many prodigies and uncommon appearances, about which I have frequently been asked by many, who have been brought to entertain these conceits by perusing the descriptions of others, are not to be found in my journal. Men with one leg, indeed, Cyclops, Syrens, Troglodytes, and the like imaginary beings have almost entirely disappeared in this enlightened age. At the same time, however, many have been hitherto induced to give credit to tales almost as marvellous, with which authors, who have before me visited and described the Hottentots, have seasoned their relations ... So

that the reader must not be surprized to find my narrative frequently differ much from those of various of my predecessors. (Sparrman, 1786, pp.xv-xvi, Vol.1)

So, where earlier accounts had set the African body as a listing of external organs in a broader space of sensationalist descriptions concerning the African's ways of eating, hunting, copulating, childbirth, punishment, and so on, the African body fabricated by Sparrman appeared alongside the carefully measured and minutely detailed descriptions of animals and plants, which, indeed, were invested with a substantially greater degree of visibility, thus locating the body of the African to the very edge of taxonomic space⁵. Nonetheless, and albeit only faintly, in the description Sparrman gave of the Hottentot body can be discerned its inscription in the new perceptual strategies of structure and character, where through their proportions and relationships its external organs began to form some impression of a distinctive arrangement, a "characteristic mark".

With regard to their persons they are as tall as most Europeans; and as for their being in general more slender, this proceeds from their being more stinted and curtailed in their food ... But that they have small hands and feet compared with the other parts of their bodies, has been remarked by no one before, and may, perhaps, be looked upon as a characteristic mark of this nation. The root of the nose is for the most part very low, by which means the distance of the eyes from each other appears to be greater than in Europeans. The tip of the nose likewise is pretty flat. The iris is scarcely ever of a light colour, but has a dark brown cast, which sometimes approaches to black. Their skin is of a yellowish brown hue, which something (sic) resembles that of an European who has the jaundice in a high degree; however,

this colour is not in the least observable in the whites of the eyes. One does not find such thick lips among the Hottentots as among their neighbours the Negroes, the Caffres, and the Mozambiques. In fine (sic), their mouths are of a middling size, and almost always furnished with a set of the finest teeth that can be seen; and, taken together with the rest of their features, as well as their shape, carriage, and every motion, in short, their tout ensemble, indicates health and content, or at least an air of sans souci. (Sparrman, 1786, pp.180-181, Vol.1)⁶

Five years later, and located to a similar position of subordination relative to the geology and botany composing "the face of the country", the apotheosis of the African as object and effect of the taxonomic gaze appeared in Barrow's (1801) Account of Travels into the Interior of Southern Africa. Here, the hesitancy evident in Sparrman to invent the African body as structure and identify from this its distinguishing character gave way to a text-book precision in the discernment of number, magnitude, form and arrangement. The effect of this was the African body as a geometrized morphology that at the same time bore within it a sufficiency of isolated structures to permit the establishment of its character.

The great curvature of the spine inwards, and extended posteriors, are characteristic of the whole Hottentot race; but in some of the small Bosjesmans they are carried to a most extravagant degree. If the letter **s** be considered as one expression of a line of beauty to which degrees of approximation are admissible, these women are entitled to the first rank in point of form. A section of the body, from the breast to the knee, forms really the shape of the above letter. The projection of the posterior part of the body, in

one subject, measured five inches and a half from a line touching the spine. (Barrow, 1801, p.281)

Elsewhere, in the Hottentot (p.157), as in the Bushman, it was not the curvature of the spine but the shape of the eye that was selected as the locus of pertinent identities and differences. "The upper lid of this organ, as in that of the Chinese, is rounded into the lower on the side next the nose, and forms not an angle, as is the case in the eye of an European" (Barrow, 1801, p.278). The women of the Hottentots were readily distinguished from those of most other nations by their "protruded nymphae".

The longest that was measured somewhat exceeded five inches ... Their color is that of livid blue, inclining to a reddish tint, not unlike the excrescence on the beak of a turkey, which indeed may serve to convey a tolerable good idea of the whole appearance both as to color, shape, and size. The interior lips or nymphae in European subjects which are corrugated or plaited, lose entirely that part of their character when brought out in the Hottentot, and become perfectly smooth. (Barrow, 1801, p.279)

A more problematic task of comparison was presented by the corporal structure of "the Kaffer". Where the spine, the eye and the nymphae were identifying singularities on the Hottentot body, and the eye of the Hottentot and the Bushman had marked the character of these bodies as close to the Chinese, that of the "Kaffer" was more difficult to place, owing to the closeness with which the form of the head approximated to that of the European.

Though black, or very nearly so, they have not one line of the African negro in the composition of their persons. The comparative anatomist might be a little perplexed in placing the skull of a Kaffir in the chain, so ingeniously put together by him, comprehending all the links from the most

perfect European to the Ourang-Outang, and thence through all the monkey-tribe. The head of a Kaffer is not elongated: the frontal and the occipital bones form nearly a semicircle; and a line from the forehead to the chin drawn over the nose is convex like that of most Europeans. In short, had not nature bestowed upon him the dark colouring principle that anatomists have discovered to be owing to a certain gelatinous fluid lying between the epidermis and the cuticle, he might have ranked among the first of Europeans. (Barrow, 1801, pp.205-206)

From Theatres of Punishment to Theatres of Healing

It is here that this chapter must end, where the eye of Barrow fabricated the African as object and effect of a taxonomic gaze to the surface of the body, while at the same time threatening to become more than skin deep as it outlined the interior lips of the "nymphae", delineated the occipital bones of the skull, and engaged with the "gelatinous fluid lying between the epidermis and the cuticle". For, some 25 years later, the classificatory gaze of natural history itself began to be made visible to a new strategy of attention which recognised "Man himself" as a central concern of its surveillance. Writing in 1827, Thompson could thus observe that:

The majority of travellers who penetrated into the interior of the country in former times, were men enthusiastically and almost exclusively devoted to scientific pursuits. Discoveries in natural history were their paramount objects. Man himself, whether social or savage, was secondary, in their researches, to a new plant or animal. (Thompson, 1827, p.vi)

This emergence of "Man" marked, of course, the point of epistemic disjunction where the age of Classification gave way to Modernity

and natural history to the new science of biology through which the taxonomic ordering of morphologies would come to be complemented by the more penetrating analysis of structure and its relationship to function. In this new epistemic space, "the internal laws of the organism were to replace differential characters as the object of the natural sciences" (Foucault, 1973, p.145), and within medicine there could emerge the deep gaze of pathological anatomy and its concern to establish how the organs of the body are ordered, the mechanics of the cell, the nature of the tissues of the skin, and the dynamics by which pathology localises itself to a distinct point within the body.

It was, therefore, this disjunction in knowing that made possible the mid-nineteenth century articulation of the African body in a new power regime, as alongside the older spectacles of sovereignty there began to appear the minute rituals of disciplinary power by which the interior of the African body was fabricated as a visible, analyzable and useful space for the installation and reticulation of power. Thus, Chapter Five examines the unfolding of the African body as an object and effect of missionary medicine, which being the first socio-medical discipline to emerge into this anatomy of power bore within its practices elements taken from the diagrams of both sovereignty and disciplinary power - its theatres of healing standing where in the earlier regime had loomed the theatres of punishment; the hands of the doctor and his instruments of treatment where before had been the tools of the torturer; and the act of healing the infirm African body supplanting the inscription of pain upon its surface as a strategy of sovereign visibility.

^{1.} So as to highlight the variability of the taxonomic gaze itself by holding constant the object that was its effect, this chapter focuses on the body of the Hottentot only, while acknowledging that alongside the Hottentots many other "tribes" of Africans were

delineated on the basis of their perceptible physical characteristics.

- 2. While there may be other examples of a gaze that penetrated beyond the surface of the African skin, these are the only two I have identified in the cross-section of published archival fragments and formal accounts of the time that serve as the sources for this chapter.
- 3. In South Africa, the statutory abolition of capital punishment in public occurred only eight years later, with the passing of Act 3 of 1869.
- 4. "Rds." was an abbreviation for "Riksdaalders".
- 5. Foucault comments on this phenomenon by noting that "in so far as there are a great many constituent organs visible in a plant that are not so in animals, taxonomic knowledge based upon immediately perceptible variables was richer and more coherent in the botanical order than in the zoological" (1973, p.137).
- 6. Paterson's natural history account of 1790 reproduced Sparrman's description of the Hottentots as a 14 page footnote to his first chapter, between shorter notes on the hartebeest and the zebra.
- 7. It is important to briefly reflect upon the resilience of taxonomy as a strategy of perception and a tactic of power. For, with Barrow's articulation of the skull of the African into the great grid of classification, we see the nascent beginnings of a new sovereignty that through the course of the nineteenth and twentieth centuries would continue to operate upon the typology of bodies produced through the interplay of structure and character. Thus, a 1958 volume of "race studies" - written for the teaching of standard six high school pupils - installed precisely the same human body as that seen by Barrow where it depicted for all to see the instruments of ethnographic observation and classification: an 18 point "scale for comparing colour of skin"; 30 samples of human hair systematically arrayed in a metal box labelled "scale for comparing hair"; 16 artificial eyes that compose the "scale for comparing eye colours", and a set of three "instruments for measuring the skull" (Bruwer, Grobbelaar & Van Zyl, 1958, pp.14-17). Thus, although it is true that with the beginnings of the nineteenth century a new regime of power that worked less upon the body's surface than through its interior would begin to materialize, this switch in power must be recognized as one that did not so much displace as complement the sovereignty of taxonomy and the dividing practices it made possible.

CHAPTER FIVE

MISSIONARY MEDICINE, MORAL SANITATION, AND FABRICATION OF THE HEATHEN HEART

We have seen in Chapter 4 how the classificatory age produced the African body as a one-dimensional 'specimen' consisting in the geometric measurements of facial and bodily surfaces by which these bodies were compared to one another, grouped according to their perceptible resemblances, and arrayed on a hierarchical chain of being from man to ape. Barrow's (1801) description of the "Bosjesmans", for example, well illustrates the body as a surface produced by this classificatory vision.

Whether considered as to their persons, turn of mind, or way of life, the Bosjesmans are certainly a most extraordinary race of people ... About four feet six inches is said to be the middle size of the men, and four feet that of the women. One of these that had several children measured only three feet nine inches. Their color, their hair, and the general turn of their features, evidently denote a common origin with the Hottentots, though the latter, in point of personal appearance, has the advantage by many degrees. The Bosjesmans, indeed, are amongst the ugliest of all human beings. The flat nose, high cheek-bones, prominent chin, and concave visage, partake much of the apeish character. (Barrow, 1801, p.277)

Exemplifying the power implications of this knowledge that fabricated the body as a flat surface without volume was the taxonomy of terror which accompanied it, from the spectacles of public torture and execution that inscribed their pain upon the body, to the 'cordon sanitaires' that kept separate the geographical spaces occupied by disease through violent prohibition of the movement of bodies between them.

However, and as argued in Chapter 2, the Classificatory age was by the end of the eighteenth century already beginning to give way in Europe to the new regime of disciplinary power and the three-dimensional body as an anatomical container of disease that under the gaze of hospital medicine was its object and effect. Among the consequences of this respatialization of illness to the deep interior of an individual anatomy was problematization of the boundary zone between the interior space of anatomy and the external space of the environment. This occurred, as Armstrong (1993) has shown, through the installation of a network of lines of hygienic surveillance directed to monitoring the passage of substances between the inside of the body and the outside.

Air, water and food originated in this external environment but had to pass into the body; equally, all those substances such as faeces, urine, sweat, semen, etc., which departed the body had to cross into the world of places. Thus the focus of late nineteenth-century public health became the zone which separated anatomical space from environmental space, and its regime of hygiene developed as the monitoring of matter which crossed between these two great spaces. (Armstrong, 1993, p.396)

Finding rapid expansion through crowded Victorian cities, these techniques marked the second-half of the nineteenth-century as the dawn of a disciplinary regime in which, for the first time, it became possible through sanitary science to "dissect the mass and recognise separable and calculable individuality in the form of anatomical space in the crowd (Armstrong, 1993, p.405).

Far from restricted to the formal centres of imperial power, these power transformations were manifested in an equally dramatic mutation along the margins of colonial expansion which created the conditions of possibility for a new African body and an attendant

shift in the strategies of European domination. For, contemporaneous with the expansion in Europe of sanitary science through the previously compact and unanalyzed mass of the crowd, so Africa grew "dark" with the barbarism and suffering of its native inhabitants as Victorian explorers, missionaries and scientists flooded it with a light refracted through the gaze of a new imperialist power targeted to the analysis and abolition of "savage customs" in the name of "civilization" (Brantlinger, 1985, p.166). Where before conquest had been envisaged and practised through the exercise of sovereign force directed to keeping separate the mass of black from white bodies, now, with the invention of "man" as an object of knowledge, it could be conceived of as a 'humanitarian' and productive endeavour aimed at liberating Africans from the "chains of grossest ignorance" that made them "prey to the most savage superstition" (Buxton, 1840, cited in Brantlinger, 1985, p.173).

Analogous to the sanitary science that in Europe individualised the body by delineating the boundaries between it and environmental space, this new colonial power constellation became evident in the emergence of missionary medicine as a strategy of 'moral sanitation' directed to the boundary zone between the African body and a surrounding space of customs, rites and superstitions. Where in Europe environmental space was now seen as a reservoir of dangerous substances whose passage into the body could cause disease, so in Africa it became possible to think of the 'moral' space surrounding the African body as harbouring every variety of vice, evil and superstition calculated to corrode its vitality and render it particularly susceptible to sickness. Similarly, as the regime of sanitary science demanded that prohibitions be set in place to prevent the contamination of environmental space by bodily wastes, so the discourse of missionary medicine gave rise to methods that could protect this moral space from further corruption and

ultimately purify it by disabling the influence of the "witchdoctor" as it was relayed through the beliefs and the behaviour of individual Africans.

The tactics through which this new medicine operated to install an anatomical space in the diagram of colonial power marked it as far from a purely disciplinary regime. For, while only possible in the cognitive context of a clinical gaze that spatialized sickness to the deep interior of the body, the technology of missionary medicine drew at the same time upon the sovereign power of the spectacle, to crystallize in the shape of the dramatic theatres of healing that until well into the twentieth century would continue to epitomise this practice of moral sanitation.

The regime of missionary medicine was therefore one of two coexisting realities and methods for their fabrication, and it is to describe their unfolding and articulate the productive tensions between these two realities that this chapter now turns to the middle of the nineteenth century. For it was within this period that medicine began to emerge as a conduit of disciplinary power which from then onwards would produce the anatomical space of the African body as its increasingly visible object and effect.

Creation of the African with a Soul and a Body of Organs

In performing most severe surgical operations they sit, both men and women, as if they had no feeling ... The spirit of God alone can affect their hearts. (Livingstone, 1841, in Schapera, 1959, p.40)

No one can be certain who it was or how they may have chanced upon the surprising powers invested in the simple act of medically examining and treating the infirm African body. Perhaps it was Theodorius van der Kemp, who some twentieth century South African

historians claim to have been the first medical missionary in South Africa (Burrows, 1958; Gelfand, 1984), while for British readers in the mid-nineteenth century it was without doubt David Livingstone. Confirming this, an 1858 book review in the *British Medical Journal* exalted:

The triumph of Dr LIVINGSTONE in having been the first European - indeed we may say the first human being - that has ever made his way across Africa ... The various savage tribes whose territories he had to traverse were dumb to the voice of the missionary, but were capable of appreciating the good services of the medical man. A knowledge of the healing art is acknowledged by Dr Livingstone to be indispensable to those who would penetrate the wilds of this vast continent ... This is indeed a high testimony to the benevolent and all powerful character of our profession. (Anon, 1858, p.52)

But concerns as to the identity of the first medical missionary, important as they are to presenting an accurate "history of the past", are of less significance to this genealogical study than identifying the point at which it became possible to speak freely of the African with a soul and a body which could in some way be impacted upon by the practice of medicine. For only then can it be concluded that there was in fact a mutation occurring in the anatomy of power — away from its dependence on the unalloyed tactics of terror enabled by the Classificatory episteme, toward a new way of functioning that played less upon the bodies of Africans than into and through them.

This leads into the late 1840s and 1850s. For it was here that just such a shift towards a nascent regime of medical practice and knowledge as disciplinary power was confirmed by the swarming of anecdotes, teaching texts and institutions that concerned themselves with mapping a set of relationships between medical practice and the

African with a body of organs and a soul. Far from surprisingly, and as argued above, this was chronologically contiguous with elaboration of the anatomised body of medical science as itself the finely mapped interior space of arteries, bones, organs and systems, which through Gray's Anatomy (first published in 1858), we now know and (mistakenly) take for granted as the only human body there ever was.

In an 1842 letter to one J J Freeman, David Livingstone recounted an incident that occurred in the course of his surveying the African "tribes" around Kuruman, and which seemed "to indicate that even the darkest minds feels (sic) the need of a something (sic) to speak peace to their troubled thoughts" (Livingstone, 1842, in Schapera, 1961, p.20).

On one occasion Sekomi, having sat by me in the hut for some time in deep thought ... said, 'I wish you could change my heart. Give me medicine to change it, for it is proud, proud and angry, angry always'. I lifted up the Testament and was about to tell him of the only way in which the heart can be changed, but he interrupted me by saying, 'Nay, I wish to have it changed by medicine, to drink it (and) have it changed at once ... He then rose and went away. (Livingstone, 1842, in Schapera, 1961, p.20)

Compare this to a similar observation made by Dr J P Fitzgerald, who unlike the missionary David Livingstone was a secular practitioner, recruited by Sir George Grey to participate in his campaign to "civilize" the "eastern frontier" around Grahamstown and King William's Town. Following his arrival in King William's Town, Fitzgerald had ridden through the country on horseback to "take stock" of the situation, and this is what he reported about the Africans he encountered:

I have performed some minor operations amongst them and not even a semblance of an objection is ever raised ... They tell me that through every part of Kaffir Land wherever I may go I will be well received with affection and kindness ... Before ten years pass over many a savage heart will be won to the British Govt. (Fitzgerald, 13 April, 1856, in Cory Library, PR 3624, Folder 1, p.9)

These are doubtless but two of countless medical experiences with "natives" - whether in China, India, or Africa - that struck their European interlocutors as surprising enough to be set down on paper and reported upon. What was it about the gaze of their authors that rendered such seemingly trivial incidents important enough to record in writing?

For in these reports of Livingstone and Fitzgerald appeared an eye that saw not only the surface, but into the very heart of the African body, a way of seeing that through the techniques of surgery penetrated deep within it to constitute as its object and effect the African with a body of internal organs and a soul. The answer, of course, lies in the notion that such anecdotes and reports at once discovered and were productive of the conditions of possibility for a new form of power. For the great innovation they reflected was the interpolation of a novel space into the existing diagram of colonial power, namely that of the volume of the African body. Or, more accurately, of the African with a body of organs and a soul, between which and the surrounding space of African tradition there lay a gap in which it was possible to discern the workings of custom and belief upon the individual body. This gap was made visible by the device of illness itself, which in its occurrence, its manifestations on the body, and in attempts to treat it, signalled the perverse play of African tradition and invited the purifying counterpoint of Christian medicine. Confirming this, the Bishop of

Bloemfontein's authoritative statement on "the sacredness of the medical calling":

The body (is) ... the instrument of the soul, by means of which that soul is brought into relations with its surroundings, and is, moreover, trained and disciplined for its own perfection. (Hicks, 1896, p.87)

It thus became possible to conceive of this three-dimensional corporal space (extended by the soul into the social) as the central object for a new strategy of colonial power premised upon its existence. This was the "medical missionary method".

Moral Sanitation and The Medical Missionary Method

In his 1849 Medical Missions. An Address to Students, Miller aimed "to shew how we might profitably blend ... cure of the body with care of the soul" (p.4). Proof of this lay in the diseased body of "the heathen" itself:

Are the hearts of the distant heathen less impressible than our own? ... Spiritually, they are dying and dead. Morally, their very virtues are vice. Intellectually, they are uncultivated, feeble and depraved. Socially, they are little removed above the beasts that perish. Their bodies are peculiarly the prey of sickness, and their flesh, as if not racked enough by disease, is maimed and torn by their so called religious rites. (Miller, 1849, p.24)

Albeit somewhat dramatically, this vision of the diseased body of the "distant heathen" condensed and compacted within it precisely the same relationships between the interior space of anatomy and the exterior context of superstition evoked in the anecdotal reports of Livingstone and Fitzgerald. Only anecdote had now become a formalized object of missionary medical knowledge, a device through which to inform the gaze of the student doctor by inculcating a sound appreciation of the fundamental premise underlying missionary medicine, that: "The sickness of the body is a continued type of sin" (Marley, 1860, p.45). Lending concrete substance to this generic formulation of the relation between sin, disease and the heathen body, Holden wrote in 1867 that "consumption" in Africans:

... is not so much hereditary as bought on by undue exposure. One great source from which it springs is their night orgies, in which singing, dancing and adultery are often carried on to great excess ... This is kept up until a late hour, until the body becomes exhausted; the pores are thrown open, and a chill ensues, which entails disease and death. (Holden, 1963/1867, p.371)

It followed from this connection between the diseased body and sin that "the medical attempt 'to do cures' remains cognate to the Missionary attempt 'to cast out devils', even to the end of the world" (Marley, 1860, p.49). But how was such benevolent exorcism of the exotic to be translated from the rhetoric of sermonising into practice?

For the practitioner of missionary medicine up until the 1920s - when theatrical healing began to give way to the less spectacular methods of hospital medicine - this demanded that he be as accomplished an actor as he was a doctor. For not only should his actions in treating the sick heal their sins, but so too should they be witnessed, either in fact or through reports by word of mouth, by as many others as possible. Speaking to the reticulation of words through the very community this method constructed, Burns Thompson (1854) advised that the practitioner recruit each and every patient into the role of publicist, and in this way build around the body of the healed an ever-expanding network of the converted.

When the man sick of palsy was healed, he was charged to tell no man. But he went out and began to publish it much, and to blaze abroad the matter ... The missionary will be known, talked of and beloved, in circles in which he has never personally made his appearance. Multiply the services of the medical missionary and groups of grateful hearts are multiplied throughout the community ... Every person in the neighbourhood of the medical missionary knows his liability to disease, to the very evil which the benevolent power in his vicinity has come to mitigate or remove; and there is awakened in all hearts a feeling of comfort at the thought that, in the event of sickness or pain, that power will manifest itself in their behalf. (Burns Thomson, 1854, p.22)

Because it depended upon the medical instruments being displayed and the work of healing witnessed, the likelihood of this method succeeding was enhanced where the doctor was able to maximize the spectacle of an operation, the setting of broken bones, or even the routine administration of medicine. Alluding to this, G.E.F.M wrote in 1898 that "wherever the Medical Missionary pitches his tent, spreads out his surgical instruments, and opens his medicine chest, he may well exclaim, 'the weapons of our warfare are mightily through God, to the pulling down of strongholds'" (G.E.F.M., 1898, p.5). It is therefore appropriate to make at this point a visit to one such theatre of healing, and join the audience as they surrounded and observed the doctor at work.

Within the Theatre of Healing

The fame of the cures effected spread far beyond those that had experienced these benefits; and of the vast numbers of strangers who throng the capital, few return to their homes without paying a visit to the dispensary, to witness the benefits conferred upon others or to seek relief for themselves. (Lowe, 1886, p.67)

Foucault began the introduction to Discipline and Punish (1977) by reproducing a description of the public execution of Damiens the Regicide which took place in March 1757. As argued in Chapters 2 and 4, Foucault chose this example to exemplify how the mechanism of sovereign power involved subjecting the population to the spectacle of power. Sovereignty operated by being visible to those on whom it had its effects, the presence of the king signalled by dramatic public displays and outward shows of ostentation, such as rituals, processions and palaces.

Strange as it may seem, it was with these self-same mechanisms of sovereign visibility and outward display that the nineteenth century theatres of healing erected in South Africa were built. Only within them it was not the executioner or soldier who represented God or the king, but the doctor; not the body of the condemned that swayed above the onlookers on a gibbet, but the body of the infirm African which lay sprawled on the examination table; and not the tools of torture and pain that glinted and bubbled in the sun, but the instruments of healing - the scalpel, the stethoscope and the catheter. This was evident in all its splendour as Dr J P Fitzgerald set to work on a distended bladder in 1856.

Late this evening three Kaffirs belonging to Siwani's Tribe
... came to me one (sic) of them suffering excruciating agony
from retention of urine which has been coming on for the last
five days. The bladder was very much distended and he could

not pass a single drop of water. I placed him standing against the wall in my consulting room, took out my Instruments and after a little delicate manipulation I succeeded in intorducing (sic) a small Catheter into the Bladder, and drew off an immense quantity of Urine; when the Urine began to flow through the Instrument, the Kafirs were struck with wonder. The two wild painted children of Nature who were standing at my back looking over my shoulders exclaimed "Nothing can beat the English, or the English can do anything" ... His two friends said, they would leave him with me, and as it was late hurried away filled with delight and astonishment. This will travel all over Kaffir land and the removal of leaves, branches and Trees, Sticks and Stones, Lizards and Toads as practised by my Professional Brethren in their uncivilized state, will in future make but a faint impression either on this patient, his two friends, or my two interpreters who saw with their eyes my whole proceedings, the flow of urine, and the relief afforded. I dare say in a very short time this will reach the trans-Kei (sic) constellation and help to extinguish his (the witch doctor's) light. These are practical illustrations for the Natives, which all the prophets and Witch Doctors in South Africa cannot gainsay ... There was a man suffering agony which all the Witch Doctors in the world could not relieve, they saw me place the patient against the wall, take out my instruments, select one, pass it into his Bladder, they saw the Urine flow, and the man instantaneously relieved, they saw with their eyes and believed, just as old Macomo told me the other night 'I believe in your work, because I see with my Eyes'. (Fitzgerald, December 11, 1856, in Cory Library, PR 3624, Folder 1, pp.65-66)

A quintessential instance of sovereign power at work, this spectacle in Fitzgerald's theatre of healing spoke at the same time to the play of discipline as it circulated through the deep gaze of pathological anatomy. For even as the drama unfolded with Fitzgerald at its centre and the "wild painted children of Nature" looking on, so there crystallized before the very eyes of the watching the African body with organs.

This day I had three Kaffirs from the Chief Sandilli's place beyond the Kei River ... One of them was very bad suffering from disease of the lungs and spitting of blood. I examined him with the stethoscope and over the part affected I had to apply the Cupping Glasses they were surprised at the flow of blood. (Fitzgerald, April 20, 1856, in Cory Library, PR 3624, Folder 1, p.16)

The spectacle of sovereignty created and addressed the many in whose beliefs and deeds were reproduced the forces of darkness that had to be made to bow to "civilization". But running alongside, almost incidental to and folded into the drama that attracted the onlookers, coursed the subtle and whispering currents of disciplinary power: through the doctor, through the catheter and stethoscope, and through the body of the patient whose blood filled the cupping glass.

Power always the unstable and hazardous play of dominations, further confirmation of the productive power invested in these rituals oscillated between accounts that privileged their sovereign component, and others that isolated the play of the disciplinary gaze. For instance, the sketch of Dr de Prosch at work near the Zambezi singled out the awe of the onlookers at his actions, the patient an almost invisible prop.

Doctor de Prosch is surrounded by sick folk waiting their turn, and watching with gaping mouths and craned necks the application of the magic art. He is just bandaging with some lineament ... the limbs of a leper. (Collard, 1900, p.218)

Elsewhere, the focus swerved sharply from the drama of doctoring itself to isolate for scrutiny the reactions of the patient and the sympathetic ripples through the community of converts created by the cure.

A group of wild kaffirs sat one day listening with much interest to a man describing how he had been cupped, he told them a glass or tumbler was stuck on his Body, which no one could remove but the operator, that then some unintelligible words were spoken to a small instrument, out of which jumped a number of things which cut him, that then the glass was reapplied and filled with Blood, he believed there was an understanding between the operator, and this wonderful little instrument. (Fitzgerald, May 1858, in Cory Library, PR 3624, Folder 2, p.140)

It is surprising how soon an isolated case of sickness will become an epidemic, as soon as it has become known that the 'Moruti' has dispensed medicine. At one place a man came to me saying he was suffering from certain pains in the stomach. I treated him for indigestion. On the morrow I was amazed to find some dozen or more people coming to my wagon. They all wanted medicine, and strange to say, for the same complaint as that I had treated the previous day. (Williams, 1887, p.115)

Just as the act of cupping blood and the treatment of "indigestion" operated to interpolate ordinary Africans as active participants in this diagram of medical power, so too were more calamitous disasters

rendered productive. Relating the increased number of Africans

attending catechumen classes to drought and rinderpest in Bechuanaland, Dyke (1898, p.216) wrote that: "this is a black picture, but it has its reverse ... The trials and losses which have come upon the Basutos have not been without fruit. The spiritual harvest has been rich and abundant". However, in some situations the theatre of healing operated to produce less than the unambiguously positive results claimed for it by most mission doctors. Thus, a 1906 account of surgery to the anaesthetized body of an African patient revealed the procedure as producing a distinct sense of unease on the part of the audience, owing to the doctor's apparent power over both the death and the life of the patient.

A curious moment is at the end of an operation. We operate at 7 in the morning before consultation hours. A convalescent stands outside our reed enclosure to prevent people coming too near. Then when it is all over, there is a whole crowd of people sitting at a distance watching us carry the patient, still asleep, in our arms. We lay him down on his mat and leave him while I see the new patients, change dressings, and my wife cleans and dries the instruments. The natives look on distrustfully; there is still some blood on my blouse. What if I suddenly decided to kill them too, and bring them back to life like the one they have just seen? (A.C.J., 1934/1906)

Despite such exceptions, the repeated confirmation in practice of this technique that blended the spectacle of sovereignty with the silent force of the deep gaze to the body's interior found in the 1920s its formalization in teaching texts that instructed readers precisely in the art of making spectacular the mundane (see Martin & Weir, 1923; Moorshead, 1926).

The way of the doctor ... (is) a mighty highway to the human soul ... Impossible as it seems to influence suspicious and hostile peoples by any other method, medical, and especially

surgical work¹, provides a way which leads to the very citadel of their being. (Moorshead, 1926, p.49)

However, even as these texts that drew upon the diagram of sovereign power to shape the medical missionary endeavour were being written, so a new strand began to define itself within the discourse of missionary medicine - the hospital. For while permanent dwellings of a rudimentary nature had often served alongside the wagons and temporary staging points at which mission doctors conducted their theatres of healing, it was only in the 1920s that there began to emerge any accounts of the relationship between Africans and the fixed space of the hospital.

Mission Hospitals and the Manufacture of African Misery

Loathsome lepers ..., sleeping sickness victims, hideous and demented, ... babes, bellies pendulous and eyes lack-lustre ... This ugly aspect of Africa's need is highly coloured. No one needs to paint it to emphasise its hideousness. The real truth is that one dare not reveal to an unprepared Western public all the horrors of it. (Tilsley, 1924, p.44)

The theatre of healing had deployed the tactics of clinical medicine upon infirm African bodies as a vehicle of colonial visibility, a mechanism by which to broadcast outwards and toward the watching the sovereign power of God and "civilization". With installation of the hospital this relationship of visibility was reversed, the dominant power investing in the work of the medical missionary switching from that of conspicuous sovereign to silent surveyor of African suffering and superstitions that: "rudely and barbarously destroy the last remnants of decency and modesty, ... and envelop the intelligence in a perfect maze of lies, deceit and folly" (McCord, 1926, p.197).

Where the healing spectacle had certainly allowed more than a glimpse of this barbarism that made the African body prey to illness, it was the "ward round" and the "out patient department" that now began to serve as moral microscopes which magnified not the figure of the mission doctor, but the misery consequent on immersion of the African patients they treated in the beliefs of witchcraft.

It is morning and the crowds are there - men with skin caps, made from the wild animals they have killed and with red blankets draped gracefully round their bodies. Women also in red blankets, with red clay plastered on their hair in order to beautify it ... Next comes a woman grandly dressed in skins, horns and bones. A lady friend, during a difference of opinion, has bitten her at the base of her thumb ... This lady is a witch-doctor, and during the dressing of the hand is asked why she has not treated it herself ... She replies that witch-doctors cannot cure themselves, only other people.

(Grist, 1924, p.9)

Exemplifying this reversal was Aitken's Who is My Neighbour (1944). A book that "does not contain any dramatic accounts of wonderful operations and amazing cures" (preface), this replaced the spectacle of the doctor at work with a vision of "the lame, the blind and the possessed" (p.33) as seen in the ward round.

I have just finished the evening round of the wards and here are some of the patients whom I saw. In a corner of the male ward is Andries ... The poor fellow has a fractured spine, and is completely paralysed from the waist downwards ... Not far away from him is Hlamalini, the boy whose leg was bitten by a crocodile. His amputation stump is healing now and he is making a good recovery ... Out on the verandah are two men suffering from consumption ... In the female maternity and surgical ward we have several mothers with newly born babies,

and three or four expectant mothers ... In a ward by herself we have a woman who is suffering from mental disorder. She firmly believes she has been bewitched by some of her relatives. (Aitken, 1944, pp.33-35)

A device for seeing far beyond the individual bodies to which it located disease, the ward round thus functioned as a corporal observatory that radiated the gaze of mission medicine into the space between African beliefs, behaviours and bodies to create this as an object of intervention.

Because he believes that his racking cough is due to a pursuing spirit, the African creeps into his dark, stuffy hut to escape, and lies there at night with his family round him; so tuberculosis becomes the scourge of the Bantu race.

(Thompson, 1932, p.11)

Repeated like a litany in other texts from the 1950s and 1960s (Barker, 1959, Doell, 1955, 1960; Ingle, 1963; Kjome, 1963; McCord, 1951; Schimlek, 1950), the patients seen in the ward round and the ills of each were first recited - "Sinoia, who had a bladder stone, ... Koko, an old woman ... was suffering from high blood pressure ..." (Doell, 1955, p.28) - and in response a story and sometimes more probing analysis of the social conditions and cultural beliefs that lay behind the suffering of each individual. As Paterson noted after presenting two accounts of children who had each had a leg amputated as a consequence of their parents "backwardness, ignorance and superstition", these "are not extraordinary stories at all", the point in telling them being to:

... indicate ignorance and superstition rather then evil intent or wilful neglect. The average native parents are not neglectful of their children, and, though strict, are usually very fond of them and treat them very well according to their lights. The fact remains, however, that their lights are

exceedingly dim when it comes to illness and accident ... It is impossible to estimate the number of Native lives that must be lost every year as the result of sheer ignorance and superstition, to say nothing of the ghastly amount of suffering that must be going on at this very moment all over the country, suffering which could be relieved if only reasonable medical care and attention were available.

(Paterson, 1950, p.94)

The very purpose of the medical missionary endeavour being to lead Africans "from darkness into the light of the Gospel" (Grist, 1924, p.9), accounts of mission hospital practice served not only to throw the gaze onto the suffering that called for the African's salvation, but also to reveal their success in countering it. Thus, and as if the clinically sanitized domain of the hospital were the very light of the Gospel, Turvey's (1951) description of the "Mkambati Leper Settlement" juxtaposed the space of evil and misery in which it was set with the benign and regimented order achieved within. "The colony busies itself daily with the tremendous task of healing those who come with bodies mutilated, disfigured and painracked, with minds filled with fear, ignorance and superstition" (p.8). Against this grim parade of corporal corruption:

In neat rooms, surrounded by flower beds, live the patients who are able to partly look after themselves: they stream up early each morning to their special bath enclosure for their daily bath and unction of Oil Chaulmoogra²; then they file over to the surgery block to drink their daily dose of yeast and fruit juice, or for special dressings and treatment which often includes painful injections, and, for most of the patients, large doses of the sulphide drugs ... It is nothing for them to swallow up to 30 tablets a day. (Turvey, 1951, p.9)

The mission hospital thus constituted a sharp line of separation between two great systems of power, which Gale (1943) delineated in a health propaganda pamphlet aimed at convincing Africans that "they ought to use the new doctors and nurses and hospitals, and not go to the witch-doctors any more" (p.3). Beyond the space of hospital medicine, a world of magic and animism in which it was:

... the spirits which caused sickness ... They did things on purpose and they were very clever. They were much stronger than men, but they were the same as men in being able to be angry, to hate, to try to get the better of others, and so on. (Gale, 1943, p.4)

Within the space of the hospital, a clinical world governed by "the laws of nature", where sickness was caused by things which do not think and do not see.

Some, but not all, of these are living things. They are called "germs". "Germs" grow (like plants) and get bigger in numbers, but (again like plants) they have no thoughts, no understanding. They do not know what they are doing. (Gale, 1943, p.5)

Thus, when African bodies crossed this threshold separating superstition from salvation, and magic from science, its impact could be clinically observed in the very physiology of the patient.

One boy came in for an operation; he did well and was at the point of going out ... when I was called to see him. The nurse told me that he was running a high temperature and was in a very excited condition. I went very carefully over him, ... and I could find nothing to account for his mental condition or the high temperature ... Next morning I enquired about him. The nurse said he was normal and quiet. 'Only' she said, 'he wants to be a Christian.' Medically I should not have thought much more about it had not a similar thing happened to another

patient. (Drewe, 1925, p.41)

For many mission doctors (eg Grist, 1924; Humphreys, 1958; Turvey, 1951; Schimlek, 1950), the power of the hospital over the heathen was epitomised by the witchdoctor patient.

It was with fear and trembling that a witchdoctor patient came for treatment. All seemed well until the hands of the white sister touched her. 'Please need it happen again?' she appealed to one of her race, because she had not slept for great restlessness after the first contact, and was afraid she might lose the powers of witchcraft. (Turvey, 1951, p.6)

In Doell (1960), and presented as the climax of a moral fable illustrating how "good can come out of evil", hospital treatment of a witchdoctor patient resulted in the draining of his "magic" along with the very blood of his body. The account told of how a witchdoctor, "the Great Horse", had been pilfering needles, sutures, scissors and scalpels from the hospital to remove cysts and lumps from the heads of his patients. Unfortunately for him, one such operation was upon a "cirsoid aneurysm". Plastering the patient's head with cowdung and mud to staunch the blood, "the Great Horse" then stole his car, but while fleeing had a tyre burst and crashed not far from the hospital. Soon, both he and his patient were in the same hospital for treatment, and the scene was set for the final denouement as told from the viewpoint of the doctor.

I went to his bed and woke him ("the Great Horse"). "Friend," I said, "a man has just arrived whom you nearly killed yesterday morning by cutting into his head. He has lost so much blood that he needs some blood from someone else. I will test your blood to see if you have enough and if it suits him; if it does you will have to give me some for him." ... "I will not give the blood,: said the Great Horse, "it is special blood and must not be used for other people." ... With that I

inserted the needle into his vein and drew off the required amount of blood. He protested all the time, but to no avail ... Among the people the story spread that Ihashinkhulu's magic had been drained; the doctor had "taken off all his blood", and his power over evil spirits with it. White magic was stronger than Black magic ... Not many months later the Great Horse contacted the mission and started his preparation for baptism. His son and daughter followed him into the fold. Several years later he sent his son to university to become - a medical student. (Doell, 1960, pp.72-73)

From Revelation to Confession: The "Speaking" Subjects of Missionary Medicine

A system of moral sanitation that deployed disease and its cure as a device to make visible and displace the superstitions of witchcraft with a Christian belief in God, the gaze of missionary medicine pervaded the soul of the African that alongside the body was its object and effect. For, as we have seen from the previous sections, the problem was how to "free" this mind from the grip of superstition so that Africans could be taught and transformed into agents of "civilization". In Tilsley's words:

The disease of Africa's dismal past and of her dark present is diagnosable in one word. That word is CARELESSNESS. Careless in life, the Ethiopian is equally careless of death, amazingly, unbelievably careless. He has got to be made afraid by outsiders. He needs inoculating with a virulent fear. Fear of disease, for instance, fear of death, fear of sin, fear of ignorance, fear of carelessness, and, above all, comprehendingly all, a holy fear of righteous God. (Tilsley, 1924, p.46)

Because it aimed so explicitly at the production of new subjectivities, the voice of the African rang loudly through the theatres of healing, halls of the hospitals, waiting rooms of the clinics, and pages of the journals, teaching texts, books, and propaganda pamphlets that composed the discourse of missionary medicine. Indeed, since "spiritual data are not of a kind to permit of tabulation" (Moorsehead, 1922, p.18), verbal accounts ostensibly from the mouths of African patients represented perhaps the most important form of "evidence" as to their success that medical missionaries could marshall. It is thus appropriate that to conclude this investigation of the medical missionary method we should, as it were, give the final say to the Africans that were contingent on this regime of moral sanitation. For it is the words put into their mouths that were presented both as "proof" of African recruitment into the power of the medical missionary endeavour, and parables that confirmed its potential as a device of colonial and Christian expansion.

Corresponding to the two phases that made up this regime - the first epitomised by the spectacular theatre of healing, the second by the ordered observation of the hospital - there was a discernible shift in what was said by the African subjects produced in each of these phases. In the former, its ostentation was mirrored in the revelationary character of the words "spoken" by the Africans it interpolated, as the surprising cures they witnessed disclosed to them the benign truth of Christianity. In the latter - where "every patient was a treasure, an investment in the golden future; we examined each with exemplary thoroughness and treated those who came like dukes" (Barker, 1959, p.47) - the words of its African patients were of a more confessional nature, with the speaking subject also being the object of what was said.

Beginning with the theatre of healing, its emphasis on the spectacular was reflected in the emotionality of what the converted had to say, and through which they verbally prostrated themselves at the feet of the doctor. In some instances, their words no less than deified the medical missionary to construct the Africans that uttered them as awe-struck supplicants to the power of God's Medicine. Take for instance the "native prince", who on being healed of wounds received at the hands of a witch doctor said to his European "preserver": "It is vain to tell my people you came from this or that place, they will have you came down from above" (G.E.F.M., 1898, p.28). Or again, "Chief Kabuti", whose joy at being saved from death led to his exclaiming: "'You are my saviour! You have brought me back from the grave! You have resurrected me!' Such were the words of Chief Kabuti, as he stood near the dispensary door". (Church Missionary Society, 1902). In other instances, the confirmation of sudden conversion was conveyed through the metaphor of death, the medical missionary God's hunter and killer of African profanity and evil. Hence A Black woman's description of a Missionary's work published in 1896 could have her say of medical missionaries that:

You are ... hunters who are returning from your expedition.
You have had good success. We are the elephants and
hippopotami, we blacks, and you are come from shooting us
down. Many have been killed outright for the glory of the Lord
Jesus. But there are some who have only been wounded by the
Word. Then you have looked at the ground, and you have
followed their bloody traces in order to overtake and despatch
them ... We are glad that you are like the warrior who returns
from the battle living and victorious. (Anon, 1896, p.209)
Other examples of what medical missionaries in the theatres of

healing would have their African patients say are somewhat more

mundane. But, perhaps for this very reason, they better epitomise the underlying diagram of a medical power that in the corporal proof of the healed body made its way into even the most remote of huts and removed of communities. Thus, following treatment to her legs and feet at the hands of a mission doctor, an African woman left: "carrying a new message, a new hope. She said 'We have not understood the people at God's station. They are for our good. See me. I was carried, now I walk (Lynch, 1900, p.297).

Before examining the identities of Africans formed through what they said in the space of the mission hospital, it is important to pause for a moment and consider these words. For their contrived quality makes it highly unlikely that they were ever actually spoken by Africans. Neither, however, is there any evidence in texts of the time to suggest how statements like these were interpreted by contemporary readers, and certainly nothing to indicate that they were considered to be outright fictions. But questions as to whether they really were said by Africans, or whether those who read them at the time of authorship believed in their authenticity, are of less significance to this analysis than the fact of their centrality to this discourse of missionary medicine. Indeed, that they may have been pure fictions on the part of their European authors only underlines the nature of this power as one that required not only the African body as an object, but for which a consciousness that could be made visible in words and monitored through speech was equally essential.

The identity of the African that had emerged in the revelations contingent upon the theatres of healing had been typified by its emotionality and outward focus on the figure of the doctor. By contrast, and no doubt a manifestation of how "the native people were becoming more and more hospital conscious" (Paterson, 1950, p.91), the words spoken in the space of the mission hospital

were of a more cognitive and confessional character, suggesting how the gaze had been internalized to recruit each patient as an "autonomous" and self-objectifying cell in the diagram of discipline.

Thus, Schimlek (1950) could describe the following conversation, in which a cured patient reflected upon the error of his ways in having first sought treatment at the hands of a witchdoctor.

As soon as he saw the missionary who had translated all his complaints to the doctors he said: "Father, you know I wasted 17 oxen on our medicine-men, only to become worse. Now I have been here for a few days and can move all my limbs except my little finger. But the doctor says that will come right too, and I believe what he says, because he is a great doctor. All I had to pay so far were a few shillings. The white man is indeed the doctor of all doctors". (Schimlek, 1950, pp.80-81) By 1958, and as reflected in Aitken's call to avoid "the temptation when writing or speaking of medical work among Africans ... to

when writing or speaking of medical work among Africans ... to emphasize what I may call 'horror stories'" (Aitken, 1958, p.18), the words reportedly spoken by African patients came increasingly to reflect the routine of work done in ante-natal clinics, child welfare clinics and hospital outpatient departments. For instance, in Barker (1959) the reader was permitted to listen in on an exchange between the doctor and the husband of a patient who refused to let his wife remain in the hospital.

With an outward show of reasonableness Thomas Gumede arrived on the fifteenth day. 'About my wife, doctor.'

^{&#}x27;Yes?'

^{&#}x27;We have an important feast at home which I wish her to attend.'

^{&#}x27;When is that?' He mentioned a date a few days ahead. 'She's

not ready to go home yet, you know, ' I told him.

He countered: 'It is most important according to our custom that she should be there.' ...

I lost my temper first. 'For heaven's sake don't be a fool, man,' I raved, 'this is your child that I'm trying to save and you come here bleating about some abominable custom which you ought to have left behind with your skins when you put on trousers.'

Gumede looked pained. All the advantages were with him. 'I understand the doctor's view perfectly, but I'm afraid my wife must be at home for the feast.' (Barker, 1959, pp.145-146)

By the mid-1970s the last of the mission hospitals and dispensaries were brought under the umbrella of the state and turned into the components of a secular clinic and hospital network (Gelfand, 1984). With this secularisation, the remarkably stable discourse of missionary medicine, along with the loquacious African bodies that were its object and effect, vanished as abruptly as they had emerged some 120 years earlier.

Conclusion

The mid-nineteenth century emergence of moral sanitation marked a key moment in the transformation of the anatomy of power. Analyzed from a conventional perspective on power as a weapon to be seized and wielded by one group over another, its significance as a watershed between sovereignty and discipline is likely to be ignored in favour of an emphasis upon how this discourse misrepresented the 'truth' of African illness and the place of traditional medical beliefs in the social fabric. Such a stance reflects, however, an embedment in the history of the past and is flawed in two respects. First, no matter how exaggerated missionary descriptions of African evil and suffering may have been, they nonetheless spoke to a power

that for the first time allowed the body and beliefs of the African to emerge from below the threshold of description and so become the target of discipline as opposed to the brute force of sovereign power alone. Second, arguments that traditional African illness beliefs and medical practices are in fact not the evils that the missionaries claimed them to be only became possible from the mid-1970s onwards. For, as shown in Chapter 11 of this study, it was only then that a further mutation in the anatomy of power allowed for a medicine that instead of suppressing traditional healers sought to recognise their role in the social fabric as a constructive one, and to recruit them into the socio-medical enterprise.

This study now turns to a very different organ in the anatomy of power. This was the machinery of mining medicine, which in the shape of a vast industrial Panopticon spread an observing network of disciplinary surveillance throughout the sub-continent to create its workforce of migrant labourers as a closely monitored and strictly regimented army of individual bodies. In sharp contrast to the regime of moral sanitation with which it co-existed, this was a medicine not of loquacious bodies, revelations, and confessions, but of numbers and the mechanical medical examination of individual bodies, both dead and alive; a medicine not of a quest to 'civilize' but of a drive to make each individual a passive and docile object of industrial exploitation. Underlining these differences between mining and missionary medicine, and also between missionary medicine and the more general discourse of public health (see Chapters 8 and 9), the "civilized" bodies of missionary medicine were for these secular methodologies not part of the solution to African illness, but instead part of its cause. For as many secular doctors noted in their submissions to the 1914 Tuberculosis Commission:

In and around the townships and elsewhere where European influence is felt, large huts are built with little windows which is a good thing but the more civilized native affects European clothing and I think is more easily affected by cold: he ruins his teeth and digestion by eating biscuits and sweets and by drinking tea. The missions are largely responsible for this, I think. A raw native may be covered with dust, but the mission boy is too often covered by clothes saturated with decomposing sweat. (Stannus, cited in Union of South Africa, 1914, p.297)

1. Confirming the status of surgery as the medical missionary's technique of choice, Holland (1923, p.1) wrote:

What department of Medical Mission work is most effective? I would ... without the slightest hesitation reply 'surgery'. For there can be no doubt that among savage and uncivilized races surgery makes a far deeper impression than medicine. It is also more effective from a spectacular point of view

more effective from a spectacular point of view.

Similarly, a 1919 Editorial in Medical Missions at Home and Abroad chose to illustrate "God's providence in modern medical missions" by showing how ether, chloroform and antiseptics had "at once widened immensely the field in which safe operative surgery was possible. The whole body indeed became the surgeon's field" (Editorial, 1919a, p.270).

2. "Chaulmoogra Oil is their chief treatment. A line of men stands, each rubbing it into his neighbour's back, while they sing a native song. Then many have a dose of it injected, or others take it as a medicine; the nastier it is, the more good they expect from it" (Thompson, 1932, p.45).

CHAPTER 6

¹THE INDUSTRIAL PANOPTICON: MINING AND THE MEDICAL CONSTRUCTION OF MIGRANT AFRICAN LABOUR, 1900 - 1950

In Discipline and Punish (1977, pp.220-222) Foucault addressed the relationship between the eighteenth century rise of capitalism and the spread of discipline as a power that made it possible to supervise the massively expanded and densely concentrated workforce which emerged with this accumulation of capital. Observing that the disciplines - in the shape of time-tables, collective training, exercises, classifications, total surveillance and so forth - extracted from individual bodies the maximum of time and force while also making the multiplicity something more productive than the sum of its parts, he argued that these methods for administering accumulations of bodies cannot be separated from those that permitted the accumulation of capital.

It would not have been possible to solve the problem of the accumulation of men without the growth of an apparatus of production capable of both sustaining and using them; conversely, the techniques that made the cumulative multiplicity of men useful accelerated the accumulation of capital. (Foucault, 1977, p.221)

This dovetailing of accumulative technologies — one for capital and one for bodies — could doubtless be demonstrated in many labour intensive South African industries. It is, however, nowhere more clearly displayed than in the pervasiveness of medical micro-powers in the rise and expansion of South Africa's gold mining industry between 1900 and 1950. For, and as this chapter aims to demonstrate, the industry's crystallization around the "docile" and calculable bodies fabricated by the gaze of mining medicine epitomised the diagram of discipline inscribed in the Panopticon's abstract formula of a very real technology, that of the body and of individuals.

Indeed, such is the omnipresence of this Panoptical schema that since the late 1970s when there began to appear critical histories of the industry's labour practices (eg. Crush, 1992a,b; Crush, Jeeves & Yudelman, 1991; Marks & Andersson, 1988; Moodie, 1976; Packard, 1989 a,b), these studies themselves can be seen to have been interpolated in its reproduction, studiously ignoring the Foucaultian perspective on power in favour of repressionist marxist and humanist analyses that fabricate as their objects precisely the authentic African subjects they so earnestly desire to liberate. For instance, while recognising the importance of surveillance as a technique of social control, the papers by Crush (1992a,b) on surveillance and power in the South African gold mines draws upon the idea of the Panopticon – not, however, to show the productive effects of discipline, but rather to underline the gold mining industry's repressive and destructive capacity.

It is the aim of this chapter to present the Foucaultian alternative to these conventional perspectives, by analysing the role of mining medicine in fabricating the bodies of African mine workers as visible objects possessed of distinct attributes that provoked particular strategies for their surveillance and management in health and disease. For there is a great deal more to the power of this industrious medicine than that attributed to it by analysts who see only its sovereign component. Indeed, rather than concealing and repressing the authentic African body, it was precisely through its machinery of ceaseless surveillance that the African body as a target of repression came to exist at all. For the operation of sovereign power and discipline are not mutually exclusive and, at least in the context of mining medicine under review, interpenetrate each another to sustain what can truly be described as a quintessential regime of discipline and punishment.

The Heat Chamber as Punishment and Panopticon

In 1935 Dreosti (p.43) described "the experimental chambers", "heat tolerance test" and "technique" developed to assess the ability of African mine workers to withstand the high temperatures and humidity that prevailed underground in the City Deep Mine, and which induced in some instances a "hyper-pyrexial" type of "heat-stroke".

The native, usually of good physique, while working, and without any premonitory signs or symptoms, suddenly develops a condition of acute mental excitement or wild delirium. He shouts and rushes about blindly, struggling violently if any attempt is made to restrain him. He becomes a danger both to himself and to those who are trying to control him. The European miner in charge will report that the native was working quite normally and "suddenly went mad, requiring four or more men to control him in order to strap him on to the stretcher for transport" ... This condition of mental excitement is soon followed by muscular tremors going on to generalised muscular twitchings and often convulsions of an epileptiform type; coma supervenes and finally death may occur in the comatose condition. (Dreosti, 1937, p.32)

Aimed at modifying the African body through careful training so as to immunise the miner against such a "pathological reaction to heat" (Dreosti, 1937), the "experimental chambers" were lined with perforated pipes that released steam into them to create humidity, and by unperforated pipes that circulated steam to generate heat. Running the length of each chamber were two trays for rock, "the shovelling...of which is similar to the type of work on which most natives are employed underground where hot working conditions exist" (Dreosti, 1935, p.44). Two observation windows made visible the interior of the chambers to an observer stationed outside. During

the "heat tolerance test", Africans found to be medically fit and with normal temperatures were ordered to strip naked and each given a shovel. Under the supervision of a "boss boy" to mimic underground conditions and ensure that they worked constantly, they were placed in rows along each tray of rock, whereupon "each native shovels the rock to his neighbour until all the rock is accumulated at one end of the tray, and so on" (Dreosti, 1935, p.46). Situated outside the "experimental chamber", a mine medical officer would supervise the entire proceedings through the observation window, to make general notes on the behaviour of the Africans being tested, and be on hand to treat any special cases. After the first half hour of such work, the subjects were seated and their temperatures recorded a second time. After another half hour of work, their temperatures were recorded a third time. They then remained in a "cooling chamber" for a further hour, at the end of which their temperatures were taken a fourth time. According to their "heat tolerance" as revealed by this test, Africans would be allocated to different "acclimatization" groups, where for a number of days or weeks they would work in a "controlled" environment until further testing indicated they had developed sufficient "heat tolerance" to work underground.

Clearly, a great deal more occurred during this procedure than the creation of medical knowledge about how a miner's body responded to heat (eg Jokl, 1935). In addition to quite literally fabricating a "new" physiology, it can be read in at least two ways. One way of understanding the "heat tolerance test" is to view it as a ritual of dehumanization, an exercise in debasement aimed at demonstrating the power of the mining industry over its African subjects. Such an interpretation reflects the idea of sovereign power, and it is this notion which underlies conventional critiques of mining medicine. For example, commenting on the "heat tolerance test", a 1976 study concluded that the enforced nakedness and other privations seemed

"unnecessary, except as a way of initiating the miners into a subculture which is deprived of any values about human dignity" (Moodie, 1976, p.6).

But there is another way to view the "heat tolerance test", not only as a weapon of sovereign force, but also as an instrument of discipline. Like Bentham's design for an ideal prison, the "heat tolerance test" operated as a clinical Panopticon that produced the individuals and bodily attributes (in this instance, "heat tolerance") it observed through precisely the techniques of surveillance and clinical examination deployed to make visible and monitor the workings of their bodies. The very design of the "heat chamber" ensured that those examined could not see their examiner; the repeated measurements of temperature made each body its own control to individualise the subjects; and through photographs, tables and charts the attributes and capacities of the individuals thus produced were turned into information upon which calculations, comparisons and selections could be made. The "heat tolerance test" thus combined in a single technique the operation of discipline and the force of sovereign power to fabricate the individual and then subject him to some form of overt or covert punishment.

Turning now to the domains of anatomical pathology and epidemiology, the mine medical examination, and finally the design of the compound, we shall see how this underlying diagram of the Panopticon repeats itself throughout this regime of mining medicine that had as its object and effect the perpetually visible and constantly calculable body of the African miner.

Inventing an Economy of Human Bodies: Anatomical Pathology and Epidemiology

Rose (1988, p.184) writes that a prerequisite for managing an economy is to conceptualize a set of processes, entities and relationships as an economy that is amenable to management.

Analogously, the birth of the migrant labour population as a distinct economy of human bodies required the deployment of methods by which to transform the collective and individual bodies of Africans into a systematically organised domain of knowledge about how disease, deviance and "normality" circulated within it.

Thus, when Brodie and Rogers (1894) subjected the dead bodies of the African miners they inspected to anatomical dissection², they introduced the possibility of transforming the African labour force into an object of medical discipline by making visible the previously irrelevant inner structures and organisation of the African body. For in so doing they confirmed the localization of disease to the inner confines of the body, since disease was constituted in anatomical pathology and the medical task thus became the identification and treatment of that discrete lesion. Their work, however, predatet by some 20 years the widespread and systematic application of anatomical dissection to the African mine worker, during which time the less penetrating but equally powerful technique of epidemiology was applied to invent the collective contours and boundaries of the migrant labour population.

Prior to formation of the Witwatersrand Native Labour
Association (WNLA) in 1900, the recruitment of mine labourers was a haphazard affair, left to "independent individuals" (Irvine & Macauley, 1905, p.344), who more often than not "sent all but the most obviously sick and lame, including many recruits only marginally fit for mine labour" (Packard, 1989, p.69; TAD, SNA 162/02). Similarly, there was no monitoring and documentation of

disease and deaths among African mine workers, a Chamber of Mines deputation to the Lieutenant Governor reporting in 1904 that before September 1902 "it was impossible to tell what the death rate was. No one knew how many died - no records were kept" (TAD, FLD 15/47/57). As long as they remained invisible as objects of medical knowledge and intervention in this coercive system of sovereign exploitation, migrant labourers would continue to represent as much a risk to the industry as a benefit, high levels of disease and death both directly and indirectly reducing its efficiency - directly through the loss of labour, and indirectly due to the resistance to recruitment this engendered among potential recruits. While this was undoubtedly recognised by the mining houses themselves, it was only under pressure from the state that in 1903 (Cartwright, 1971, p.17) there commenced application of the indirect, aggregating technique of epidemiology.

The first statistical profile of disease and death by territory of origin among Africans employed on the Transvaal gold mines appeared in the minutes and evidence of the 1904 Transvaal Labour Commission (The Transvaal, 1904, pp.75-80). This transformed what was previously a confused and perplexing mass of bodies into a stable and neatly ordered statistical community, to form a core of evidence around which the Commission drew a qualitative picture of the "character of the natives of (the) ... districts" (p.2) from which mine workers were recruited³. In the same year, the Chamber of Mines took the first step toward making the recording and reporting of death and disease a constant feature of all mine hospitals, recommending the adoption of a uniform set of procedures, listing the information to be obtained, and defining the form in which it should be reported at monthly intervals (Transvaal Chamber of Mines, 1903).

This simple procedure of epidemiological mapping turned the otherwise negative fact of deaths and disease into an opportunity for the surveillance and monitoring of not only illness, but also the capacity of "normal" Africans in the regions from which miners were drawn to withstand disease. With repeated application, it could render visible changes (or the absence thereof) in how deaths and disease were distributed among Africans employed on the mines, thereby isolating for closer investigation and monitoring those particularly problematic mines and sectors of the migrant labour population. Why were the death rates of Mozambique recruits from north of Latitude 22° south excessive, while among those from south of this line they were acceptable? However, while it created the possibility of asking such questions, epidemiological mapping could not provide the answers as to what underlay the patterns of disease and death created by these statistical techniques.

By 1910, pathological anatomy was increasingly being applied to answer the questions raised by epidemiology concerning the disease susceptibility of African mine workers, and in particular those amongst whom the highest death rates clustered. As an introduction to their comparative anatomical and anthropological investigation of "Bantu natives from Portuguese East Africa" Maynard and Turner (1914) evaluated the potential as migrant labourers of nine "tribes", each of which was illustrated by drawings of "native faces, ... chosen as typical of the race they represent" (p.129). The "Shangaan", "an uncircumcised race of superior type to their neighbours" (p.125) and the "Agawa", "the predominant race, both mentally and physically" (p.127), distinguished themselves from the "Parapatos", "a tall but otherwise not physically a fine race, and on the Rand show little resistance to disease" (p.129). While acknowledging that "it is not so easy to determine the tribe of a native when seen in the mortuary after death" (Maynard & Turner,

1914, p.125), their paper nonetheless proceeded to demonstrate the interaction between "tribal" classification; anatomical variables such as "skull thickness", the weight of organs (spleen, cerebrum, heart), height and full body weight; and exposure to mining.

The native with the heavier brain and shorter stature conforms more closely to the European ratio of cerebrum weight to height, and he may therefore represent a higher type of development than the mean of his race, and thus be less stable, also less resistant to abnormal conditions. (Maynard & Turner, 1914, p.140)

Other papers, such as Maynard's (1913) enquiry into the aetiology and manifestations of pneumonia among "tropical natives", were more circumspect about the utility of aggregating Africans by "tribe", preferring instead to do so by geographical district, since "in recent years so much intermarriage has taken place that, except on very broad lines, tribal distinctions are not maintained" (Maynard, 1913, p.2). However, irrespective of whether aggregation was by "tribe" or district, these studies highlight the point also made by Vaughan (1991, p.11), that early colonial medical discourse constructed Africans first and foremost as members of groups, "and it was these groups, rather than individuals, who were said to possess distinctive psychologies and bodies". Further, it was from the physiological and anatomical make up of these composite bodies that differences in death rates emanated, an editorial of 1913 observing that "no one factor can explain them, and there must be a more or less complicated interplay of various factors of race and environment" (Editorial, 1913, p.254). Thus, by mapping their geographical distribution, the migrant labour population was partitioned into aggregates of differing disease susceptibility, and an anatomical topography by which to guide the practices of recruiting superimposed upon the geographical face of the subcontinent.

By the mid-1920s this early emphasis upon aggregation began to give way to a more differentiating and individualizing gaze. This was conceptually articulated in the "virgin soil theory" of tuberculosis (Cummins, 1929), which held that susceptibility to the disease was determined not by evolutionary forces, but rather by the body's exposure to the conditions of industrial or "civilized" life. Hence, as such exposure was prolonged, so immunity should increase, and it was possible (although unlikely) for an individual to move from immunity to susceptibility in the space of years. It was this assumption that shaped the work of the Tuberculosis Research Committee (hereafter TBRC) between 1925 and 1932. Using the most sophisticated methodologies available, it was widely regarded at the time of its release both locally and internationally as the most exhaustive enquiry into tuberculosis among Africans, and African miners in particular, yet produced. In determining practices of prevention until the late 1930s, the Committee's findings would also be seen by writers from the 1950s onward (eq Dormer, 1952) as central to retarding efforts at preventing the spread of tuberculosis on the sub-continent. However, to analyze only these destructive consequences conceals its productive power. As an instrument of discipline, its surveys, tuberculin tests, radiographic examinations and pathological investigations impelled the gaze of mining medicine into all but the most distant corners of the migrant labour empire, and the deepest recesses of the African body. Simultaneously, these fabricated the individual body as a discrete and visible entity into which disease was inscribed, and the social as a space traversed by surveillance and suffused with power.

Pathological anatomy (Fischer, 1929, 1932) and radiographic pathology were prominent among the Committee's methods, and photographs of lungs carefully labelled with the age, "tribe" and mine number of the deceased illustrated its report. Through repeated application these techniques first fabricated and then confirmed the individual body and its interior of organs and organ systems as an object of social consciousness, to be scrutinized for difference, and then classified according to what its structure revealed about how it functioned in life. It was, however, in the capacity of this medicine to erase all signs of the "productive relationship" between method and object that its ability to create the individual bodies and racial differences of disciplinary power resided. Hence, the Committee could write that conclusions as to racial differences in anatomic structure and physiology - such as differences in lymph nodes (TBRC, 1932, p.178) and movement of the chest walls (TBRC, 1932, p.309) - "were gradually forced on us during the course of investigation" (TBRC, 1932, p.178). This medical gaze was reluctant, even resistant to perceiving such difference, and it was not the method that constructed its object, but rather the object that imposed itself upon the medical gaze:

This want of resistance to tuberculosis is ... a biological character of the African Native which can only disappear with the lapse of time and during many successive generations of industrial contact. This biological lack of resistance exists quite apart from any risk incurred in the mining industry or any other industries. (TBRC, 1932, p.254)

Where these techniques isolated the body and made visible its interior as sites for the production of disease, a complementary set of surveillance devices radiated out and into the spaces between bodies to create the gaps between them as a space monitored by surveillance and traversed by power. Who has the miner seen and

slept with, how many of his family or friends are infected, what customs inhibit or promote the spread of infection from body to body? Thus, counterpointing the procedures of pathological anatomy that fabricated the individual body were a very different set of techniques: Tuberculin tests, random examinations of sputum, and household surveys in the districts from which African miners were drawn and to which they were repatriated when found to be diseased. Through the device of perceiving bacterial exchange between the sick and the well as the means by which tuberculosis and other diseases were spread, these procedures comprised an extended medical gaze that moved surveillance from the inside of the body to its exterior, and into the spaces of social contact between the sick and the well. This "Dispensary Gaze" thus served to "establish the reality of the social by identifying diseases of social space, of contacts and relationships" (Armstrong, 1983, p.11), and Lyle Cummins could in 1927 note that the repatriation of tuberculous Africans to the native territories "is calculated to disseminate infection and depreciate health" (CMA 2308/1544).

Committee's report, the "Dispensary Gaze" brought not only the body of the individual miner, but also the history of his contacts and his family into sharp resolution within the industrial panopticon of mining medicine. "The third line of investigation was the tracing of Natives repatriated from the Rand with tuberculosis. Those who could be seen were examined and also as many contacts in their families as possible" (TBRC, 1932, p.234) - so read the methodological introduction to a section describing the Committee's "tuberculosis survey of the native territories". One example of the many available serves to illustrate the high level of visibility achieved by this method.

Disc 5499, Tom Ngqukumbana, aged 43 of St. John's district, a Pondo. Married, three wives and three children, all healthy. Repatriated on 29th July, 1926. Examined on 24th September, 1928. This man appeared well-to-do, and when seen he was selling his crop of mealies. He is able to walk about and carries on his own farming operations. He had no cough and no sputum, and his general condition was very good. (TBRC, 1932, p.238)

The "Dispensary Gaze" served not only to fabricate the social networks of individual miners in the course of surveying them and mapping the path of disease, but also the "cultural" practices and "customs" that shaped the patterns of exchange and everyday life within these networks. Contact with European "civilization" was viewed as among the more central factors determining the spread of infection from person to person, as it eroded traditional values and practices (such as farming, hunting, dietary habits and ways of dressing) that in the beliefs of the mine doctors would have lessened the risks of infection were they to have remained intact. As noted in a progress report on the tuberculosis survey of the Ciskeian and Transkeian territories:

Tuberculosis is stated to be on the increase among the natives, and the reason for this increase is that the natives are discarding the red blanket. If this is taken symbolically, it is probably true, for the natives are discarding many of their old customs which acted as a safeguard. (CMA 2308/1544).

Hence, as this machinery of pathological anatomy fabricated the biology of the individual miner as insufficiently evolved to withstand the assault of the mining industry and disease, so too the body of the social, which through the device of the survey was invented as having yet to "develop" to a level that could sustain the individual "when a life of monotonous leisure is suddenly

exchanged for one of strenuous and unfamiliar exertion" (TBRC, 1932, p.264).

From epidemiology, through the phase of the composite body and into the space of disciplinary individualisation, racial differentiation and the "Dispensary Gaze". In the space of 30 years the migrant labour population as an object of medical knowledge was transformed from an inchoate mass of bodies into a closely supervised army of individuals, the device of infectious disease serving to map and constantly monitor their movement through social and geographical space. These procedures were not, however, designed to identify diseased and otherwise deviant individuals (such as those who were too short, too thin, deformed in some way, and so on) at the point of recruitment. To do so required a human sorting house, a set of disciplines able to inspect both the interior and the exterior of the living body, and, by comparing individuals within a group, establish a norm to isolate those who failed to measure up to it.

Debasement and Discipline: The Mine Medical Examination

Among the practices by which mining medicine constructs its objects, there is perhaps none more central to the process than that of the initial and periodical medical examination. Until the 1940s its primary purpose of selecting and screening individual miners for illness and infirmity was linked into the repressive strategies of confinement by which diseased Africans were banished to the "native territories". For instance, the Miners' Pthisis Act of 1916 stated that at all points where Africans entered urban and industrial areas from the "labour districts" there be instituted medical examination procedures to "not only weed out all weakly natives, but ... sufficiently stringent to detect any native suffering from active tuberculosis so as to prevent him leaving his district for the Rand"

(Union of South Africa, 1916, p.142). Within the organisation of each mine, it was the initial medical examination that determined the tripartite division between bodies immediately acceptable to the mining industry, "detentions" who were retained for further scrutiny and "fattening up", and "rejects", who were "sent home" (Maynard, 1913, p.3). From 1916 onwards, the introduction of periodic weighing wove the examination into a miner's career as a constantly repeated ritual⁴, and from 1925 onwards all miners were subject to examination at the end of their contracts (TBRC, 1932, p.110). A miner's work status was fixed by the examination, and could only be changed by further examination. In short, the mine medical examination has and continues to constitute the cornerstone by which the individual miner is fixed in organisational space.

This level of analysis, however, accords a power to the examination only as great as that of the authorities who conduct and control the procedure. It speaks to a "clinical power (that) can be likened to sovereignty, the doctor equated with the king in the control exercised over bodies" (Armstrong, 1987, p.69)⁵. As we shall see below, such interpretations of the examination as a strategy of sovereign power may be of value in understanding and challenging some of the more debasing elements of its earliest incarnations. But what of the modern examination, or even that of the mid-1950s, where in some recruiting agencies veterinary tactics began to give way to more humane and discrete procedures? Did the arrival of these mean that the body was no longer in the grip of power, that somehow it was "free"? To answer these questions requires descending to the immediate point at which the techniques of the examiner play upon the examined, to that capillary space of power where discipline fabricates its object, the individual.

In 1906 Dr George Turner, medical officer of the WNLA, was sent to investigate the extent of pulmonary tuberculosis and "kindred diseases ... in the kraals south of latitude 22°", and report on matters which might generally be useful in dealing with the health of East Coast Natives on the mines (Turner, 1907, foreword). Having used a camera, a weighing scale and a measuring tape, he produced what was perhaps the first set of anthropometric and somatometric standards by which to select individual African mine workers. Reflecting the early fabrication of composite bodies, his report recorded in minute detail the bodies of individual Africans as "specimens" of the larger "tribal" units to which they belonged, thereby extending the Panoptical gaze of mining medicine from the aggregate to the individual and from the pathological to the "normal". An instrument for the relay of disciplinary power, his report operated to configure the subjectivities of its readers mine medical men and recruiting agents charged with selecting and classifying migrant labourers - whose scrutiny of the photographically regimented bodies would enhance their ability to calculate, compare and discriminate.

The following illustrations ... permit one to judge of the physique of the East Coast native as compared with other classes of recruit. Picked specimens of each type of boy have been taken. (Turner, 1907, p.78)

Production of these images and the accompanying tables of anthropometric measurements required considerable manipulation and invasion of the Africans' bodies. After being weighed, their heights noted, and chest measurements at forced inspiration and expiration taken, they were made to strip naked and adopt a uniform posture against a portable white screen. The regulation imposed upon their bodies rendered the pictures in relation to each another isomorphic to the perfect comparability of the accompanying numeric tabulations

164

of anthropometric indices. These were mathematically combined into an equation that supplied a fixed standard of measurement for recruiters and medical examiners to accurately compare "kaffirs of different tribes" and "individual boys and gangs of boys" (Turner, 1907, p.77). This trained the medical gaze toward greater "objectivity" for:

I would warn the observer not to be deceived by the black colour of the skin, which usually leads people to overestimate the measurements, and to infer the subject of observation is a much finer specimen of humanity than he really is. (Turner, cited in TBRC, 1932, p.302)

Comments in the text and other photographs underlined the violence of this gaze, which debased and primitivised the human objects that were its effects. As well as constructing otherwise elusive anthropometric and cultural differences between "tribes"6, this ceaselessly confirmed the gulf between "civilized" European and "barbarous" African. A sequence of eight pictures inspected the open mouths of men whose teeth have been filed to sharp points, the accompanying text and its elaboration in a 1911 article in the Transvaal Medical Journal (Turner, 1911) suggesting that this was evidence for their past cannibalistic tendencies (pointed are better than straight teeth for tearing human flesh). Eighteen images of cicastrated torsos offered corporeal confirmation of their subjects' pagan souls, and depictions of albinism, hermaphroditism, dwarfism and "other deformities" were used to suggest the teratological potential of these atavistic races (Turner, 1907, p.70).

Turner's report somewhat dramatically suggested how early mine doctors perceived the African bodies that were the objects and effects of their corporal investigations. The Panoptical lay out of the photographs it contained - four to a page arranged in a grid so as to permit comparison of the bodies depicted - also reflected how

the examination itself was conducted in the immediate space of interaction between the observing doctor and the recruits who were observed. Typically, from the early 1900s to the 1970s, the examination of recruits would commence with their being "paraded" and inspected in "batches". Not only was efficiency thereby enhanced, but in so doing the observer could at once establish a norm for each group and thereby isolate those individuals who failed to measure up to it. Because the stationary or walking body might conceal a certain lack of agility or physical deformity, the "parade" would also include a regimen of physical exercises. Thus, a 1923 examination schedule (CMA 2325/713) listed "bodily defects" that "are definite causes for rejection" (p.5) - such as "weak chest"; "flabby muscles and loose skin"; "weight under 105 pounds, unless under five feet in height" - and set out a plan of the physical procedures to be followed.

Line up all the natives entirely stripped (they must not be allowed merely to drop their trousers and retain them about their ankles). Stand them in line about 20 feet away from the medical examiner. Make each boy walk towards the examiner, observing his gait and whether he is lame etc. When about five feet from the examiner cause him to rise on tip-toe, then squat, then rise again, then extend both arms above his head, extend the arms at right angles to the body laterally, then forward, then flex the elbow joints. When in this position cause him to clench and open his hands, and then rotate each arm parallel to the long axis of the body. Turn him around and look at his spine ... Ask the native a simple question in an ordinary voice to ascertain whether he is deaf. Look at his ears, his gums and teeth. Cover each eye separately, and ask him to count the fingers of your hand to test for blindness. Look at the skin, noting the presence of any large scars or

varicose veins, or herniae, or flabbiness of muscles or skin. Now examine heart and lungs. (CMA, Gold Producer's Committee, Circular 7/23, p.7; Native Recruiting Corporation Ltd, 1928, pp.7-8)

Aimed ostensibly at inducing systematic contortions of the body so as to externalise the internal presence of disease or infirmity, the surfeit of instructions and responses entailed in this procedure constituted it also as a form of "dressage", where the will of the examiners must subdue that of the Africans being examined.

In the course of examining the chest during such inspections, and with the effect of quite literally confirming the body being examined as a container of disease, some doctors made use of "a screen to prevent the boys breathing in one's face while one is examining them" (Stoney, 1923, p.4). The screen could be a sheet of zinc, the back of a paraffin tin, or a chart-board, and "one got a native attendant to hold it in front of the patient one was examining". For some doctors, this procedure gave those examined more confidence to breathe freely, or else enabled stethoscopy by keeping the sounds of exaggerated breathing from the stethoscope; others thought that it interfered with the examination, as "some of them (Africans) ... seemed to have a sort of idea it was used for some express purpose other than what the medical man used it for" (Stoney, 1923, p.4). It was surely to such suspicion and resistance that Fanon referred when he described the reactions of the colonised on a "visit to the doctor":

The doctor rather quickly gave up hope of obtaining information from the colonized patient and fell back on the clinical examination, thinking that the body would be more eloquent. But the body proved to be equally rigid. The muscles were contracted. There was no relaxing. (Fanon, 1978, p.234)

This same rigidity of resistance through which the body contorted itself against the play of the doctor's gaze reappeared in materials documenting the examination procedure applied in 1951 at the WNLA's compound hospital in Johannesburg (CMA 1898/3642). Following deverminization of the body and clothing:

... the recruits parade naked and in daylight carrying their medical history cards completely filled in. They are then grouped according to how they were recruited; ... and again according to good physique, poor physique and poor condition". (Skaife, 1925, p.2)

This device of multiple groupings ensured that not only could a visual norm be establish by which to select individuals, but also that the parade could itself function as a means of placing under surveillance the standards used by recruiting agencies in various districts. Thereafter, "the Natives are drafted in batches to the examination rooms" (TBRC, 1932, p.84) where they underwent a procedure designed quite literally to bring their breathing patterns into conformity with that of the "European chest" for which the techniques of auscultation and stethoscopy were designed. Because "raw natives are exceedingly stupid and do not try to expand the chest when observations are being taken" (TBRC, 1932, p.309), or else, in the more charitable views of others, were "very nervous and apprehensive", training in "how to breathe deeply" (TBRC, 1932, p.84) was an essential precursor to auscultation. Their resistant breathing patterns reconfigured to permit accurate evaluation of the state of their lungs, the recruits were then lined up, naked, in rows before the medical examiners, and their lungs examined from the anterior: "the native standing with his hands clasped behind his back. He is then made to turn around, and, with his arms folded in front, the posterior aspect of the lungs is examined" (Skaife, 1925, pp.2-3). "A (chalk) mark on the chest" (TBRC, 1932, p.84) on

detection of any abnormality coded those bodies requiring further investigation, following which x-rays and inspection of "the limbs, eyes and glands, (and examination of the genitalia for) ... signs of venereal disease" (TBRC, 1932, p.84). Finally, with fingerprinting and the allocation of passes, the objectifying and regularising gaze of the medical examination converged to inscribe the individualised body of each mine worker in the bureaucratic surveillance apparatus of the mining industry and the state.

Beyond the level of bodily resistance incited by these veterinary tactics of examination, there are some records to show that they provoked more direct opposition on the part of the mine workers. As early as 1909, the Government Native Labour Bureau temporarily suspended the initial examination of mine workers in a fully nude condition. Following complaints from some of the "chiefs" in the districts from which the miners were recruited, it was feared that it may have had "a prejudicial effect on recruiting due to some of the natives disliking this mode of examination" (TAD, GNLB 2910). In 1957 (Martiny, personal communication), also as a consequence of the disruptive effect it had among the miners, the initial examination procedure at WNLA's central compound depot was adjusted to do away with enforced nudity and examination in batches. Instead, miners were examined in individual cubicles, walled on three sides but open to the front, this Panoptical arrangement allowing the doctor to simultaneously view each recruit but not the recruits to see one another. Individuals entered the cubicles clad in a pair of trousers, which they had to remove only when the doctor examined them. Prior to undergoing the procedure they were shown a filmed depiction of it, in the hope that this would lessen their anxiety and reduce the uncertainty generated by the procedure (Martiny, personal communication). Although by 1976 (Moodie, 1976) not all mining houses had made similar changes to the format of the initial

examination, the trend was clearly away from its construction as a humiliating and debasing ceremony of sovereign power toward its conduct along the more subjectifying lines previously reserved only for white miners.

Rightly so, it has been the excess of brutality and violence inflicted upon the African body in the name of sanitary segregation and decidedly unnatural selection of the fittest that has incited resistance not only upon the part of those subject to these procedures of mining medicine, but also among social scientists demonstrating the cruelty and oppression of colonial medical practices. However, it is the implicit notion of sovereign power upon which such resistance rests that both creates and restricts its value as a tool by which to understand the interplay of power and the body in South Africa's mining industry. Doubtless, the prominent component of punishing and humiliating practices in the early examination procedures described above met with some success in defining the roles of dominator and dominated by demonstrating the power of the former to make the latter suffer. Also certain is that resistance to such tactics forced their abandonment, to leave only a humane and clinically sanitized domain in which the doctor, impersonal and distant behind a battery of electronic devices for monitoring the body and looking inside it, was scarcely visible as, for instance, during the procedure of mass miniature radiography, which Collender described in 1945.

Two rotating anode tubes face two upright stands, while two patients stand side by side. A smooth mechanism moves the camera-cum-screen from one patient to the other. Two high speed lifts are provided, having nine height adjustments, so that patients from 5ft. to 6ft. 3in. can be accommodated. The patients are lined up 70 at a time, tallest on the right, shortest on the left ... As the two patients step on to their

respective height adjusted platforms, their numbers are placed against permanent magnets within the top left of the screen areas ... Next, the tube opposite the first patient is excited; next, by pressing a button, three operations take place. First, the spool in the camera is wound to position; second, the high tension is switched from the first to second tube position, and third, the camera-cum-screen is moved to the second position and then the second tube is excited. Both men then step down and are replaced by two more men. (Collender, 1945, p.37)

But, no matter how impersonal, whenever it occurs the medical examination always renders those it isolates for inspection forever subject to the knowledge that they have been observed, and to the knowledge that they cannot know what about them has been seen, heard and recorded, or how such information may be used. It is this face of the medical examination as the silent induction of its subjects into the domain of ceaseless surveillance that remains hidden by those who would resist its powers over the body by challenging whatever components of repressive force it may be blended with. Further, it is precisely such resistance that intensifies the power of the medical gaze to individuate and discipline the subjects it constructs. By provoking the development of increasingly inconspicuous, impersonal procedures and devices for investigating and recording the properties of the body, so the gap between the knowledge gained of the individual and what the individual knows to have been gained is ever widened: "disciplinary power ... provokes and works through resistance" (Armstrong, 1987, pp.68-69).

This paradoxical power of discipline to increase itself through the resistance it provokes is evident not only in the changing face of the mine medical examination, but also in the changing patterns of control exerted over miners through the design

of the compound.

A Therapeutic Operator: Compound Design and Disease Control

Stones can make people docile and knowable. The old simple schema of confinement and enclosure - thick walls, a heavy gate that prevents entering or leaving - began to be replaced by the calculation of openings, of filled and empty spaces, passages and transparencies. (Foucault, 1977, p.172)

Because they hold both resources and the capacity to manipulate patterns of production, reproduction and social interaction, buildings are literally filled with power. This is true of all buildings, but particularly apparent among those erected as instruments of control over the inmates of "total institutions" - like the asylum and the mine compound. In their design, such buildings are keyed to the medically fabricated nature of their inhabitants and the mechanisms by which diseases or disruption are seen to spread between them. As the physical space into which bodies are placed shapes their behaviours and movements, so the design of such spaces takes into account the attributes of the bodies they must contain and the social spaces they must police. It is to an examination of this interplay between the built environment and the changing shape of the individual and disease produced by the gaze of mining medicine that the final section of this chapter turns.

In the pre-bacterial era of contagionist theory (for this discourse of mining medicine from around 1880 to 1920), a high level of carbon dioxide in the air was the medium through which disease was spread between bodies. Consequently, the chief architectural weapon in the fight against disease was the manipulation of cubic air space and the provision within huts of forced ventilation. Under the Coloured Labour Ordinance of 1905 (The Transvaal, 1905), this belief gave rise to the "Rand Mines Type of Hut" in which the

sleeping arrangements for occupants were "shelves and nothing between the shelves" (Orenstein, 1922, p.3). At either end of the huts were large ventilators producing cold draughts of air that prevented the build-up of dangerous levels of carbon dioxide (Pearson & Mouchet, 1923, p.31). Through the early twentieth century, the arrangement of these huts in the compound copied the design of Kimberley's closed compounds, which were first introduced in 1885 (Crush, 1992a, p.2). The huts were distributed around the interior walls of a large open square. The only access to them was by doors opening inwards onto the square, and their rear walls were also those of the enclosing perimeter. At the centre of the compound square were sometimes the washrooms and a kitchen. Entrance to the compound itself was by a single entrance gate, alongside which was the mine manager's office. With this design, the manager could survey from his office the entire square, monitor workers' movements into and out of their rooms, and control their movements and that of visitors into and out of the compound (see Crush, 1992a, p.5; Pearson & Mouchet, 1923).

It was not until the early 1920s that pre-bacterial theories of contagion gave way to the knowledge that "infectious diseases are either transmitted by immediate contact or by indirect contact" (Orenstein, 1922, p.3). It was precisely this knowledge and its perceptual analogue in the "Dispensary Gaze", that realised the previously latent disease prevention potential embedded in compound arrangements that maximised the balance between surveillance possibilities and physical techniques of separation.

The great anti-hygienic factor in compounds is, of course, the aggregation of a large number of people under one roof ...

Something much better must be provided to counteract the effect of this bringing together of thousands of people from various parts of the country and from various tribes and

races, of different susceptibilities to disease. (Orenstein, 1922, p.2)

In this same address on "compound sanitation" to the Transvaal Mine Medical Officers' Association, Orenstein roundly criticised the recommendations of the Gorgas Report (Gorgas, 1914) that the density with which Africans were quartered be reduced, and that family housing replace the barrack system which divorced labourers from their families for the duration of their contracts on the mines. Instead, Orenstein argued for a mechanism by which to separate individuals and maintain a high number of occupants per compound hut.

It is not necessary to separate people by so many yards of air space - the same can be achieved by introducing some mechanical obstruction to the projection of bacteria from the nose, throat, or mouth ... (This) can be achieved by ... simply interposing some isolating mechanical device during the hours of sleep when they may, and do, come in close proximity. (Orenstein, 1922, p.3)

This "device" was simply a pair of boards, as long as the body and somewhat wider than it. Placed on either side of the bed, they created "a sort of cubicle principle" (Orenstein, 1922, p.6), a box open to the top and where the feet lay, just large enough to contain a single supine body. It would be hard to find a better example of the disciplinary principle of partitioning by which space is "divided into as many sections as there are bodies ... to be distributed" so that "each individual has his own place, and each place its individual" (Foucault, 1977, p.143). By the 1930s (Gordon, 1935), most mines had complied with Orenstein's prescription to partition sleeping arrangements, thus giving concrete expression to the otherwise abstract power by which the medical gaze individualised and regimented its subjects.

Complementing this individualizing system of prophylactic isolation within the dormitories, compound residential space was also partitioned along ethnic lines, those of similar ethnic background tending to room together (Crush, 1992a, p.7). This not only precluded the dangerous intermingling of Africans of differing disease susceptibility, but also minimized the traffic across social space of infection, since it confirmed the fact that attitudes toward personal cleanliness also clustered according to the "tribal" background of a worker.

The Shangaan has a mania for washing himself and keeps his body beautifully clean and oiled, the Zulu and Swazi are clean personally, the Xosa is indifferent and usually dirty, while the Pondo is one of the dirtiest of mankind and often does not wash himself for six or nine months. (CMA, C2309 F1806)

So, within the dormitories where the mine workers slept, partitioning by person and ethnicity was the driving principle uniting medical knowledge with compound design. Each and every space and surface was calculated to minimize contact between individual bodies, like the latrines which were:

Of a special design ... and so constructed that it is almost impossible for a native to squat on the seat. The flush is automatic, (and) ... 5 gallons per seat is delivered at required intervals, usually twenty minutes when the natives are not at work underground. (Gordon, 1935, p.9)

Beyond the dormitories, both underground and in the open spaces of the compound (the latter being so designed as to allow no less than "30 square feet per boy ... for recreation, rest and games" [Gordon, 1935, p.8]), separation gave way to surveillance. Here the concerns of mine doctors fused with those of the mine managers in seeking to maximize the transparency that compound arrangements afforded in relation to the behaviour of their inmates.

Published in 1923, and drawing heavily upon the experience of South African mine doctors, Pearson and Mouchet's *Practical Hygiene of Native Compounds in Tropical Africa* leant strong emphasis to surveillance in its discussion of compound arrangements.

The general features which we should seek to embody in any arrangement are those which conduce to easy supervision and maximum accessibility to all installations combined with as great a degree of compactness as possible, in view of the necessity for avoiding too great proximity between natives. (Pearson & Mouchet, 1923, p.23)

As discussed earlier, the importance of surveillance as a technique of disease control resided in construction by the "Dispensary Gaze" of the social as a space of danger through which disease-causing bacteria were constantly passing from one individual to another. Spitting was perhaps the most conspicuous habit to be isolated as a mechanism of disease transmission between bodies, and in 1925 tuberculosis prevention campaigns were "centred against the carrier and distributor of the infection: for his sputum is the cause of all the trouble" (CMA 2309/1777). To police the occurrence of such behaviour required that all mine workers be subject to constant observation and the knowledge that whoever "expectorated" would be seen and punished. This could be achieved through a system of "sputum espionage" wherein:

Whenever a native, or indeed anyone, is seen to expectorate anything more than saliva, a smear should be made and sent to the Institute with the name of the expectorator attached to it; the Institute would report to the Mine Medical Officer the result of the examination. (CMA 2309/1777, p.13)

While the mobile and ranging characteristics of the "Dispensary Gaze" meant it could be deployed independently of any particular spatial configuration in respect of compound arrangements, the

efficiency of this gaze was enhanced where such arrangements facilitated supervision and hierarchical observation. Noting this, Pearson and Mouchet (1923) paid special attention to the compound arrangement deployed at the City Deep mine on the Rand.

The dwelling-huts are erected in long lines which radiate fanwise from a centre at which the compound offices are situated. The plan is devised to give maximum ease of supervision by the compound manager, who can survey the whole, or almost the whole, of his compound area whilst sitting at his office window. (Pearson & Mouchet, 1923, p.26)

At the time of writing in 1923, this "fan compound" was the only example of its kind, and as Crush (1992a, p.6) has also noted it would be difficult to find a more precise realisation in compound architecture of Bentham's panoptical design for the maximisation of surveillance. In addition to affording visibility, the "fan compound" also overcame the limitation on building expansion imposed by the closed square format, since it permitted the addition of extra huts along each spoke of the wheel "without sacrificing the possibility of instant surveillance from the compound manager's office" (Crush, 1992a, p.6). Thus, coinciding with the expansionist phase of the mining industry in the 1930s, the Panoptical compound design became, from the late 1940s through to the 1970s, "the industry standard" (Crush, 1992a, p.6).

Conclusion

In each of the domains of mining medicine that this chapter has examined, clear changes can be discerned in the medical discourse by which African mine workers were constructed and controlled over the first half of the twentieth century. By briefly extending the time frame into the 1990s, we can see how the techniques of anatomy no longer fabricate racially distinct bodies,

but instead discern individual differences in the internal structure and organisation of bodies. The concept of "susceptibility" has been displaced by the ideas of deprivation, poverty and exploitation in explaining the incidence of tuberculosis (eg Packard, 1989), and in place of the earlier "Dispensary Gaze" by which the space of culture was fabricated as a determinant of disease exposure, there now stand open-ended interviews and attitude surveys (Steinberg, 1993). Such techniques work not through the eye and observation, but rather through the ear and hearing, to constitute their respondents not as the mute and passive objects of the past, but as the subjectified authors of their own attributes and identities, whose most intimate secrets concerning sexuality and personal sanitation are entered into the space of surveillance and the design of disease prevention programmes.

The examination, both initial and periodical, remains a key component in the machinery by which the bodies of individual miners are graded, allocated and monitored. Along with the increasingly sophisticated and impersonal manner in which the examination is conducted, so has there crystallized an increasingly subtle and nuanced discourse around the possibility that individual miners may consciously or unconsciously manipulate or resist the examination, in the shape of psychometric and psychiatric scales and interviews designed to test for somatisation, malingering, or deliberate symptom minimisation (Personal communication, Drs GK Sluis-Cremer and L Eriksson).

Complementing these medical procedures for the fabrication of a more autonomous, subjectified and therefore "whole" individual, are the changes that have occurred in the design and layout of the mine and mine compound. Since the mid-1970s, and in the face of an upsurge of worker protest on the mines (Crush, 1992b, p.832), mine compounds started to be known instead as "mine villages". In these,

the stark and angular square or radial arrangements of the compound that broadcast to those observed the fact of their being subject to constant surveillance were replaced by interior environments that create a sense of openness, with park-like surrounds and less bleak living quarters (Crush 1992b, p.833). But in them, a system of surveillance "without windows, towers, walls or quards" (Poster, 1990, p.93), these being replaced by the computer, the bar code, and the swipe card, through which it is possible to constantly monitor the movement and location of every worker, both above and below ground (Crush, 1992b) 10. All of these developments point clearly to a decline in the importance of sovereign power as a means of achieving control over the individual and social body of the mine worker. But, at the same time, every one of them represents a conscious attempt to increase the intensity, intimacy and invisibility of the monitoring gaze by which disciplinary power articulates itself upon the individual and pervades the social.

- 1. An early version of this chapter was read to the *Health and Empire Seminar* of the Institute for Commonwealth Studies in London on June 5, 1994, and a further version is 'in press' with *Social Science and Medicine*.
- 2. Brodie and Rogers' 1894 paper on "acute specific rhinitis" appears to be one of the first local instances involving the application to Africans of the technique of pathological anatomy. Attempting to explain the relatively sudden onset of death (when compared to Europeans with the same disease), in the African mine workers they examined, they concluded that: "the brain of the uncivilized Kaffirs and they were all raw Kaffirs is less responsive to the effect of disease than that of the highly organised brain of the white man" (Brodie & Rogers, 1894, p.181).
- 3. This Commission itself operated as an extended Panopticon, the evidence collected from observers in different regions of the subcontinent allowing the state and the mining industry to simultaneously survey and compare the "usual work, ... food, ... pay, ... physique, aptitudes, (and) special ailments" (The Transvaal, 1904, p.2) of Africans from different regions of South and Central Africa. In addition to a majority of sober evaluations from its witnesses, the evidence included descriptions of "cannibals" and "pigmies" (see The Transvaal, 1904, eg p.380, evidence of Ewart Grogan).

- 4. Writing in 1936, Dreosti described how:
 - All natives are weighed once monthly and their weights recorded. Any native who shows a loss in weight of 5 lbs. or more, since his last weighing, or 6 lbs. or over on three consecutive weighings, is brought up before the medical officer for examination. The weighing is done by specially trained Europeans whose duty it is also to look out for any apparent ill-health in the natives being weighed and to bring such natives before the medical officer irrespective of weight. (Dreosti, 1936, p.8)
- 5. This was also the level at which it was most commonly contested by individual miners. For instance, in 1920 a miner named Nontswaku was the centre of a dispute between WNLA medical officers and the medical officer on the mine to which he was allocated.

I was told (at the WNLA compound) there was nothing wrong with my chest and that I was to return to work at the mine. I returned to the mine but the Mine Medical Officer contends I have something wrong with my chest and I am not allowed to go to work...I have made a mistake in not complaining to the Inspector before this. (GNLB 211/29151)

- 6.In the introduction to his report on the survey, Turner alluded to the necessity of an active gaze in discriminating tribe from tribe: "It has been a difficult matter to keep within any very strict lines of description, the native tribes and their customs seem to merge into one another so much that for the sake of comparison one has often to diverge considerably in describing them" (Turner, 1907, p.5).
- 7. Dr Olaf Martiny is a retired Chief Medical Officer of the WNLA.
- 8. A 1939 report on procedures for the establishment of anthropometric indexes and average values by which to establish the condition of miners, noted that European miners are weighed "in trousers and socks only, but braces or belt (unloaded) may be retained" (Bedaux Company of Africa, 1939, p.7).
- 9. A somewhat more detailed description of this compound arrangement is given in Crush (1992a, p.6), where he quotes from police evidence to the 1914 Buckle Commission of enquiry into mine violence:

It is surrounded first of all by a high galvanised iron fence. It has barbed wire at the top which prevents anybody getting in or out ... The gates are so constructed that they have turnstiles by which each native can file in singly. The buildings are so constructed that from the compound manager's office he can see down any direction along the line of huts. The buildings are arranged like the spokes of a wheel with the office as a hub (and) by that means they are able to see exactly what goes on in the compound and practically in the rooms.

10. For instance, by the early 1980s on the HJ Joel mine in the Orange Free State, Anglo American's "Human Resources Information System" was installed to constantly monitor the movement and location of every worker, both above and below ground.

At Joel, the mine complex (itself enclosed by security barriers and guards) is partitioned into a series of self-contained spatial zones - including the residential 'village', kitchen and dining rooms, indoor and outdoor bars, shops and recreation areas. These zones are bounded by impenetrable physical barriers (such as walls and fences). Each zone has a fixed entry and exit

point at which there is a gate or turnstile and check-in points where workers have to swipe their bar-coded ID cards before proceeding. Each transaction is automatically logged in the data banks of the mine computer in the central security tower. The movement of every worker around the mine can thus be continuously monitored and their geographical location fixed in an instant. (Crush, 1992b, pp.835-836)

CHAPTER SEVEN

¹DISCIPLINE AND DANGER: A GENEALOGY OF THE "AFRICAN PERSONALITY"

It is argued by some critics that the Foucault schema fails in being unable to explain opposition and resistance to domination and repression. For instance, Turner (1987, p.13) states "it would be difficult to know how one would explain or locate opposition, resistance and criticism to medical (or any other form) of dominance". This criticism is itself flawed on two counts, and because resistance is an important surface for the formation of the African psyche, elaboration of these flaws offers itself as a useful introduction to this chapter's exploration of the "African personality" - its emergence, transformation and eventual dissolution as an object and effect of the psychological sciences.

Returning to Turner's criticism of the Foucaultian failure to accommodate resistance, its first and most obvious flaw is that it reflects a sovereign view of power only. In arguing that it is "difficult" to explain or locate resistance in the disciplinary diagram, Turner implies that the only way resistance can be conceived of is as opposition to a power that works in a repressive and homogenous way (cf Nettleton, 1992, p.131). Clearly, and as touched upon in Chapter 2 of this study and in relation to its role in the discourse of mining medicine, resistance is readily explicable within the Foucault schema. Not as something that can block or disable disciplinary power, but rather as a mechanism of its extension and elaboration. Thus, because resistance provokes discipline, the consequences of resistance are the installation of increasingly intensified techniques of individualization, a lowering of the threshold of description and the devices of surveillance that occurs in a relationship of perfect positivity to the degree of resistance. As resistance intensifies around and against technologies that ignore individuality or fail to recognise

subjectivity, so the very agents of resistance increasingly confirm their interiorisation of the gaze and recruitment into the disciplinary web to become the subjectified objects of their own surveillance and self-analysis.

This much was perhaps what Foucault meant where he observed that "resistance ... does not predate the power it opposes. It is coextensive with it and absolutely its contemporary" (in Kritzman, 1988, p.122). Flowing from this is the second flaw in Turner's argument, which is the incorrect implication that Foucault himself failed to address or explain resistance. Foucault in fact made clear that resistance - alongside surveillance - forms the very stuff of disciplinary power, for:

As soon as there is a power relation, there is a possibility of resistance. We can never be ensuared by power: We can always modify its grip in determinate conditions and according to a precise strategy. (Foucault, in Kritzman, 1988, p.123)

This acknowledgement of the centrality of resistance to the functioning of discipline must, it is true, appear to be contradicted by the emphasis in this study on the formal codifications of socio-medical knowledge that constitute the published texts it takes as "data". However, to view it as a contradiction reflects a conventional viewpoint on history. In the history of the present, resistance — in the form of concrete opposition, the contestation of knowledges, or the retrieval of subjugated knowledges — only exists as a problem when it is recognized and made an object of analysis. As Gordon comments:

The study of the history of forms of rationality imposes a certain bias which necessitates greater attention being paid to forms of domination than to forms of insubordination. But the facts of resistance are nevertheless assigned an irreducible role within the analysis. The field of strategies

is a field of conflicts: the human material operated on by programmes and technologies is inherently a resistant material. If this were not the case, history itself would become unthinkable. (Gordon, 1980, p.255)

Using this Foucaultian formulation of resistance, Chapter 7 presents what is essentially an extended case-study in the productive effects of conflict and the creativity of the disciplinary force field that both fabricates and is itself fabricated by the incessant play of forms of domination and insubordination around the axis of sovereign power.

Lunatics and Nervous Systems

The first glimpse of the African psyche as a possible object of knowledge occurred in 1875 as the effect of a psychiatric gaze to insane Africans in the Town Hill Hospital, Pietermaritzburg.

53. Majonda, a tall powerful male native aged about 25 years was admitted on 20th October, 1875 suffering from Dementia. This inmate was a prisoner in the Central Goal Pietermaritzburg, where he began, a short time ago to show certain peculiarities indicating insanity. When told to do anything he would laugh in a silly and vacant manner, and when spoken to would answer by entering on a rambling and purposeless conversation. At the same time he began to be dirty in his habits, besmearing the walls of his cell with porridge etc. He has become quarrelsome in his manner without cause and is under the delusion that his head is filled with water. (cited in Minde, 1956, p.288)

To search any earlier for signs of the African psyche in South African socio-medical discourse is to toil under a delusion, for until the late 1870s when special provisions were made for the identification, treatment and confinement of lunatics, the

conditions necessary for its emergence had yet to exist. Prior to this point the insane had - on Robben Island in the Cape as elsewhere in South Africa - no separate existence from the criminals which under common law they were confined together with (see Burrows, 1958, p.344; Foster, 1990). The emergence of madness as a functional relay of disciplinary power that fabricated a relationship between mind and behaviour thus dates to the late 1870s when passing of the Lunacy Law Amendment Act of 1879 constituted the insane as a particular class of people composed of two subcategories: "persons dangerously insane, either with suicidal tendencies or criminal inclination", and "persons of unsound mind but not dangerously so" (cited in Burrows, 1958, p.344). In 1891 this act was re-drafted to define the lunatic as "an idiot or person of unsound mind incapable of managing himself or his own affairs", and specifying three types of lunacy: "Dangerous lunatics", "criminal lunatics" and "lunatics who do not come under either of these heads" (Burrows, 1958, p.346).

Roughly within the period bounded by these Acts and coextensive with the emergence in South Africa of missionary medicine that located disease to the internal structure of the body (see Chapter 4), the first asylums dedicated to the confinement, observation and treatment of lunatics were built (see Burrows, 1958, pp.341-347; Foster, 1990, pp.29-32), and it was with this new practice of isolating the insane to intensive inspection that the first distinctive strand in the genealogy of the "African personality" became possible. It is, however, a misnomer to use the term "personality" in relation to the objects produced at this point, for at the level of primary spatialization this early psychiatric gaze reflected a 'constitutionalist medical psychology' that produced the psyche - African and European alike - as no more than a bundle of nerve fibres and brain cells.

Built to confine the mad, the asylums also functioned as sites from which to observe the nature of the "normal" African nervous system, thereby delineating insanity as a disease localisable to lesions of the physical body and brain. In 1895, for example, Greenlees at the Grahamstown Lunatic Asylum could observe that the preponderance of mania and rarity of melancholia among African patients was indicative of the fact that in "normal" Africans "the higher and latest developed strata" of the brain had yet to evolve (p.72), and therefore that "the native brain has its analogue in the European child's cerebrum". This he demonstrated through "a series of observations on the naked-eye appearances and the microscopical characters (sic) of the native brain", which combined with statistical information on mental diseases among Africans revealed their place on the scale of evolution (Greenlees, 1895, p.75).

Confirming this primary spatialization of insanity to the neuronal networks of the African brain, insane Africans were confined in surroundings commensurate with the "sensitivity" of their "nervous systems". Thus, the Commission of Inquiry appointed in 1879 to investigate moving the Robben Island Asylum to the mainland could report that:

... (T)he modern plan of constructing asylums instead of having these large buildings, is to erect a series of cottages — to have a large space of ground, which is dotted over with separate cottages, so that all can get the benefit of quiet. With regard to the Kafir, the closer you can assimilate his condition to that of his normal state the better. I think it would be a mistake to confine Kafirs to a house and tie them to one spot. They would be better if they had room to roam about a little. For that reason I think the asylum on Robben Island is particularly suited for natives. (Cape of Good Hope, 1880a, p.3)²

Elaborating on this theme, the head of the asylum in 1879 argued that owing to the greater "sensitivity" of their "nervous systems", Europeans were "more amenable to such influences as scenery" (Cape of Good Hope, 1880a, p.8) than Africans, and that a "double classification" (classification here meaning segregation), by race and degree or type of insanity should be implemented. Noting that "there is not as large a proportion of coloured patients amenable to treatment as Europeans", the asylum's chief medical officer objected to "double classification all through" on the grounds of cost, and advocated separation of the "noisy" from the "quiet" patients, and double classification only of the "paying patients" (Cape of Good Hope, 1880a, p.9). From these deliberations issued the Commission's final recommendation that to limit expenses the new asylum should effect "double classification" only among patients "amenable to treatment and sensitive to surrounding influences". Violent and incurable African and European patients - such as those suffering from dementia - could be housed together, since with such conditions racial differences in nervous system sophistication were obliterated, and "all classes become assimilated" (Cape of Good Hope, 1880b, pp.1-4).

This first interpolation of a specifically African psychophysical space into the anatomy of power was tightly restricted to the closed interior of the confining asylum. However, in producing the African nervous system as a discrete entity that existed in a particular relationship to the environment, the conditions were created for the subsequent elaboration of African behaviour as determined by distinct laws of psychological formation and socio-cultural organisation.

Impulsive Insanity and the Perilous Black

In pre-industrial South Africa the number of Africans in European towns was sufficiently small for their monitoring and regulation through direct surveillance and intervention on the part of the authorities and European employers or landowners. With industrialization, however, increasing numbers of Africans whose movements and place of residence could not be directly observed and controlled began to live in the larger towns and cities. A substantial proportion of these found employment as servants to European households, and it was this practice that constituted the conditions of possibility for the elaboration of a psychological surveillance apparatus that radiated beyond the closed walls of the asylum, and into and through the spaces of intimate contact it invented between black and white bodies.

In 1893 a Johannesburg morning newspaper carried the following somewhat dire warning to its readers: "Beware of your houseboy, for under the innocent front may be lurking and lying latent the passions of a panther, or worse!" (cited in Van Onselen, 1982, p.49). This response to the attempted rape by a black male servant of his white "madam" catalysed the first of a series of "black peril" scares that traversed the Witwatersrand between then and 1912. Over these 11 years "the curse of the black peril" recurred sporadically in response to similar instances of violence on the part of black men toward white women, peaking between 1911 and 1912 when the Rand Daily Mail organised a petition, and in May 1912 had close on 52 000 signatures submitted to parliament demanding that it take action to curb the "black peril". The social historian Van Onselen (1982, pp.50-53) has shown how the majority of individual incidents clustered among economically less stable working and middle-class households, to argue that as a collective phenomenon the "curse of the black peril" was driven by "periods of stress and

acute tension within the political economy of the Witwatersrand as a whole" (p.51).

While that may have been so, it is clear that this economic explanation for the "black peril" is an anachronistic fiction of the history of the past, which conceals the underlying power shift that made it possible in the first place for violence to serve as a mechanism of disciplinary surveillance, a tactic of visibility by which the inner workings and passions of the African mind were exposed to the eyes of everyone. For even by this point the power of discipline to fabricate the African psyche as a distinct space of knowledge and target of power was pervading increasingly intimate domains of domination and resistance. Confirming this, a 1909 case of native insanity drew more than the routine attention demanded of officials by the Lunacy Amendment Act of 1908, which set out procedures for the management and documentation of "Governor's Pleasure", "Criminal" and ordinary "lunatics" (TAD, CS 863/14966).

In 1910, a Johannesburg doctor communicated the following facts which had come to his knowledge "officially" and of which he felt obliged to inform the Secretary for Native Affairs "in the interests of the public welfare".

On the 26th Jan. 1909 I find a certain native named Isaac was sent to the Pretoria Asylum certified insane. It appears that he was liberated from there some months afterwards. A few weeks ago this same native was arrested for assault, or threatening to stab his mistress. He was sent up to the Fort by magistrate V. d Berg for medical observation. I am of the opinion that he is a dangerous person, because he has moments of perfect sanity, and afterwards he is apt to lose all control of himself. He says if he is balked or thwarted he feels like murdering the party doing it. In short he suffers from what I call "impulsive insanity". Now, it appears to me

highly necessary that when a native has been in the asylum and authorities consider it necessary to liberate him, that the fact of his having been in the asylum should in some way be stamped on his pass. You or I or anybody else might innocently engage such a native and expose our families to the utmost danger, whereas if he is known to have been in an asylum he will through force of circumstances ultimately be compelled to return to and remain at his kraal. The community would be well rid of such a character. (TA, AG 202/10 LD 1786)

Within the context of the "black peril" "Isaac" was "the panther, or worse!", his crystallization within this psychological gaze as "impulsively insane" epitomizing the power of discipline to invent the previously shadowy constellation of impulses within the African mind as its target of power. Consequently, despite doubts surrounding the very existence of "Isaac" at the time of his alleged assault upon his mistress - the Pretoria Asylum medical superintendent claiming that he had died in the Asylum a year earlier (TAD 202/10 LD1786) - the appeal for the marking and banishment of native lunatics fell upon receptive official ears. In response, the Secretary for Native Affairs instructed the medical superintendent of the Pretoria Asylum to endorse the passes of all native lunatics as to the fact of and duration of their detention in the asylum, and ensure that they were repatriated to their own kraals, not only to purify the white community of their threat, but also "so that the patients may have a complete rest ... to strengthen their recovery" (TAD, 202/10 LD 1786).

Although no further steps appear to have been taken to give this practice the force of law, the case of "Isaac" remained a marker of how ruptures in the boundaries of crude repression were inducing a shift in the psychological gaze towards problematization not of the nervous system in and of itself, but rather of the

relationships between the internal space of the African mind and the external space of the environment. Was it not therefore possible, as Conroy (1909) argued, that the African brain was no different to that of the European, and therefore that the proclivity of Africans to insanity emanated from the consequences of external assaults to the brain? "The baby when born is treated by such barbarian methods as are likely to sew the seeds of chronic disease" and "brain instability" (Conroy, 1907, p.36). Reflecting an identical concern with the relationship between mind and the tribal environment, although reversing Conroy's negative evaluation of the latter, a 1912 editorial in the South African Medical Record (Editorial, 1912, p.201) could thus argue for "the curse of the black peril" to be dealt with through "a scientific treatment of this social evil on exactly the same lines as if it were a human disease". Giving rise to the psychological analogue of the "dressed native" that at this time came to inhabit the parallel space of public health (see Chapter 8), it defined "the black peril" as a consequence of removing Africans from their tribal environment and then failing to substitute this in the cities with an equivalent set of contextual restraints on African sexuality and desire.

We have taken enormous hordes of young adult savages or semisavages, eminently virile in more senses than one, from their
own environment, and have placed them in an environment
absolutely teeming with every possible stimulus to the sexual
impulse at the same time that they are, necessarily, kept
celibates ... We have not even tried to put them in the social
mosquito-proof house of a reproduction of a native community,
but, on the contrary, have freely exposed them to all the
stings of a class of human mosquitoes whose interest is to
inoculate them with every kind of human vice, and, as regards
some forty thousand of them at least, have permitted their

employment in duties of all other most calculated to raise the sexual impulse. (Editorial, 1912, p.203)

In fabricating an interdependence between African sexuality and socio-cultural context, the African in the city was thus rendered 'normally abnormal', and therefore the target of interventions directed to ameliorating such 'abnormality' through temporary banishment to the "native territories" (as suggested in relation to the case of "Isaac"), or of a system of "social sanitation" directed to recreating the cultural context of the kraal in the space of the urban location.

Obsolete Machinery and the Poor White Problem

The "curse of the black peril" and the contemporaneous irruption of a psychological gaze to the impulsive African that was its effect established African behaviour as a possible object of rational management at the level of the population. In 1918 the anthropologist JS Marwick published a paper on "The Natives in the Larger Towns". An early example of the flurry of academic papers that from the 1920s onward effected installation of the psychological sciences as a productive apparatus in the science of governing the African and policing the fabric of inter-racial contact they made visible, (eg Boehmke, 1928; Flint, 1920; Loram, 1922; Rheinhallt-Jones, 1926), this argued for the necessity of drawing Africans into a system of "positive law" that would operate to regulate and mould their conduct in urban settings.

In the early history of the towns the presence of Natives was not a matter that called for regulation by positive law, as their numbers were not great, and their duties and obligations were not easily evaded in a small community. (Marwick, 1918, p.593)

This "early history" now buried beneath the demographic changes accompanying industrialization, the problem had become:

The regulation of the routine of human existence in our larger towns, so that Europeans and Natives may live on such terms that mutually satisfactory relations shall subsist between the two races. This foreshadows the necessity of a finely adjusted organisation in which good legislation, good administration and good citizenship shall each bear a part. (Marwick, 1918, p.590)

For CT Loram (1922), the way to secure "mutually satisfactory" relations between Africans and Europeans lay in deployment of the psychological sciences.

The machinery for dealing with the Native question has become obsolete and ineffectual ... Just as the war needed the chemist, the physicist, and the engineer, so the Native question needs the human-nature scientists, the political scientist, the economist, the psychologist and sociologist. (Loram, 1922, p.100)

The effect of these programmatic arguments for a social scientific solution to the "native problem" was to invent as a surface of analysis and intervention the interface at which black bodies threatened to cross over into the strictly delimited domain of white bodies, and so threatened to destroy the lines of sovereignty that had previously kept them apart.

At the heart of the "poor white problem" was the conviction that through social and sexual intercourse with blacks indigent whites would lose their identity as Europeans, and by taking on the mores and values of the African destroy the perception by blacks of Europeans as inherently superior, and with it the possibility of continuing to exploit cheap black labour (Carnegie Commission, Joint Findings, 1932). "Going kaffir" (Carnegie Commission, Joint

Findings, 1932, p.xix) was a colloquialism that expressed this fear of losing the symbolic force of sovereign power invested in the white body, and connoted the worst scenario, poor whites breeding and living with and in precisely the same way as Africans. Stating that such extreme cases were rare even among poor whites in a preponderantly native environment, the findings and recommendations of the Carnegie Commission were nonetheless unequivocal as to the deleterious effects that extended contact between Europeans and "inferior coloured races" would have on them. Of the five volumes comprising the Carnegie Commission's report, one analysed it in sociological terms (Albertyn, 1932), one in psychological terms (Wilcocks, 1932), and one from a public health perspective (Murray, 1932). This latter volume made short thrift of contemporary claims (Huntingdon, 1924) that the poor white problem was due to the physically and mentally enervating impact of the South African climate upon Europeans, and in concluding that its "primary causes ... have not been physical" (Murray, 1932, p.127) localized its origin and solution to the domain of economics and the psychological sciences.

The primary object of this psychosocial surveillance was the "poor white" that was its effect, different "types" of which were photographed and inscribed in ethnographic comments to constitute them as objects of taxonomic classification akin to the Africans of Turner's mine medical report (see Chapter 6) and those of other ethnographers. However, unlike the isolated Africans of the mine medical gaze, pressing upon these "poor whites" was the ever-present figure of the African, in the absence of whom the "poor white" had no existence: "The term 'poor white' could hardly have come into common usage except in a country inhabited by an inferior non-European population as well as by Europeans" (Carnegie Commission, Joint Findings, 1932, pp. xviii-xix). Construing the native

component to the "poor white" problem as of the colonists' own making, since "under European rule the native population has greatly increased in numbers" (Carnegie Commission, Joint Findings, 1932, p.xix), the reports propelled the quantitative and qualitative techniques of the psychological sciences deep into the interstices between the white and black bodies they surveyed, to at the same time invest these spaces with the dividing power of discipline. Thus, in pervading the minutest points of contact between African and European - the kitchen, the nursery, the road gang, the factory, and the mine shaft - these were established as an analyzable network of body boundaries and breached spaces between black and white minds by which the habits and values of each were subjected to psychosocial surveillance aimed at preventing their dangerous intermingling. The effect of this was to objectify the African as a source of corruption and the European as an unwitting victim, whose protestant ethic was insidiously undermined and ultimately destroyed by psychological proximity to the idle, immodest, obscene and careless African.

Uncivilized native habits often affect the white family and break down the work of the Church, the school and the home. The native has no refinement, taste, or sense of propriety, according to European standards, but is coarse and immodest; without realizing it the whites are influenced detrimentally by contact with him. (Albertyn, 1932, p.40)

The other component to this increasing visibility of African mentality was the invention of "intelligence" as a quantitative surveillance device that partitioned the population by setting in place a hierarchy of groups and individuals in relation to the norm of the "intelligence quotient". Accordingly, and as had Fick (1927, 1929), Wilcocks (1932, p.169) could show that while the environment operated to lower the intelligence quotients obtained by poor whites

relative to the entire white population, "the majority of poor white children ... (and) poor white adults posses normal, and, in part, even more ordinary innate intelligence". By comparison, the "average intelligence" of Africans was revealed to be equivalent to that of "mentally defective whites", their "learning ability" insufficient for them "to compete on equal terms with the average European, except on tasks of an extremely simple nature" (Van Rensburg, 1938, p.43)3. Contemporaneous with this wave of intelligence testing arose calls for the implementation of eugenic measures to protect and refine the purity of white racial stock through the selective encouragement of breeding only within races and then only between the "fit" whose "germ plasm" was "good" (see Appel, 1989, p.612). As Appel has shown, however, such direct eugenic measures were never actually implemented, all references in the South African Journal of Science to eugenics and the work of the Eugenics Committee (formed in 1920) abruptly ceasing in 1932.

The psychiatric gaze as it played upon lunatics to invent the African nervous system as a discrete psychophysical space; the "black peril" and fabrication of the normal African in an urban environment as deficient in impulse control; the "poor white question" and constitution of the interstices between black and white as a psychological and sociological surface, monitored by surveillance and traversed by power; the rise of mass intelligence testing and the eugenic reflex. Singly and in combination each of these problems signified difference under siege, a triangular assault upon the biological "truth" of European racial sovereignty and incitement to the creation of a new language of government that would not merely manage the racial differences made visible by the psychological sciences, but actively cultivate a culture of difference.

A "Better Native": Indirect Rule and the Cultivation of Culture

By the 1930s traditional African customs and culture had been constituted as a distinct body of knowledge in the writings of South African anthropologists, ethnographers, psychologists and psychiatrists. This issued from formalization of the psychological sciences in general and of sub-specialities devoted to studying the African in particular. In 1921, Radcliffe-Brown was appointed chair of the Union's first department of anthropology (at the University of Cape Town), and in October of the same year the first edition of Bantu Studies and General South African Anthropology was published. In 1925, GP Lestrade was appointed to head the newly created ethnological section of the Union's Native Affairs Department, and within a few years courses in "Bantu studies" and anthropology or their equivalents were offered by all four of the country's teaching universities (see Dubow, 1987, p.80). This was also the period in which psychology's professionalisation commenced. The first academic appointment was that of RW Wilcocks as Professor of Logic and Psychology at Stellenbosch University in 1917; the University of Cape Town followed suit in 1920, Rhodes University in 1926, the University of the Witwatersrand in the mid-1920s, and the University of Pretoria in 1929. Appointment of the first state psychologist in 1923 was followed by a second appointment in 1925 (Foster, 1990, p.61).

Despite their disparate knowledges and diverse approaches to understanding the person and behaviour, these sciences were unified by the common object that was the effect of their investigations: the African mind, behaviour, and their relation to a surrounding social and cultural space. As such they were components of a single apparatus of power, a Panoptical system for the production and surveillance of individual minds and a social space traversed by power. The "native problem" was therefore confirmed as "a problem in

the mental field of anthropological research, ... a problem to the solution of which the anthropologist and the psychologist can both contribute" (Rheinallt Jones, 1926, p.80).

In tandem with other African colonies (see Bhaba, 1986; Vaughan, 1991), this formalization of the psychological sciences created the springboard from which hitherto invisible and irrelevant aspects of African life and mentality were pervaded by the gaze of coordinated scientific research and constituted as key components in the regulatory mechanisms and practices of "indirect rule" that could now be politically imposed as a sovereign strategy of European colonization. In South Africa, as elsewhere in colonial Africa (see Vaughan, 1991, p.109), the idea of "indirect rule" described the tactics adopted by the colonists to resolve the crisis posed by the perception that the education and "civilization" of Africans was eroding their malleability and docility, thereby endangering social control and threatening the economic base of cheap labour. To contain this threat, the discourse of indirect rule translated African dissatisfaction out of the lexicon of political resistance and into the vocabulary of ethnology, anthropology and psychology. Signs of "native restlessness" thus became symptoms of "deculturation" or "acculturation", iatrogenic consequences of the colonial cure for African barbarism. So, by bolstering African adherence to "custom", obedience to traditional leaders, and cultural or tribal identity, such threats could be averted.

Eiselen, a lecturer in ethnography and "Bantu studies" at Stellenbosch University and later Secretary of Native Affairs under Hendrik Verwoerd, could thus argue in 1929 that the notion of "indirect rule" meant that: "The duty of the native (is) ... not to become a black European, but to become a better native, with ideals and a culture of his own" (Eiselen, 1929, p.12). Two years later, this emphasis on cultural purity was modified to form the

"adaptationist position", a tactic by which the "ideal" African would be forged in a crucible of sovereign power and disciplinary knowledge that fused elements from both African and European traditions and cultures.

There is a middle way between tying him (the native) down or trying to make of him a black European, between repressionist and assimilationist schools ... It is possible to adopt an adaptationist attitude which would take out of the Bantu past what was good, and even what was merely neutral, and together with what is good in European culture for the Bantu, build up a Bantu future. (Lestrade, 1931, in Dubow, 1987, pp.85-86)

A year later, the Native Economic Commission endorsed this adaptationist position, describing it as "not only the most reasonable but also the most economical approach to the native question" (in Dubow, 1987, p.85). Thus, as in the corporal economy of bodies produced by the industrial Panopticon of mining medicine,

question" (in Dubow, 1987, p.85). Thus, as in the corporal economy of bodies produced by the industrial Panopticon of mining medicine, it was through the constant shuttling of power between the productive radiation of discipline into the psychosocial and the repressive concatenation of sovereignty upon it that the African mind was invented, sustained and transformed as an object of knowledge and target for power.

Urbanisation and Surveillance of the African Unconscious

Whether in Lestrade's formulation as a strategy by which to fabricate the ideal "Bantu" as a synthetic entity or in the construction by "deculturation" theorists of its loss as a symptom of colonial contact, cultural and racial difference took on a new utility within the political and economic context of adaptationism. Instead of being a purely negative incitement to suppression and inferiorization, difference was now a productive element in a new, more subtle machinery of discipline that operated through its

cooption to render too little difference just as problematic as too much.

It was within this context that there commenced the deployment by psychiatrists and psychologists of psychoanalytic techniques that drew a line through culture, the unconscious, and behaviour. By making this intersection visible, the domain of instinct, desire and emotion came to be fabricated as a distinct entity - the "African personality" - upon which the strategies of disciplinary surveillance could articulate to monitor African behaviour and distribute African bodies in the fragile space of urban and industrial contact between black and white. Emergence of this new discourse on culture and behaviour commenced in 1937 with the publication of two psychoanalytic studies: BJF Laubscher's Sex, Custom and Psychopathology: A Study of South African Pagan Natives, and Sach's Black Hamlet: The Mind of an African Negro as Revealed by Psychoanalysis.

A senior psychiatrist in the Union Mental Service, Laubscher combined the method of ethnology with psychoanalytic theory to impel the psychoanalytic gaze into the most intimate corners of "Tembu tribal life", and behind the resistant front of African antipathy to European surveillance. As if it were the back lighting that revealed to the Panoptical observer the interlocking grid of cells in which its inmates are objectified, the effect of this was to identify the personality of the individual African as a mere node in the matrix of indigenous culture.

It will be seen that the cultural pattern to which the native belongs, determines the nature of his mental content, but does not affect the particular form of mental disorder, namely, its structure, to the extent of making it something different from that which occurs in European culture. (Laubscher, 1937, p.xi) Established in this way as "phylogenetically on a par with the

Oedipus phase in ontogenetic development" (p.58), Africans were seen to be psychologically and intellectually ill-equipped to cope with the sudden surges of instinct and libido that emanated from the deep psychic well of the now distinctly defined African unconscious.

The native is not by nature bloodthirsty, but his aggressive instinctive or pugnacious propensities are excitable, easily roused and explosive ... His aggressive libido flows outwards, becomes readily externalized, and sudden, impulsive assaults, often fatal, are common ... Once an emotional impulse is aroused and the stimulus continues to be present, the native just drifts along with the impulse and exercises little if any inhibitory power ... Resultingly, the intellectual mechanisms of foresight, judgement and self-control are readily submerged by the instinctive impulse. (Laubscher, 1937, pp.306-307) fabricated as a visible complex of instincts, emotions and

Thus fabricated as a visible complex of instincts, emotions and intellectual mechanisms, the African unconscious could now become a space for the installation of a psycho-behavioural calculus directed to managing the African body through the African mind.

Confirming its strategic value to the science of governmentality, the target of this psycho-behavioural calculus was precisely those points of contact between Europeans and Africans made visible by the "black peril" and later the Carnegie inquiry. Accordingly, a section of Laubscher's (1937) text which focused on "sexual offenses" observed that: "the commission of sadistic sexual acts on European women by detribalized natives living in towns led me to enquire into the frequency of the occurrences of sexual offenses in the native territories" (Laubscher, 1937, p.257). Finding that such offenses were rare among rural Africans, Laubscher concluded that in urban settings their prevention could be achieved through manipulation of the tribal rites relating to African masculinity. Thus, because neglect of the circumcision rite created

"a marked instability ... in behaviour and attitude to practical things" (p.134), impairing the African's dignity and sincerity and increasing the danger to European women, it should not only be permitted but actively encouraged among urban Africans (p.134). In contrast to this stabilising and therefore desirable rite was the "racial characteristic of sharing and mutual assistance" (Laubscher, 1937, p.135). In the rural areas this was an admirable attribute. In the towns, however, it "facilitates his comprehension of communistic ideals ... and makes the native prone to the influence of agitators" (p.196-197). Such altruism was therefore to be met with the antidote of education, carefully calculated to engender a desire for private property within the framework of those racial and tribal traditions consistent with "capitalistic administration" (Laubscher, 1937, p.197).

In contrast to Laubscher's ethnological approach that began with the construction through direct observation of traditional African culture, Sachs' (1937) investigation concentrated the psychoanalytic gaze to raise the life of a single individual - "John" - into the eye of disciplinary power. Like Laubscher, Sachs too fabricated the interzone of European civilization and African tradition as a psychological no man's land, a space that because it was in between the clearly demarcated domains of the kraal and the city, gave rise to African psyches that were flawed and split.

John, moreover, had an additional tragedy which shadows the life of almost every African. The circumstances of his life, the clash of his two worlds, constantly caused inner division. Every African leads a double life in the full sense of the psychological concept. (Sachs, 1937, pp.174-174)

Unlike Laubscher, Sachs concluded that not only were there no structural differences between Europeans and Africans in the manifestations of madness, but that in all respects the fundamental

working principles of the unconscious were identical, and therefore that in its composition and functioning the African mind contained no intrinsic barriers to adapting to urban conditions (Sachs, 1937). While it is clear that Laubscher and Sachs interpolated the African soul into divergent political projects - Laubscher's an inferiorizing and repressive one, Sachs' a paternalistic one - the effect of their disagreement was to solidify the space between African tradition and European civilization as a region of psychological disintegration bounded on the one side by the "noble savage", and on the other by the psychologically cloven "detribalized" African of the town and the city.

Confirming this disciplinary force field that fed the sovereign strategy of adaptationism with its psychological objects as demanding a knowledge of the "noble savage", was Biesheuvel's African Intelligence (1941). Earlier studies had measured the intelligence of Africans, thereby constructing intelligence as a uniform commodity distributed unequally between and within different races. By contrast, the concept of "African intelligence" fabricated it as something qualitatively distinct from European intelligence, so rendering attempts at comparing the intelligence of Africans with that of Europeans misleading and harmful. By devising intelligence tests specifically designed to measure "African intelligence", Biesheuvel could therefore argue that what was previously viewed as the African's intellectual inferiority would reveal its 'authentic' nature as the "genius of a people":

It would be idle to deny that there is such a thing as 'the genius of a people', even though this 'genius' is, to a large extent, culturally determined. To do or to not do a particular thing may become second nature to a member of a cultural group to such an extent that subsequent training in a different direction may be of little avail. (Biesheuvel, 1941, p.56)

Further recognition of the tribal African as a "noble savage" came with Phillips' The Bantu in the City. A Study of Cultural Adjustment on the Witwatersrand (1948). One of the first questionnaire-based surveys of the African psyche, this complemented responses from "232 Africans in 49 different occupations" with records and reports from a native reformatory and interviews with bankers, magistrates, social workers and groups of Africans, to make visible the minute spaces of contact that together constituted the interface between rural tradition and urban "civilization". As for both Laubscher (1937) and Sachs (1937), Phillips (1948) fabricated the space of rural custom as the epitome of pastoral "innocence", where:

In the bosom of his family the African is secure against want. His women-folk provide the necessities of life from the garden, bush and stream. His future is guaranteed by his growing children. His well-fitted cattle kraal and his herd of goats testify to the world that he is a responsible man. To his hands a share of the wealth of his tribe is safely entrusted. (Phillips, 1948, p.73)

Against this, and while observing that exposure to urban mores stimulated "intellectual growth and freedom of individual expression, all of which are almost totally lacking in tribal life" (p.74), the dominant effect was to problematize the perspective and perceptions of the African.

Through the extension of psychological surveillance into the eye of the urban African, this was produced as an ocular relay in a normalizing network of gazes that isolated for inspection those situations which stimulated "increases in anxiety and inner tension" (Phillips, 1948, p.74), to thereby enable monitoring of "the emotional orientation of the African and the dominant role which the personality of the acculturator plays in the matter of cultural transference in Africa" (Phillips, 1948, p.187). Thus, alongside the

negative effects upon personal and cultural adaptation of the violent and prejudicial exercise of police powers in suppressing African resistance and crime, the corrupting effects of urbanisation upon the African were identified with all those situations where "decent, coloured natives", observed "the white man under conditions which are not favourable to the development of respect on the part of the observer".

African youths seem to be everywhere; they see everything ... To illustrate: the writer found a lad of about fifteen years of age ... engaged as a helper to an elderly woman who kept a magazine stall on Eloff Street, Johannesburg, for the sale of overseas pulps - "True Confessions," "Modern Romances," "Love Magazine" etc. When visited, the lad was engrossed in his reading of a profusely illustrated pamphlet with actual photographs of nude White women, entitled "The Beauty of the Female Form." (Phillips, 1948, p.105)

The Imposition of Apartheid and Installation of Moral Surveillance

The law as it applies to Africans, especially in white areas, is involved, pervasive and often vexatious ... Hence there is some danger that a purely negative attitude towards Western codes, based on fear, or even an attitude of hostility, based on feelings of injustice, may become established in large numbers of Africans. (Biesheuvel, 1957, p.309)

The imposition of statutory apartheid in 1948 brought with it a draconian extension of existing state controls over the geography of African mobility. By 1952 "Africans required official permission to travel and not to travel, to work and not to work ... Permits were required to look for jobs, to take jobs, and then to change jobs" (Posel, 1991, p.116). The introduction in 1953 of "Bantu Education" complemented these repressive controls over movement,

employment and place of residence with attempts to further cement separate development through the manipulation of mind and language. These extensions and intensifications of sovereign power were met with an intensification of both organised and informal resistance on the part of Africans. The effect of this resistance was to provoke a resurgence in the development of psychological surveillance devices that could monitor the African personality and maintain under constant scrutiny the behavioural outcomes of its mutation under the combined pressures of urbanisation and resistance to the sovereign force of apartheid repression.

In 1953 Biesheuvel could therefore publish his "Moral Attitudes Inventory", a questionnaire aimed at interrogating "the manner in which Africans become aware of the conduct that is required of them in their relations with Western society".

An understanding of what Africans know concerning European manners, morals, ethics, and legal codes, of the attitudes which they are adopting towards the standards of conduct to which we expect them to conform, is ... exceedingly important for the citizen generally and for those who as educators, administrators, social workers or law-makers have the well-being and future development of Africans in their hands. (Biesheuvel, 1957, pp.309-310)

By 1957 this instrument for the fabrication of African morality as an index of resistance and target for power had been applied to more than 1 000 Africans drawn from "all walks of life" and "from all parts of the country and many native reserves and locations" (Biesheuvel, 1957, p.310). An observatory for the manufacture of resistance as a calculable capacity, the inventory inducted Africans into an imaginary conversation with five "speakers" by having them rate the "wisdom" of each speaker's opinions. These opinions were in the form of reflections upon everyday situations involving some

question of belief, manners, ethical conduct or legal duty, each including a statement about how Africans should act in such settings and why. For instance, "William said: 'One must be courteous for it is the custom of our own people", while "Jack" thought: "'Why should the African be courteous to the white man, who is never courteous to him?'"4. Through their responses, ordinary Africans thus engaged in a dialogue about deculturation and oppression, to simultaneously objectify themselves within the categories of this colonial discourse on culture and behaviour and feed the machinery of surveillance with information about the stability of the social order. For not only did the inventory install a norm against which various groups could be defined and distributed in ethical space, but it at the same time operated as a more individualising device, "useful in assessing the moral insight, integrity, maturity, social submissiveness or hostility of individuals, by means of the deviation of their responses from the group attitude pattern" (Biesheuvel, 1960, p.155).

In 1958 Sherwood published a paper titled *The Bantu Clerk:* A Study of Role Expectations. Among the more specific objects of knowledge to be produced by this machinery of moral surveillance, "the Bantu clerk" epitomised how effectively the fact and threat of African insubordination lowered the threshold of calculable individuality to highlight the psychosocial attributes and tendencies of ordinary Africans. In addition, it underlined the strategic nature of this moral-psychological gaze, for "as an intermediary between state and subject" the "Bantu clerk" was a particularly sensitive link in the lines of political power by which the boundaries between black and white were controlled and patrolled, a "marginal man" (Reader, 1963, p.8), whose personality structure was at once the object of psychological surveillance and an effect of the force relations that pervaded this unruly boundary

zone between the two great centres of sovereign power defined by the dominator and the dominated.

(The Bantu clerk) ... occupies the role of a public servant owing allegiance to the state. But he is also a Bantu in this country, in which role he is one of the subjects bound by the widespread systems of control which this department applies.

As such he shares the attitudes and feelings of Bantu to these systems of control and there is little doubt that hostility is felt toward this department and its policies. (Sherwood, 1958, p.298)

Accordingly, this study deployed a range of "structured, unstructured and projective-type questions" (p.299) to fabricate the Bantu clerk as contingent on both his own attitudes to the moral and ethical context of the civil service, and of the attitudes of non-civil service "Bantu professional and clerical workers", for some of whom he "is conflicted in his conscience, regarded as a traitor by his people, feared and hated" (Sherwood, 1958, p.299). Exemplifying the normalizing power of the disciplinary gaze, among the more important outcomes of this study were its implications for personnel selection, which could now proceed through the use of:

... hypothetical personality models ... which would indicate the characteristics of Bantu clerks who could function most freely and effectively in this organisation ... In his relations with the Bantu public, the clerk needs to be nurturant and kind while avoiding deep emotional involvement with his clients, while his relations with authority figures should be based on clearly defined roles of dominance and submission and he should be able to accept authority as

absolute. (Sherwood, 1958, p.315)

The attempted control of African attitudes and relations toward white authority and the apartheid state in the late 1950s was thus enabled through manufacture by the psychological sciences of the African mind as the origin and container of attitudes and values. Through instruments such as the "Moral Attitudes Inventory" these were subjected to scrutiny and the resultant observations used to plot the lines of opposition and acquiesence that pervaded the space between the formal centres of white domination and black resistance. The effect of this was to further problematize the question of African personality. For where studies such as Biesheuvel's had shown that in general Africans manifested a loyalty toward the government and acceptance of South African society's moral and legal codes (Biesheuvel, 1957, 1959), other researchers had found less acceptance, and even outright rejection of and hostility to the state.

Bloom (1960), for instance, "stepped out of the sterile role of social scientist to deplore the lack of hope" (p.111) and other psychosocial consequences of apartheid, by asking 52 African and 42 white university students to "write fully and in confidence" on topics such as: "If you could change yourself in any way you liked, in what way would you like to change?"; "what sort of person do you most admire?", and "what sort of person do you most despise?" (Bloom, 1960, p.105). The effect of this investigation was to triangulate the positions of Africans and Europeans in a psychopolitical space relative to such great men as Chief Luthuli, Orwell, Hitler and Trevor Huddleston (Bloom, 1960, pp.107-108). By reading off their social distance from these figures in combination with the

responses to other questions, Bloom concluded that the African was at once a victim and an agentic opponent of: "the inexorable and intolerable pressures of a social system in which they are forbidden to participate as full citizens, and in which many of them ... believe there is no immediate possibility that they might participate fully" (Bloom, 1960, p.106).

The disparity between findings that fabricated the African as on the one hand a loyal subject of apartheid, and on the other a resistant opponent, provoked claims that questionnaire-based devices for the measurement of attitudes and assessment of personality were flawed, that they measured not the African personality itself, but rather that they elicited: "mere lip-service to the culture of the dominant group, prompted by fear of disapproval or by an attempt to please the examiner by giving him what one believes he wants" (Biesheuvel, 1959, p.145). Confirming the pervasiveness of the disciplinary gaze to the innermost space of the multi-layered mind produced by this psychological micro-power, a solution to this problem crystallized in the shape of the projective test, which because it used pictures rather than words to provoke the unconscious into revealing its tendencies, could bypass the African's readiness to bring elements of the western oriented 'persona' to the fore.

The Rise of Projective Testing and the African as a "Dangerous Individual"

In 1950 Lee had conducted the first South African study of the African mind to deploy the idea that the inner space of personality could be made visible through the influence it exerted on how the

individual viewed and interpreted visual stimuli in the outer world. By 1957, this technology of projection was sufficiently wellestablished for Sherwood to mount a critique of Lee's procedure on the grounds that he failed to make explicit the methodological assumptions underlying the design of the pictures he had used, and that these pictures were so non-specific as to evoke "generous and spontaneous fantasy only secondarily concerned with ... specific areas of personality or social relationships" (Sherwood, 1957, p.166). Against the fantasy-bound illustrations used by Lee that elicited only spontaneous and uncoupled unconscious material, Sherwood developed what he termed an "area-first" approach to thematic apperception testing. This dissected the personality into discrete yet interacting sub-components such as the relationships between "father-son, father-daughter, mother-son", and other constructs such as "person alone, aggression, love triangle", and so on (Sherwood, 1957, p.166). In this way, each individual subjected to the procedure was fabricated as a microcosm of the more encompassing context of authority figures, intimate relationships and cultural norms that had been internalized or were in the process of being eroded by "detribilization".

A method for penetrating to and analysing the inner core of the African personality that it manufactured, this elaboration of the Thematic Apperception Test for use with Africans provided the conditions of possibility for a new substrate of instincts, emotions and unconscious energies to be installed beneath the ethico-moral topography of contact between black and white that had formed under the earlier regime of attitudinal surveillance. Manifest in a spate of studies that from 1960 to 1975 were devoted to refining the

methodology of African projective testing (eg Baran, 1971; Erasmus, 1975; Minnaar, 1975; Pretorius, 1971), this three-dimensional ballooning of the African personality produced the urban "location" as an analyzable constellation of individual personalities, a criss-crossing of projections, perceptions, impulses and needs that were seen to originate from and reflect the essential characteristics of their inhabitants.

The threshold of psychological description thus lowered beneath the line of consciousness drawn by the earlier regime of the questionnaire-based approach to attitude measurement, urban Africans were now interrogated not through scrutiny of the overt meanings of what they said, but rather through the "apperceptive" and "unconscious" dynamics that were now seen to underly the spoken word. "... (A) TAT picture (is) ... a question addressed to the subject - addressed both to his conscious and his unconscious mind" (Sherwood, 1957, p.167). Accordingly, De Ridder could in 1961 publish his Personality of the Urban African, a text that minutely detailed the apperceptive interstices of 2 500 Africans resident in a number of Johannesburg locations. Story after story was presented whereby these narratives were filtered through the gaze of psychodynamic theory to produce "the personality of the urban African" as characterized by: "strong feelings of anxiety and insecurity" (p.155); "strong latent aggression and insufficient moderation and control" (p.158), and "uninhibited primitivism and sexual licentiousness" in their "male-female relations" (De Ridder, 1961, p.160). Epitomising the paradoxical power of discipline to increase itself through resistance, it was however another kind of individual who loomed largest in this projective Panopticon.

This was the "dangerous individual", a ubiquitous presence within any disciplinary regime and marker of its pervasiveness to the very core of the person as its isolated and self-contained psychological object and effect. Describing the emergence of the "dangerous individual" as a condition of possibility for all political systems premised on a law that makes individuals the origin of criminal actions, Foucault noted how:

At first a pale phantom, used to adjust the penalty determined by the judge for the crime, this character becomes gradually more substantial, more solid and more real, until finally it is the crime which seems nothing but a shadow hovering about the criminal, a shadow which must be drawn aside in order to reveal the only thing which is now of importance, the criminal. (Foucault, in Kritzman, 1988, pp.127-128)

"Recent developments" wrote De Ridder, "have focused attention upon a particular type of individual" (1961, p.118). These "developments" were the "anti-pass" campaigns of Langa and Sharpeville, where in 1960 black resistance to apartheid oppression had resulted in the shooting of 67 Africans. The "particular type of individual" was a leader of this resistance - "an individual usually referred to by the Europeans in Africa as an agitator or an African nationalist" (De Ridder, 1961, p.118) - and it was precisely this resistance that provoked De Ridder to lend a full chapter to analysing the personality of this dangerous individual through the presentation and interpretation of an entire protocol produced by "an active African nationalist" (p.119). Leaving no doubt that the crime of treason was itself an epiphenomenon when viewed against the person of the criminal, De Ridder concluded that:

The subject is definitely not adjusted to the prevailing social conditions. He shows very strong feelings of insecurity and anxiety feelings and is frustrated in the satisfaction of his needs, desires and ambitions. His resulting embitterment and his feelings of being discriminated against find outlet in criticism of the prevailing social set-up in general and of Europeans in particular. (De Ridder, 1961, p.127)

Later, these tendencies were generalized to the "majority of African nationalists seeking independence" (p.128), whose consciousness of discrimination was "obsessive", and whose acts of resistance "are as much a reflection of their own personality needs as they are of actual social conditions" (De Ridder, 1961, p.128).

Unsurprisingly in this context of constant struggle between black and white for a hold over sovereign power, the last projective test specifically designed for assessment of the African personality was also that most explicitly targeted to the identification and manufacture of the African as an imminent danger to the European. First published in 1975 and known as the "TAT-Z" ("TAT Zulu"), this was presented to respondents as "a test to measure the power of your imagination" (Frontispiece, Erasmus, 1975). Concealing in this ostensible concern with the measurement of imaginative power the productive power of psychological surveillance, the "TAT-Z" was a test preoccupied with relationships of domination and subordination, control and rebellion. Thus, the aim of card six was "to determine the attitude towards White authority" (Erasmus, 1984, p.14), and so showed a black man standing facing a white man who is pointing toward something. The respondents whose stories indicated they "accept White authority with active willingness to carry out

instructions" scored six; zero was allocated to those who "reject White authority aggressively and/or completely" (Erasmus, 1984, p.50). Card 10 (the "aggression card") invented as its objects of surveillance the "extent of underlying aggression towards Whites, ... (and the) degree of aggression ... among the Blacks themselves" (Erasmus, 1984, p.17). A condensed pictorial rendition of the earlier "curse of the black peril", the hierarchy of response types listed in the scoring manual supplied a code by which to seriate the individual Africans it produced on a ladder of threat towards the European.

The people in uniform are fighting, but the White	
man in uniform will control them successfully	20
Perceives aggression towards the White but he	
himself is clearly negative towards this aggression	
and rejects it	16
The people are fighting; although the White man in	
uniform will not be able to control them, they do	
not harm him	14
It is a festival and the White/man in uniform is	
merely a spectator	12
They are fighting, want to attack White man or are	
aggressive towards him without the respondent's	
taking up an attitude in favour of the figure	3
They are going to attack the White man but not	
necessarily kill him	2
They are going to kill the White man	0.
(Erasmus, 1984, p.51)	

Monitored by the European designers of projective tests as if it were a pre-given entity that would ultimately yield the "truth" of its inner dynamics to the ideal test, the early 1970s offered somewhat dramatic confirmation from a very different site that the African personality was at the same time the effect of a more general mutation in the anatomy of power. For it was at this point that the psychological gaze to the African personality became autonomous of its scientific conduits and internalized by Africans themselves, a transformation that was both produced by and productive of a novel strategy for African revolution and resistance known as "Black consciousness".

Black Consciousness and the Alienated African

At the heart of this kind of thinking is the realization by the Blacks that the most potent weapon in the hands of the oppressor is the mind of the oppressed ... Hence thinking along lines of Black Consciousness makes the Black man see himself as a being, entire in himself, and not as an extension of a broom or additional leverage to some machine. (Biko, 1988/1972, p.83)

Viewed by conventional historians of revolutionary politics as among the high points of African resistance to apartheid oppression, the emergence in the early 1970s of Black Consciousness was at the same time the moment where disciplinary fabrication of the African personality found its greatest confirmation. For with its crystallization the African personality was no longer dependent for its existence upon the formal technologies and instruments of the psychological sciences. Instead, Black Consciousness being

"essentially an inward-looking process", the African personality was now the end product of a confessional discourse in which the speaking subject was also the object of what was said.

At its core, Black Consciousness was a recursive mechanism that refracted the psychological gaze through a revisionist history of the past to fabricate Africans of the present as the effects of their own subjugation.

It becomes more necessary to see the truth as it is if you realize that the only vehicle for change are these people who have lost their personality. The first step therefore is to make the black man come to himself; to pump back life into his empty shell; to infuse him with pride and dignity; to remind him of his complicity in the crime of allowing himself to be misused and therefore letting evil reign supreme in the country of his birth. (Biko, 1988/1970a, p.43)

Exemplifying the disciplinary process by which an invention is translated into a language of liberation, and a positive power which creates is concealed in the identification of a repressive power which is lifted, Black Consciousness enabled the recognition that "blacks are suffering from inferiority complex - a result of 300 years of deliberate oppression" (Biko, 1988/1970b, p.35). Knowledge, expressed as a strategic relation, is the other side of the power coin, and it was now possible through the device of "alienation" for a new African personality that was the mirror image of the old to emerge.

Perhaps epitomising this regime of Black Consciousness that for the next decade would operate alongside and in sovereign opposition to the white regime's invention of the African as a

"dangerous individual", was Manganyi's Being-Black-in-the-World (1973). The first black clinical psychologist to be trained in South Africa, Being-Black-in-the-World derived from Manganyi's doctoral thesis in which he compared the body image of healthy black subjects with that of black paraplegics (Manganyi, 1970). The effect of this investigation was to pathologize all Africans, for far from being the "dangerous individuals" of white psychological surveillance, the healthy subjects were shown to manifest the same diffusion of bodyboundaries associated with the passive and non-coping life strategies of hospitalized paraplegics (Manganyi, 1970). This installation of the ordinary African as a psychological paraplegic demanded that the aetiology of this dysfunctionality be defined, and confirming the localization by Black Consciousness of the African inferiority complex to the vertical lines of sovereign force that pressed upon the black body from the formal centres of white domination, Manganyi's work fabricated the African body as in part a fabrication of racist socialization.

... (I)n the African experience there was over time developed a sociological schema of the black body prescribed by white standards. The prescribed attributes of this sociological schema have, as we should know by now, been entirely negative. It should be considered natural under these circumstances for an individual black person to conceive of his body image as something entirely undesirable, something which paradoxically must be kept at a distance outside of one's self so to speak. (Manganyi, 1973, p.51)

Because it presented itself as a therapeutic device by which this alienated and coruscating white mask over the authentic inner

core of black skin could be revealed and removed, this new component to the discourse of the psychological sciences demanded an equivalent intensity of surveillance to the force relations pervading the spaces between black and white bodies as that which had characterised the work of the colonial social sciences some 40 years earlier. Just as the creative capacity of that earlier regime had been most intense in the interzone of anomaly between the tribe and the city, so too with this new regime, which had as its focus those bodies which were black but not black, such as albino children in the black metropolitan area of Soweto (Manganyi, Kronenberg & Jenkins, 1974). Thus, Manganyi's "The body for others" (1991/1977) could consolidate his explorations of black paraplegics (Manganyi, 1972) and albino children to show how: "human beings institutionalise or politicise the problem of the body by turning it into a body-for-others, symbolically transforming a first order metaphysical problem into second order social problem" (Manganyi, 1991/1977, p.51). Borrowing from Fanon (1967), Manganyi defined this second order problem as "a racial epidermal schema" (1991/1977, p.51), and, by 1981, the imperial forces that sustained this "white mask" had been lifted further into visibility through historical investigations into how "Euro-American psychologists have had a definite function and role in the history of (neo)colonial oppression" (Bulhan, 1981, p.25).

Feeding on its own resistance to invisibility and confirming the inevitable extension of surveillance into every dark space of the social and the psychological, the disciplinary micro-powers of the psychological sciences had thus moved full circle by the 1980s. So, just as the African personality had coalesced under the earlier

regime to invent the African as a "dangerous individual", it was now the personality of the white man that was the source of danger, corruption, and alienation.

A "Liberatory Psychology" and the Diffusion of Danger

In 1985 the first edition of a psychological journal called Psychology in Society was published. This brought together the previously scattered writings of "critical psychologists" to confirm the consolidation of a new knowledge constellation in the psychological sciences, and with it the 'discovery' of a novel psychosocial space, "firmly rooted in the context of a changing South Africa and in the service of liberation" (Editorial, 1986, p.1). Against the preoccupation of the earlier regimes with illuminating the essentialist attributes of a pre-given African subject and personality, the focus of this was to the human subject as the product of a dialectical relationship between the individual and the social.

Critical psychology is based on the rejection of the polar extremes of psychologism (the reduction of cultural phenomena to psychological categories) and sociologism (social determinism). To the extent that sociology exclusively embraces the study of supra-individual forces while dismissing spsychic (sic) structure and agency it becomes sterile and devoid of meaning. But, on the other hand, to the extent that psychology tries to explain social phenomena by appealing simply to individual subjectivity it succumbs to the ideology of subjectivism which obscures the penetration of the individual by the social order. (Ivey, 1986, p.23)

Under this new theoretical configuration the "African personality" was dissolved (Couve, 1986), for within it the very notions of personality and the individual were themselves constituted as ideological fictions of industrial capitalism (Dawes, 1986, pp.33-34).

Consistent with its emancipatory mission to "carve out the foundation of a practice which contributes to the real, not imagined, social arrangements in which full human lives may be lived" (Foster, 1986, p.65), the space traversed and fabricated by this new psychology was one of historical depth and interdisciplinary breadth. For this was a gaze that extended itself from the very beginnings of colonial occupation at the Cape (Lambley, 1980), into the possible future of a democratic state (Seedat, 1993); from the exploitative interests underpinning capitalist industry and the "white hands" at the formalized centres of knowledge production in the human sciences (Muller & Cloete, 1987), to the most intimate space of the community confessional and the sinister darkness of torture and detention chambers (Foster & Skinner, 1990).

The danger that had provoked the initial installation and continuous renegotiation of the African personality was thus relocated from the individual and diffused into an all pervasive threat which imbued each and every person, profession, practice, relationship and environment. By the 1990s, it was as if over the 120 years since their emergence, the psychological sciences had extended the three-dimensional space marked by the nineteenth century fabrication of the African mind as a psychophysical entity to the multi-dimensionality of a subjective, psycho-political space

which constitutes the framework for the existence of contemporary identity. Danger, which initially was seen to reside only in the dark space of mind, has with this most recent power mutation come to seen as lurking everywhere, each and every individual an agent of moral surveillance, scrutinising those they relate to with infinite care so as to locate them in an unwritten taxonomy of psychopolitical correctness or deviance. The diffusion of danger is therefore complete and totalising, and the psychological sciences, for all their characterisation by some of the sentries of sovereignty as irrelevant and ineffectual in an African context, are, as a mode of discipline, omnipresent and inescapable.

- 1.An earlier version of this chapter was presented in the Africa Seminar of the London School for Tropical Medicine and Hygiene on July 5 1994.
- 2. See also the explanation of Dr WH Ross, superintendent of the Robben Island Asylum in 1888, for the poor cure rate there in comparison to that in British institutions.

No comparison can in fairness be instituted between the lunacy of savages and uneducated natives and the derangements of nervous systems met with among highly organised individuals living at the headlong pace of the 19th century. (cited in de Villiers, 1971, p.89)

- 3. Simultaneously, other psychologists were examining the intelligence of Africans. Some (such as Rich, 1917) took environmental factors into account to conclude that the wide-spread contemporary belief that African intellectual development ceased at puberty was spurious, an artifact of tests ill-suited to the population being assessed.
- 4. In addition to the "traditional" and "non-compliant" attitudes represented by these examples, the inventory included conversations portraying "ethico-legal", "religious", "expediency", "fear", "compliance" and "pleasure" as possible attitudes.

CHAPTER EIGHT

PUBLIC HEALTH: I. SANITARY SCIENCE AND A SOCIO-PHYSICAL SPACE

In 1904 (Editorial, 1904) a strand of self-reflexive criticism rose into the discourse of South African public health. Speaking to fiscal rather than humanist concerns, this led to its then current practices in relation to Africans - in particular the "native location" as a device of sanitary control - being viewed as evidence for the discipline's over-dependence on repressive tactics and failure to make better use of what were seen as the economically and administratively more viable strategies of hygienic education and sanitary supervision. Since then, the critique that public health has operated as a repressive force has been cast increasingly in the language of progressive humanism and visited upon every subsequent regime of public health, to provide the conditions of possibility which underlie the contemporary quest for a health service characterised by "affordability, acceptability, efficiency, equity and effectiveness" (Kaiser Family Foundation, 1991, p.6).

Underlying these criticisms is the assumption that the social body is something upon which the machinery of public health impinges, a complex of wills possessed of its own dimensions and dynamics that pre-exists the installation and interventions of public health. From the Foucaultian perspective, however, "the phenomenon of the social body is the effect not of consensus but of the materiality of power" (Foucault, in Gordon, 1980, p.55). In this genealogical perspective there is therefore no "public" and no "social body" waiting to be distorted or repressed by public health. As entities of medical knowledge and sites of resistance, these exist only and precisely to the degree that they are manufactured by the methods of public health where these invent the interstices between people, and between bodies and the environment, as possible surfaces for various interventions and controls. For more than the

other socio-medical disciplines examined in this study, the fundamental concern of public health as a conduit of disciplinary power is not with the interior space of the body, but with the extra-corporal spaces surrounding it, which once fabricated as domains of positive knowledge in turn exert their own outward pressure to constitute the individual bodies they isolate as possessed of particular attributes and identities.

The Power of Space and Spaces of Power

Preoccupied with gaps between bodies and the interface separating bodies and the non-corporal world, public health technologies exemplify the productive power of disciplinary space, which is the contextual condition of possibility for the existence and identity of the objects that are located and made visible within it. Following Armstrong's (1993) use of Mary Douglas' Purity and Danger (1968), one way of exploring public health spaces as spaces of power is to view their form and nature as produced by and productive of the hygienic rules and rituals codified within the practices of public health.

At one level, hygienic rules are simply a means of identifying and keeping separate that which must be kept apart. To illustrate this function, Douglas analyzed the dietary rules given to Jews in Leviticus and Deuteronomy. Consisting in a list of animals distinguishing between those which may be eaten and those which may not, she argued that the only way of understanding the allocation of animals to either of these two classes was the principle of completeness or "holiness" which demanded that different categories of things were not confused.

In the firmament two-legged fowls fly with wings. In the water scaly fish swim with fins. On the earth four-legged animals hop, jump or walk. Any class of creatures which is not

equipped for the right kind of locomotion in its element is contrary to holiness. (Douglas, 1968, p.55)

Accordingly, because they live in the water but do not have fins and scales, the eel and the shellfish were part an of anomalous group and therefore unclean: "Everything in the waters that has not fins and scales is an abomination to you" (Leviticus xi, in Douglas, 1968, p.42). Analogously, "dirt" or "filth" - which features so prominently in the discourse of public health - is essentially matter out of place, and rules of hygiene themselves function like religious interdicts to keep separate that which must be kept apart. Illustrating this idea of "dirt", a contributor to the Johannesburg journal *Public Health* wrote how:

The pleasant, earthy odour of kraal manure on the land becomes an unbearable stink through the breakfast room window, and the overpowering stench of stable manure becomes a nice, fresh smell when you pat that horse ... which has just carried your shirt at long odds. (Anon, 1937, p.20)

What Armstrong (1993) adds to this analysis is to examine a further effect of pollution rituals, for in addition to ensuring the purity of the spaces which they are designed to keep separate, these rituals focus attention on the boundary itself.

The boundary between 'protected' spaces is a line across which pollution threatens to pass. But in closer focus it can appear to be more than a linear dimension: rather it becomes a space or region marked out by its own conceptual axes and containing its own anomalous objects excluded by the contextual classification system. This boundary line is a residuum of social order, a twilight place of outcasts, danger and pollution ... Seemingly within the line itself, in a space without volume, lurks threat and danger which cannot be ordered, only contained. This unruly region separates and

defines the fundamental spaces of social life, yet somehow seems to lie outside of the social. (Armstrong, 1993, pp.393-394)

It is the aim of this and the following chapter to follow Armstrong into this unruly space of productive power by analysing the rules and rituals of public health that from the second half of the nineteenth century have had as their object and effect the relation of the African body to public health space.

Emergence of the Body Boundary Zone

During the second half of the nineteenth century there occurred within South African public health a respatialization of illness that for the first time made it possible to conceive of the volume of the human body as a distinct space alongside the physical space of the environment. Previously (see Chapter 4), disease served not to make visible the bodies of people, as much as to illuminate the characteristics of geographically defined places, for the causes of sickness had been seen to reside in the interplay of the air, the soil, water and the sun. For instance, Lichtenstein had observed in 1812 that "intermittent fevers are unknown to the Kaffirs; their soil is dry, they have no lakes or morasses, and their huts are commonly built about three or four hundred paces from the river at which their cattle are to drink" (Lichtenstein, 1812, p.252). Similarly, and as late as 1834, Kay had been able to ascribe the distribution of disease on the subcontinent to the fact that:

The more southerly divisions of the country are generally pretty healthy, owing to the peculiar dryness of the atmosphere and soil. Hence epidemics, at all serious, very rarely occur ... (H) owever, the tribes higher up the coast are manifestly subject to (diseases) of a far more destructive character. The ground being marshy, rain more abundant, and

the rivers much more extensive towards the tropics, miasmata and noxious vapours are, of course, frequently productive of fevers that are little less than pestilential. (Kay, 1834, pp.346-347)

While this geo-climatic spatialization of disease sustained the technique of quarantine aimed at keeping diseased and non-diseased localities apart by preventing the movement of bodies between them, those bodies themselves - their characteristics, attributes, identities, and so on - remained largely irrelevant and therefore unanalyzed.

In the second half of the nineteenth century this public health focus that located the danger of disease to the characteristics of the earth, air, soil, water and sun began to give way to a new regime of hygienic rules and rituals which replaced the geo-climatic space of old with a socio-physical one. This "sanitary science" problematized not the movement of disease into the body from the atmosphere, but rather the two-way exchange back and forth of energy and matter from the human body into external space, and from external space into the body. The effect of this new gaze was to establish as the object of public health surveillance the zone which separated anatomical from environmental space.

Man lives in a medium on the surface of the Earth - absolutely necessary for the support of life and that medium is pure atmosphere. Essentially necessary for the preservation of his health or for the recovery of his health when lost. Fish live in a medium and that medium is water. Water, either fresh or salt, if one poison the water in proportion to the amount of poison will the Fish sicken and die. In like manner if one poison the atmosphere, man will either sicken and die - in proportion to the amount of poison contained in the atmosphere, because the blood unless it can be subjected to

the influence of pure atmosphere in its passage through the Lungs becomes hurtfull (sic) to the body, oppressive to the Brain, unfit for the reproduction of healthy tissue, the freedom from disease and the support and nourishment of the Body in General. (Fitzgerald, 1859, PR 3624, folder 3, pp.200-201)

In this new regime, it was the human body itself — and in particular the diseased human body — that was the most prominent source of danger to the purity of the environment, for: "A body in a state of disease is like a volcano in action and is constantly eliminating from the Lungs, skin and various organs of the Body Noxious matter and Effluvia hurtful to it and no longer to be endured" (Fitzgerald, 1859, PR 3624, folder 3, p.201). Accordingly, in their 1868 notes on "the epidemic in Cape Town" Thornton and Fuller could recognise four "generically distinct" (p.5) types of fever, three of which emanated from exposure of the healthy body to an atmosphere corrupted by the effluvia given off by the waste products of the human body, which belonging to neither the body nor the environment were particularly hazardous to health.

- 1. Simple continued Fever. Caused by exposure, fatigue, surfeit, and becoming epidemic through bad odours, poverty, and c.
- 2. Typhoid or Pythogenic Fever. Caused by poison contained in emanations from sewers, and c.
- 3. Typhus. Caused by the concentrated exhalation from squalid human beings.
- 4. Relapsing Fever. Caused by Famine. (Thornton & Fuller, 1868, pp.5-6)

Purity of the body and the atmosphere were therefore contingent on the purity of each another, and it was through the deployment of a simple series of rules and rituals directed at

monitoring and controlling the exchange of matter between these two categories of completeness that the African body emerged into the regime of sanitary science.

The "Christianized Kaffir" as a Public Health Problem

By the 1870s the body boundary zone delineating anatomical from environmental space was itself located in a further and more encompassing pair of categories, a superimposition that made possible crystallization of the African body as a public health object characterised by its own and very particular identity. On the one hand, the "natural" and therefore pure category of "tribal" life, and on the other hand the equally pure category of the European city and "civilization". In between, an indeterminate region that gave rise to the "Christianized Kaffir", who belonging to neither the tribe nor the town was an anomalous object and so particularly dangerous. This danger issued from the manner in which the incomplete "civilization" conferred by "Christianization" at the hands of the missionaries interfered with the proper exchange of matter and energy between the body the environment, and in 1877 Egan observed that:

Among the ... Kaffirs, cases resembling phthisis are often met with; but I believe that most of these are cases of pneumonia becoming chronic through neglect. This is more especially the case among Christianised Kaffirs, because the wild Kaffir wears only a blanket, and when he gets wet, as soon as he returns to his hut he throws off his blanket, and does not sit or sleep with his wet blanket round him but lies naked on a mat before the fire. But the Christianised Kaffir, who wears European clothes, does not trouble to change them when he gets wet, as it is too much trouble, but keeps them on and sleeps in them, and is thus, through help of civilization, more

subject to bronchitis and pneumonia, the latter often through neglect terminating in abscess of the lung. (Egan, 1877, p.112)

Against this momentary focus of the sanitary gaze to the two-way exchange of energy across the skin of the African as one of the more obvious boundaries between body and non-body, the gaze of sanitary science was until around 1910 preoccupied with the unidirectional policing of matter moving out of the African body into the "atmosphere" absorbed by European bodies.

Particularly hazardous were those substances which belonged to neither the body nor the environment - such as faeces, urine and saliva - and it was therefore the bowel and the mouth through which these were expressed that emerged as the dominant objects of surveillance in this nascent regime of sanitary science.

Epitomising this focus was the late nineteenth century preoccupation with the sanitary purification of sewage and the African's mode of defecation. Underlying this preoccupation was the observation that air was liable to corruption by the noxious fumes given off by sewage. Especially dangerous were the gases produced by their unnatural mixing, because since these solid and liquid bodily wastes were kept separate within the body it followed that their unnatural intermingling out of the body would increase their anomalous nature and therefore the danger to health. Accordingly, it could be suggested in 1888 that "the Public Health at Kimberley and other Towns" (Fitzgerald, 1888, p.4) would be much improved by a system of sewage disposal that kept separate categories of human waste which did not belong together.

...(C) an it be conducive to Public Health to have a number of human beings congregated close together in Towns and Cities with a number of Cesspools and one Tub Closets containing fluids and solids in their midst, constantly undergoing

fermentation, and giving forth foul emanations poisoning the atmosphere they breathe? Why should we mix solids and fluids together, thus making a poisonous and disease-generating mixture polluting the air? From the natural organization of our bodies, it was never intended we should do so. On the contrary, it is clearly pointed out to us that we should get rid of them as speedily as possible without mixture.

(Fitzgerald, 1888, p.4)

This focus upon preventing the dangerous intermingling of bodily wastes and their pollution of the atmosphere rendered Africans living in urban locations on the fringes of European habitation particularly hazardous. For, analogous to the "Christianized Kaffir's" misuse of clothing, these Africans continued in the urban setting to defecate in the open, as was customary in the rural context of tribal life. In urban areas this gave rise to what Harris (1894) termed "a contagium vivum", a result of "decomposing matter" left freely exposed to the air. It could thus be suggested that to protect the public health from the threat of typhoid:

One of the first things to be done is to eliminate superfluous quantities, and this is what can be done in Port Elizabeth, as a first step in the great health problem, by removing the locations. This is the factor that should first be removed from the municipal problem, for drain, disinfect, or do what they will, while defecation in the open by large numbers of people is allowed just windward of the town, so long will typhoid fever continue to exist. (Harris, 1894, p.124)

Writing in 1895, GB Messum declared this "to be a decade of micro-organisms, for there is now scarcely a medical subject or a disease which is not supposed to have its microbe or its pathogenic organism" (p.268). To wherever it turned, the gaze of sanitary science filled the environment with such organisms as they swarmed

from the earth and around the body of the African. In Cape Town, a public health note for 1894 commented on how "the large numbers of disease-producing organisms which accumulate in the upper layers of soil are washed away by the very heavy rainfall" (Public Health Notes, 1894, p.,75), and in Aliwal North where the coming and going of "numerous bands of natives" was reported, "it was feared ... that these aboriginals carried a vast assortment of dangerous and lethal microbes about with them on their persons and in their blankets" (Fuller, 1897, pp.42-43).

Epitomising the dangerous and threatening objects produced by and productive of the boundary line space between the body and the environment, the "microbe" was less a discovery than a device of surveillance which in demanding that its passage through space be mapped made visible those bodily regions across which disease-causing organisms might pass into the world of people, places and things. Thus, in tracing how syphilis "osculated" the community it was the mouth of the "church native" that was produced as the origin of danger and threat to European purity.

Properly conducted and careful enquiries ... will nearly always show a focus of infection. This in nine cases out of ten is the servant-maid; she is generally a church native, and almost invariably wears stockings. She, it can be proved, has wantonly kissed the baby; it gets syphilis. The unsuspecting master also inflicts upon his offspring a chaste and paternal kiss and, as a partial consequence, he gets a hard sore on his glans or prepuce. Thus the disease gradually osculates the whole community. (M.O.M., 1894, p.154)

Leprosy, which previously had been an hereditary condition dealt with through the banishment of bodies and their confinement as an undifferentiated mass, was also inducted into this socio-physical space, where it came to underline the dangers of dirt, for: "Those

families in which there is much leprosy are the dirty families. They are the patients who give most trouble in the Asylum, who appear to delight to escape baths (and) cleanliness of all kinds" (Turner, 1903, p.2). Ascribing the preponderance of leprosy among rural Africans to their dependence on agriculture - since such work "necessitates close and intimate intercourse of individuals, and the free interchange of tools, implements and c." - Impey (1896) observed that the foci of infection were those bodily extremities most directly exposed to the environment. Thus, the face, hands and feet, being the closest to cold and most distant from the centre of circulation, were isolated to the eye of sanitary science, as "the leucocytes, with their bacilli, congregate at these congested spots, and, escaping the vessels, accumulate in the lymphatic and perivascular spaces of the part" (Impey, 1896, p.32).

The New Hygiene of Location

By the turn of the twentieth century the body-boundary zone had thus expanded into a three-dimensional space that pressed outwards to establish the contours of the African body as an anonymous anatomical container and isolate as immanent sources of danger its points of greatest permeability to the external world of things and other bodies. The occurrence of bubonic plague between 1900 and 1904 operated to further insinuate this socio-physical space into the gaps between bodies by illuminating a series of dark corners in the cities which the light of surveillance revealed as especially dangerous owing to the dense intermingling within them of different bodies.

Whole streets were inhabited by natives, and in some houses close to the leading thoroughfares the cellars were occupied by large numbers of men - Europeans, Malays, and raw Kafirs - all sandwiched together, living in a state of the utmost

neglect, disease and vice. (Graham, 1902, cited in Swanson, 1977, p.400)

If the occurrence of disease could be identified with such admixtures of different bodies, then its prevention demanded that those same bodies be separated out, and through their aggregation the minute interstices of contact between different bodies came to outline a massive new surface for public health intervention involving the binary division of African from European bodies.

This consisted in the strategy of "Location". As a means of control through confinement and surveillance, the idea of "Location" had since the mid-1800s existed in rudimentary form and been sporadically applied to extend the eye of imperial power into certain quadrants of rural African society - "it seems a pity these people are allowed to remain in these secluded parts, where the eye of the authorities cannot easily be upon them" (Cape of Good Hope, 1884, p.17) - and, in some urban areas, as a possible means of imposing hygienic order upon the built environment of Africans living in the towns.

If we mean to civilize the natives we must enforce order and regularity, and naturally the round Kafir hut cannot find a place alongside the square or oblong white man's house. There should be an interdict against the round hut. It certainly

breeds vermin. (Cape of Good Hope, 1883, Appendix C, p.257) By crystallizing this otherwise indistinct relationship between the disorder of urban space and the production of disease, the plague offered powerful confirmation for the strategy of "Location" as a means by which to combat such disorder, since it revealed to the sanitary eye the failure of urban Africans to adequately manage the passage of matter across their body boundaries. However, instead of problematizing the relation of individual Africans to their own body-boundary zones through the training of hygienic habits, the

initial effect of location was to install the African body as part of the environment, as a threat to the European which could not be ordered, only contained. Giving evidence for a report on the plague in Natal (Hill, 1904), Durban's Medical Officer of Health could thus observe that:

Of course, with an Indian or Kaffir population constant supervision is essential, for their ideas of sanitation are not sufficient, in my opinion, to allow them to live in any area where Europeans reside. (Munson, cited in Hill, 1904, p.9)

Between 1900 and 1904 the productive power of the plague as a disciplinary device was realised in the installation of geographically defined locations outside Cape Town (1901), Port Elizabeth (1903), Johannesburg (1904), and a host of smaller towns, in each instance as a direct result of the plague appearing within them to shine the light of surveillance into "every yard, hole and corner" where previously "everyone ... (was) allowed to go except a policeman" (South African Native Affairs Commission [SANAC], 1905, p.652)².

However, the sovereign strategy of "Location" constituted a massive infraction of the hygienic rules which demanded that bodies be kept separate so as to prevent their pollution via the dangerous accumulation around them of exhaled air, sweat and other anomalous human wastes that belonged neither to the body nor the environment. It therefore became, even at the point of its installation, a site for the resurgence of disciplinary surveillance to the interface between the interior of the African body and the environment. Arguing that in failing to insert adequate sanitary supervision into the locations local authorities were evading their responsibilities to the public health by using the African as a "sanitary whipping boy", a 1904 editorial called not for the abolishment but rather

refinement of "Location" as an hygienic strategy.

For years, intelligent people, medical and lay, had been preaching the urgent necessity of providing for them a well managed Location, all to no purpose. The Municipal authorities shelved the question on one pretext or another. Then came the plague, and an energetic Colonial M.O.H., fortunately backed by a strong Minister with the shadow of martial law behind him, transferred the whole crowd to an improvised Location inside three or four days ... When such people are transferred from their own environment to one exacting a totally different habit of thought and practice the clear duty of the white man who has learnt his lesson is to pass that lesson on to them ... Our paramount duty is (therefore) to face the burden of a better and more expensive hygienic supervision than is necessary with the man of white skin. (Editorial, 1904, p.71)

"Location" thus became a strategy which combined the repressive tactics of separation and enclosure with the subtle segmentations associated with discipline, to at once enable the sanitary segregation and surveillance of Africans, and in the course of so doing produce them as "docile" and "regimented" bodies. Hence, what the superintendent of the Durban Police had to say in 1905 (SANAC, 1905, p.653) lay comfortably alongside Watkins-Pitchford's (1908) note on the location as sanitary device for hygienic surveillance.

The Indian Ocean would guard them on one side, the Umgeni on the other, and the borough police on the third. I would put my natives in barracks and let them march into town as they do with soldiers. (SANAC, 1905, p.653)

That Natives and Asiatics, other than those employed in domestic service, should reside apart in a specially allotted district of the town is ... highly desirable. These people have moral ideas and social habits widely divergent from those of educated Europeans, and this fact alone fully justifies such racial segregation. To the hygienist, however, the most convincing argument is the facility which is afforded for sanitary control, more especially in respect of communicable diseases. (Watkins-Pitchford, 1908, p.73)

By interpolating hygienic surveillance into its closed domain, the location became an observatory for the minute surveillance of the sanitary behaviour of Africans. The effect of this was to revivify and elaborate the earlier focus on the "Christianised Kaffir" as an anomalous object produced in the unruly region between African tradition and European civilization.

The "Dressed Native" as Object and Problem

Where previously the sanitary gaze to the body boundary of the African had been preoccupied with the monitoring of matter passed out of the African body so as to purify the atmosphere and thereby protect the European body, now this was complemented by an equivalent focus on policing the substances that moved into the African body from the environment.

With the radiation of an observing gaze through the locations, food, for instance, now became the subject of close scrutiny and a device by which sanitary science elaborated such organs as the African mouth with teeth, which as the first point of contact for many substances that entered it was a particularly dangerous part of the body boundary zone. Thus, both Mitchell (1908) and Bruce Bays (1908) offered comparisons of the African's diet under "natural conditions" and in the location. "Consisting mainly of mealies,

pumpkin, sweet potatoes, and sour milk, ... with meat occasionally and as a luxury", the tribal African's diet was "healthy and nutritious" (Mitchell, 1908, p.258). In contrast, the African in the location:

... has in most cases ... to fall back on his own devices. He may procure his food at a kafir eating-house, where a bowl of soup and some white bread furnishes him with a meal of poor value as regards nourishment, or he may feed at home on the offal of beasts of the slaughter-houses, on coffee, perhaps condensed milk and again on white bread. This great fondness for fine white bread on the part of the native is unfortunate; for many reasons it is distinctly inferior to the whole meal loaf. The present age has been well and truly be described as "the great pap age", as regards food, and the food of the present day no longer requiring the amount of mastication that the food of our ancestors did, the result is that the teeth tend early to decay, and to become organs no longer required; the native even, at one time blessed with a splendid set of teeth, now shares with the European in that most deplorable spread of dental caries so universally prevalent amongst the civilized races of South Africa, whereby the teeth in so many instances are found to be decaying immediately after their irruption. (Bruce Bays, 1908, p.267)

The minute surveillance of the African body boundary enabled by the location thus coincided with completion of the great cycle of interchange involving contamination and purification of the substances exchanged between the environment and the anatomical space of the body. For the African body now existed as the point where the arc of matter moving outwards was met by an equivalent arc of inward movement. Exemplifying this completion of the circle was the figure of the "dressed native":

The harmful effects of European dress on the native are undoubted. His blanket is, as a rule, tolerably clean; it is impregnated with red ochre, which is obnoxious to vermin; when he perspires he wraps it round his waist or removes it altogether; if it gets wet it dries readily, or is at the first opportunity put out and dried. When he takes to European clothes he wears them night and day almost until they fall off; if they get wet from perspiration or rain they have to dry on him, and in this way they soon become impregnated with dirt and perspiration, and more or less impervious. They thus predispose to affections of the chest and seriously interfere with the functions of the skin, which probably plays an appreciably greater part in eliminating waste matters than in the case of Europeans, and upset the adjustment between the excretory activities of their skin and kidneys, an altered adjustment to which Europeans have been accustomed for generations. (Mitchell, 1908, p.259)

This closure of the sanitary cycle meant that surveillance was now equally concerned with the body of the African as both the origin and the destination of substances shuttling between it and non-corporal space. Confirming this was the report of the 1914

Tuberculosis Commission (Union of South Africa, 1914), in which each of its investigations into the management of matter which departed the African body was matched by an equivalent focus on that which entered it. So, talking of the native's "apparently ineradicable ... dislike to ventilation in his dwelling" the report observed how:

Windows, and ventilation openings he persistently blocks up.

If possible he will always have a fire in his sleeping place.

The hotter and stuffier the air the better he likes it. Added to this he invariably sleeps with his head wrapped up in a blanket. If the blanket were clean there would be no great

harm in this, on the contrary it would act to some degree as a filter both to himself of the air he inhales, and to others of the breath he exhales. (Union of South Africa, 1914, p.103)

Complementing this attention to the nose and mouth as points where dangerous substances moved into the African body, so too were they now visible as orifices that expressed dangerous matter into the environment, for:

... all natives are in fact most careless and filthy in regard to their nasal and buccal secretions. He will foul his fingers with it and after "cleaning" them on his own bare leg, on the floor or the neighbouring wall of the hut, or anything else convenient, he may dip into the common eating utensil. He always eats with his fingers; and pipes, drinking and other utensils are used in common. Spitting about outside the hut is possibly not a great danger with the intense sunlight of South Africa, but as children are always crawling about and fowls and pigs are foraging some danger may occur ... Another custom which is conducive to disease is the sleeping on the ground of the hut, and also using it as a table. In this way he comes into contact with any dirt and infection that may be on the floor. (Union of South Africa, 1914, p.102)

Sewage was also subject to this reversal in the surveillance of the natural history of substances passing across the body-boundary zone, and instead of advocating that locations be moved away from European towns so as to prevent their pollution, the stress was now upon the installation of sanitary devices to contain these dangerous wastes and prevent their re-entry into the African body.

There is no proper system of sanitation carried out in the locations. The use of pails and the removal of night soil is optional. Where there are infectious diseases ... there appears to be no regular method of removing or burying the

excreta ... The sick and dying crawl out and defecate as near as possible to the hut they live in, and when they get beyond the strength of that, they lie in their filthy clothes, or use rags which are then thrown out into the streets, or hidden in the aloes and prickly pear bush. (Union of South Africa, 1914, p.134)

Contemporaneous with crystallization of the "dressed native", McVicar had in 1908 argued for the special importance of installing in "native schools" (p.314) a system of medical inspection and health instruction as a means of correct training by which hygienic habits could be inculcated in the African: "It is they who are likely to spread infectious or contagious disease. It is their unhygienic habits and their ignorance that require to be remedied" (McVicar, 1908, p.314). By 1913, this strategy found further elaboration, and through the proposed "medical inspection of schools and school children" (Beck, 1913), the school could be thought of not as a place of sanitary disorder, but rather as an observatory of hygienic behaviour - "the place where we can best determine the evils to be found" (Tomory, 1913, p.363). For the classroom was now potentially a space where not only the conduct of the individual could be monitored and manipulated, but also the "moral", "sanitary" and "physical" conditions in the home (Beck, 1913, p.256). Thus, through "tooth brush clubs", "tooth brush drill" and "nose breathing drill" (Tomory, 1913, p.363), "the schools will become places where infectious diseases will find a limiting agency instead of the spreading agency schools now so often are" (p.366), and the child thus recruited into the regime of hygienic conduct a "most powerful influence for home hygiene: improvement will go from the school to every home" (Tomory, 1913, p.363). As a result, while "of little direct value at present to the community" the proposed teaching of hygiene was "nevertheless educationally of vital and immediate

importance, for as the years pass by increasing waves of hygienically-disposed minds are entering the ocean of our civilization" (Leipoldt, 1916, p.535).

Such strategies directed to recruiting individual Africans to the service of managing their own body boundaries were, however, signs of a public health regime to come, for it would be another 30 years before they began to find any sustained application in relation to the African. Instead, and confirming the invention by sanitary science of the dangers to health as residing in the lines between the body and the environment, the regime of sanitary science gave rise to a centralised control technology aimed at policing the movement of impurities across the body boundary through tactics of "prevention and suppression".

Policing Impurity: The Public Health Act of 1919

Until its legislative formalization in the country's first public health act of 1919, the requirement for a centralised health administration was evident more by its absence than in its presence. For example, editorials in 1911 and 1914 criticised the fact of "similar health calamities (being) ... dealt with in different ways" (Editorial, 1911), because:

Municipalities are not always intelligent bodies, ... some doing nothing at all for a long time, and then, under the influence of panic and negrophobism, rushing into paths wherein angels fear to tread. (Editorial, 1914, p.121)

In 1918-1919, and as had the bubonic plague some 15 years earlier, so too did the influenza pandemic heighten the visibility of the boundary zone between the body and the environment, the Report of the Influenza Commission advocating "the necessity of devoting immediate attention to the improvement of housing and sanitary conditions in slum areas and locations" (Union of South Africa,

1919, p.54). In the same year, and drawing heavily upon this Commission's report, "The Public Health Act No. 36 of 1919" established the Department of Public Health as a central coordinating body charged with standardizing the methods of observation, procedures of investigation and research, and mechanisms for the "prevention and suppression" of infectious diseases deployed by each local authority. Each authority was in turn charged with the task of furnishing the Department of Public Health with weekly returns showing notifiable diseases and treatment statistics.

The end result of repeated inscription in administrative consciousness of the anonymous border between the mass of bodies in the population and the external environment, the Act gave the force of law to tactics for its monitoring and control. Thus, its nine chapters and 161 sections contained no mention of the person as an idiosyncratic individual with thoughts, beliefs, or emotions. Rather, its network of hygienic rules and regulations were precisely restricted to the socio-physical space of sanitary science, the limit of their reach coinciding exactly with the body-boundary zone between corporal and non-corporal space. Factories, for instance, should be designed to make provision for the prevention of sweating; the regulations governing housing laid down a complex of laws concerning ventilation, lighting, space, the storage of food and disposal of sewage, while the Act's "Food and Drug Adulteration Laws" set out standards governing the nature, quality and composition of foodstuffs.

In 1923, what until then had remained an ill-coordinated yet formally repetitive series if tactical and practical procedures for protecting the purity of the body and the environment found their systematic codification in the first edition of Reid's Sanitation and Public Health³. This instructed its readers in how to detect

such sanitary dangers as the ill-ventilated room, which "on entering rapidly from the outside the sense impression gives a good idea as to whether ... its air is fresh or stuffy, oppressive or smelly" (Reid, 1927, p.50); identify for various infectious diseases "the channels of invasion, or ports of entry into the body", the principle of these being "the skin and the mucous membranes of the respiratory, alimentary and genito-urinary tracts of the body" (Reid, 1927, p.264); and how best to fumigate rooms and disinfect "articles like furs, feathers, bound books and leather goods which would be damaged by steam or liquid disinfectants" (Reid, 1927, p.241).

In radiating its regulatory tactics into the boundary zone separating bodies from the environment, the great achievement of sanitary science was therefore to manufacture this as a visible interface amenable to manipulation in the fight against contamination and disease. This, however, was also to prove its greatest failing, since while laws governing such things as the design of buildings and the quality of foodstuffs could be enforced with relative ease, the regulation by external means of more intimate bodily activities - such as bowel movements, bathing and sexual intercourse - could not.

Indicative of this was an increasing recognition - commencing in the mid-1920s - by the newly established Department of Public Health of the difficulties attaching to the "prevention and suppression" of syphilis among Africans. Since 1909 "special antisyphilitic measures" (Colonial Secretary, 1910, p.1) had been set in place that sought to prevent the spread of infection by making the issue of passes allowing natives to be present in European towns and labour districts conditional on their being examined and treated for syphilis. In "urban areas to which the Urban Areas Pass Regulations apply" (Colonial Secretary, 1910, p.2), these made it compulsory for

all male natives suspected of having the disease to submit to a medical examination for the purpose of its detection. To enable this, the Medical Officer of Health in each town or city, police officers, mine compound managers, and private employers were empowered to take any native suspected of being syphilitic for examination. For instance:

Any private employer of a native ... who suspects that such native has syphilis may take him or her to the Police Surgery ... for free examination by the district surgeon at 10 o'clock in the morning of any weekday. If the district surgeon finds that the native is syphilitic he will certify to that effect on a prescribed form ... to the Chief Pass Officer, Central Pass Office, and will deliver the native and the certificate to the police orderly. (Colonial Secretary, 1910, p.2)

By 1928 the Department of Public Health began to comment on the "special difficulties" attaching to this repressive strategy, which because it did not extend the requirement of compulsory examination to native females had little or no effect on preventing its spread through prostitution.

Under the pass system obtaining in some of the Provinces, a measure of control can be exercised in regard to males, but action on these lines in regard to females is extremely difficult. Native females are frequently commercialized purveyors of the disease, and in the large labour centres of the Northern and Eastern Transvaal frequently operate in gangs. It was hoped that with the coming into operation of the Natives (Urban Areas) Act, No. 21 of 1923, it would be possible through the agency of matrons of Native hostels and otherwise, to exercise a measure of control and supervision over Native females and to exclude form urban areas undesirable and redundant Natives of both sexes, but up to the

present this hope has not been realized. (Union of South Africa, 1928, p.47)

Ironically, while it was possible by 1930 to attribute a measure of success to these procedures (Union of South Africa, 1930, p.47), they were also then beginning to be seen as inducing effects opposite to their intended aims of detection and control.

On the one hand, they produced the suspicion that the increased prevalence of venereal diseases was due not only to better reporting of the problem, but also to "free and convenient treatment facilities ... (encouraging) exposure to infection and consequent spread" (Union of South Africa, 1930, p.47). For the enforced examination of Africans had revealed to the gaze of public health the previously marginal importance of taking into account their "moral" make up.

A large percentage of such patients is almost entirely "a-moral" and many are without any feelings of shame or common decency. They will often freely admit to repeated exposure to infection, or even perhaps to incest; re-infections after a period of prolonged, troublesome, and expensive treatment are not uncommon. (Union of South Africa, 1930, p.47)

On the other hand, attempts to expand the system of enforced medical examination to include "all natives in domestic service" (male and female) were found to "arouse intense antagonism and resistance amongst the native population" (Union of South Africa, 1930, p.47), driving the disease underground and preventing the centralised authority of public health from intruding its lines of hygienic surveillance into the intimate spaces of sexual contact by which it was spread. Instead, it could now be suggested that in place of these prohibitive practices "tactful methods and friendly persuasion - coupled with suitable methods for voluntary treatment - will in most cases yield the best results" (Union of South Africa, 1930,

p.47).

Thus, and as the failure of this regime became increasingly evident in relation to not only syphilis, but also malaria, tuberculosis, and other diseases, so there began to become manifest within the discourse of public health an increasingly synaptic and productive form of disciplinary power. Against the preoccupation of sanitary science with the repressive strategies of "prevention and suppression", this nascent regime of "personal health" (Reid, 1927, p.346) crystallized around the new idea of "health" as something to be achieved through the constructive technology of training the habits of individuals in a direction of greater cleanliness, better feeding, and closer attention to the well-being of themselves and their families.

While the liability to contract infectious diseases depends greatly on the environment of the individual, the cause of constitutional diseases depends more on personal habits and ways of living and as to how far the rules of health and laws of nature are obeyed ... Public Acts and Laws are chiefly designed to promote the health of communities through improving environmental conditions, by removing anything insanitary liable (sic) to be injurious to the general health. Personal hygiene is mainly directed to the promotion of the health of the individual. It aims at increasing the vital forces of the body so as to prevent constitutional disease. (Reid, 1927, p.346)

Accordingly, the 1929 report of the Department of Public Health could complement its earlier identification of needs for improved techniques of disease notification and sanitary surveillance with a new emphasis on: "more health publicity and educative work for the dissemination of knowledge of the simple principles of healthy living ... amongst all races and classes of the population" (Union

of South Africa, 1929, p.1). By 1930 the socio-physical space of sanitary science that had fabricated the body as an anonymous corporal container was thus well on the way to being replaced by the psychosocial space of a new public health. Soon to be known as "social medicine", its attempts to recruit people themselves into the surveillance of anatomical spaces and body boundaries would "recognise countless individualities, ... each composed of different constitutions, habits and idiosyncrasies" (Armstrong, 1993, p.401).

- 1. In Discipline and Punish, Foucault (1977) discerned two configurations of disciplinary power "exile-enclosure" and "the plague" as possible responses to disease. The first had as its essential and symbolic object the leper, and implied a practice of rejection whereby the diseased were physically removed from the community and confined to their "doom in a mass among which it was useless to differentiate" (Foucault, 1977, p.198). The essential and symbolic object of the second was the town in the grip of plague, whereby the dangerous mixtures of bodies were separated out through techniques of individual identity such as spatial partitioning, registration and surveillance that assign to each individual his or her "'true' name, his 'true' place, his 'true' body, his 'true' disease" (Foucault, 1977, p.198). Alongside these strategies Foucault also sketched a third response to disease, which combined the political dream of pure community attaching to "exile enclosure" with that of the disciplined society invoked by "the plague". It is this previously unnamed third response that the strategy of "Location" epitomised and to which the term here refers.
- 2. For this history see Robinson (1990) and Swanson (1977).
- 3. Since no copy of this text can be located in South Africa or through an international library catalogue search, it is not possible to establish how it differs from the second edition of 1927, which, "thoroughly revised and considerably enlarged" (Reid, 1927, preface) included a 22 page chapter on "personal hygiene".

CHAPTER NINE

PUBLIC HEALTH: II. SURVEILLANCE MEDICINE AND INVENTION OF A PSYCHOSOCIAL SPACE

Dominated by the rituals of inclusion and exclusion characteristic of Panoptic power, the socio-physical space of sanitary science had maintained a reductive and dividing public health gaze to the body-boundary zone. Projecting outwards from a central administrative structure, its lines of sanitary surveillance had fixed upon the spaces between the bodies of the ill and the bodies of the well to subject these to a variety of prohibitive rules of hygiene enforced by a legislative framework. But, as illustrated in the previous chapter's review of their failure to govern the activities of Africans in relation to the venereal diseases, there were clear limits to the effectiveness of this centrally controlled regime.

By the early 1930s this problem of effectiveness began to be addressed as a new regime of "surveillance medicine" - a medicine dedicated to bringing everyone into an all pervasive network of visibility (Armstrong, 1994) - began to crystallize around the possibility that Africans themselves might be recruited to the surveillance and management of their own anatomical spaces and body boundaries. Summarising this shift, the first edition of Cluver's Public Health in South Africa (1934) defined its primary aim as being to "raise the general fitness of the individuals constituting the nation to so high a level as to render them immune to attack by preventable disease" (Cluver, 1934, introduction), the securement of general sanitation now of secondary concern to all those tactics which could be pressed into persuading individuals to participate in monitoring their own body boundaries.

Our first aim will be attained when we have induced the individual to eat food in correct quantity and quality, to live in atmospheres with sufficiently high cooling power whose action is not neutralised by incorrect clothing, to respond to muscular exertion by suitable psychological stimuli, and generally to live in accordance with the findings of the science of physiology. (Cluver, 1934, introduction)

Each a variation on this cardinal principle of recruiting the individual into the disciplinary network as at one and the same time the subject and object of surveillance, this regime consisted in three sub-discourses. First, "social medicine" (1930 to 1955); second "community health" (1955 to the mid-1980s), and finally the still nascent discourse of the "new public health" as it crystallizes around a concern to protect the environment from the by-products of human social, political and economic activity.

Social Medicine

Premised on the recognition of "personal hygiene" as a disciplinary device through which the "constitution" of the individual bodies it invented "may be strengthened by continually practising regular habits and following the rules of health" (Reid, 1927, pp.346-347), the emergence of social medicine in the mid-1930s found its conditions of possibility in a lowering of the descriptive threshold to manufacture the previously irrelevant customs and beliefs of Africans as its analyzable objects and effects. An early example of the knowledge produced by this new public health power, Laidler's (1931) paper on "Native beliefs concerning pregnancy and child-birth, (and) their effects on public health administration" noted that:

At present, something is known of the beliefs underlying the practice of Bantu medicine, but no detailed account has been published concerning ... the superstitions connected therewith and the clash between them and more civilized thought in the form of public health administration. (Laidler, 1931, p.418)

His description of these "superstitions" and analysis of their public health implications thus marked the point at which the sociophysical space of sanitary science began to give way to a psychosocial space that recognised health as in part a function of those cultural components which could now be seen as contributing to the hygienic conduct - or misconduct - of the individual.

In turn, this expansion of public health space beyond the contours of the body and into the intangible topography of beliefs and cognition transformed the individual into a more pliable and mutable entity than had been sustained by the regime of sanitary science. For, as Gale noted in 1938, where earlier proposals concerning the health needs of natives had "centred almost entirely on the needs of those who are sick" (p.9), the problem of public health could now be cast in terms of persuading everyone to follow the rules of health.

A more aggressive policy in health education is required ... The fundamental health problem ... is the problem of how to win over an illiterate people, still loyal in thought and in practice to medical ideas and customs intimately associated with deep-rooted ancestral superstitions, to a confidence in and utilisation of the sciences and art of western twentieth century medicine. (Gale, 1938, pp.8-9)

Intertwined with this emerging focus of public health surveillance to the beliefs it installed behind the overt hygienic behaviours of the African, was the cognitive device of viewing hygiene as coextensive with economic factors in general and patterns

of African domestic economy in particular.

No amount of medical attention or instruction in hygiene will avail unless the Natives possess the facilities for observing any rules and regulations that may be promulgated ... The observance of instruction in medical hygiene is intimately wrapped up in the economic factor. (Kark, 1934a, p.18)

To establish this relationship between hygienic behaviour and the "economic factor" as a surface of intervention demanded not only that better statistics be maintained to "investigate thoroughly the incidence of disease in the native", but also that mechanisms of surveillance be deployed to construct the interrelationships between such factors as the "accommodation", "ventilation", "diet", "sanitary conditions" and "superstitions and other racial traditions" (Kark, 1934b, p.67) prevailing among Africans in the townships, locations and rural areas. Just as hygienic behaviour could not be disentangled from the "economic factor", so was disease now viewed as coterminous with the social fabric produced by the interplay of all these factors.

Disease is not simply due to inherent deficit, nor poverty, nor harmful customs, nor ignorance, and, finally it cannot be claimed that lack of care of the sick is the sole cause. The health of the nation is a manifestation of the interplay of all these factors. (Kark, 1935, p.19)

Illness thus relocated from the elementary space of the body-boundary zone discerned by sanitary science into this complex space of multi-factorial causation, the nascent gaze of social medicine demanded a new technology for mapping and monitoring its distribution. This crystallized in the device of the survey, which could now became an increasingly prominent technique of surveillance alongside the older methods of Panoptical observation that had registered the occurrence of disease from the geographically fixed

points of the clinic and notification office.

Surveying a Psychosocial Space: Problematisation of the Normal

Preoccupied with fabricating immunity through the modification of individual constitutions, social medicine demanded a technology of seeing that could dissolve the binary division of the population into the ill and the healthy and so induct everyone into its network of visibility. Hence the first manifestation of social medicine was its "problematisation of the normal" (Armstrong, 1994, p.5). In relation to the African body, this commenced in the 10 years between 1935 and 1945 with a swarming of the survey and its radiation of a public health gaze into African schools, townships and rural areas, to bring everyone into the eye of this new public medicine through the medicalisation of everyday life.

Established in 1934, "The Society for the Study of Medical Conditions among the Bantu" had as one of its first projects "a scheme for investigating mathematically several thousand native school children" (Editorial, 1935, p.3). Suggesting the novelty that attached to this new way of seeing the African was Achterberg's characterisation of native schools and classrooms around Johannesburg as:

... an enormous virgin field of medical research lying fallow practically at the very doorstep of the medical school ... In native schools within the municipal area of Johannesburg ... there are enroled at present 7,000 pupils ... Within a distance of 30 miles from Johannesburg, there are an additional 3,000 pupils ... The possibilities for research work are boundless. Accurate means for judging age and reliable age-norms are needed. There is the fundamental investigation ... of vision, hearing, nose and throat, teeth, nutrition, and the incidence of hookworm and syphilis.

(Achterberg, 1935, p.10)

In the same year Orford reported on a "somatometrical study of bodily habitus in the Bantu female" which classified anatomical and physiological features to delineate "the normal types of bodily form" (Orford, 1935, p.41), and in 1936 Broomberg's investigation into the blood pressure of "250 apparently normal Zulu adults" revealed the variability of this normality by showing higher average readings for town-dwelling natives when compared to those in rural areas (Broomberg, 1936, p.32). Penetrating into the very homes of those it subjected to surveillance, Fox and Back's (1938) survey mapped the relation between agricultural practices, nutritional status and health in the Transkei, while the Union Nutrition Survey (Le Riche, 1938) combined anthropometric measurements with home budget studies to a draw a line between the dimensions of the body, patterns of domestic expenditure, and ordinary peoples' ideas about the nutritional value of different foodstuffs and feeding patterns. Meyer's (1941) study of the "physical measurements of Bantu school children" offered "suggestive indications regarding the processes of bodily growth" by which deviations from the norm could be detected, while health surveys by Becklake (1943), and Kark and Le Riche (1944), of African school children provided a perceptual grid in which to locate individual children on a continuum of health through the normalising inspection of "build" (linear, intermediate, lateral), "posture" (satisfactory, fatiqued, scoliosis), "skin" (elastic, dry, rough, mosaic)", and so on (Becklake, 1943, p.30).

As illustrated by these examples, the survey thus impinged upon the bodies and minds of all Africans to make health and illness coterminous not only with the interface between the anonymous interior of the body and the external world of other bodies and things, but also with individual conduct, patterns of collective behaviour, and access to economic and nutritional resources. Anning,

for instance, could report from a survey of Benoni Location "such details as the medical conditions of ... individuals, their movements to the country or to other towns, their occupations, their incomes, the way in which their money is spent, and so on" (Anning, 1938, p.10). By locating illness not to the gap between anatomical and non-anatomical space, but rather to the interpersonal spaces of beliefs and behaviours it made visible, the survey thus erased the earlier distinction between the sick and the well to manufacture everyone as ill.

Sit in your car ... and watch the people who pass to and fro along the sidewalk. They are folk, white and black, who make up the main bulk of our population ... Do they appear to be healthy? ... The answer is, quite definitely, no ... The people do not achieve that optimum of health which we really mean when we talk brightly about an Al nation. (Anning, 1938, pp.7-8)

In short, the effect of the survey was to superimpose upon the socio-physical space produced by the earlier regime's Panoptical surveillance a new psychosocial space. This was a series of gaps between bodies that because they were important not only for the "microbes" that might pass across them, but also for the meaning and information that flowed between them, could now be caught up in a systematic health education campaign directed to their hygienic modification and regimentation.

To the Back of the Black Man's Mind: Educating the Individual

An important outcome of the survey's problematisation of normality was to set in place a new objective for the practice of social medicine. Since everyone was now ill, this required that everyone be made well, and in parallel with elaboration of the survey as a perceptual technique there arose a complementary focus

on analyzing "health propaganda" and "health education" as components of an expressive technology directed towards the constructive goal of manufacturing a healthy nation. "A Ministry of Health!" exclaimed the Department of Public Health in 1937, "the nation must be made health conscious and health minded rather than sickness conscious and sickness minded" (Union of South Africa, 1937, p.26).

Park-Ross, Deputy Chief Health Officer for the Union in Durban, could thus in 1937 describe "the Native ... as ripe to absorb European ideas about disease and health control" (Park-Ross, 1937, p.29). No longer merely the passive object of a centralised Panoptical power, the individualized African of the survey was now beginning to be turned into its vehicle, an active conduit of power which through proper education could be recruited into the machinery of this new medicine as his own overseer, exercising surveillance over, and against, himself.

Public health is evolving and its direction is ever changing. Last century the emphasis was on the environment, and sanitation occupied the field; to-day the emphasis is being placed on the individual, and social medicine is the term describing the new method. (Gear, 1938a, p.44)

Hence the possibility of a novel public health gaze able to extend its reach into the very "back of the black man's mind":

Does the European doctor or Sanitary Inspector really believe he can get at the back of the black man's mind, or trace the history of an outbreak of disease among the kraals as a native can? I believe that the (best) approach to the black man is by the black man supervised by the white and also that the main attack must be educational and that it must be kraal to kraal ... The country people ... must be tackled at their homes, by visiting and demonstrations, ... and the iron hand of the law

is best hidden in the velvet glove of persuasion. (Park-Ross, 1937, p.29)

Confirming the synaptic nature of the disciplinary power produced by and productive of this new regime, Anning observed that through health education each individual should be made to become his own diagnostician, for "the root of national and individual health ... depends primarily upon diagnosis, and the primary diagnostician is the sufferer" (Anning, 1938, p.10). What this recognition therefore demanded was a technique to increase the efficiency of each individual in reading his or her own state of health, for so long as "consciousness of social incapacity" instead of "subjective state of disease" continued to guide the search for treatment, so would people continue to remain sickness rather than health-minded. "We must think in terms of the opportunity for everyone to maintain and develop their health, and of assisting them to detect and suppress the first signs of illness" (Anning, 1938, p.8).

Confirming this transformation, the repressive legislation and "usual herd methods of examination, when all and sundry are stripped and examined in the mass" (Union of South Africa, 1937, p.57) that had earlier been applied to the control of venereal disease among Africans, could now be seen as "contrary to usually accepted health principles in so far as they tend to destroy co-operation and sympathy" (58). Instead, and where compulsory examination in the pass office and native clinic did still occur, it was transformed from a ritual of repression into a relay for the constructive power of discipline. "The pass office medical examination ... is a channel for health education and propaganda, ... and much could be done through this contact to awaken his (the African's) intelligent interest and cooperation in hygiene" (Union of South Africa, 1937, p.57).

The result of this new practice was a complementary shift in the identity of the African, who, as an effect of this concern to educate the mind of the individual, was endowed with an increasingly private 'self' that was at once an object of concern for the examiner. As Gale observed in his 1939 notes on medical examinations at the pass office:

In conducting examinations, my own method is to allow the men to wear their trousers, rolled up to the knee; and they approach in single file, one behind the other. Chest, fauces, etc., are examined first; and then the man is quietly asked to loosen his clothing for an examination of the genitalia. If there is the least suspicion - often suggested in advance by his embarrassed manner - he is asked to stand aside until the end, when a thorough examination is made in private. If during the routine examination the face of the next man peeps over or around the shoulder of the one being examined, it usually encounters a smart slap, which, coupled with an appropriate homily, ensures that the remainder of the day's string remembers its manners ... If (the native) ... is treated like an animal at the very start, can we blame him if, subconsciously, he decides that he might as well act like one? (Gale, 1939, p.266)

Similarly, where it had earlier been viewed as a disease of anonymous anatomical bodies, venereal disease was now "an index of social and health welfare, ... a gauge of communal pride and responsibility" (Union of South Africa, 1935, p.44), while its treatment, like that of tuberculosis and other diseases, was no longer best accomplished in special venereal clinics but instead under a single roof along with other types of illness, to constitute the patient as a whole person and use the occasion as an opportunity to educate individuals in the practice of regular habits

and the rules of health.

Venereal disease treatment is provided most conveniently, efficiently, and economically in a combined and general medical and health scheme. The so-called polyclinic or subdispensary, where the Native can get any form of medical advice or treatment, and which serves as a centre for teaching and propagating health and sanitary knowledge seems to be the logical unit to establish in Native areas. (Union of South Africa, 1937, p.57)

Complementing this transformation of the clinic into a relay for the dispersal of hygienic discipline into the individuals it treated, was the new figure of the "native health assistant", a mobile and roving agent of health propaganda designed to extend the vigilant gaze of social medcine into the homes and minds of everyone.

They are actually the eyes, ears and nose of the Medical Officer of Health, which eyes, ears and nose must see, hear and smell everything which might have a bearing on the public health of the community ... To carry the analogy further, the Health Inspector can be likened to the hands of the Medcial Officer of Health, ... (because he) gives public health its practical application ... The Health Inspector is also the mouthpiece of the Health Department. (Liston, 1944, p.11)

Exemplifying the shift from sanitary repression to the productive discipline of social medicine, the "sanitary inspector" of old was transformed into a constructive agent for the promotion of health. As Cluver (1941, p.8) noted, "the health official does ... his best work not by means of prosecutions ... but by means of education", while for Rauch:

The term Sanitary Inspector has, we all hope, passed for good. In future you will be known as Health Inspectors ... The development of public health in recent years has brought you to a new horizon in human welfare, and you will now look out on a field of activity which embraces almost every possible aspect of human progress and happiness. (Rauch, 1939, p.20)

Confirming Gale's (1938, pp.8-9) identification of the public health problem as being one of redefining the African's beliefs about health and illness so as to conform to that of "western twentieth century medicine", Anning's description noted of the "Native health assistant" that:

These men, of good address and of sufficient age to carry weight with their fellows, have a background of intensive instruction in the working of the human body, the meaning of infection, the methods of spread of infectious disease, and the prevention of that spread. They have been equipped to follow up cases of infectious disease, and the contacts of such cases; to gain the interest and the confidence of the sufferers and their families in order to encourage them to attend at the clinics; to deliver lectures on health topics in beer halls, cinemas and schools; to prepare health pamphlets in Zulu; to inspect and report on defects of housing and sanitation in the non-European dwellings of Maritzburg. (Anning, 1937, p.7)

The aim of health education being to recruit each and every individual into the service of monitoring their own body boundary zones, this could be facilitated by having the native health assistant promulgate a device such as Hertslet's "score-card" for a "better home" and "better family" competition. Intended to be taken by "Bantu men and women ... trained as Health Assistants ... into the Native locations, townships, black belts and reserves"

(Hertslet, 1946, p.22), the first part of this "score-card" analyzed the sanitary environment of the home and garden into 30 elements, each to be given a mark out of 10 or 20. The second part shifted the focus to 25 "parts of the body" - such as eyes, gums, kidneys and bladder, sleeping, and "mental" - each of which was to be evaluated for each family member and allocated a score according to its condition as determined by a schedule of maximum marks. For instance: "Bowels: Open once or twice daily without medicine (3); No discomfort (2); No diarrhoea (2); No bleeding (1); No pain or burning (2)" (Hertslet, 1946, p.26). Together, completion of these sanitary and bodily inventories would establish for each individual and each family the reality of hygiene and health as inscribed in the relationships between the body and the environment, which once internalised would "help their people to walk ... and practice the ways of clean and right living" (Hertslet, 1946, p.22).

For Gale (1938) the primary duties of the native health assistant in a rural area should be to modify the African's knowledge and behaviour in respect of:

... nutrition in relation to agriculture and domestic life of the kraal; dietetics; methods of storage and utilisation of food; hygiene of the kraal, hut, individual; measures against vermin, flies, insect and animal vectors of disease; practical knowledge of conservancy methods suited to rural conditions, protection of water supplies - ability to lay out and direct simple works in connection therewith. (Gale 1938, p.28)

Crystallization of health education as a tactic of health promotion also found its way into the native school. Through the agency of native health assistants or teachers specially trained in the subject, social medicine now realised the long recognised potential of the classroom as a site for the creation of individual health, where "the learner provides in his own person the subject-

matter with which both the training and the study are concerned" (Dugard, 1944, p.418). There was education and training in nutrition, domestic science and school gardening (Dugard, 1944, p.418) - aimed at cultivating "in him a taste for protective foods which will last him through life", and turning the children of this new regime into adults who will "see to it that there is adequate food in the kraals where the child's youngest years ... are spent" (McGregor, 1944, p.419). There was training in physiology, disease transmission and personal hygiene aimed at making the mind of each child the locus of his own sanitary supervision:

My experience of Native children has been that they simply do not mind having dried food and nasal discharges and flies all over their faces ... In other words, it does not seem to be much good telling a child why he should be clean; ... Our real aim should be to create in him an active dislike of dirt, so that his reaction to it is emotional rather than intellectual. (Mcgregor, 1944, p.419)

Finally, and as the tactic by which just such an emotion of pride in the cleanliness and appearance of the body could be established, was the new focus on "physical culture", by which health education would proceed through a practice of physical education designed to correct the African child's excessive "sluggishness" and the ills that this induced, such as "constipation, pimples, headaches, vague digestive disturbances, delayed puberty, dysmenorrhoea or other symptoms not traceable to any one positive cause" (McGregor, 1944, p.419). As Shearer noted:

Knowledge of the body in action must be studied and through the application of psychological and hygienic principles along with a better appreciation of the dynamics of movement, physique may be fortified, resistance to disease increased, and thus life may be healthier, happier and more productive. (Shearer, 1938, p.13)

The "physical education lesson" thus operated to establish an alliance between the free yet controlled movement of bodies and the regime of personal hygiene, as, for instance, through the game of "the mulberry bush", where to the tune of "here we go round the mulberry bush" were substituted verses depicting such hygienic rituals as washing the face, cleaning teeth, hands, feet, combing the hair and running to school (Huntley, 194-, p.78). Such games and exercises were at one and the same time a means of observing the body and disciplining it, for:

While they are singing they should fit appropriate actions to the words ... The teacher should see that the actions are correctly performed, and that during the singing of the chorus the children skip or run neatly, with small, vigorous, skipping steps. (Huntley 194-, pp.78-79)

The Polela Native Health Unit

Deployed independently of each other the productive capacity of the survey and of health education were subject to clear limitations. Alone, the power of the survey was restricted to making visible patterns of health and disease in the population. In the absence of precisely this information, health promotion and health education lacked any clearly defined target and baseline for the measurement of its effectiveness. To maximize their productive potential thus required that the knowledge created by the receptive technology of the survey be closely synchronised with the messages and targets identified to the expressive device of health education. Ideally, the two should be fused into a seamless exercise of surveillance-subjectification, the dissemination of health knowledge to the individual occurring at one and the same time as the recording of surveillance information.

Noting that because births, deaths and illness were so inextricably a part of the psychosocial fabric, "vital statistics and epidemiology can only be studied in the field, and in a field which can be described in exact terms and kept under continuous observation" (Gear, 1938b, p.79), Gear set out the plans for just such an integrated field of surveillance and education where he described the idea of "experimental health areas". First, the survey would establish these areas as domains of exact description by recording such factors as: (a) race, age, sex and family composition; (b) social customs, dietary patterns and beliefs; (c) disease and defect; (d) hygiene and sanitary arrangements. Then:

The area would be kept under continuous observation and reactions and results noted, following the trial of different forms of housing and different forms of medical and social service, of the introduction of sanitary services, etc. (Gear, 1938b, p.81)

Two years later, this vision of an "experimental health area" subject to continuous observation and intervention found its concrete expression with establishment of the Polela Native Health Unit.

Described in 1940 as "a new venture having as its object the improvement of Native Health, not by the mere provision of treatment facilities ... but by an attempt to rectify the insanitary conditions and the ignorance which are at the root of so much Native ill-health" (Union of South Africa, 1940, p.8), the methods deployed by the Unit epitomised the transformation of disease from a device of Panoptical objectification into a technique of disciplinary subjectification. First, and repeating the principle of Panoptical surveillance that had emerged with the strategy of "Location", the geographical space upon which it operated was rendered calculable through a technique of "mapping". The entire geographical area was

partitioned into subdivisions sufficiently small for a single native health assistant to record the place, personal identity, family configuration and various indexes of sanitation, hygiene and health for the occupants of every homestead in his area. Second, into this objectified nucleus for the maintenance of "population records ... and epidemiological data" (Union of South Africa, 1941, p.63), were intruded an array of surveillance techniques, every one a conscious attempt to make visible the web of human relations and recruit each individual into this synaptic network of disciplinary power. "The supreme aim of the Unit is to advance health standards by an improvement of living conditions brought about by the conscious and intelligent efforts of the people themselves" (Union of South Africa, 1941, p.57).

Explicitly denying the binary division between the sick and the well - "our services ... include treatment of the sick and care of the healthy" (Union of South Africa, 1945, p.40) - each area once mapped was placed under constant surveillance through a "routine of home to home visits of ALL the homes in specific areas, regardless of the presence or absence of ill health in a particular home" (Union of South Africa, 1945, p.36). During these visits the members of each family were interviewed by a native health assistant and encouraged to talk about sanitation, vegetable growing, eating habits, sleeping patterns and so on. This information was recorded on special cards - one per family - that set out in tabular form the relationships between various health, education and employment indices for each individual in the family; factors such as the dimensions of rooms in the homestead, to what uses the rooms were put and what furniture they contained; diet, and qualitative observations concerning the "health consciousness" of the family. The family was thereby constituted alongside the individual as a key object and effect of this social medicine - "the only social unit in which there was any advanced degree of communal responsibility" (Kark, 1944, p.39) - and any illness within it could at once be related to such intimate observations as the fact that "poultry share this hut with the family during sleeping hours", and while:

the head of the family is keen to progress, ... his present wife is an extremely backward person, lazy and unkempt, and the home, unfortunately, reflects her personality. It is kept in an untidy and filthy condition. (Kark, 1944, p.46)

Available to the doctor when treating patients for any particular illness at the Unit's clinic and in the schools during routine medical inspections, these cards linked the otherwise separate fields of visibility represented by the school, the clinic, and the home, to make each patient and his or her social space an integrated and open field of medical visibility.

Instead of being cyphers, each man and woman, each child whether at school or not becomes a living entity with a home and a background, with thoughts and behaviour patterns — and each becomes an important part of our lives". (Union of South Africa, 1945, p.36)

Confirming the fabrication by this gaze of the individual as a "whole person", the Unit had by 1945 phased out the last of its "specialised disease clinics" due to their:

... "dividing the indivisible", namely the patient. To such an extent has this become the case that a person is known and classified by the disease from which he suffers. Should there be two or more main pathological entities, e.g., syphilis, dysentery and tuberculosis then the person is put into three separate pigeonholes ... It is our contention that this is harmful and often leads to neglect not only of understanding a person as a person but of even missing some additional pathological factors influencing the individual's health. The

Health Unit ... must therefore strip itself of this "dividing of a person" and must use specialists and special clinics only where the practitioner of social medicine finds it necessary in the interest of the patient. (Union of South Africa, 1945, pp.36-37)

Complementing the routine of home-to-home visits by which the medical gaze was radiated out and into the psychosocial fabric of the community that it constructed, a corresponding series of devices replicated the pattern of surveillance established at London's Pioneer Health Centre, where surveillance of the community had been achieved by bringing the community within the Centre's own walls (see Armstrong, 1983, p.36). In the same way that all schools in the area covered by the Unit at Polela were used as observatories of health status and conduits for the creation of health in the home, so the buildings and grounds of the Unit's headquarters were deployed to monitor and mould the health behaviour of Africans who visited them.

The Panoptical and objectifying function of Saturday nutrition clinics for children - where weights were recorded on a ladder scale and various laboratory tests applied to saliva, haemoglobin, urine, and stools - was thus linked with the subjectifying device of a "physical education clinic" aimed at interiorising the gaze of health by encouraging "through a pride of body a greater degree of cleanliness than we get at the moment" (National Health Services Commission, 1944a, p.8653). Similarly, the social activity and reaction tendencies of adults - in general and toward the Unit in particular - could be observed when they gathered for meetings of the Polela Peoples' Club (which offered a programme of concerts, dances, debates and discussions), and subtly modified through exposure to demonstrations of healthy cooking and other hygienic habits when they attended the Unit's once weekly open days (Kark,

1942; Kark & Cassell, 1952; Union of South Africa, 1945).

From Social Medicine to Community Health

We are now a long way from the strategy of "Location" that at the turn of the twentieth century had produced the African as the "sanitary whipping boy" of South African public health. For, while evidence that this power continued to sustain the shape the social body was everywhere apparent in maintenance of the great binary division between Africans and Europeans through institutions such as the townships, locations, and native territories, the rise of the socio-medical survey and its invention of a psychosocial space created the possibility of superimposing upon this socio-physical space a far lighter and more subtle, subjectifying apparatus of medical discipline.

For where sanitary science had recognized only the anatomical identity of the African bodies it policed, the preoccupation of social medicine with personal hygiene fabricated the personal and social identities of Africans as the cardinal points through which it attempted to recruit them into managing and monitoring their own body boundary zones to the environment and the interpersonal spaces between bodies. In principle, therefore, this medicine of the social could function – as envisaged in the Nation Health Services

Commission Report of 1944¹ and the 1946 act that changed the name of the Department of Public Health to "The Department of Health"² – as what Foucault termed a "discipline mechanism".

"A functional mechanism that must improve the exercise of power by making it lighter, more rapid, more effective, a design of subtle coercion for a society to come" (Foucault, 1977, p.209), the discipline mechanism was a machinery of constant inspection that achieves its hold over the body "according to the laws of optics and mechanics, according to a whole play of spaces, lines, screens,

beams, degrees and without recourse ... to excess, force or violence" (Foucault, 1973, p.177). However, and analogous to the failure of sanitary science to achieve complete control over the exchange of matter between the inside and the outside of the body through external coercion, so was the technology of social medicine of only limited effectiveness in transforming the health beliefs and behaviours of the Africans it interpolated, owing to the great differences in cultural and social orientation between them and Europeans that towards the end of the 1940s began to be reevaluated as a way of dealing with this problem of effectiveness.

Community Health

While recognizing the "countless individualities" which it had sought to recruit into its synaptic web of personal hygiene, social medicine had at the same time been a totalitarian regime. For although the individual was its relay, it acknowledged personal idiosyncrasies and cultural variations more for their negative role as barriers to the cultivation of a uniform and regimented "health consciousness" than as conduits to collective well-being. Thus, Kark had been able to note in 1944 of the Polela Native Health Unit that:

At the beginning we were met with very solid antagonism ... They did not understand these "black spies" that the Government had sent out into their homes ... The trouble is that you are dealing with something around which there is a considerable number of beliefs. Our first job was to break down those beliefs. (Kark, in National Health Services Commission, 1944a, Part 1, p.8650)

Grounded in a liberal-humanist idea of the transcendental human subject, Orwell's 1984 had been a rejection of precisely this totalising tendency, and contemporaneous with its post-war publication in 1947 there commenced a reevaluation of the meaning

and function of African resistance to public health strategies around which the new object of community was to form as an effect of community health.

An Analysis of Resistance and the Emergence of Community

In 1947 Kuper published a paper on "the concept of social medicine applied to some Bantu speaking tribes". Observing that among the Bantu "new ideas are seldom accepted with alacrity, especially if they involve action by the European government and if they attack fundamental and vital beliefs" (p.55), this introduced a new way of seeing African resistance to European public health by analyzing the "political implications" of Bantu attitudes to health and practices of medicine. For, reversing the direction taken by the earlier assessments of African beliefs from the external perspective of the public health official, Kuper's analysis adopted a frame of reference internal to the Bantu tribes she investigated, in the same way as the invention of "African intelligence" (see Chapter 7, p.202) had in 1941 inverted the gaze of the psychological sciences to enable recognition of the cultural specificty of cognition.

Accordingly, Kuper could show how traditional medical practices were coeval with the structure of tribal authority, its hierarchical distribution of power, and an array of sexual and "magico-social principles" (Kuper, 1948, p.59) which clustered around food and housing to ensure that "diet, recreation and housing are never haphazard and uncontrolled", but followed "traditional codes within the framework of tribal experience" (Kuper, 1947, p.58). The effect of this analysis was to reconfigure the African as an object of public health practice by replacing the earlier focus on regimentation through rational persuasion with the idea that social medicine should be synthesized with African institutions in general.

The modern European concept of social medicine is a historical development in a particular sociological setting. In Bantu society, with an entirely different background, we find a different approach to medicine ... To suggest that the African be simply "argued out of his belief in witchcraft" - is useless, not because of any innate differences of mentality, but because of the different social conditioning. Our treatment of African health must therefore be regarded as part of the approach to African institutions in general. Only on that basis can "social medicine" as conceived by twentieth century sociologists and medical men be made effective in the new environment of the Bantu. (Kuper, 1947, p.66)

Confirming this shift by which the analysis of African resistance led increasingly to the installation of public health power in the capillary spaces of community force relationships, was Schaap's (1953) paper on "health visiting among the urban Bantu". This explored the resistance of urban Africans to health visitor instructions that premature babies be placed in special boxes to ensure that these babies lept alone. Noting in some cases that the midwife's attempts to introduce the box to the mother were rejected by the infant's grandmother, the health education strategy was not to override but rather to coopt this newly recognized authority relationship.

Much talk and persuasion on the part of the health visitor was required to convince that most important person in an African home, the grandmother. Thereafter, she tended to think the box her own idea and its magical properties the reasons for the child's survival. It is well for any health visitor starting work amongst the Africans to realise the importance of getting the grandmother on her side. (Schaap, 1953, p.534)

In 1957, and based on a similar analysis of resistance as emanating from African antipathy to health propaganda which failed to acknowledge the internal structure of African society, Goddard (1957) reported how a new series of venereal disease films were made to replace the earlier versions that had employed white actors.

"They caused great excitement because of the local setting, Bantu cast and the narrative which was woven around Bantu domestic life, its traditions and customs" (Goddard, 1957, p.18).

Albeit only hesitantly, these scattered commentaries on resistance signalled the emergence of a new public health space premised on a new dynamic of disciplinary power. For rather than trying to flow around or erase them through force of reason, the new space of community health had begun to transform the traditional power structures and health beliefs of African society from anomalous objects into lines of force that could themselves be coopted into the production of health.

A Community Gaze

Exemplifying the new object of community as an effect of this nascent "community health", Kark and Steuart observed in 1957 that "while effective health education must have precisely defined objectives, an attempt is made to avoid substituting one rigidity (ours) for another (the peoples')" (Kark & Steuart, 1957, pp.133-134). Thus, where health education was an "essentially practical" task of "change in the interests of progressively improving states of health", it at the same time "must achieve its ends by means that leave inviolate the rights of self-determination of the individual and his community" (Steuart, 1962, p.65).

Health education will then be at odds with itself if it tries to perpetuate, in Maurice Baring's words, 'the vandalism of restoration', if it attempts to re-fashion society on the model seen through the refracting lens of the health worker's culture. Manifestly this applies with increasing force, the greater the difference between the social and cultural make-up of the expert on the one hand, and the community he serves on the other. (Steuart, 1962, p.65)

An important consequence of recognising this cultural relativity was to reconstitute the codes of public health perception. Under the regime of social medicine these had demanded that complete calculability of the psychosocial be achieved through its precise mapping as a clearly demarcated series of relationships between epidemiological disease distributions, personal habits, and economic factors, from which flowed the precisely measurable objectives of promotive health. Now, the very precision that had enabled the gaze of social medicine to itemize public health problems was itself seen to be a problem. Accordingly, and as had social medicine criticised the regime of sanitary science for dividing the indivisible in the shape of the individual, so the community gaze now criticised social medicine for its fragmenting of the community.

Whatever ends may be served by the necessary specific (sic) definition of clearly articulated targets, the range of targets should be based on the implicit recognition that the health and disease of a community cannot be described purely in terms of discrete items but also as a single complex, contributed to by the whole pattern of everyday living. (Steuart, 1962, p.68)

As a result, this "single complex" that was the cognitive object of community health began to crystallize as the effect of a new strategy of attention directed to localizing the occurrence of ill health and the potential for health to the internal and interrelated points between which power was reflexively exercised by community

residents. Thus, in her "case note-book of the 'Riversend' community", and through a close analysis of the historical, economic, cultural and political forces that led to the formation of this African and Indian community, Jacobsen (1962) could identify a number of "features in the life situation" of these two groups as enhancing "community potential":

They utilized common facilities such as communal water points where children played together while adults laundered, drew water, came fishing and repeatedly spent many hours in each other's company. ... Years of neighbourliness resulted in personal friendships, frequent exchange of visits, ideas, and amenities. They often attended each other's weddings and funerals. They manifested public-spiritedness in organizing church or temple committees, a ratepayers' association and a care committee for families in which there were cases of tuberculosis. (Jacobsen, 1962, p.258)

Correspondingly, through the "community diagnosis" and treatment of illness the individual was transformed into a "microcosm of his culture as a whole" (Steuart, 1962, p.74), a node in this complex matrix of traditions, beliefs, behaviours and customs that it made visible and which in turn could be seen as instructing the personal and interpersonal ways of the individual. As Cassell (1962) observed, what "would otherwise appear as a series of inexplicable interrelated acts" (p.238) on the part of Africans refusing health centre treatment for tuberculosis, now found their own internal logic when viewed through a knowledge of cultural patterning and the social situation.

A firm conviction existed that patients presenting symptoms of pulmonary tuberculosis were suffering from a disease that could only be treated by a skilled *inyanga* and about which White physicians could be expected to know little Should

the Health Centre viewpoint be accepted, therefore, the patient was in danger of being feared and ostracized by the community. (Cassell, 1962, pp.239-240)

Preoccupied with the identification and stimulation of "those processes of community in a community which might lead to active promotion of health" (Kark & Kark, 1962, p.9), the community gaze was also manifested in a new technology of recording devoted on the one hand to seeing pathology as it existed in the social interstices of community, and on the other hand to inducting the lines of spontaneous association and community authority relationships into its web of public health power.

As a technique of community surveillance, "the Meadowlands method" (Sachs, 1959), for instance, deployed the conceptual device of "health recovery" to transform the nature of pathology from a causally discrete and time-bound event occurring within the "host", into a multi-dimensional process that continually regressed or progressed in response to the individual, the family, the community, the environment, and so on. To document "health recovery" were two sets of charts. First, those recording acute cases, divided into columns for each day of the month. Second, a chart for chronic cases divided into weekly intervals for one year. Symbols on both charts by date recorded whether the problem was identified during a home visit or clinic attendance, and the files could be grouped according to disease, age, ethnic grouping, or address. "Thus one can observe the progress of a whole group ... over a whole lifetime, provided the population remains relatively stable. Thus, in a matter of minutes, one could abstract all congenital deformities in each racial group for each year of existence of the clinic" (Sachs, 1959, p.783).

The obverse of this community surveillance device was a system designed for the fabrication and cooption of "primary groups" as relays and reinforcers of the disciplinary gaze through the deployment of "community structure files" - "an index system of carding every group of whatever kind as it was 'discovered' or use made of it in a programme" (Steuart, 1962, p.83). For, confirming the operation of community health as a technology which strived to inscribe the discipline of health in the very fabric of community organization, the primary group epitomized the economy of disciplinary power as a force "distributed in homogenous circuits capable of operating everywhere, in a continuous way, down to the finest grain of the social body" (Foucault, 1977, p.80).

Internal communication among the members is likely to be continuous and intimate and deeply toned by an everyday familiarity. Primary friendship groups could be expected to exert, on the one hand, conformity pressures of a powerful kind because of the deep-seated attractiveness of membership and the fundamental human urges for acceptance and belonging. On the other hand, they may be able to tolerate certain differences among the members without rejecting them, and when pressures to conformity operate in respect of these differences, to be so coloured by personal friendship that conformity will result without undue strain on the individual. (Steuart, 1962, p.82)

No doubt a direct consequence of the state's repression of public health activities in the early 1960s (Lapping, 1961; Letlhaku, 1961), "community" was in the decade that followed noticeable only by its absence, an editorial of 1967 calling for "the organization of community-orientated, curative, preventive and promotive medicine. If disease lies hidden in our community is it not our task to root it out?" (Editorial, 1967a, p.662). By 1970,

however, and coinciding with the emergence into clinical medicine of a "cross-cultural outlook" (see Chapter 10), the community gaze began to reassert itself. In 1970 Silbert could thus publish a paper on "the Cape morbidity survey"; in 1971 this was followed by a second morbidity survey in Uppington (Movsowitz, 1971), and in 1975 an editorial confirmed "the recognition of community medicine" (Editorial, 1975, p.32), which Spencer described as:

... (A) specialist branch of medicine, which does not deal primarily with individual patients, but with communities, determines community health status and priority health needs by epidemiological techniques, and prescribes and makes operative the means optimally to maintain health. (Spencer, 1975, p.35)

Confirming the technique of epidemiology as the community medicine analogue to the methods deployed in clinical medicine for examination of the individual patient, a flurry of morbidity and mortality studies that linked disease to demographic, socioeconomic, educational, and socio-cultural variables appeared over the next 10 years. The effect of this epidemiological renaissance was to install what Power and Heese called "the new morbidity": "Behavioural disorders, adolescent problems, drug abuse and unwanted pregnancy are some of the areas covered by these terms" (p.409, 1978).

With this rise of the "new morbidity", community health began to engage with a new object and effect, that of "lifestyle".

The lifestyle of a community and of its individual members is a product of the environment and the reactions of the community or individual to it. There is every reason to believe that the patterns of health and disease is (sic) determined to a great extent by the prevailing lifestyle. (Editorial, 1978, p.733)

Where it had previously recognised the factors productive of illness and health as immanent in community force relationships, community health remained nonetheless concerned with illness per se. Now, with the invention of "lifestyle", it was less illness itself than the precursors of future illness that became the target of a new epidemiological focus to the extra-corporal space of "risk" and "risk factors".

"Pointers to a potential yet unformed eventuality" (Armstrong, 1995, p.15), the recognition of risk and the deployment of techniques for mapping risk factors expanded the dimension of time to insert a temporal space into the fabric of community. In 1979 Robbs and Moshal could thus make use of archival records for the period from 1950 to 1976 to examine the risk factors surrounding duodenal ulceration among Africans, their conclusion drawing a line through morbidity, life-style and health risk behaviour to interlink these into a complex precursor for future illness.

It may be that dietary factors play some part in the increasing incidence of duodenal ulceration among Durban Blacks. However, increasing stresses and responsibilities that accompany better job opportunities, and the rapidly increasing exposure of an essentially rural people to the pressures and hurly-burly of city life may also be important. (Robbs & Moshal, 1979, p.42)

In addition to the temporal dimension that it installed, the concept of lifestyle as an object of medical concern also had the effect of making visible "the environment" - whether physical, social, economic, or political - as a probable locus of illness and the surface of visibility upon which the "socio-ecological model" of the new public health would begin to unfold.

A New Public Health: The Socio-Ecological Model

Over the last 15 years, what has become known as the "new public health" (Armstrong, 1993) or "socio-ecological model" (Goldstein, 1993, Appendix B), has begun to take shape and embrace the population in a novel strategy of attention. As Goldstein noted, the emergence of this approach resided in a recognition that "major sectors of the population are unable to make changes in individual risk factors" (1993, Appendix B), owing to their lifestyles themselves being conditioned by sociological and environmental forces that transcend both the individual and the community. Where sanitary science was concerned with the intrusion of nature into bodies, and social medicine and community health with the dangers that lurked in interpersonal space, the gaze of the socio-ecological model is therefore concerned with the intrusion of the activities of those bodies into nature: "The new public medicine has discovered that the by-products of economic and social activity can be dangerous and has committed itself to maintain the purity of the natural environment" (Armstrong, 1993, p.405). Thus, and epitomising its reflexivity, the "socio-ecological model" invents the individual, the community and the social as at once their own greatest sources of danger and the locus at which intervention should occur. Epitomising this new focus is the concept of "health promotion", which Tobias and Reddy define as:

... (A) ny combination of health education with related organisational, political and economic interventions designed to facilitate behavioural and environmental adaptations that will improve or protect the health of communities. A study of the disease profile of South Africa reveals a high rate of infectious diseases (e.g. diarrhoea, T.B., S.T.D.'s) and malnutrition amongst poorer communities. Many of these health conditions and broader circumstances that result in a

compromised quality of life are not within the control of the individual. There is a need to acknowledge the gap between the rich and the poor and the limitations economic inequities place on an individual in adopting or resisting behaviour that compromises health. (Tobias & Reddy, 1993, Appendix A)

The effect of this has been to extend the psychosocial space of interpersonal hygiene into a 'politico-ecological dimension', its contours delineated by the intersection of interdisciplinary and cross-sectoral modes of analysis and intervention. For instance, the risk factors surrounding violent injuries are transposed from the individual and the community into the subjectifying effects of repressive ideologies that here sustain implosive patterns of interpersonal violence and there explosive patterns of internecine violence (eg Butchart & Brown, 1991). Through the surveillance of cigarette and alcohol usage, a vast network of observation and caution now identifies the threat to innocent minds which resides in the products of the advertising industry and its "particular ramifications for youth who are easily influenced by social factors as they attempt to develop a sense of identity" (Parry et al, 1994, p.44). The levels of bodily exposure to noxious gases and other wastes from car exhausts, coal-fired stoves, and industrial plants are revealed through the indoor and outdoor monitoring of pollution and integrated into the diagrams of urban planning and interventions aimed at altering the use patterns of fossil fuels (Seager, 1993). Deforestation of the land in search of wood for fuel has further elaborated this 'green response' in the shape of new strategies for electrification and national tree planting campaigns, while the prevention of "chronic diseases such as hypertension and obesity -"a threat to the life of all South Africans" is inscribed in strategies that now interlink the earlier concept of "lifestyle" with "the Departments of Health, the ANC, the Unions,... the

Department of Manpower, (and) large employers (Steyn, 1993, p.111), to invent the individual as a relay in a great matrix of corporate, political, governmental and environmental forces.

Thus, whether the environment be that of the socialising patterns set in place by the dynamics of the economic and political order, or the physical environment as it is formed through the chemical outputs of industry and the built environment as it takes shape under the impact of informal settlement and low-cost housing, the space of identity in which the African body of the new public health emerges is a space of subjectivity, a space preoccupied with understanding and protecting the thinking, acting subjects which it fabricates from their own actions, and in that way maintaining the hygienic separation of human activities and nature.

Conclusion

To conclude this and the previous chapter's examination of public health spaces and the identity of the African body as it has emerged and been transformed within them, it is useful to follow Armstrong (1993) in abstracting the essential characteristics of each regime by thinking about public health as a line drawn between bodies.

First, and briefly examined in both Chapter 4 and Chapter 8, there was the geo-climatic model and its attendant strategy of quarantine by which a line was drawn between places. Second, there was the regime of sanitary science and its concern to police a line separating bodies from the environment. Third, the regime of social medicine and its preoccupation with recruiting those same bodies into maintaining a line between each another and the environment. Fourth, the strategy of community health which embedded groups of bodies in the larger social units produced by the lines it drew around communities. Finally, the socio-ecological model of the new

public health and in its intrusion of lines of hygienic surveillance "everywhere throughout the body politic" (Armstrong, 1993, p.405).

Correlated with these changes in the lines between bodies was the identity of the African body that each regime made possible. Under the regime of geo-climatic medicine the line between bodies was a line with neither permeability, volume or depth. Accordingly, it recognised no separate bodies and no individualities, the rules of quarantine and their sovereign enforcement ensuring that these remained below the threshold of visibility and analysis. With the emergence of sanitary science this line expanded into one with sufficient width and malleability to flow around and in-between bodies, to thereby constitute the African body as a distinct but anonymous corporal space in the crowd, its contours delineated by the points of greatest permeability to the environment on which clustered the external control techniques of sanitary segregation. The advent of social medicine further expanded the dimensions of this line to make its volume more significant than its linearity. Thus, its ballooning into the space of mind that was its effect allowed the African body to crystallize as an individuality invested with traditions, superstitions, customs, emotions, and so on. With community medicine, the volume of this line underwent a further expansion outward to fabricate the edges of a shared social space, the borders of which were folded in on themselves and coterminous with those of the communities it discovered as encasing the individual and the interpersonal. Finally, with the new public health, any vestige of linearity has disappeared, to be replaced by a multi-dimensional 'presence' that invests and sustains the African body as a reflective subject and conduit of an all-embracing socioideological context of economic and political activities.

The power of public health to invent, sustain, and transform the social body and the various types of individual and aggregate

bodies that have materialized within it does not, therefore, reside within the ordered spaces and categories of health and wholeness that these lines protect. Rather, the productivity of these technologies emanates from the chasm between these regions of completeness, in the abyss separating the fundamental spaces of social life that over the last 150 years has, from its beginnings in the slender and almost invisible line of quarantine, "rolled back across the landscape, revealing a vast space of limitless dimensions in which the social and the subjective would crystallize" (Armstrong, 1993, p.409).

- 1. Essentially a synopsis of all developments in South African social medicine up to the date of its publication, this Report emphasised that the danger to public health lay not with the environment, but instead with people and their points of contact, their habits, attitudes, daily regimens of sleeping, eating and exercising, and their self-consciousness of health and the body. Accordingly, the dramatic strategies of sanitary segregation were subordinate to:
 - The less spectacular ... campaigns for the prevention of disease and the conscious cultivation of good health. The new road led through adequate nutrition; through healthy environment in home, school and work place; through periodic medical examinations; through active immunisation; through physical education, and a better understanding of personal hygiene. (Union of South Africa, 1944, p.7)
- 2. The change is one of profound and far-reaching significance. It implies that no longer is the Department limited in its functions to the traditional field of "public health" the control of sanitation and of infectious diseases but now has explicit authority for the enlargement of its boundaries to include ... the whole range of personal health services. This change recognises that the promotion of human health and the prevention of illhealth is intimately related to the control not only of the physical environment of man but also of his social and economic environment, and that it depends not upon the prompt detection of infectious individuals but also upon the early diagnosis and treatment of incipient disease in all members of the community. (Union of South Africa, 1947, p.1)

CHAPTER TEN

BIRTH OF THE BANTU' CLINIC AND INVENTION OF THE AFRICAN PATIENT

It was not until comparatively recently that the Bantu peoples existed for the (medical) student as a problem. (Bernstein, 1938, p.28)

When I do a ward round at the White hospital and then walk over to the Bantu hospital, I truly have to change over in my way of thinking; I have to take one computer programme out of my mind and substitute another marked 'Bantu' to work there.

(Kloppers, 1973, p.287)

This study has so far concerned itself with tracing deployment of the socio-medical disciplines in relation to the African body at sites distant from the hospital or clinic. For missionary medicine the theatre of healing and then the ward round invented the extraclinical relationship between the African patient and the witchdoctor as a key target for its evangelical interventions. Mining medicine, on the other hand, created the body of the African miner as an object for industrial exploitation through a gaze that scrutinized the dead and the living to generate a series of aggregate anatomical portraits which enabled the selection by doctors of heat and disease resistant bodies. In crystallizing a distinct "African personality", the psychological sciences did so through surveys using projective tests that created and suffused the interpersonal and apperceptive spaces between Africans and Europeans resident in urban and rural locations and reserves. For the successive regimes of public health, the separateness of the

anatomical space of the body was maintained by an elaborate series of lines of hygienic surveillance directed to the spaces between bodies and between bodies and the physical environment.

Moving from these extra-clinical domains, this final substantive chapter turns to the medical consciousness and the African body produced by and productive of the space of the clinical examination itself. For while the bodies invented beyond the hospital circulated constantly through its wards, surgical theatres and out-patient departments, it was within this "Bantu clinic" that they were most consistently subjected to those minute procedures that expose to a medical gaze the whole body and its most intimate depths.

All right, take off your Sekulingile, khumula; lala clothes and lie down on the kulo mbede.

Lie flat on your back. Lala ngomhlana.

Lie quite straight. Lala wenabe or Lal'uqonde.

Show me your teeth. Veza amazinyo.

Open your mouth widely and put Khamisa umlomo kakhulu; khipa out your tongue. ulimi.

Look at my finger. Ngibuke emnweni.

Hold out your arm. (B.P. Elul'ingalo.

reading).

Breathe in and out. Phefumula.

Relax your abdomen, and whole Thambisa isusu, nomzimba body.

body. wonke.

Tell me if it hurts. Ngitshele kubuhlungu.

Does that hurt?

Loko Kubuhlungu?

Do you feel (that pin pricking

Uyabuzwa lobuhlungu?

you)? (Lit: that pain).

Is that sharp or blunt?

Kuyahlaba noma kubuthunthu?

Lie down on your side with your Lala ngohlangoti, ufinyeze

legs drawn up.

imlenze.

Get on your hands and knees:

Khasa: kanje.

like this.

35)

I'm going to put this

Lombhobho ngizowu ngenisa

ngemuva.

instrument into your rectum.

I'm going to sigmoidoscope you. Ngizoku khangela. (Idiomatic

(Campbell & Lugg, 1958, pp.34-

in certain Hospitals - "I'm

going to have a look").

As exemplified in this section on "the clinical examination" from Campbell and Lugg's 1958 Handbook to Aid in the Treatment of Zulu Patients, the clinical gaze enters deep within the living body to manufacture its most intimate depths and deeply hidden recesses as visible objects of medical knowledge through its techniques of palpation, auscultation, invasive instrumental inspections such as rectoscopy and fundoscopy, and surgical investigations that physically reveal the interior of the body to the observer. Whether applied in whole or in part, each and every of these techniques mark the clinical examination quite literally as the point where "power becomes capillary", and so at the centre of those technologies that constitute the individual as the effect of power and object of knowledge. It is therefore unsurprising that it was from within this most compact of surveillance sites that the African body and African patient as unique objects of socio-medical knowledge should have emerged in the 40 odd years between Bernstein's characterisation in 1938 of the Bantu peoples as only recently having become a problem for the medical student, and Klopper's (1973) recognition of the African's clinical care as founded in a specifically "Bantu" code of medical perception.

Birth of the "Bantu Clinic"

It was not until the early 1930s that secular hospital doctors began to write about the African patient as a distinct object of clinical knowledge. A 1934 description of "a day in non-European casualty" affords a glimpse of how this clinical gaze produced the African patient as quite literally a lump of flesh.

You start in on the crowd which has now extended ten deep, and wonder if they've been breeding while you were away ... You go into the female cube and find about six perspiring masses of flesh; listening to a chest you hear the wierdest (sic) noises, and you realise the steriliser is the cause of it. You sing out for it to be turned off and return to the chest.

This was a gaze that further divided the body into a series of disconnected segments defined by the pathology that was seen. Here "a good T.B. chest in the cubicle - one at a time may examine"; there "an interesting skin case", and elsewhere "cases of syphilitic ulcers, mucous patches and gonorrhoeal ophthalmia, ... quickly dealt with by sending to Rietfontein" (Casualty Officer, S.S., 1934, pp.36-38). The African patient as a passive and fragmented collection of body parts and lesions that emerged from this account

(Casualty Officer, S.S., 1934, p.36)

was more than the reductive fantasy of a callous practitioner anxious to display an heroic capacity for clinical work. For this first regime of the "Bantu clinic" (from the 1930s to around 1960) coincided with a far wider practice of pathological anatomy which actively created the African patient as an inert body by inventing a distinctive "Bantu anatomy". Because it remained a central object of knowledge in clinical discourse until the late 1970s, this "Bantu anatomy" is now briefly explored so as to provide the corporal context within which the clinical practices that are the focus of this chapter were deployed.

A "Bantu Anatomy"

In 1937 Dart concluded his Racial Origins by setting out a future in which the Bantu body would be subject to the self-same intensity of anatomical and physiological investigation as had the European body in the "400 years since Vesalius". Through this its then tentative outlines would be refined and its inner details defined.

The background of our picture has been limned; various highlights have been tentatively painted in; their gaunt relief will be subdued by the labours of those artists whose detailed work is essential to the masterpieces of the future. Their books are works of the time to come and will unquestionably appear when an army, equal to that which has laboured in Europe over the last 400 years since Vesalius, has been organised to collect information about the Bantu similar to that which has been garnered over these centuries concerning Europeans. (Dart, 1937, p.102)

Over the decade that followed Dart's future vision of a "Bantu anatomy", so, Frankenstein-like, the anatomy and physiology of the passive body of the African patient began to assemble itself in the pages of journals devoted to the medicine of the clinic. "Every day, instances of variation in some anatomical feature or other are brought to light in work on the Bantu on the operating table, in the post-mortem and in the dissecting-hall" (Tobias, 1947, p.17). Organ by organ (eg the heart, Malherbe, 1934; the intestine, van Velden, 1943), bone by bone (eq the skull, Galloway, 1941; the pelvis, Wells, 1933), and limb by limb (eg the thigh, Boshoff, 1935; the hand, Goldberg, 1941), its attributes and properties were isolated, analyzed and displayed for scrutiny alongside and in comparison to the European body. Thus, what this medicine demanded and what these anatomizing techniques produced was "a monograph on the anatomical peculiarities of the Bantu", a "Bantu anatomy" (Tobias, 1947, p.18) precisely equivalent to Grey's. While such a monograph was never to appear, the swarming of articles devoted to various aspects of a "Bantu anatomy" from the 1930s to the 1970s confirmed its centrality as object and effect of the "Bantu clinic".

As the gaze of pathological anatomy opened it up to reveal and compare its configuration to that of the European body, certain organs, bones and systems of the African body attracted more intensive scrutiny than others. For instance, Sutherland-Strachan published in 1932 one of the first papers to examine what was to become colloquially known as the "Bantu liver", which owing to its filtrative functions in the body was a particularly sensitive site from which to monitor the relation of Africans to the elements, minerals and alcohol its pathological analysis revealed to be

present in their diet.

In 1962 South African Blacks were granted access to all varieties of liquor. This change in drinking habits has produced an alteration in the picture of liver disease, with the appearance in micronodular cirrhosis of fatty change, alcoholic hyalin, alcoholic hepatitis and alcoholic cirrhosis. Many livers show a mixed picture of iron overload and fatty change with alcoholic hyalin, indicating consumption of traditional home-brewed beverages plus hard liquor. (Isaacson, 1978, p.368)

Offering a means of explaining the "strange difference" between European and African women in "the obstetrical sphere" (Broomberg, 1935, p.11), the pelvis of the Bantu female would also become the epicentre of more intensive study, as reflected in 1956 by the publication of Bantu Gynaecology (Charlewood & Frylinck, 1956): "Less than twenty years ago the Bantu were an exotic growth to the gynaecologist. Now this branch of the human race has been received in orthodox gynaecological circles and its womanhood forms for the observer an entity" (Charlewood & Frylinck, 1956, p.1). The heart was singled out both due to what Elliot (with remarkable understatement) referred to as the "social anthropological interest" (Elliot, 1953, p.29) attaching to findings that it might differ anatomically from the European heart (Brink, 1959; Sandeman, 1965; Singer, 1959), and because it was affected by a pathology so foreign to that seen in the European as to be labelled "cryptogenic heart disease" (Higginson, Isaacson & Simson, 1960). Other applications of human anatomy analyzed not the interior of the African body but rather its external surfaces, such as the pigmentation of the skin

(Wasserman & Heyl, 1968) and of the skin within the mouth (Van Wyk, 1970), because "the various patterns which skin pigmentation may assume are not always appreciated. Incorrect interpretation of a perfectly normal appearance may therefore result" (Van Wyk, 1970, p.177).

Uniting these studies and their anatomical products as the objects and effect of a single clinical technique, was the deep gaze of pathological anatomy which required that the Bantu body exist as a distinctive three-dimensional corporal space within which diseases could occur, be diagnosed and treated.

In anatamo-clinical experience, the medical eye must see the illness spread out before it, horizontally and vertically in graded depth, as it penetrates into the body, as it advances into its bulk, as it circumvents or lifts its masses, as it descends into its depths. (Foucault, 1973, p.176)

These and other such applications of pathological anatomy thus furnished doctors with an intimate familiarity of the otherwise dark and unknown interior of the African body necessary to distinguish correctly the signs of real pathology from those that were mere phantoms of an eye, ear or hand unfamiliar with what was "normal". As Wells (1949) noted of the African body in a paper on "The Possible Field of Anatomical Research in South Africa" where he compared it with the European body:

... (T) he anatomist may expect to find differences widely distributed throughout its structure. These can hardly fail in every case to exert an appreciable influence on function.

Immediately they assume a practical bearing on the clinical sciences, ... since it is agreed that normal function is best

preserved or restored by maintaining or re-establishing normal structure. (Wells, 1949, pp.86-87)

The device of a peculiarly Bantu anatomy emerged therefore as the object and effect of a normalizing judgement whereby the organs and systems of an individual are compared with others so as to allow for their assessment, measurement and clinical correction. "By making it possible to measure gaps, to determine levels, to fix specialities and to render the differences ... the norm introduces, as a useful imperative and as a result of measurement, all the shading of individual differences" (Foucault, 1979, p.184) - and, in this colonial context, of racial differences between the African body and the European body . But this anatomy was by no means a stable mechanism within the gaze of the clinic. From its crystallization in the 1930s, Bantu anatomy would for the next 30 years continue to consolidate itself. From the mid-1960s, however, it began to run alongside a new component in the discourse of the clinic that permitted doctors to not only see the pathology but also to hear what patients said as signals of their physiological and emotional interdependence with a more encompassing socio-cultural domain, which by the late 1970s had been formalized in the discipline of "community health" (see Chapter 9) that produced the body of the individual as coextensive with the communal body. By 1978 Tobias could thus topple the device of an individual Bantu anatomy from its central position within the clinic where he wrote of "physical anthropology" that:

'While anatomy and physiology deal with the standard individual, (physical) anthropolgy is the science of the group'. Herein lies its great importance in a medical and dental school in this last quarter of the twentieth century; for it is with the group that community health has to deal ... Just as one has to study the anatomy and physiology of the individual as a groundwork for training in personal medicine, ... so too does one need to study ... the anatomy and physiology of groups of men or communities, as a baseline for the later emphasis on community medicine and quest for community health. (Tobias, 1978, pp.1067-1069)

Turning now from this highly schematic genealogy of the anatomy of the African body, the remainder of this chapter examines the African patient as an object and effect of clinical practice, from the 1930s to the 1990s.

The African Patient as a Lesion-Containing Body

The earliest incarnation of the Bantu clinic developed around a discursive regime premised upon the perceptual technique of triangulation involving symptom, sign and pathology. The symptom was a marker of illness as experienced by the patient. The sign was an intimation of disease as elicited by the physician through history taking and physical examination, and both symptom and sign pointed to an underlying lesion that was the disease (Armstrong, 1994, p.3). The body of the patient was therefore coterminous with the space of disease, and so the patient and the lesion could not be conceived of as separable entities. In effect, the patient was the lesion, and his or her cultural, cognitive, linguistic and personal

idiosyncrasies counted only in so far as they served to obscure from accurate apprehension the truth of the pathological lesion itself. Indeed, as an overture to physical examination of the body by which the lesion was finally pinpointed deep within it, the task of the doctor consisted in "provoking the lesion to speech" (Armstrong, 1984, p.738). Pathology itself being voiceless, this could occur only through the surrogate medium of what the patient had to say about where, how and when the pathology made itself known within the body, to render extraneous all those words that in their order and meaning did not reproduce the outlines of the lesion. In turn, this problematised all those patients who for whatever reasons were not fully competent to speak for their pathology.

It was therefore around this component of the clinical gaze that contemporaneous with fabrication of a "Bantu anatomy" in the 1930s there crystallized a sub-discourse devoted to identifying the characteristics of African patients that might serve to limit their ability to speak on behalf of the lesions within them. Initially these writings were somewhat anecdotal, such as Grobbelaar's identification in 1934 of "the snag" that "lies in the taking of the history of the case, for ... (the African patient) thinks that he is helping you ... if he answers every question in the affirmative" (Grobbelaar, 1934, p.14).

For instance: Question: "What do you want?"

"Nkoos I weep because I am ill."

"How are you ill?"

"My whole body is ill."

"Have you pain?"

"Yebo, Nkoos."

"Where is the pain?"

He points to head, chest, stomach with a sweeping downward gesture.

"Is the pain in your head?"

"Yebo, Nkoos."

"Is the pain in your stomach?"

"Yebo, Nkoos."

"Is the pain in your chest?"

"Eheu! YEBO, Nkoos."

In other words "You've got it." (Grobbelaar, 1934, p.14)

Confirming this procedure as the correct one to adopt when examining

Africans in this clinical regime that located disease to a specific

point inside the body, Dowie Dunn (1939) spelt out its principles.

If there was no obvious evidence of disease, one talked in general terms, stating that with this sickness sometimes one got a headache or bellyache and so on. The native always gave the show away by showing definite interest when particular areas of his body were mentioned. (Dowie Dunn, 1939, p.51).

Published in 1943, the first edition of Gelfand's *The Sick*African² systematized the otherwise scattered recommendations of practitioners such as Grobbelaar and Dunn, to formalise the notion that clinical practice with African patients "involves an entirely different angle of approach to investigation and treatment"

(Gelfand, 1943, preface). In its chapters dealing with clinical practice *The Sick African* confirmed the negative significance of what the African patient had to say. Despite a 26 page chapter on "The Patient" - "as a patient, he is well behaved, docile and submissive (Gelfand, 1943, p.6) - and a 20 page chapter on "The

Examination", what the African patient said was mentioned only to alert the doctor to how these words might confound objective apprehension of the pathology.

... (D) ifficulty in obtaining a good clinical history is presented by the patient himself ... He will not speak readily or communicate freely ... He has little conception of time and seldom knows his age ... Often enough, a few hours later, he will give an entirely different account. So the doctor must often rely upon the conclusions which the clinical findings enable him to draw. (Gelfand, 1943, p.28)

In 1948, Keen published a further exposition on the problem of diagnosing disease in the African body. Titled The Psychological Approach to Bantu Medicine, this advocated a number of methods for making the virtual voice of pathology audible through the noisy "mixture of magic, religion and medicine which forms the background of the Bantu's mental reactions" to clinical care (Keen, 1948, p.6). For instance, because "the taking of a long history goes against the grain in the Bantu" (p.8), the doctor should know even before talking with the patient where in the body the pathology was. To achieve this, a practice of surreptitious surveillance in the doctor's waiting area, achieved by:

... sending an orderly among the patients sitting outside my consulting room collecting names and tickets. He would tactfully find out what was wrong and as a result, I always had on my desk a list of names with major complaints. The patient would walk into the room and I would look him over and say "Take off your shirt, I want to examine your chest" or "For how long have you been coughing," and then during the

examination I would get my history knowing it would be as accurate as is possible in a Swazi. (Keen, 1948, p.8)

So too with the stethoscope or other instrumental investigations, which should be used not to explore but purely to confirm: "You must know what is wrong before sending the patient for an X-ray examination. If you suspect T.B., say ... "Listen! There is inflammation in the lung ... and I want to see how much lung has been eaten away" (Keen, 1948, p.9). Further, in physically examining the body of the African the course traced by the hands of the doctor over it and towards the site of the lesion should reverse the direction taken by the hands on European bodies so that the patient's confidence in the doctor not be lost along with a chance to locate the pathology.

In examining a patient ... go for the main pathology first. For example, you have been taught that in palpating an abdomen, where you suspect the possibility of appendicitis you must start your examination in the left iliac fossa and work across to the right side. The idea of course is not to stir up any pain or guarding. That is fatal when dealing with the raw Bantu, as he will at once think that you do not know what you are about. (Keen, 1948, p.9)

Much the same recommendations appeared two years later in Storr's Medical Diseases in the Bantu (1950), and Brebner's Surgery in the Bantu (1950). For Storr, "Mr. Medical-diseases-in-the-bantu" (1950, p.49) was a particularly difficult patient in which to establish the truth of the pathological lesion owing not only to the frequency with which the taking of cases had to proceed through an interpreter, but also because "to the average Bantu patient time is

not important". Living "very much in the present, the past and the future being shrouded in mist" (Storr, 1950, p.49), the Bantu patient lacked the historical consciousness requisite to reproducing the lesion's chronological dimensions. "Thus it is very difficult to obtain concrete answers to questions where time is really concerned. For how long has the pain been present; or when did he first notice that lump; when did he first start coughing up blood?" (Storr, 1950, p.50). Other obfuscating factors included "the pigmented skin" which hindered the identification on physical examination of such conditions "as early jaundice, anaemia and cynosis" (Storr, 1950, p.50).

But this diagnostic transfer of the lesion from the body into the abstract external space of the clinical gaze was merely a precursor to treatment. Where this entailed ongoing drug therapy or periodic medical monitoring, it demanded that same lesion to exist as an entity within the patient's own consciousness of his own body so that as long as it remained he would monitor and treat it. But the African's "concrete mindedness" and envelopment in a world of "superstition" where sickness emanated from bewitchment, spirit possession or ancestor influences, meant that even this could not be assumed. The deep gaze of pathological anatomy thus configured itself into a technique aimed at training the consciousness of the African patient to produce the same corporal depth and volume of the pathology-containing anatomy as seen by the doctor.

The Bantu, if he sees the trauma, can understand what's what and he then recovers because his tissues also have an immunity to infection. Years of repeated wounds give his tissues a certain immunity to infections. But woe betide him if that

infection is hidden. If it is somewhere in his liver or his lung where he can't see it, he gives up the ghost very easily. It is in such a case that I think it worth while if you can spend the time, in simple language to say to him, "now look, you have got this inflammation inside your body; it has to run its course; we'll try and control it". (Brebner, 1950, p.47) This then was a means of recruiting the African patient into the heart of clinical discipline as his own insightful physician, and for Keen involved showing the patient the pathology on the x-ray, the urine being tested and the results obtained, and letting the

This then was a means of recruiting the African patient into the heart of clinical discipline as his own insightful physician, and for Keen involved showing the patient the pathology on the x-ray, the urine being tested and the results obtained, and letting the patient "look down my microscope. He will probably not see anything, but it will give him something to fix his mental reactions" (Keen, 1948, p.9).

It is therefore true that while it was the passive body containing the lesion that filled the medical gaze in this first incarnation of the "Bantu clinic", the consciousness of the patient and methods for training that consciousness were not wholly absent. It is, however, incorrect to argue that this momentary surfacing of how the African patient conceived of his own body represented the tip of a subjective iceberg beginning to be discovered by a medicine edging its way toward a more humanistic approach and the "whole person". For we have seen how these techniques were directed to the diametrically opposite end of having the patient objectify himself and the disease contained within his body. Problematisation therefore around 1960 of the African patient's thoughts and feelings as positive objects of clinical medicine that should themselves be included in the clinical equation (rather than discarded or transformed into a mechanism of self-objectification), represented

not the elaboration of, but rather a break from this old regime. For the African patient as an emotional being was less a discovery of humanistic enlightenment than a surveillance device demanded by medicine to "illuminate the dark spaces of the mind and social relationships" (Armstrong, 1984, p.739) within which it occurred, and which in the paralell space of public health were at this same historical moment beginning to crystallize within the gaze of a nascent "community health".

An Emotional Patient

The second edition of Gelfand's The Sick African (1947) differed from the first only in extending the range of pathologies that the doctor should be prepared to see within the body. Inclusion in the third edition (Gelfand, 1957) of entirely new sections dealing with "psychological disorders" (p.533), and the "effect on work and the importance of knowing the African" (p.791), thus signalled a reconfiguration of power in the discourse of the "Bantu clinic" that allowed of a patient that was more than a passive and anatomised body containing a lesion. Under the heading "disorders of the nervous system", Gelfand's first two editions (1943; 1947) had recognised only "the anxiety state", "hysteria" (attributed to fear of bewitchment), and "organic ... disorders". Now Gelfand could argue that the African patient's psychology was in itself an important component of the clinical encounter.

It is not merely a pathological problem. It is a problem which involves the appreciation of his outlook and his attitude to disease. One must know not only the diseases of Africa, but also the people with whom we are dealing. (Gelfand, 1957,

It was therefore appropriate that the clinician be alerted to such emotional conditions as "the psychoneuroses" and "affective disorders", for "clinical practice is so bound up with problems of mental disorders that a brief account would not be out of place" (Gelfand, 1957, p.533).

Confirming the psychology of the African patient as an important effect and target of this new clinical regime, a paper published by Findlay (1960) analyzed "the emotional pattern of the tribal Zulu as it affects pre-anaesthetic assessment and management". He observed that among the implicit functions of the anaesthetist was to "note the emotional state of his patient in order to induce tranquillity by means of reassurance, suggestion and suitable premedication" (Findlay, 1960, p.854). Where the patient was a "tribal Zulu", it was particularly important the anaesthetist pay special attention to this function, owing, he argued, to the culture- and tradition-bound tendency of such patients to mask the "stress" occasioned by fear. So, while the capacity to experience feelings was equally well developed in both the European and the "Zulu", in the latter:

Fear is deceptively masked by the absence of its outward manifestations. Thus the usual reaction to stress can be described as autonomic rather than vocal. The Zulu shares the belief of other warrior races that courage, as such, should be regarded as a primary virtue, and any display of fear as contemptuous self-indulgence. The psychosomatic implications of this are the actually exaggerated responses anaesthetists encounter daily in the Zulu as a result of moderate

physiological and pharmacological interference. (Findlay, 1960, p.854).

Accordingly, the anaesthetist working with the "Zulu" patient should remain especially vigilant, and to avoid being "misled" by the patient's outwardly placid nature should anticipate the emotional infrastructure it concealed. "Positive action" in the form of careful "psychological preparation" was therefore essential (Findlay, 1960, p.855).

These works marked a new analysis of disease and its indicators that involved a reassessment of the African patient. For, as Steuart had written in 1958, what was needed was "for the physician to develop and exploit a more psychiatric type of relationship than is at present current. This would include greater opportunity for self-expression by the patient ..., (and) his guidance could be more closely related to the felt needs of the patient" (Steuart, 1958, p.590). So, just as the emotional infrastructure of the Zulu patient recognised by Findlay (1960) meant he should not be mechanically pumped full of anaesthetic, so at a cognitive level the patient "cannot be regarded as an open vessel ... or as a vacant vessel, ready to accommodate whatever the doctor wishes to instil in him" (Abramson, 1960, p.365).

Reciprocally, the lesion within the body of the patient which the earlier regime had so assiduously strived to isolate from the surrounding context of the person, family life, and culture, now came to serve as a relay for illuminating precisely these factors in the life of the patient, and these in turn as a focus of clinical treatment. Speaking to this new found concern with the psychosocial, Crowhurst Archer (1960) advocated a "psychiatric approach to

tuberculosis". Within this approach, the doctor should be:

... concerned not only with the function of the individual organs of the human body, but also with the health of the human being as one integrated whole. Moreover, ... (it) is interested in the social forces which facilitate or retard emotional adjustment in the individual and in the group.

(Crowhurst Archer, 1960, p.242)

Illustrating the implications for practice of this novel clinical approach he observed that because tuberculosis among Africans occurred within a "patriarchal society composed of large family groups governed by primitive taboos" (p.243), treatment of the individual as an individual would reduce the body's capacity to heal itself by arousing resentment on the part of others and concomitant "emotional breakdown" of the patient. Thus, the entire social unit in which it occurred should be made the patient. "To this end the wards of the admission blocks of some hospitals where Africans are treated are only separated by walls 3 feet in height so as to preserve the sense of community life" (Crowhurst Archer, 1960, p.243).

An emotional component of illness now identified as existing in the shifting social spaces between bodies that composed "the patterns of daily living" (Abramson, 1960, p.34), a clinical method was required that in addition to the physical examination of old could map these same social spaces. Since these could only be known through what was said by the patient, illness was in effect being converted from what was visible to what was heard. Confirming this, The Language of the Patient (Campbell, 1961; Editorial, 1961) called for a thorough assessment of the doctor's capacity to hear and

understand what the African patient might say.

It is morally wrong for any doctor to practice for gain unless he is able to communicate direct with them (sic) in a language which they understand well enough to express accurately, not only the overt symptoms of their physical illnesses, but also the finer nuances of their thoughts and emotions, and the true nature of their hidden hopes and fears. (Editorial, 1961, p.986).

This "moral" imperative to study the intimacies of what the African patient experienced and thought, was, of course, less an ethical necessity than a discursive device to mobilise a surveillance apparatus able to do just that, and it was precisely toward establishing "the true nature of their hidden hopes and fears" that the mechanism of the patient survey was first directed in 1961.

In What is Wrong with Me? A study of the Views of African and Indian Patients in a Durban Hospital (Abramson, Mayet & Majola, 1961), its authors confirmed this new regime's distribution of illness in the previously dark vaults of the subjective and the unknown interstices of the social where they asked patients:

... a number of general questions concerning the illness, what the patient thought or had been told about it, and the steps he had taken. The patient was also asked whether he thought his illness was related to his food, work, smoking, drinking, or worries, whether he thought he had a 'Bantu disease' or had been 'tricked', whether he thought he might have inherited it or got it from somebody else who was ill, and whether he thought it might be a punishment, or result from any act or omission on his part. (Abramson, Mayet & Majola, 1961, p.690)

Invention by the patient survey of the social interstices from which the body and the emotions of the individual took their shape suggested the possibility that illness itself was more than simply the lesion in the body. Thus, contemporaneous with the flowering into clinical consciousness of the African patient as an emotional being, there emerged the technique of "urbanization" as a means by which individual African bodies were reconstituted - from being isolated anatomical containers of interesting pathology, "urbanization" now made each individual body coterminous with an aggregate body defined by the behaviours and attitudes specific to culture and tradition.

Urbanization and a Cross-Cultural Clinical Gaze

Since the early 1900s the idea of "detribalization" had been installed by the psychological sciences (see Chapter 7), and the technologies of public health (see Chapters 8 and 9), to explain the heightened proclivity of Africans to behaviours that increased their risk of syphilitic or tubercular infection, and their tendency towards "impulsive" sexual and interpersonal aggression. Against this problematization of behaviour, the clinical notion of "urbanization" etched a far deeper psychosomatic line that ran not only through culture and behaviour, but also the very physiology and biology of the African body, to render these inner spaces resonant and interdependent with their social and cultural context. By 1964, studies which some 30 years earlier had been the exception - such as Broomberg's measurement of the blood pressure of "apparently normal Zulu adults" to show "a definite tendency toward lower readings" among kraal dwellers as against city dwellers (Broomberg, 1936,

pp.31-32) - had become the rule, and in place of the "large field of work waiting to be explored" (Sutherland-Strachan, 1932, p.31) was now the distinctive notion of "urbanization" as not only a descriptive but also a causal mechanism. Thus Seftel could write in 1964 of a clinical epidemiological study of diabetes in African patients attending a Johannesburg hospital that "urbanization ... appears to be a potent diabetogenic factor ... The condition is rare in rural Africans but common in those living in and around cities" (Seftel, 1964, p.82). Such research consolidated the earlier shift toward translating illness from that which was seen to that which was heard by making it possible to conceive of a class of disorders in the African patient that were identical with the behaviours, attitudes and emotions reflected in reported symptoms rather than the signs elicited on physical examination. Indexical of these diseases were those that affected the stomach (ulceration) and the bowel, which increasingly from the 1960s onwards were to be made the pathological markers of African urbanization, magnified within the gaze of the clinic by the cognitive device of "psycho-somatic" theory.

As Mirvish noted in 1962, "there has emerged an increasing knowledge of the nature of symptoms in the study of such conditions as headaches, migraine, and many skin-conditions of nervous origin, and of the effects of the emotions on the gastro-intestinal tract, the stomach, and the bowel" (Mirvish, 1962, p.210). This new discovery of a class of illnesses defined less by the lesion than as a certain emotional and attitudinal pattern called for an equivalent modification in the gaze of the doctor, who must "be led to appreciate the close and inevitable link between psyche and the

soma, and the way in which the one works on the other" (Elliot, 1964, p.148). A year later, Crowhurst Archer confirmed this new interest in the patient as an integrated mind and body by advocating that psychiatry be given increased prominence in the medical curriculum, for to do so would introduce doctors "to the problem of individual differences and their statistical treatment, the problem of normality and the problem of inter-personal relationship. It should ... prepare him to see the person in the patient" (Crowhurst Archer, 1965, p.635).

Complementing this new medicine's interest in seeing the "person in the patient" was a reassessment of the place of health education and health promotion. For if illness could be conceived of as a pattern of emotions, then the old binary division of patients into the sick and the well on the basis of the presence or absence of a lesion was no longer adequate. Instead, everyone was potentially a patient, and illness could be established before it even became manifest through scrutiny of the social fabric it formed a part of. Accordingly, the South African Medical Journal could in 1967 explore the implications of this new gaze for the clinical examination itself. Because "some cultures are in equilibrium but others are undergoing change in the process of industrialization and urbanization which results in cross-cultural conflict" (Editorial, 1967b, p.41), it was essential that doctors "who work in multiracial communities" understand and interpolate these cultural factors into their clinical practice.

It is advocated that when case histories are taken on any particular patient, some questions be asked which relate to the patient's general culture. In every community the doctor

is in a favourable position to study his fellow men because he can ask any questions he likes in the name of Medicine.

(Editorial, 1967b, p.41)

For the next four years this shift toward fabrication of the individual African patient as coterminous with the broader community and an emotional conduit of its culture remained a purely theoretical one. By the early 1970s, however, the translation into practice of this new "cross-cultural outlook" on clinical medicine was well under way.

Seeking to establish why "the 'average' hospital case" failed to reattend for ongoing treatment or monitoring, Torrington (1971) asked 251 "mainly African patients" a single question: "What is wrong with you?" Her respondents were split between those attending a comprehensive clinic where a team consisting of a doctor and a social worker enquired into the social and cultural background of their patients, and a non-comprehensive care clinic where, as under the old regime, only the disease was attended to. Under comprehensive care, 88% of the patients had a "reasonably accurate" knowledge of their conditions and were adequate "reattenders", as against only 31% in the non-comprehensive clinic (Torrington, 1971, p.43). She thus concluded that failure to reattend lay in a "lack of understanding of the illness on the patient's side and failure of communication between the doctor and the patient in the wards" (Torrington, 1971, p.43). The patient's view was, therefore, a problem in its own right and a resource, which if adequately managed, could be used to secure the patient's participation in the therapeutic regimen.

Further crystallization of the African patient as a person whose illness could not be understood in the absence of knowledge about how the patient's culture isolated certain experiences and feeling states as more significant than others, occurred with Mokhobo's (1971) reassessment of "medical history taking among the Bantu tribes of South Africa". Drawing upon Chamberlain and Oglivie's (1967) attempt to show that for some diseases in different stages of their development symptoms could be more important than signs, Mokhobo distinguished between "predominantly historical diagnoses" (eg angina, peptic ulcer, vascular insufficiency), and disorders where "physical findings may be all important" (eg meningitis, malignant disease). Because "many African patients exhibit a pattern of attitudes born of (the) ... traditional influences" inscribed in "Bantu medical practice", doctors unaware of the illness meanings created by these attitudes were liable to confuse the relative importance of symptoms and signs. So, where thirty years earlier what the African patient had to say was considered a hindrance to accurate apprehension of the true pathology, in this new approach the patient's story was central.

The Bantu patient ... may exasperate the doctor by explaining every one of his symptoms. [But] this self-analysis and diagnosis is, however, a priceless account to the doctor ... The manner in which the patient tells his story, his timed emphasis, all furnish information which may otherwise be hard to come by. (Mokhobo, 1971, p.112)

Such information was, however, only apparent to the doctor primed with an intimate understanding of the cultural meanings attached to specific organs and symptoms, and "a patient's psychological and

cultural outlook must provide the mirror through which the clinical picture is viewed" (p.112). To provide this, Mokhobo offered a brief compendium of "tribal terminology" relating to various classes of disorder, a perceptual grid that would allow doctors to recognise how within the indigenous African systems of diagnosis and healing it made visible:

Priorities of symptoms and signs have a complex but interesting treatment. A patient with gonorrhoea will give undue prominence to backache and not mention penile discharge, the reason being that the damage may have been inflicted on the kidney, which is an important organ of potency and masculinity. (Mokhobo, 1971, p.112)

Mokhobo's realignment of the relationship between signs and symptoms and his observation that the traditional African healer operated to render these nodal (as opposed to focal) points in a complex network of feelings and social relationships was to have a number of implications for the African patient.

First, it coincided with a more general reevaluation of "that forgotten human being - the patient" (Barlow, 1971, p.925; see also Oosthuizen, 1971), and recognition that because "the paths of medicine, society and the patient form an interwoven meshwork", the doctor should at all times be alert to the possibility that he was dealing with and impacting upon far more than the isolated individual present in the consulting room (Anderson, 1971, p.864). Second, and specifically in relation to the African patient, it suggested an entire complex of psychosocial and semantic needs that for doctors under the earlier regime had not existed. Consequently, Barker (1971) could argue that:

Your Zulu goes to the medicine man because our understanding is too small. We have failed to answer his unspoken question, we have not helped him at a level where our help is seen to be help ... If we learn anything from this 'reversion' (as we so hatefully style it) to the medicine man, it is that physical healing is not considered enough in Zulu society; ... Our Zulu patients do not just ask the ordinary question 'how?' - which we are expert at answering with our detailed knowledge of microbiology and biochemistry - but they also ask a more metaphysical 'why?' We of course, most often do not realize that we are being asked the question at all, and almost never do we attempt to answer it. (Barker, 1971, p.559).

Thus, albeit indirectly through the intermediary of the African traditional healer, the gaze of the "Bantu clinic" to the African patient had begun to engage with a new problem: that of the sociocultural matrix which informed the African patient's view of illness and attitudes to western medicine.

The consequence of this was a bifurcation in the discourse of the clinic. On the one hand, since it could now be observed that it was through the practice of the traditional healer that the African's ideas about and experience of illness were produced, there emerged a distinctive body of research devoted to the scrutiny of traditional healing practices and the illness beliefs that went with these. On the other hand, recognition of the African patient as a feeling person with psychosocial needs demanded a reorientation on the part of the western doctor so as to accommodate these in the clinical context. The effect of this bifurcation was a new object of clinical knowledge - the African as a dichotomous patient produced

at the confluence of western and traditional practices - who would remain a central figure in the eye of clinical medicine until the 1990s.

A Dichotomous Patient

Under the old regime, the classical triangulation method had linked signs and symptoms to locate the pathology in a unitary body. Installation of the traditional healer as an important component of the diagnostic and therapeutic process replaced this with a new technique of triangulation involving not so much signs and symptoms as doctor and traditional healer. Signs and symptoms were, of course, still important, but their significance now lay in revealing how the disease pattern they formed might reflect the play of traditional healing, as did a 1972 study which correlated the pathology of rural Africans with such variables as "religion", "education", "witch-doctor attendance" and "the wearing of shoes" (Edginton, Hodkinson & Seftel, 1972, p.969). Illness now interdependent with the fabric of traditional illness beliefs, Watts (1980) could in 1972 (although the findings were only published in 1980) conceive of the reaction to illness among urban Africans as a sequence of "separate steps" - such as visiting a hospital, consulting an "inyanga", and sacrificing a goat - with an "average" African patient taking "2,5" such steps. Because these steps invariably led between western and traditional practices, the doctor should be trained "to obtain insight into the traditional worldviews and practices of their typical patients and ... how ... to modify patients' attitudes and behaviour when this is essential" (Watts, 1972, p.591).

Affirming the solidification of a clinical gaze that established the African patient as the intersection of a triangular relationship between it and the western and traditional practices now isolated for clinical surveillance, Ingle (1973) argued that "it is axiomatic to start where people are and with what they believe" (p.333), while Jansen's (1973) The Doctor-Patient Relationship in an African Tribal Society explored the meaning of physical contact and the use of intruments during the examination to install these microspaces and meanings as the elements of a culture-sensitive clinical calculus.

With the introduction of western medicine in Bomvaland came the innovation of the physical examination ... Patients soon came to understand that European doctors required the examination in order to arrive at a diagnosis. Indeed, western doctors did not meet much resistance to the examination ... as it was regarded as a symbol of modern ways and technical prestige. Taking the medical history, the doctor communicates with his patient in his role of interviewer and presents himself as the one who must ask before knowing. As soon as he takes the role of examiner, he has a less dependent position towards his patient. In stead (sic) of standing in front of the patient with empty hands, now as examiner he operates with several kinds of instruments: stethoscope, reflexhammer (sic), sphygmomanometer, etc. No doubt this contributes to the status of the white doctor. When the examination is extended to the taking of X-ray films, the prestige of the doctor reaches its peak in the eyes of the patient. This modern apparatus contributes highly to the image of a powerful man who has

mysterious methods to 'see' the diseased parts inside the body. The Bomvana call the X-ray the u-Gesi, a term used both for electrical instruments and for electrical light. (Jansen, 1973, p.109)

By 1974, Barker could castigate western doctors for having "been blind for so long that almost none of us know what this Black patient is thinking" (1974, p.34), while writers such as Manganyi (1974), Mgobozi (1974), Mutwa (1974) and Ngubane (1977) elaborated African medical traditions and customs to elevate them to the status of a coherent and systematically structured cosmology that was one side of a culturally relativistic coin. Now, African "traditions and customs" (Gumede, 1974) were only a barrier to the advancement of health in so far as they were despised and neglected, whereas if respected and incorporated into clinical care they could be valuable diagnostic and therapeutic tools.

Unless we see Africans as they see themselves in disease not only as the western doctor sees them these cultural traditional practices will continue to block development. Yet with better understanding they could be utilised to act as catalysts in promoting change. (Gumede, 1974, p.35)

In producing the African as a dichotomous patient whose emotional needs were met by traditional practices while western medicine treated the body, an element of self-reflexivity was introduced into the gaze of the "Bantu clinic" that problematized its failure in this regard. In 1975 Stott asked: "Do we identify our patient's needs?". Drawing upon Rogerian psychotherapeutic principles, he advocated a series of strategies that could enable doctors in the cross-cultural clinical encounter to monitor how

their own attitudes and communicative tendencies might block rapport, and hear beyond what the patient said to the subjectivity that these words might conceal. For what the patient said was now only one aspect of the patient's view, and in certain cases might "be no more than an excuse to see and assess the doctor", or "a method to gain access to the surgery as a prelude to revealing "something ... difficult to verbalise" (Stott, 1975, p.33). In effect, it was now possible to think of the roles of patient and doctor as reversible, demanding that just as the doctor be comfortable assessing the patient, so should he or she also accept it when "the patient becomes judge/assessor" (Stott, 1975, p.34).

This recursive analysis by which the gaze of clinical medicine problematized its own role in relation to the African patient extended well beyond individual clinical encounters to embrace the whole discipline, and in 1978 The Leech devoted an edition to "The Role and Place of the Traditional Medicine Man and 'Witchdoctor' in African Health Care". Where 20 years earlier Gelfand's (1947) evaluation of African "witchcraft and medicine" as "enemies to the sick African's peace of mind" (Gelfand, 1947, p.4) reflected general opinion, now it was possible to say of the doctor who dismissed traditional healing as "a bane that is best forgotten and left to history" (Le Roux, 1977, p.629), that he "is certainly entitled to his opinion, but it is important to remember that there is more than one way of throwing the bones" (Dick & Murray, 1978, p.312). In place of the old medicine as an objective and absolute technology, was now a "western medicine ... (with) its own cultural relativity", which made it possible both to see the traditional healer and transform this practitioner from a threat to the clinical care of

the African, into "the best person to assist" the western doctor (Dick & Murray, 1978, p.312)

A flurry of work from this point on and into the late 1980s extended this by now well consolidated cross-cultural clinical gaze to solidify the African patient as the simultaneous product of western and traditional medical practices. For some, this reflected the all-determining influence of culture and acculturation (eg Cheetham & Griffiths, 1982; de Villiers, 1985; Farrand, 1984); for others the possibility of a more agentic African patient whose choice of healer was determined by factors such as income and access to health care (eg Boonzaier, 1985; Buchanan, Shuenyane, Mashigo, Mtongali & Unterhalter, 1979; Heap, 1985); and for others a template by which the western doctor could reproduce in clinical practice the function of the traditional healer by answering the questions "'Why am I ill?' and 'Who made me ill?'" (Daynes & Msengi, 1979). Perhaps epitomising this was the work of Segal and Ou Tim (1979) on "the witchdoctor and the bowel". This wove together the ideas of urbanization, choice of healer and traditional healing practices to both reveal the iatrogenic consequences of the latter and argue for a system by which to draw "the traditional practitioner into the structure of the health services" (Segal & Ou Tim, 1979, p.310), both to police any possible harmful practices (eq Buchanan & Cane, 1976; Kiernan, 1978), and confirm the role of "psychologist, psychiatrist, marriage counsellor and healer" in which "the vast majority of Blacks believe in and consult the witchdoctor" (Segal & Ou Tim, 1979, p.310).

The "Quest for Wholeness" and a Subjective Patient

The analyses constituting this cross-cultural body of knowledge that had as its object the relationship of clinical medicine to the African patient and traditional healer were divided in their evaluation of the immediate influence of traditional practices on the health of the individual. Their common effect, however, was to reconfigure the boundaries of the clinical encounter. Under the regime of pathological medicine these had been tightly drawn, and restricted to the gaze of a solitary doctor and the isolated body of a single patient as its effect. Acknowledgement of the interrelationship between symptoms and feelings had, it is true, brought the patient's immediate relationships to family, society and culture into the consulting room, but only as adjuncts to a diagnostic and therapeutic process over which the doctor could retain control through astute monitoring of the "doctor-patient relationship". By 1990, however, even the idea of the "doctorpatient relationship" was no longer adequate as a code for construing the psychological and socio-cultural forces at play, for the clinical encounter was itself now viewed as no more than an arbitrary moment in an all-encompassing "biopsychosocial system".

Thus, while somewhat paradoxically offering itself as a text devoted to "whole-person care" (p.xix), Clinical Health Psychology:

A Behaviourial Medicine Perspective (Schlebush, 1990) could argue for the untenability of distinguishing separate experiential realms for doctor and patient. Instead, the doctor, the patient, the disease, the illness and all interactions between them, were now perceptually defined punctuations produced by and productive of a universal "energy system ... seen as a collection of parts secured

by some type of interaction or interdependence".

General systems theory sees individuals as nonseparate entities of an environment ... (E) ach person is comprised of systems which in turn are part of bigger external systems: while individuals are composed of molecules, cells and organs, they belong to families, communities, cultures, nature and the world. The biological, psychological and social structures of each individual are affected by other levels of system and vica versa. (Schlebush, 1990, pp.14-15)

Because it was the perceptual configuration of the observer rather than the object of observation that was now seen as the crucial determinant of the clinical encounter, the patient's subjectivity could emerge as a focal object of clinical concern. Drawing upon the works of Eisenberg and Kleinman (1981), and the 1986 volume of Mchugh and Vallis on "illness behaviour", this "biopsychosocial" model constructed the patient as suffering not only from disease - "a biological process" - but also "illness" which it defined as:

A subjective, psychological and social experience which is therefore open to interpretation by both patients and the society in which they live, and may in fact occur in the absence of disease ... It has idiosyncratic elements and is oriented towards problems of existence and coping so that its measurement ... must be orientated towards the viewpoint of the patient. (Schlebush, 1990, p.41)

So, some 60 years after the African patient had first emerged into the light of the clinical examination as a passive corporal container of pathology, the codes of medical perception had mutated to invert the relative importance of what was seen and what was

heard. Then, all that was heard was that which assisted the eye to see since disease could not be separated from the body; now illness could not be separated from the viewpoint of the patient since that which was heard was the illness.

Accordingly, Simon (1988) was able to observe that in "ignoring" the patient's view biomedicine was "mechanistic" (p.5) and, alongside analyses that explained African disease and the distribution of health care from a marxist framework, authoritarian. "The medical practitioner and the political economist are alike: both diagnose from a position of authority and control without much knowledge of what it is the patient or subject sees and experiences, wants and desires" (Simon, 1988, p.11). To counter this, it was now important that the doctor engage in "the study of patients' perceptions and how they act on these" (Simon, 1988, p.182), for as De Villiers (1993) noted, the patients of this new regime "are not passive participants in a hospital environment, but perceive and experience health care phenomena according to their socio-cultural orientation" (De Villiers, 1993, p.111). Similarly, Heap and Ramphele (1991) could characterise the earlier discourse of the clinic on the African patient and traditional healer as "essentially a debate among professionals based on their perceptions"; criticise it for failing to obtain "any significant input from the 'patients' who are the objects of their concerns"; and invite the reader to contemplate precisely these subjectivities as they shaped "perceptions of illness and sickness" among African hostel dwellers (Heap & Ramphele, 1991, pp.117-120).

"The quest for wholeness" (Heap & Ramphele, 1991) that unites these contemporary approaches to ascertaining the patients's view thus conceals in its concern with revealing what is said the far more pervasive and invisible power of a contemporary clinical perception locked into that which is heard. For they create the possibility of evaluating as "reductionistic" (Rogers, 1992, p.5) and "illogically and deleteriously" dividing of the patient (Schlebush, 1990, p.14), all those methods of clinical medicine that have as their object and effect anything less than the "whole person", to thereby invent precisely the "whole" and subjective patient they claim to have discovered.

Silence and Speech

Essentially, the changes traced by this chapter in the discourse of clinical medicine and the African patient it has produced, sustained and transformed, reflect a shift from the visible and tangible yet silent and passive body, to a loquacious and subjectified "whole person", whose verbal expression of needs and beliefs render her an agentic and idiosyncratic individual. As a manifestation of power, how is this change to be understood?

From the marxist and liberal-humanist view of sovereign power that in the 1970s began constituting the entire enterprise of South African medicine as an oppressive and dehumanising regime (see Dowling, 1973; Medical Association of South Africa, 1974), thoughts are freely spoken unless forcefully suppressed and negated. Thus, the failure of clinical medicine until the 1980s to elicit "the patient's view", and see only the African body as a passive container of pathology and register of racial difference, would be

read from this perspective as evidence for the fact of an ideologically bound regime of repression in which the vociferous African was an immanent danger to be forcefully silenced. But in the Foucaultian schema silence is less a sign of repression at work than a signal of discipline at play in the carceral complex of relationships that unite dominator, dominated, and liberator in an omnipresent web of surveillance. For in this system:

There is no binary division to be made between what one says and what one does not say ... Silence itself - the things one declines to say or is forbidden to name, the discretion that is required between different speakers - is less the absolute limit of discourse, the other side from which it is separated by a strict boundary, than an element that functions alongside the things said, with them and in relation to them

(Foucault, 1979, p.27)

Accordingly, the complete absence from secular clinical discourse until the 1930s, and then the initial emergence and reconfirmation from then until 1960 of the African patient as a mute body in the "Bantu clinic", cannot be simplistically regarded as evidence for the stifling power of sovereign oppression. Similarly, the appearance in the 1960s of a speaking patient whose feelings were increasingly counted in a clinical procedure that simultaneously made visible the web of the community, is not to be seen as the lifting of this regime of silence and liberation of an African voice for so long barred from speech.

Rather, this arc from silence to speech maps no more and no less than the functioning of a productive power which at certain points manufactures silence and at others a provocation to

discourse. For far from being unique to this South African archaeology of clinical perception and the African patient that is its effect, a closely equivalent sequence from the mute body of the passive patient to the loquacious voice of the "whole person" is to be found in the discourse of the British clinic (see Armstrong, 1982, 1984).

These convergencies notwithstanding, it is true that the African patient as object and effect of the clinical gaze had to wait some 90 years longer than its European counterpart to be invested with a "Bantu anatomy" equivalent to that in Grey's, and some 20 years longer to first be heard as a subjective being. It is also true that the utility of this "Bantu anatomy" as an object by which the sovereign regime of the apartheid state would find the conditions of its possibility meant it would begin to vanish as the discourse of liberal-humanism arose in the 1970s and 1980s to invent the universal body and authentic person it claimed to "liberate".

Foucault asserted that the rise of disciplinary techniques in Europe "made the cumulative multiplicity of men useful (and thereby) accelerated the accumulation of capital" (1979, p.221). This waxing and waning of the African patient in the gaze of clinical medicine serves only to emphasize the correctness of that assertion. For the diffusion in South Africa of discipline through the socio-medical sciences provided precisely the peculiarly African body that made possible the politics of racial segregation and the countervailing revolution by exactly those African bodies whose agentic resistance was itself the most powerful confirmation of discipline as a power which "produces; it produces reality; it produces domains of objects and rituals of truth. The individual and the knowledge that may be

gained of him belong to this production" (Foucault, 1977, p.192).

- 1. The term "Bantu" is used here because its entrance into more general usage in South African socio-medical discourse coincided with the emergence and first 40-odd years of that strand in the discourse of clinical medicine devoted to the diagnosis and treatment of illness in Africans. For a discussion of the terms "native", "Bantu", "black" and "African" see Sharp (1988).
- 2. Reviewers in 1944 of "this pioneer attempt at filling the breach which has so long hampered South African medicine" (N.V.S. & P.K., 1944, p.37) were critical of the generalizations made concerning disease distribution across the continent, but unequivocal in their support of its chapters on the patient and the examination, stating that "the book is essentially clinical and should be in the hands of every medical practitioner dealing with the Bantu" (N.V.S. & P.K., 1944, p.39).

CHAPTER 11

POSTSCRIPT: ON THE ANATOMY OF POWER

Bound by the conventions of liberal humanism and all that these imply in respect of the a-historical human subject and an economist notion of power, conventional analyses of the sociomedical sciences in South Africa proceed as if they were a species of judicial inquisition into the phenomena examined. They are therefore constrained in their conclusions to offer a summing up of the case, a judgement, and then a series of recommendations concerning some course of retribution, rehabilitation or reinforcement that will guide the future actions of concerned social scientists in the direction of a "better" practice characterised by greater equity, justice, and so on.

Marks and Andersson, for example, concluded their study of typhus by noting that "the true violence of South Africa" lies not in "the infectious diseases which are defined by the Department of Health as 'epidemics' - but TB, measles, and malnutrition and malnutrition-related diseases" (Marks & Andersson, 1988, p.278). Similarly, Packard ended his history of the political economy of tuberculosis in South Africa by noting that:

A new resurgence of TB is surfacing in the urban areas of the country as thousands of workers and their families attempt to escape the poverty of the bantustans. Once again, industrial capital and the state have combined to lay the groundwork for a major upsurge in urban-based TB. The question that remains is whether the state and/or local authorities will also once again apply their time-honored policies of exclusion to solve this growing problem, perhaps in conjunction with new promises about the virtues of chemoprophylaxis. Or will they at last recognize the futility of this policy and begin to deal with the underlying causes of TB? (Packard, 1989, pp.318-319)

As a final example, the conclusion to Zwi and Ugalde's (1989) paper on an epidemiology of political violence was a reminder that "researchers should strive to ensure that their work, can, in some small way, be used in the promotion of peace, the promotion of broader levels of democracy and participation, and the achievement of liberation for the oppressed" (Zwi & Ugalde, 1989, p.641). In short, these conventional histories thus conform to the marxist dictate that the aim of the human sciences should not be simply to study the world and the person but rather to change them. They therefore epitomise the confidence characteristic of the modern subject as a relatively autonomous and self-contained individual who through careful examination and analysis of the situation gains access to the political control panel and there takes control over the design, direction, and delivery of power.

From the Foucaultian perspective, the irony of this imperative to engage in therapeutic action is clear. For, and as demonstrated throughout this thesis, the dual structure of all power relations as strategic yet without a strategist (Dreyfus & Rabinow, 1983, p.187) means that in the very act of calling for the socio-medical sciences to participate in the task of liberation these observers themselves participate in a regime of power, their claims to discern a repressive force which is lifted concealing a positive power which creates. Accordingly, it is the aim of this postscript not to speculate on how the South African anatomy of power and the African body that is its object and effect might be changed, but to do no more than study it.

Rewriting the African Subject

The African body fabricated here in all of the fantastic, geometric, pitiable, docile, dangerous, risky, anatomically dissected, and politically subjectified configurations that have comprised at various times and places its shifting truth as an object of western socio-medical discourse, the effect of this thesis is to offer a radical challenge to conventional histories of the socio-medical sciences in their colonial and apartheid contexts. For, in effacing the notion that power and the body can ever be separated, "that under power with its acts of violence and its artifice, we should be able to rediscover the things themselves in their primitive vivacity" (Foucault, in Kritzman, 1988, p.119), it demonstrates how the body of the African as a pre-existing entity which inhabits conventional histories and accounts of the sociomedical sciences is in fact no more than an artifact of these accounts, an effect sustained only by their elaborate efforts to rewrite history in a manner that produces the African as an unequivocal and subjective body (cf Chapter 1).

Accordingly, there can be little doubt that this thesis will not be easily read for what it says by those with an investment in progressive humanism, and may even be interpreted as a reactionary text, a scandalous denial of what every historian knows to be the 'truth' of how the 'authentic' African body was savagely mutilated by the unmitigated sovereignty of colonialism and apartheid.

However, to question the activities of socio-medical scientists, whether they be from the right or the left of the political spectrum, is not the same as being reactionary. For, open to an analysis of its own productive force, this study installs within South African socio-medical discourse a new and dispassionate gaze to the problem of the African body and socio-medical power - a gaze that does not seek solace behind the crash barriers of ideology and

their implications that in the absence of ideology's distorting and perverting consequences colonialism and apartheid might never have occurred; and a gaze that by the same token is not compelled to repeat indefinitely, and with no effect other than a shifting of players' positions on a stage whose limits and organization is already fixed, the refrain of the anti-repressive anthem: "power is bad, ugly, poor, sterile, monotonous and dead; and what power is exercised upon is right, good and rich" (Foucault, in Kritzman, 1988, p.120).

Instead, and by neither denying nor affirming either of these perspectives, this study fabricates a new, trans-humanist mode of strategic interrogation, by which the tactical integration of the socio-medical sciences within present day programmes of disciplinary power may be studied and thereby invested with a new relevance - a relevance that issues not from what they do, but from what it is that is produced by the performance of these practices, "the power over life" (Atterton, 1994), by which the individual and the social are continuously invented, sustained and transformed as calculable and manageable entities in the very act of analyzing them. For, power relations always being "both intentional and non-subjective" (Foucault, 1979, p.94), what is done by the doing of the sociomedical sciences is equally always of a dual character, this radical reassessment of power and knowledge itself at once revealing the limitations of conventional approaches and actively inventing the genealogical perspective it sustains.

Why then has this not been recognized before? What lines of force have until recently ensured that not even a single South African study has inverted the analytic codes of the juridicoliberal approach to power and so moved out of the space of progressive humanism to a point where the African body could be discerned as fabricated not found, and colonial/apartheid socio-

medical power as productive rather than merely destructive? An answer to these questions is suggested by an exploration of how the socio-medical sciences in South Africa have fabricated the Foucaultian notion of power, and how, in their failure to recognize its rejection of a transcendental subject - "there is no sovereign, founding subject, a universal form of subject to found everywhere" (Foucault, in Kritzman, 1988, p.50) - they are themselves the most obvious evidence for what it is that these disciplines do within the strategic space of contemporary South African society.

Foucault and the South African Socio-medical Sciences

The Foucault schema is now over 30 years old, dating back to the 1961 publication of Histoire de la Folie, and of Naissance de la Clinique 1963. English translations of the main texts drawn upon to inform the analytic and methodological basis of this study - The Order of Things (1973), The Birth of the Clinic (1976), Discipline and Punish (1977) and Gordon's Power/Knowledge (1980) - have been available since the mid-1970s, and by the early 1980s there already existed a substantial number of British and American studies that deployed Foucault to delineate the political anatomy of the European and American body (see Chapter 2).

In the decade since the mid-1980s, it was therefore at least conceivable that equivalent explorations by South Africans of sociomedical power in South Africa - which must surely count as one of the more startling examples of how power produces the body as an object of knowledge - could have been conducted. Yet, by 1995 the only study to draw on this perspective in its examination of the African body was that by the English historian Megan Vaughan (1990), and which, as mentioned in Chapter 2 of this thesis, pressed Foucault into the service of what Gerhardt (1989, p.xxvi) characterises as the Marxist or "conflict paradigm" in medical

sociology, rather than deploying the Foucault schema as a new approach to power and thereby challenging the anatomy of the African body in its own right.

This reticence to embrace in its full implications the Foucaultian theory of power and knowledge is even more apparent when the work of South African scholars is surveyed with a view to establishing how this has (or more correctly, has not) invented Foucault. First, to seek for any signs of Foucault in the South African literature on missionary, mining, clinical and public health medicine is to toil under a delusion, a Foucaultian perspective on these disciplines conspicuous only by its total absence. Second, on scrutinizing the literature examining the psychosocial sciences, it is clear that the minimally greater epistemological permeability of South African sociology and psychology to Foucaultian thought is all but illusory. For where it is inducted into these disciplines, Foucault is deployed not as an analytic tool by which the subject as an object and effect of power may be studied, but as a weapon in the armamentarium of marxist class struggle and laissez-faire liberalism to be wielded in the emancipation of the African.

For instance, and completely suppressing the Foucaultian qualification that for discipline the provocation of resistance is a condition for the possibility of its extension, Cloete, Muller and Orkin (1986) noted of their papers that criticize the Human Sciences Research Council "without being constructive" that:

A first retort might be as Foucault (1981) has remarked, that "critique doesn't have to be the premise of a deduction which concludes: this is then what needs to be done. It should be an instrument for those who fight, those who resist and refuse what is". (Cloete, Muller and Orkin, 1986, p.44)

In seeing only the sovereign side of "what is", they thus invent Foucault as a tool of emancipation, and by suggesting that South

African social scientists restructure their research agendas and methods, extend an invitation to the human sciences to insert their surveillance technologies ever more deeply and insidiously over, around and into "those constituencies not catered for by the HSRC", and "towards empowering disenfranchised and oppressed communities of our society" (Cloete, Muller & Orkin, 1986, pp.43-44). Elsewhere, the sociologist Webster cites Foucault's The Order of Things - "the historical emergence of the human sciences was occasioned by a problem, a requirement, an obstacle of a theoretical or practical nature" (Foucault, cited in Webster, 1986, p.8) - not to demonstrate how the micro-powers of observation, recording and inspection make possible the great shifts in political and economic conditions by providing precisely the human objects which these require to take hold, but instead to show the reverse. Thus: "... (T) he structural transformation of the South African economy, particularly the challenge of Black labour, is the occasion for the emergence and growth of social research into industry" (p.16) and; "faced by the crisis of the 1970s, the apartheid state is finding it increasingly necessary to mobilise social scientists to serve apartheid" (Webster, 1986, p.26). Webster's view suggests that for Foucault power is something to be grasped and wielded, that its locus resides in political life, when in fact for Foucault "power is neither there, nor is that how it functions. The relations of power are perhaps among the best hidden things in the social body" (Foucault, in Kritzman, 1988, p.118).

Confirming this trend by which South African social scientists deploy Foucault not to study the productivity of power but rather to highlight the repressive hypothesis which the Foucault schema is so preoccupied with dispelling, Dawes (1986) at once conceals the creativity of the psychological sciences by demonstrating their 'unresponsiveness' to the "African context and to the needs of the

majority of its citizens," while at the same time interpolating Foucault into a machinery that will free the African subject from entrapment and distortion.

It is based on a range of largely Marxian studies developed in Europe as exemplified by Foucault (1970), Seve (1978),
Althusser (1971) and others. While not a coherent group,
psychologists of this persuasion are concerned to question the
very basic assumptions of the discipline and how its knowledge
and practices have developed ... In so doing they expose this
(unitary) subject as a product of deeply embedded ideological
notions regarding the nature of "man" inherent in natural
science and capitalist social formations. (Dawes, 1986, pp.3334)

As a final example of how Foucault is fabricated in the discourse of conventional South African social science, Nell (1991, p.69) draws upon a quotation concerning the correlative nature of power and knowledge - "We are subjected to the production of truth through power and we cannot exercise power except through the production of truth ... etc" (Gordon, 1980, pp.93-94, cited in Nell, 1991, p.69) - as a reminder that:

...(I) n a society on the brink of transformation, in which a search ... is under way for a democratisation of knowledge, for a redistribution of resources, for a sharing of knowledge and power in our society for the greatest good and justice, we need to remember that governments ... function by the truths rendered to them by an intellectual elite. (Nell, 1991, p.69)

Thus, where the Foucaultian schema as expressed in Foucault articulates power as a network of disciplinary force relations distributed everywhere and coursing through the bodies, behaviours, beliefs, and words of everyone - through the patient who bares his chest for examination, through the township activist whose clenched

fist rejects the intrusion of the academic, through the intellectual who calls for the observance and protection of human rights - this invocation does precisely the opposite, localising the power of knowledge to those formal centres of knowledge production that in the diagram of discipline are simply the points of concentration in a generalized force field.

From this brief review of how Foucault has been fabricated in the South African social sciences and medicine, it is clear that his famous claim 'we have yet to cut off the head of the king' applies with especial vigour to this society, its anatomy of power bending even the written lines of Foucaultian analysis themselves into evidence for the belief that power emanates from the top - the courts, the state, the academy - when in fact power comes from below.

At the most prosaic level of explanation, this failure of Foucault to take hold in the South African socio-medical sciences may reflect nothing more than a failure to fully appreciate the more elusive ramifications of his writings, a failure that can itself be located within a broader tradition of what Nettleton (1992) describes as the perceived obscurity and inaccessibility of Foucaultian ideas to scholars immersed in the philosophies of the English as opposed to the French-speaking world:

Wittgenstein once said that if a lion could speak we wouldn't understand it. Be that as it may, it is certainly true that if Continental philosophers all spoke English, most British and American philosophers wouldn't have much idea what they were saying. The two traditions divided about a century ago, and have been moving steadily apart ever since. (Papineau, 1991, cited in Nettleton, 1992, p.105)

The obvious difficulty with such an explanation is that it produces the idea that knowledge is unrelated to power, that it exists out

there waiting to be grasped, understood and applied to one or other problem. It leaves untouched therefore the strategic questions, the tactical conundrum as to what the socio-medical sciences in South Africa do by not 'doing' Foucault.

The answer, of course, has already been repeatedly given throughout this thesis, and is merely confirmed here by the recognition that counterpointing their impermeability to the Foucault schema is the readiness with which the South African sociomedical sciences embrace all those theories, models, and methods that may be deemed "social constructivist" in that their aim is to expose how various types of interests (eg class, social, political, technical) distort or contribute to the creation of certain types of knowledge. Examples of some such approaches to have found favour in the South African setting of attention include: the medical anthropological models of Kleinman (1980) and Scheper-Hughes (1990) which inform the work of local writers such as Rogers (1992), Lerer and Scheper-Hughes (in press), and Swartz (1991); the social constructionist approach of Berger and Luckmann (1967), Gergen (1982), and Shotter (1984) as it informs the works of Levett (1987), or Butchart and Seedat (1991); the method of discourse analysis developed by Potter and Wetherell (1987) and applied locally by Lerer, Butchart and Terre Blanche (1995), or Scrooby (1994); and Bulhan's (1985) neo-Fanonian methodology for understanding the dynamics of colonial domination and revolution (eg Nell & Butchart, 1989; Seedat, 1993).

For, while all of these social constructivist approaches are consonant with the Foucaultian concern to see socio-medical knowledge as produced, sustained and selected as an outcome of various social processes, they at the same time share another premise that renders them dissonant with the genealogical approach. Following Nettleton, this is that:

whilst knowledge is socially created there exists an underlying truth, a real external world which remains more or less disguised or more or less understood. For all these constructivists' knowledge of the world is constructed through the play of either interests, perceptions or language; the material world, however, exists as an external reality. (Nettleton, 1992, p.136)

Hence, as a tactical complex within the force field of disciplinary power, the affinity of the South African socio-medical sciences with methods devoted to stripping away veneers of interests, motives and ideologies mutates into a machinery of production that ceaselessly sustains the material matrix of the corporal as an external reality. Perhaps ironically, it is therefore precisely in its failure to accurately understand and embrace the Foucault schema that the present methodological configuration of the socio-medical sciences confirms the South African anatomy of power as a Foucaultian economy of disciplinary forces, tactics, strategies and knowledges. Because, within the genealogical gaze the pejorative terms that are the bedrock of this methodological configuration - objectification, reification, stereotyping, prejudice, positivism, alienation and so on - are not the techniques through which bodies are imprisoned, but the analyses through which they are created. Discourses against positivism or against alienation are, therefore, objectifying strategies themselves, a part of the whole which they presume to criticise, devices for establishing the subject as 'object' of perception. (Armstrong, 1985, pp.114-

115)

The Relevance of Foucault to Socio-Medical Practice in the Present

From these observations it is clear that the Foucualtian perspective offers new insights and new ways of thinking about the contemporary practice of the socio-medical sciences in South Africa. For, while this study has deployed materials from the past as a means by which to make its point concerning the correlative relationship between power and socio-medical knowledges of the African body, its relevance can only be for the present in which it is written and of which it is a product.

The Foucaultian perspective and its present application to the problem of the African body suggests, for instance, that biology, the body and disease cannot be simplistically regarded as materially given processes and external realities, but rather as at one and the same time inherently social strategies of surveillance and visibility. Accordingly, they fall squarely within the remit of sociological study, with the effect that instead of sociology continuing to operate as an appendage to biomedicine by assisting in the understanding of illness experiences or the identification of social factors in the aetiology of disease, it can now study disease in its own right, by asking how certain diseases are invented, what makes them possible, and what, in turn, they make possible.

Related to this recognition is the relevance of the Foucaultian approach to the ongoing and fractious debate between medicine and the psychological sciences (eg Manganyi, 1991; Miller & Swartz, 1990; Swartz, 1988; Swartz & Levett, 1989). As Nell (1992) articulates it from the side of psychology, the willingness of psychologists to subordinate themselves to the profession of medicine perpetuates a situation of medical hegemony that in reducing all human suffering to mute lesions within the body or the mind stifles the psychosocial origins and the subjectivity of illness.

... (T) he medical gaze is barren, and psychology's pathetic fate is that its seduction by the clinic is followed by its own impotence. Psychologists deluded by the medical gaze are made impotent by the company they must keep in the *klinikos* -

a silent doctor, and a longing patient. (Nell, 1992, p.230) As a result, psychology is rendered powerless to make the "significant contribution to human welfare and ... a just society" (p.228), that as "the bearer of an empowerment standard" (p.238), it should be doing by opposing "the monopolistic control of health care by any single profession", and so rescuing the "lay public" from "the ways in which medical technology and medical information-giving ... disempower clients, rendering them passive and ... helpless recipients of medical care" (Nell, 1992, p.237). Such an argument is, of course, merely another version of the medicalization thesis, whereby writers such as Illich (1976), McKeown (1979), and Singer (1990) have drawn on various types of evidence to demonstrate how medicine has invaded and taken control over increasingly extensive and intimate areas of life. From the Foucaultian perspective, however, the currency of the medicalization thesis is severely devalued by its recognition that instead of repressing the body and disease, medicine in fact invents these, and therefore that those who oppose the power of medicine with their calls for a humanistic and psychologized alternative can at best triumph in a palace revolution only. For, since they are no more than diverse sides of a unitary apparatus for the invention of the body, the person, and the social as their objects and effects, any such inversion of the hierarchical relationship between medicine and psychology would be no more than the exchange of one spurious monarchy for another, which through its promised emancipation would further conceal the already well hidden locus of power to produce the knowing and free subject as its target and its relay.

In short, freedom, empowerment and liberalism are always double edged, at once enhancing and at the same time a concealing veil under which an ever more finely tuned and insidious machinery of surveillance installs itself within and around everyone. Thus, psychology's challenge to medicine that it be allowed to rediscover the authenticity of suffering in the words of the sick is no more than a shift in disciplinary emphasis from the technology of seeing to that of hearing. For, in place of the purely clinical examination and the mute body of the Panopticon, its tactical effect is to install the confession, a technique of intimate surveillance through which the most confidential ideas and private secrets of everyone are amplified to audibility and lifted into socio-medical space as devices of disciplinary subjectification.

This type of discourse is, indeed, a formidable tool of control and power. As always, it uses what people say, feel, and hope for. It exploits their temptation to believe that to be happy, it is enough to cross the threshold of discourse and to remove a few prohibitions. But in fact it ends up repressing and dispersing movements of revolt and liberation. (Foucault, in Kritzman, 1988, p.114)

As a final example of the relevance of Foucualtian theory to the practice of the socio-medical sciences in the present, it suggests a whole new angle of approach to the vexed question of the "relevance" of western knowledges and techniques to Africans in an African context (eg Anonymous, 1986; Asante, 1990; Berger & Lazarus, 1987; Bulhan, 1990; Seedat, 1993). Conventionally, it is argued that because these emerged in Europe and America they can at best be of only limited value in the 'alien' context of an African society upon which they have been imposed, and at worst constitute the source of an ongoing and pernicious brand of neo-colonialism. As Seedat argues in relation to the psychological sciences:

Liberatory psychology is centred ... around the organizing principle that rejects the primacy of Euro-American values and philosophical assumptions about humankind. Liberatory psychology is oriented towards placing the experiences of those other-than-European in the centre of its discourse ... The commitment to centre the African or 'Third World' psychosocial experience heralds the articulation of a dynamic, formative agenda that is connected to progressive and

democratic voices throughout the world. (Seedat, 1993, p.253) Against this point of view, and because within the genealogical perspective knowledge is never independent of the objects that are its effects, there can be no possibility of one way of knowing being more or less "relevant" than any other. It therefore implies that in their haste to dismiss "Euro-American" science as irrelevant to Africa and Africans, critical socio-medical scientists arguing from an Africanist framework may indeed be throwing out not only the bath water of a colonial past and a neo-colonial present, but with it precisely the African body that in the absence of these 'irrelevant' approaches would, quite simply, cease to exist as a manageable object of socio-medical knowledge.

In all likelihood, it is of course true that its place would immediately be taken by a novel African body as the effect of an indigenous African knowledge. But would this provide the apparatus of the state and the machinery of industry with the individual, social, and demographic objects that have for so long been, and continue to be, the prerequisites for their functioning? While a study of indigenous African socio-medical knowledge from the Foucaultian perspective has yet to be performed to allow for this question to be properly answered, it probably would not. Hence, the debate over relevance studiously avoids problematising all those micro-powers that produce these essential objects - such as the

clinical examination, the epidemiological survey, or the participatory research interview - in favour of such epiphenomenal questions as those around notions like cosmology, epistemology, ideology and cultural imperialism.

The relevance of Foucault to the present lies therefore not in the possibility of its bringing some kind of therapeutic leverage to bear on what the socio-medical sciences do, but simply in providing a method of analysis that permits of a constant vigilance, a perpetual monitoring not only of what these disciplines do, but of what it is that is done by their performance.

Conclusion

Arguing from a feminist perspective, Nancy Harstock (1990, p.166) wrote: "reading Foucault persuades me that Foucault's world is not my world". For, along with other critics such as Bury (1986), Walzer (1986) and Dews (1987), she considers the genealogical aspiration to a non-interventive analytical neutrality as Foucault's greatest failing, the "catastrophic weakness of his political theory" (Walzer, 1986, p.67). For, they argue, the formulation of power as omnipresent and obedient to only its own rules of ordering offers no hope for the future. If power is "always-already present, constituting the very thing which one attempts to counter it with" (Paternek, 1987, p.111) there can be no escape and no progress, all phenomena continuously suspended in the ever-presence of the present. However, whether one agrees or not with Taylor's (1984) view that this is only a spurious objection since the very neutrality it critiques is itself derived from an evaluative reason for this non-evaluative stance, it by no means removes the Foucaultian analysis from a participant position in the ongoing fabrication and recreation of reality. On the contrary, precisely because knowledge produces power and power produces knowledge, the

knowledge of genealogy and the genealogy of knowledge are always actively creating the world and so far more than mechanisms by which it is simply studied.

Thus, what these critics reveal in their preoccupation with the Foucaultian failure to provide any guidance for action is the "assumption that there must be action and progress, a non-relativist way forward that has been defined by a western tradition in the sciences of man" (Armstrong, 1987, p.74). They thus fail to recognise that the Foucaultian analysis formulates its questions and performs its studies from a plane of analysis independent of this perspective, a plane that precisely because it is independent of humanism is neither for nor against it. Accordingly, Foucault is able to remind us that there is likely to be a completely different way of knowing and seeing our world, a way so different as to be incommensurable and unrecognizable from our late twentieth century perspective. As Rorty (1986) has noted, Foucault thus succeeds in doing what philosophers are supposed to do, "reaching for speculative possibilities that exceed our present grasp, but may nevertheless be our future" (Rorty, 1986, p.48), a new form of life "based on an ethical stance endlessly disengaging from all forms of discourse based on the familiar and the accepted" (Kritzman, 1988, p.xxv).

It is here that this overview and introduction to the problem of the African body in a South African anatomy of power must end. It is an overview because each substantive chapter could itself be the subject of a full-length genealogy, and it is an introduction because in between the objects of knowledge they pick out lie great fields of socio-medical micro-power that this thesis ignores or only barely touches upon. For instance, the body of the African woman and the techniques of gynaecology; the invention of infant mortality and the emergence of forensic pathology with its changing fabrications

of death; the science of demography and the strategy of population; dentistry and the African mouth with teeth, or the discipline of nutritional science and its problematization of mastication, digestion, excretion and growth of the body. As endless as the objects of socio-medical knowledge we continue to take for granted as unchanging entities in an unvarying reality, this list is given to emphasise the point that this thesis marks not the completion but merely the commencement of a new series of possible studies of power and knowledge in South Africa.

^{1.} It is important to emphasise that I have confirmed the accuracy of this observation concerning the absence of Foucaultian analyses only in relation to the socio-medical sciences. It cannot therefore be generalised to other fields (such as literary criticism and the arts more generally), where there may well be examples of South African scholars who have conducted full-scale Foucaultian investigations.

References

- Abramson, J.H. (1960). The doctor as teacher his practical problems. South African Medical Journal, 34, 364-368.
- Abramson, J.H., Mayet, F.G.H. & Majola, C.C. (1961). What is wrong with me? A study of the views of African and Indian patients in a Durban hospital. South African Medical Journal, 35, 690-694.
- Achterberg, N.D. (1935). A fresh field of research. The Leech, 6(2), 8-10.
- A.C.J. (1934). Early experiences of a missionary doctor (from a letter dated 12th February, 1906). The Leech, 5(2), 33-34.
- Ackernecht, E. (1967). Medicine at the Paris hospitals 1774-1848.

 Johns Hopkins: Baltimore.
- Aitken, R.D. (1944). Who is my neighbour? The story of a mission hospital in South Africa. Lovedale: The Lovedale Press.
- Albertyn, J.R. (1932). The poor white problem in South Africa. Report of the Carnegie Commission, Part V. Sociological report.

 Stellenbosch: Pro-Ecclesia.
- Anderson, I.F. (1971). The doctor and society. South African Medical Journal, 45, 864-866.
- Anon. (1858). Book review. Missionary travels and researches in South Africa. By Dr. David Livingstone. British Medical Journal, Vol for 1858 (LV), 52-53.
- Anon. (1894). News of the month. South African Medical Journal, 2, 82.
- Anon. (1896). A Black woman's description of a missionary's work.

 Medical Missions at Home and Abroad, 6, 209.
- Anon. (1937). How far can you smell? Public Health (Johannesburg), 2(2), 20 & 25.
- Anonymous. (1986). Some thoughts on a more relevant or indigenous counselling psychology in South Africa: Discovering the socio-

- political context of oppression. *Psychology in Society*, 5, 81-89.
- Anning, C.C.P. (1937). Native health assistants in urban areas.

 Public Health (Johannesburg), 2(3), 5-11.
- Anning, C.C.P. (1938). To-morrow we die. The Leech, 9(2), 7-11.
- Appel, S. (1989). Eugenics in South Africa, 1920-1932: A historical note. South African Journal of Science, 85, 612.
- Armstrong, D. (1995). The rise of surveillance medicine. Sociology of Health and Illness, 17, 393-404.
- Armstrong, D. (1993). Public health spaces and the fabrication of identity. Sociology, 27, 393-410.
- Armstrong, D. (1990) Use of the genealogical method in the exploration of chronic illness. Social Science and Medicine, 30, 1225-1227.
- Armstrong, D. (1987). Foucault and the problem of human anatomy. In G. Scambler (Ed.) Sociology theory and medical sociology (pp.59-76). London: Tavistock.
- Armstrong, D. (1985). Review essay: the subject and the social in medicine: an appreciation of Michel Foucault. Sociology of Health and Illness, 7, 108-117.
- Armstrong, D. (1984). The patient's view. Social Science and Medicine, 18, 737-744.
- Armstrong, D. (1983). Political anatomy of the body: Medical knowledge in Britain in the twentieth century. Cambridge: Cambridge University Press.
- Armstrong, D. (1982). The doctor-patient relationship: 1930-1980. In

 D. Wright and A Treacher (Eds.), The problem of medical

 knowledge. Edinburgh: Edinburgh University Press.
- Armstrong, D. (1979). Child development and medical ontology. Social Science and Medicine, 13, 9-12.

- Arney, R.W. (1982). Power and the profession of obstetrics. Chicago: University of Chicago Press.
- Arney, R.W. & Bergen, B.J. (1983). The anomaly, the chronic patient, and the play of medical power. Sociology of Health and Illness, 5(1), 1-24.
- Arney, R.W. & Bergen, B.J. (1984). Medicine and the management of the living. Chicago: Chicago University Press.
- Arnold, D. (Ed). (1988). Imperial medicine and indigenous societies.

 New York: Manchester University Press.
- Asante, M.K. (1990). Kemet, afrocentricity and knowledge. New Jersey: Africa World Press.
- Atterton, P. (1994). Power's blind struggle for existence: Foucault, genealogy and Darwinism. History of the Human Sciences, 7(4), 1-120.
- Baran, S. (1971). Development and validation of a TAT-type projective test for use among Bantu-speaking people.

 Johannesburg: National Institute for Personnel Research.
- Barker, A. (1959). The man next to me: An adventure in African medical practice. New York: Harper and Brothers.
- Barker, A. (1971). New, good doctors for an altered society. South

 African Medical Journal, 45, 558-561.
- Barker, A. (1974). The social fabric: Language and prejudice. The Leech, 44(2), 33-34.
- Barnes, J. (1984). Aristotle: The complete works, Vol. 1. Princeton:
 Princeton University Press.
- Barlow, M.R. (1971). That forgotten human being the patient. South

 African Medical Journal, 45, 925-926.
- Barrow, J. (1801). An account of travels into the interior of Southern Africa, in the years 1797 and 1798. London: T.Cadell Jun. and W.Davies.

- Batman, S. (1582). Uppon Bartholome. His book de Propretatibus

 Rerum, newly corrected, enlarged and amended: with such

 additions as are required, into every useful book. London:

 Thomas East.
- Beck, L.A.W. (1913). Medical inspection of schools and school children. South African Medical Record, 11, 254-259.
- Becklake, M.R. (1943). A health survey of 156 African children in the Dikonyaneng nursery school, Orlando. The Leech, 14(2), 29-31.
- Bedaux Company for Africa. (1939). Diet in relation to physical efficiency with particular reference to African mine natives.

 Johannesburg: Bedaux Company for Africa.
- Berger, P. & Luckmann, T. (1967). The social construction of reality. London: Tavistock.
- Berger, S. & Lazarus, S. (1987). The views of community organisers on the relevance of psychological practice in South Africa.

 *Psychology in Society, 7, 6-23.
- Bernstein, R.E. (1938). The student's attitude to the Bantu problem.

 The Leech, 9(1), 28-31.
- Bhaba, H. (1986). The other question: Difference, discrimination and the discourse of colonialism. In F. Barker, P. Hulme, M. Iversen, & D. Loxley (Eds.), Literature, politics and theory (pp. 148-172). London: Macmillan.
- Biesheuvel, S. (1941). African intelligence. Johannesburg: South
 African Institute of Race Relations.
- Biesheuvel, S. (1953). A technique for measuring attitudes of educated Africans. Proceedings of the South African

 Psychological Association, 4, 13-20.
- Biesheuvel, S. (1955). The measurement of African attitudes toward

 European ethical concepts, customs, laws and administration of
 justice. Journal of the National Institute for Personnel

- Research, 6(1), 5-17.
- Biesheuvel, S. (1957). The influence of social circumstances on the attitudes of educated Africans. South African Journal of Science, 53, 309-314.
- Biesheuvel, S. (1959). Further studies on the measurement of attitudes towards western ethical concepts. Journal of the National Institute for Personnel Research, 10, 1-18.
- Biko, S. (1988/1970a). We Blacks. In A. Stubbs (ed.) I write what I like (pp.41-46). Harmondsworth: Penguin Books.
- Biko, S. (1988/1970b). Black souls in white skins?. In A. Stubbs (ed.) I write what I like (pp.33-40). Harmondsworth: Penguin Books.
- Biko, S. (1988/1972). White racism and Black Consciousness. In A. Stubbs (ed.) I write what I like (pp.75-86). Harmondsworth: Penguin Books.
- Bloom, L. (1960). Self concepts and social status in South Africa: A preliminary cross-cultural analysis. *Journal of Social Psychology*, 51, 103-112.
- Boehmke, M. (1928). Some social implications of the poor white problem. South African Journal of Science, 25, 82-88.
- Boonzaier, E. (1985). Choice of healer: An important area of interest for general practitioners. South African Family Practice, 6, 368-373.
- Boshoff, P.H. (1935). A note on an abnormality in the thigh musculature of a Bantu. The Leech, 6(2), 49.
- Bouchard, D.R. (ed.). (1977). Michel Foucault: Language, counter memory and practice: Selected essays and interviews. Ithaca (N.Y): Cornell University Press.
- Bourne, W. (1578). A booke called the treasure for traveilers, divided into five bookes or partes, contayning very necessary matters, for all sortes of travailers, eyther by sea or by

- lande. London: Thomas Woodcock.
- Brantlinger, P. (1985). Victorians and Africans: The genealogy of the myth of the dark continent. Critical Inquiry, 12, 116-203.
- Brebner, I.W. (1950). Surgery in the Bantu. The Leech, 21(1), 47-48.
- Brink, A.J. (Ed.). (1988). South African medical research: Twenty years of growth. Pinetown: Owen Burgess Publishers.
- Brink, A.J. (1959). Coronary arteries of the Bantu heart. South

 African Medical Journal, 33, 407-408.
- Brodie, W., & Rogers, W. (1894). Acute specific rhinitis. South

 African Medical Journal, 2, 7-8.
- Broomberg, A. (1935) An institute for the study of medical conditions among the Bantu in Natal. The Leech, 6(2), 10-12.
- Broomberg, A. (1936). An investigation into the incidence of high blood pressure in the native. The Leech, 7(2), 30-34.
- Bruce Bays, J. (1908). The injurious effects of civilization upon the physical condition of the native races of South Africa.

 Report of the South African Association for the Advancement of Science, 6th Meeting, Grahamstown, 1908. Grahamstown:

 African Book Company, 253-262.
- Bruwer, J., Grobbelaar, J., & van Zyl, H. (1958). Race studies (differentiated syllabus) for Std VI. Johannesburg:

 Voortrekkerpers Beperk.
- Buchanan, N. & Cane, R.D. (1976). Poisoning associated with witchdoctor attendance. South African Medical Journal, 50, 1138-1140.
- Buchanan, N., Shuenyane, E., Mashigo, S., Mtangai, P. & Unterhalter, B. (1979). Factors influencing compliance in ambulatory Black urban patients. South African Medical Journal, 55, 368-373.
- Bulhan, H.A. (1990). Afrocentric psychology: Perspectives and practice. In L.J. Nicholas and S. Cooper (eds.) *Psychology and apartheid* (pp.67-78). Johannesburg: Vision Publications.

- Bulhan, H.A. (1985). Frantz Fanon and the psychology of oppression.

 New York: Plenum.
- Bulhan, H. (1981). Psychological research in Africa: Genesis and function. Race and Class, 23(1), 25-41.
- Burns Thomson, W. (1854). Medical missions. A prize essay. Edinburgh: Jhonstone and Hunter.
- Burrows, E. (1958). A history of medicine in South Africa up to the end of the nineteenth century. Cape Town: A.A.Balkema.
- Bury, M.C. (1986). Social constructionism and the development of medical sociology. Sociology of Health and Illness, 8, 137-169.
- Butchart, A. The industrial Panopticon: Mining and the medical construction of migrant African labour in South Africa, 1900-1950. In press, Social Science and Medicine.
- Butchart, A. & Brown, D.S.O. (1991). Interpersonal violence in Johannesburg-Soweto: Incidence, determinants and consequences.

 Forensic Science International, 52, 35-51.
- Butchart, A. & Seedat, M. (1991). Within and without: Images of community and implications for South African psychology.

 Social Science and Medicine, 31, 1093-1102.
- Campbell, G.D. (1961). The language of the patient. South African Medical Journal, 35, 1000.
- Campbell, G.D. & Lugg, H.C. (1958). A handbook to aid in the treatment of Zulu patients. Durban: University of Natal Press.
- Cape Of Good Hope. (1880a). Report of the commission appointed to inquire into, and report upon, the best means of moving the asylum at Robben Island to the mainland (Vol.1, report). Cape Town: Saul Solomon and Co.
- Cape Of Good Hope. (1880b). Report of the commission appointed to inquire into, and report upon, the best means of moving the asylum at Robben Island to the mainland (Vol.2, evidence).

- Cape Town: Saul Solomon and Co.
- Cape of Good Hope. (1883). Report and proceedings with appendices of the Government commission on native laws and customs. (G.4-83). Cape Town: The Government Printers.
- Cape of Good Hope. (1884). Reports of the commissioners of police of the several police districts of the colony for the year ended 1893. Cape Town: The Government Printer.
- Carnegie Commission. (1932). Joint findings. The poor white problem in South Africa. Stellenbosch: Pro-Ecclesia.
- Cartwright, A. (1971). Doctors of the mines. Cape Town: Purnell.
- Casualty Officer, S.S. (1934). A day in non-European casualty. The Leech, 5(2), 36-38.
- Cassell, J. (1962). Cultural factors in the interpretation of illness. In S.L. Kark and G.W. Steuart (Eds.) A practice of social medicine (pp.233-244). London: E. & S. Livingstone.
- Chamberlain, E. N. & Oglivie, C.M. (1967). Symptoms and signs in clinical medicine (8th ed.). Bristol: John Wright and Sons.
- Chamber of Mines Archives. (2325/713). Gold Producer's Committee.

 Circular No. 7/23. Report of the sub-committee of the

 Transvaal Mine Medical Officers' Association on tuberculosis

 among mine natives. 23 February, 1923.
- Chamber of Mines Archives. (2309/1806). Tuberculosis Research

 Committee. Comments on preliminary statement by chairman of

 the Tuberculosis Research Committee on prevention of

 tuberculosis. May, 1925.
- Chamber of Mines Archives. (2309/1777). Tuberculosis Research

 Committee. Statement on prevention of tuberculosis (made by W.

 Watkins-Pitchford). 17 June, 1925.
- Chamber of Mines Archives. (2308/1544). Tuberculosis Research

 Committee. Eighth progress report of Dr Peter Allan's

 investigation of tuberculosis in the Ciskeian and Transkeian

- territories. (by P. Allan). 16 July, 1928.
- Chamber of Mines Archives. (1898/3642). Witwatersrand native Labour Association, Ltd., Johannesburg. Comments on movements of natives through the Johannesburg compound and hospital (prepared by Production Engineering SA Ltd.). 10 May, 1951.
- Charlewood, G.P. & Frylinck, C. (1956). Bantu gynaecology.

 Johannesburg: University of the Witwatersrand Press.
- Cheetham, R.W.S. & Griffiths, J.A. (1982). Sickness and medicine an African paradigm. South African Medical Journal, 62, 954-956.
- Chevalier, L. (1958). Le cholera: La premiere epidemie due XIXe Siecle. La Roche-Sur-Yon.
- Church Missionary Society. (1902). Typical work in a medical mission. No. 4. Pioneer work. London: Church Missionary Society.
- Cloete, N., Muller, J & Orkin, M. (1986). How we learned to stop worrying and love the HSRC. Psychology in Society, 6, 29-46.
- Cluver, E.H. (1934). Public health in South Africa (1st Ed.).

 Johannesburg: Central News Agency.
- Cluver, E.H. (1941). The public health official. *Public Health* (Johannesburg), 6(1), 8 & 13.
- Collard, R.F. (1900). The Zambesi. The doctor's work. Medical Missions at Home and Abroad, 8, 218.
- Collender, K.G. (1945). Mass miniature radiography. The Leech, 16(1), 36-39.
- Colonial Secretary. (1910). Control and treatment of syphylitic natives (circular, No.1, C.S.O. 3/18524). Pretoria: Colonial Secretary's Office.
- Comaroff, J. & Comaroff, J. (1991). Of revelation and revolution:

 Christianity, colonialism and consciousness in South Africa,

 Volume 1. Chicago: University of Chicago Press.

- Conroy, J. (1907). Insanity among natives in Cape Colony. South

 African Medical Record, 5, 33-36.
- Couve, C. (1986). Psychology and politics in Manganyi's work: A materialist critique. Psychology in Society, 5, 90-130.
- Cory Library. (PR 3624). The Fitzgerald letter-book. Unpublished archival material. Grahamstown: The Cory Library.
- Crowhurst-Archer, B. (1960). A psychiatric approach to tuberculosis.

 South African Medical Journal, 34, 242-243.
- Crowhurst-Archer, B. (1965). The role of psychiatry in the medical curriculum. South African Medical Journal, 39, 635-636.
- Crush, J. (1992a). The genealogy of the compound. Paper presented at

 Eighth International Conference of Historical Geographers.

 Vancouver, August 16-21.
- Crush, J. (1992b). Power and surveillance on the South African gold mines. Journal of Southern African Studies, 18, 825-844.
- Crush, J., Jeeves, A. & Yudelman, D. (1991). South Africa's labour empire: A history of Black migrancy to the gold mines. Cape Town: David Phillip.
- Cummins, S.L. (1929). Virgin soil and after. A working conception of tuberculosis in children, adolescents and aborigines.

 British Medical Journal, 2, 39-41.
- Dart, R. (1937). Racial Origins. In I. Schapera (Ed.) The Bantu Speaking tribes of South Africa. London: George Routledge.
- Dapper, O. (1970/1668). Kaffraria or land of the kaffirs, also named Hottentots. In I. Schapera and B. Farrington (Eds.), The early Cape Hottentots described in the writings of Olfert Dapper (1668), Willem Ten Rhyne (1686) and Johanus Gulielmus de Grevenbroek (1695). Westport Connecticutt: Negro Universities Press.
- Dawes, A. (1986). The notion of relevant psychology with particular reference to Africanist pragmatic initiatives. *Psychology in*

- Society, 5, 28-48.
- Daynes, G. & Msengi, N.P. (1979). 'Why am I ill? Who made me ill?'

 The relevance of western psychiatry in Tanskei. South African

 Medical Journal, 59, 307-308.
- De Beer, C. (1984). The South African disease: Apartheid health and health services. Johannesburg: South African Research Services.
- De Beer, C. (1990). A brief history of divisions in health care. The Leech, 59(1), 7-8.
- De Kock, V. (1950). Those in Bondage. London: George Allen and Unwin.
- De Ridder, J. (1961). The personality of the urban African in South

 Africa (a thematic apperception test study). London: Routledge

 & Kegan Paul.
- De Villiers, S.A. (1971). Robben Island. Cape Town: Struik.
- De Villiers, S. (1985). (Consideration of) (sic) illness causation among some Xhosa-speaking people. South African Journal of Ethnology, 8(2), 48-52.
- De Villiers, S. (1993). An anthropological investigation of some Xhosa-speaking patients' perceptions and behaviours in a hospital context. Unpublished PhD dissertation. Pretoria: University of South Africa.
- Devisse, J. (1979). The image of the black in western art (Vol 2).

 New York: William Morrow and Co.
- Dews, P. (1987). Logics of disintegration: Post-structuralist thought and the claims of critical theory. London: Verso.
- Dick, B. & Murray, P.J. (1978). Traditional healers and the medical profession. South African Medical Journal, 53, 311-312.
- Dietrich, K. (1993). Of salvation and civilization: The image of indigenous South Africans in European travel illustrations from the sixteenth to the nineteenth centuries. Unpublished D

- Litt et Phil thesis. Pretoria: University of South Africa.
- Doell, E.W. (1955). Doctor against witchdoctor. London: Christopher Johnson.
- Doell, E.W. (1960). A mission doctor sees the winds of change.

 London: Christopher Johnson.
- Dormer, B.A. (1952). Procedures in the control of tuberculosis.

 Public Health (Johannesburg), 16(2), 34-38.
- Douglas, M. (1966). Purity and danger. London: Routledge and Keagan Paul.
- Dowie Dunn, D. (1939). Medical practice among natives. South African Medical Journal, 13, 51-53.
- Dowling, S. (1973). Medicine in South Africa. Proceedings of the Medical Association for the Prevention of War, 2(8), 225.
- Dreosti, A.O. (1935). The measurement of heat susceptibility of native mine workers of the Witwatersrand. Unpublished M.D. dissertation. Johannesburg: University of the Witwatersrand.
- Dreosti, A.O. (1936). Industrial medicine in the Witwatersrand. The Leech, 7(2), 5-11.
- Dreosti, A.O. (1937). Pathological reactions produced by work in hot and humid environment in the Witwatersrand gold mines. The South African Journal of Medical Sciences, 2, 29-36.
- Drewe, F.S. (1925). The dawn of a new hope in Pondoland. Conquest by Healing, 2(2), 39-41.
- Dreyfus, H.C. & Rabinow, P. (1983). Michel Foucault: Beyond structuralism and hermeneutics (2nd. ed.). Chicago: University of Chicago Press.
- Dubow, S. (1987). Race, civilization and culture: The elaboration of segregationist discourse in the inter-war years. In S. Marks and S. Trapido (Eds.), The politics of race, class and nationalism in twentieth century South Africa (pp.71-94).

 Harlow: Longman.

- Dugard, J.H. (1944). Health education in the rural native school.

 South African Medical Journal, 18, 417-418.
- Dyke, R.H. (1898). Light and shadows in Basutoland. Medical Missions at Home and Abroad, 8, 218.
- Editorial. (1904). The sanitary whipping boy. South African Medical Record, 2, 70-71.
- Editorial. (1911). Centralized public health administration. South

 African Medical Record, 9, 129-130.
- Editorial. (1912). An urgent question of sociology. South African Medical Record, 10, 201-203.
- Editorial. (1913). Comparisons in native mine mortality. South

 African Medical Record, 11, 253-254.
- Editorial. (1914). Infectious diseases legislation. South African Medical Record, 12, 121-123.
- Editorial. (1918). A native location medical service. South African Medical Record, 12, 121-123.
- Editorial. (1919a). The hand of god in the direction and development of modern medical missions. *Medical Missions at Home and Abroad*, 17, 269-272.
- Editorial. (1919b). Report of the influenza commission. South

 African Medical Record, 18, 51-55.
- Editorial. (1919b). The report of the influenza commission. South

 African Medical Record, 17, 1-3.
- Editorial. (1919). New public health bill. South African Medical Record, 18, 1-3.
- Editorial. (1935). The native in health and disease. The Leech, 6(1), 3-4.
- Editorial. (1939). Medical history. The Leech, 10(2), 6-7.
- Editorial. (1961). The language of the patient. South African Medical Journal, 35, 985-986.
- Editorial. (1967a). Health promotion in a mutiracial comunity. South

- African Medical Journal, 41, 662.
- Editorial. (1967b). A cross-cultural outlook in medicine. South

 African Medical Journal, 41, 818.
- Editorial. (1975). Recognition of community medicine. South African Medical Journal, 49, 32.
- Editorial. (1978). Lifestyle and health. South African Medical Journal, 53, 733.
- Editorial. (1986). Psychology in Society, 5, 1-3.
- Edginton, M.E., Hodkinson, T. & Seftel, H.C. (1972). Disease patterns in a South African rural Bantu poulation. South African Medical Journal, 46, 968-976.
- Eiselen, W. (1929). Die naturelle vraagstuk. Cape Town.
- Eisenberg, L. & Kleinman, A. (Eds.). (1981). The relevance of social science for medicine. Dordrecht: Reidel.
- Egan, C.J. (1877). Statistics on disease in King William's Town,
 British Kaffraria. Medical Times and Gazette, August 4, 112.
- Elliot, G.A. (1953). Coronary arteries and their diseases in the Bantu. The Leech, 23(1), 25-29.
- Elliott, G.A. (1964). The integration of medicine with mental health activities. South African Medical Journal, 38, 148-151.
- Erasmus, P.F. (1975). Thematic Apperception Test (TAT-Z). Pretoria:

 Institute for Psychological and Edumetric Research, Human

 Sceinces Research Council.
- Erasmus, P.F. (1984). Manual for the Thematic Apperception Test (Zulu) (TAT-Z). Pretoria: Human Sciences Research Council.
- Fanon, F. (1967). Black skin, white masks. New York: Grove Press.
- Fanon, F. (1978). Medicine and colonialism. In J. Ehrenreich (Ed.),

 The cultural crisis of modern medicine (pp. 229-251). New

 York: Monthly Review Press.
- Farrand, D. (1984). Is a combined western and traditional health service for Black patients desirable? South African Medical

- Journal, 66, 779-780.
- Fick, M.L. (1927). The value of mental tests. II. Application to economic, educational, and colour problems. The Social and Industrial Review, 3, 223-226.
- Fick, M.L. (1929). South African intelligence tests: Comparison of various racial groups. The Social and Industrial Review, 8, 701-705.
- Findlay, R.A. (1960). The emotional pattern of the tribal Zulu as it affects pre-anaesthetic assessment and management. South

 African Medical Journal, 34, 854-855.
- Fischer, P.J. Cultural spects of Bantu psychiatry. South African Medical Journal, 36, 133-138.
- Fischer, W.O.A. (1929). A preliminary report on 1,402 consecutive autopsies on native mine workers. South African Medical Journal, 3, 511-516.
- Fischer, W.O.A. (1932). Record of 561 consecutive autopsies on native mine workers. South African Medical Journal, 6, 359-361.
- Fitzgerald, J.P. (1888). A short history of the Grey Hospital,
 together with an essay on improved sanitation. King William's
 Town: S.E. Rowles and Co.
- Flint, V.J. (1992). The imaginative landscape of Christopher Columbus. Princeton N.J.: Princeton University Press.
- Flint, W. (1919). Race-consciousness and the scientific spirit.

 South African Journal of Science, 16, 1-16.
- Foster, D. (1986). The South African crisis of 1985. Psychology in Society, 5, 49-65.
- Foster, D. (1991). Historical and legal traces, 1800-1900. In S.Lea and D.Foster (Eds) Perspectives on mental handicap in South Africa. Durban: Butterworths.

- Foster, D. & Skinner, D. (1990). Detention and violence: Beyond victimology. In N.C. Manganyi and A du Toit (Eds.), Political violence and the struggle in South Africa (pp.205-233).

 Halfway House: Southern Book Publishers.
- Foucault, M. (1972). The archaeology of knowledge. London:
 Tavistock.
- Foucault, M. (1973). The order of things. New York: Random House.
- Foucault, M. (1976). The birth of the clinic: An archaeology of medical perception. London: Routledge.
- Foucault, M. (1977). Discipline and punish. New York: Pantheon Books.
- Foucault, M. (1979). The history of sexuality, Vol. 1. London: Allen
- Fox, F., & Back, D. (1938). A preliminary survey of the agricutural and nutritional problems of the Ciskei and Transkeian territories. Johannesburg: Transvaal Chamber of Mines.
- Friedlander, F.C. (1974). Grey's Hospital: The oldest hospital on its original site in the republic. South African Medical Journal, 48, 187-192.
- Friedman, J. (1981). The monstrous races in Medieval thought and art. Cambridge, Mass.: Harvard University Press.
- Fuller, E. (1897). Public health notes. South African Medical Journal, 5, 42-46.
- Gale, G.W. (1934). Native medical ideas in relation to Native medical services. South African Medical Journal, 8, 748-757.
- Gale, G.W. (1938). A suggested approach to the health needs of the native rural areas of South Africa. Benoni: Record Printing Company.
- Gale, G.W. (1939). The incidence and control of venereal diseases among the natives of South Africa. South African Medical Journal, 13, 265-270.

- Gale, G.W. (1943). Doctor or witchdoctor? Johannesburg: South
 African Institute of Race Relations.
- Galloway, A. (1941). Palatal measurement of Negro and other crania.

 South African Journal of Science, 37, 285-292.
- Gear, H.S. (1938a). A South African institute of hygiene and tropical medicine. The Leech, 9(1), 43-45.
- Gear, H.S. (1938b). The field for vital statistics and epidemiological studies in municipal health services. The Leech, 9(2), 77-81.
- G.E.F.M. (1898). Medical missions. London: Simpkin, Marshall, Hamilton, Kent and Co.
- Gelfand, M. (1943). The sick African: A clinical study (1st ed.).

 Cape Town: Stewart Printing Company.
- Gelfand, M. (1947). The sick African: A clinical study (2nd ed.).

 Cape Town: Stewart Printing Company.
- Gelfand, M. (1957). The sick African: A clinical study (3rd ed.).

 Cape Town: Juta and Co.
- Gelfand, M. (1984). Christian doctor and nurse (the history of medical missions in South Africa from 1799-1976). Marrianhill:

 Marriannhill Mission Press.
- Gergen, K.J. (1982). Toward transformation in social knowledge. New York: Springer-Verlag.
- Gerhardt, U. (1989). Ideas about illness: An intellectual and political history of medical sociology. Basingstoke:

 Macmillan.
- Gilman, S. (1985). Difference and pathology: Stereotypes of sexuality, race, and madness. Ithaca: Cornell University Press.
- Goddard, J.E. (1957). Health visiting among the urban African.

 Public Health (Johannesburg), 17(12), 533-536.
- Goldberg, S. (1941). The origin of the lumbrical muscles in the hand

- of the South African native. The Leech, 12(2), 35-37.
- Goldstein, S. (1993). Tracing the health promotion movement. In M.

 Westaway (Ed.), Health promotion Proceedings of six one-day
 workshops heald in Cape Town, Durban, Bloemfontein,
 Pietersburg and Port Elizabeth 1-12 November 1993. Pretoria:
 Medical Research Council.
- Gordon, A. (1935). Mine hygiene. Public Health (Johannesburg), 2(5), 3-10.
- Gordon, C. (Ed.). (1980). Power/knowledge: Selected interviews and other writings 1972-1977 by Michel Foucault. Brighton:

 Harvester Press.
- Gorgas, W. (1914). Recommendations as to sanitation concerning employees on the mines on the Rand. Cape Town: Argus Printing and Publishing Company.
- Grafton, A. (with Shelford, A. & N. Siraisi). (1992). New worlds, ancient texts: The power of tradition and shock of discovery.

 Cambridge Mass.: The Belknap Press of Harvard University

 Press.
- Greenblatt, S. (1992). Marvelous posessions. Oxford: Oxford University Press.
- Greenlees, D. (1895). Insanity among the natives of South Africa.

 Journal of Mental Science, 41, 71-7
- Grevenbroek, J. (1970/1695). An elegant and accurate account of the African race living round the Cape of Good Hope commonly called Hottentots. In I. Schapera and B. Farrington (Eds.), The early Cape Hottentots described in the writings of Olfert Dapper (1668), Willem Ten Rhyne (1686) and Johanus Gulielmus de Grevenbroek (1695). Westport Connecticutt: Negro Universities Press.
- Grist, F. (1924). A dream come true. Medical missionary work in Pondoland, South Africa. Medical Missions at Home and Abroad,

- 20, 6-10.
- Grobbelaar, F.P. (1934). Random jottings of a country practitioner.

 The Leech, 5(2), 13-14.
- Gumede, M.V. (1974). Traditions and customs. The Leech, 44(2), 35-38.
- Harris, W.J. (1894). The typhoid scare in Port Elizabeth. South

 African Medical Journal, II, 123-125.
- Harstock, N. (1990). Foucault on power: A theory for women? In

 L.Nicholson (Ed.) Feminism/postmodernism (pp.157-176). London.
- Hattersley, A.F. (1955). A hospital century. Grey's Hospital,
 Pietermaritzburg 1855-1955. Cape Town: A.A. Balkema.
- Hayes, G. (1993). Finding spaces for critical thought. Unpublished paper presented to the forum on "The Role and Function of Psychology in a new South Africa". Johannesburg: September 3.
- Heap, M. (1985). Health and disease in two villages in south eastern Lesotho: A social anthropolgical perspective. Unpublished Masters in Social Science dissertation. Cape Town: University of Cape Town.
- Heap, M. & Ramphele, M. (1991). The quest for wholeness: Health care strategies among the residents of council-built hostels in Cape Town. Social Science and Medicine, 32, 117-126.
- Hertslet, L.E. (1946). The new vision of health from four angles.

 Public Health (Johannesburg), 10(7), 20-26.
- Hicks, J.W. (1896). The sacredness of the medical calling. Medical
 Missions at Home and Abroad, 6, 87-88.
- Higginson, J., Isaacson, C. & Simson, I. (1960). The pathology of cryptogenic heart disease. Archives of Pathology, 70, 497-507.
- Hill, E. (1904). Report on the plague in Natal 1902-3. London: Cassell and Co.
- Hinkle, G.J. (1986). Foucault's power/knowledge and American sociological theorizing. *Human Studies*, 10, 35-59.

- Hirschberg, W. E. (1967). Monumenta ethnographia: Early
 ethnographical pictorial documents Vol. 1 Black Africa. Graz,
 Austria: Akademische Druk.
- Holden, W. (1963/1867). The past and future of the Kafir races. Cape Town: C.Struik.
- Humphreys, N. (1958). Mission stories. London: Blackfriars.
- Huntingdon, E. (1924). Civilization and climate. New Haven: Yale University Press.
- Huntley, G. (194-). Simple games for the physical education lesson and for social occasions. Cape Town: Juta and Co.
- Illich, I. (1976). Medical nemesis. New York: Random House.
- Impey, S.P. (1896). A handbook of leprosy. London: J. & A. Churchill.
- Ingle, R.F. (1963). Doctor's note. London: Society for the Propogation of the Gospel.
- Ingle, R.F. (1973). An experience of Amagquira. South African Medical Journal, 47, 333-334.
- Irvine, I.G. & Macauley, D. (1905). The life history of the native labourer. Proceedings of the 75th meeting of the South African Association for the Advancement of Science, Vol. III (pp.342-367). Johannesburg: South African Association for the Advancement of Science.
- Isaacson, C. (1978). The changing patterns of liver disease in South African Blacks. South African Medical Journal, 53, 365-368.
- Ivey, G. (1986). Elements of a critical psychology. *Psychology in Society*, 5, 4-27.
- Jacobsen, Z. (1962). Case note-book of the 'Riversend' community. In S.L. Kark and G.W. Steuart (Eds.) A practice of social medicine (pp.65-92). London: E. & S. Livingstone.
- James, T. (1975). The first fifty a review of the South African medical congresses. South African Medical Journal, 49, 1313-

- Jansen, G. (1973). The doctor-patient relationship in an African tribal society. Assen: Van Gorkum and Co.
- Jansen van Rensburg, J.A. (1938). The learing ability of the South African Native compared with that of the European. Research Series No. 5. Pretoria: South African Council for Educational and Social Research.
- Jansen van Rensburg, J.A. (1939). Psychological aspects: With special reference to child guidnace, vocational guidance and education. South African Journal of Science, 34, 545-551.
- Jokl, E. (1935). Aortic failure and physical activity. The Leech, 6, 35-36.
- Kaiser Family Foundation. (1991). Changing health in South Africa:

 Towards new perspectives in research. Menlo Park, California:

 Henry J. Kaiser Family Foundation.
- Kark, S.L. (1934a). The economic factor in the health of the Bantu in South Africa. The Leech, 5(2), 18-22.
- Kark, S.L. (1934b). The Society for the Study of Medical Conditions among the Bantu. The Leech, 5(2), 67-68.
- Kark, S.L. (1935). Problems of national health. The Leech, 6(2), 12-19.
- Kark, S.L. (1942). A Health service among the rural Bantu. South

 African Medical Journal, 16, 197-198.
- Kark, S.L. (1944). A health unit as family doctor and health advisor. South African Medical Journal, 18, 39-46.
- Kark, S.L. (1949). The social pathology of syphyllis. South African Medical Journal, 23, 77-84.
- Kark, S.L. & Kark, E. (1962). A practice of social medicine. In S.L.
 Kark and G.W. Steuart (Eds.) A practice of social medicine
 (pp.3-40). London: E. & S. Livingstone.

- Kark, S.L. & Cassell, J. (1952). The Pholela Health Centre. A progress report. South African Medical Journal, 26, 101-104; 131-136.
- Kark, S.L & Le Riche, H. (1944). A health study of South African Bantu school-children. South African Medical Journal, 18, 100-103.
- Kark, S.L. & Steuart, G.W. (1957). Health education and neighbourhood family practice. Health Education Journal, 15, 1-10.
- Kay, S. (1834). Travels and researches in Caffraria: Describing the character, customs, and moral condition of the tribes inhabiting that portion of Southern Africa. New York: Harper and Row.
- Keen, P. (1948). A psychological approach to Bantu medicine. The Leech, 19(1), 6-9.
- Kiernan, J.P. (1978). Is the witchdoctor medically competent? South

 African Medical Journal, 53, 1072-1073.
- Kjome, J. (1963). Back of beyond. Bush nurse in South Africa.

 Minneapolis: Augsburg Publishing House.
- Kleinman, A. (1980). Patients and healers in the context of culture:

 An exploration of the borderland between anthropology,

 medicine and culture. Berkely: University of California Press.
- Kloppers, P.J. (1973). The aims of the Transkei and Ciskei research society. South African Medical Journal, 47, 287-298.
- Kolben, P. (1731). The present state of the Cape of Good Hope: or, a particular account of the several nations of the Hottenots,

 Volumes 1 and 2 (trans. G. Medley). London: W Innys.
- Krige, P.E. (1939). The march of medicine: A brief biographical
 history. The Leech, 10(1), 63-73.
- Kritzman, L.D. (Ed.). (1988). Michel Foucault: Politics, philosophy culture: Interviews and other writings, 1977-1984. New York:

- Routledge.
- Kuper, H. (1947). The concept of social medicine applied to some Bantu speaking tibes. The Leech, 18(1), 55-58 & 66.
- Laidler, P.W. (1931). Native (Bantu) beliefs concerning pregnancy and child-birth, their effects on public health adminsitration: And the effects of detribilization or urbanization upon those ancient customs and upon infantile mortlaity rates. South African Journal of Science, 28, 418-422.
- Laidler, P.W. (1937). Medical establishments and institutions at the Cape during the opening years of the nineteenth century. South

 African Medical Journal, 11, 481-486.
- Laidler, P.W. (1938). Medical establishments and institutions at the Cape. VI. Dr J. Atherstone and the introduction of anaesthetics. South African Medical Journal, 12, 453-456.
- Laidler, P.W. (1939). Medical establishments and institutions at the Cape. VIII. Through epidemics to reform. South African Medical Journal, 13, 223-229.
- Laidler, P., & Gelfand, M. (1971). South Africa: Its medical history 1652-1898. Cape Town: C.Struik.
- Lambley, P. (1980). The psychology of apartheid. London: Secker and Warburg.
- Lapping, D.J. (1961). Polela Health Centre (a letter). South African Medical Journal, 35, 39.
- Laubscher, B.J.F. (1937). Sex, custom and psychopathology (a study of South Africa pagan natives). London: George Routledge and Sons.
- Lee, S.G. (1950). A preliminary investigation of the personality of the educated African by means of a projective technique.

 Unpublished MA dissertation. Pietermaritzburg: University of Natal.

- Leech, The. (1978). The role and place of the traditional medicine man and 'witchdoctor' in African health care (whole edition).

 The Leech, 48(2).
- Leibbrandt, H.C.V. (1901). Precis of the archives of the Cape of Good Hope. Journal, 1662 1670. Cape Town: W A Richards and Sons.
- Leipoldt, C.F.L. (1916). Medical inspection of schools in relation to efficiency. Report to the South African Association for the Advancement of Science, 13th Annual Meeting, 1916. Cape Town:

 South African Association for the Advancement of Science.
- Lemert, C.C. & Gillan, G. (1982). Michel Foucault: Social theory as transgression. New York: Columbia University Press.
- Lerer, L.B., Butchart, A. & Terre Blanche, M. (1995). 'A bothersome death' Narrative accounts of infant mortality in Cape Town, South Africa. Social Science and Medicine, 40, 945-953.
- Lerer, L.B. & Scheper-Hughes, N. (In press). Who is the rogue?

 Hunger, death and circumstance in John Mampe Square. In N.

 Scheper-Hughes (Ed.), Mothers and children at risk. Berkeley:

 University of California Press.
- Le Riche, H. (1938). A short review of some recent work in nutrition. The Leech, 9(2), 45-49.
- Le Roux, G.H. (1977). The medical profession and the witchdoctor.

 South African Medical Journal, 52, 627-629.
- Letlhaku, L.L.M. (1961). A postmortem examination of the South African health-centre service experiment. South African Medical Journal, 35, 917-919.
- Letts, M. (1949). Sir John Mandeville. London: Batchworth.
- Le Vaillant, M. (1796). Travels into the interior parts of Africa.

 By the way of the Cape of Good Hope; in the years 1780, 81,

 82, 83, 84, and 85. Volumes 1 and 2. (2nd Ed.). London: G.G.

 and J. Robinson.

- Levett, A. (1987). Childhood sexual abuse: Event, fact or structure?

 *Psychology in Society, 8, 79-100.
- Lichtenstein, H. (1812). Travels in Southern Africa in the years

 1803, 1804, 1805 and 1806 (trans A. Plumptre). London: Henry
 Colburn.
- Lipsius, J. (1592). A direction for travaillers. London: C. Bubie.
- Liston, J. (1944). Health officials. Public Health (Johannesburg), 8(4), 9-15.
- Loram, C.T. (1922). The claims of the native question upon scientists. South African Journal of Science, 18, 99-109.
- Lowe, J. (1886). Medical missions. Their place and power. London: T Fisher Unwin.
- Lynch, D. (1985). Discipline and the material form of images: An analysis of scientific visibility. Social Studies of Science, 15, 37-66.
- Lynch, F.P. (1900). A cure and its results. Medical Missions at Home and Abroad, 6, 209.
- Malan, M. (1988). In quest of health. Johannesburg: Lowry Publishers.
- Malefijt, A. (1968). Homo monstrosus. Scientific American, 219, 112-118.
- Malherbe, J. (1934). A rare congenital abnormality of the heart (bilocular heart). The Leech, 5(3), 22-24.
- Manganyi, N.C. (1991). Treachery and innocence: Psychology and racial difference in South Africa. Johannesburg: Ravan Press.
- Manganyi, N.C. (1977). Mashangu's reverie. Johannesburg: Ravan Press.
- Manganyi, N.C. (1974). Health and disease: Some topical problems of socio-cultural transition. South African Medical Journal, 48, 922-924.

- Manganyi, N.C. (1973). Being-Black-in-the-world. Johannesburg: Ravan Press.
- Manganyi, N.C. (1972). Body image boundary differentiation and self-steering behaviour in African paraplegics. *Journal of Personality Assessment*, 36(1), 45-50.
- Manganyi, N.C. (1970). Body image in paraplegia. Unpublished D Litt et Phil dissertation. Pretoria: University of South Africa.
- Manganyi, N.C., Kronenberg, J.A. & Jenkins, T. (1974). Studies on albinism in the South African Negro intellectual maturity and body image differentiation. Journal of Biosocial Science, 6, 411-418.
- Marley, R. (1860). Medical missionaries; or medical agency cooperative with Christian mission to the Heathen. London: James Blackwood.
- Marks, S., & Andersson, N. (1988). Typhus and social control in South Africa: 1917-1950. In R. Macleod, & M. Lewis (Eds.),

 Disease, medicine and empire (pp. 257-283). London: Routledge.
- Martin, H. & Weir, H. (Eds.). (1923). Medical practice in Africa and the east. London: Student Christian Movement.
- Marwick, J.S. (1918). The natives in the larger towns. South African Journal of Science, 15, 590-610.
- Maynard, G. (1913). An enquiry into the etiology, manifestations and prevention of pneumonia amongst natives on the Rand, recruited from tropical areas. Johannesburg: South African Institute for Medical Research (Pub. no. 2).
- Maynard, G., & Turner, G. (1914). Anthropological notes on Bantu natives from Portuguese East Africa. Johannesburg: South African Institute for Medical Research (Pub no. 4).
- McCord, J.B. (1926). Native witch doctors and healers. South African Medical Record, 24, 195-205.

- McCord, J.B. (1951). My patients were Zulus. New York: Rinehart.
- McGregor, M. (1944). Health education for rural Bantu children.

 South African Medical Journal, 18, 418-419.
- McHugh, S. & Vallis, T.M. (Eds.). (1986). Illness behaviour: A multidisciplinary model. New York: Plenum.
- McKeown, T. (1979). The role of medicine: Dream mirage or nemesis.

 Oxford: Blackwell.
- McVicar, N. (1908). Health training in schools, with special reference to Native schools. Report of the South African Association for the Advancement of Science, Sixth Meeting, Grahamstown, 1908 (pp.309-314). Grahamstown: African Book Co.
- Mead, R. (1748). A discourse on the small pox and the measles.

 London: John Brindley.
- Medical Association of South Africa. (1974). The true facts about medicine in South Africa. South African Medical Journal (supplement), 48, 1-7.
- Meirus, A. (1598). Certaine briefe, and speciall instructions for gentlemen, merchants, students, souldiers, mariners, and c. employed in services abrode, or anie way occassioned to converse in the kingdomes and governements of forren princes.

 London: John Woolf.
- Menko, H. (1954). Contributions of the Netherlands to the development of South African medicine (1652-1902). Cape Town: H.A.U.M.
- Mentzel, O.F. (1921/1785). A complete and authentic geographical and topographical description of the famous (and all things considered remarkable) African Cape of Good Hope (in three parts, trans. H.J Mandelbrote). Cape Town: Van Riebeeck Society.
- Mercury, The. (1959). 100 years of service to humanity: Centenary of the Grey Hospital (supplement). The Mercury, June 11.

- Messum, G.B. (1895). Presidential address to the South African Republic Medical Association. South African Medical Journal, 2, 267-269.
- Meyer, E.T. (1941). Studies on physical measurements of Bantu school children. The Leech, 14(2), 29-31.
- Mfenyana, K. (1988). Attitudes of rural African patients toward the use of drugs as prescribed by doctors. South African Family Practioner, 9(4), 137-142.
- Miller, J. (1849). Medical missions. An address to students. London: Simpkin Marshall and Co.
- Miller, T. & Swartz, L. (1990). Clinical psychology in general hospital settings: Issues in interprofessional relationships. Professional Psychology, 21, 48-53.
- Minde, M. (1956). Early psychiatry in Natal. South African Medical Journal, 30, 287-291.
- Minnaar, G.G. 91975). Die invloed van verwestering op die persoonlikheid van 'n groep Zoeloemans. Unpublished PhD dissertation. Pretoria: University of Pretoria.
- Mirvish, L. (1962). Psycho-somatic aspects of gastro-intestinal diseases. South African Medical Journal, 36, 210-212.
- Mitchell, J.A. (1908). The growth of the native races of the Cape

 Colony and some factors affecting it. Report of the South

 African Association for the Advancement of Science, 6th

 Meeting, Grahamstown, 1908. Grahamstown: African Book Co.
- Mokhobo, K.P. (1971). Medical history taking among the Bantu tribes of South Africa. South African Medical Journal, 45, 111-114.
- M.O.M. (1894). Climate and venereal disease. South African Medical Journal, II, 154.
- Moodie, D. (1976). The perception and behaviour patterns of Black mineworkers on a group gold mine. Johannesburg: Anglo American Corporation.

- Moodie, D.E. (1960). The record, or a series of offical papers relative to the condition and treatment of the native tribes of South Africa. Cape Town: Balkema.
- Moorshead, F. (1922). The evangelistic function of medical missions.

 Medical Missions at Home and Abroad, 19, 17-19.
- Moorshead, R.F. (1926). The way of the doctor: A study in medical missions. London: The Carey Press.
- Movsowitz, L. (1971). Some thoughts on medical training from a morbidity survey in general practice in Uppington. South African Medical Journal, 45, 133-135.
- Muller, J. & Cloete, N. (1987). The 'white hands': Academic social scientists, engagement and the struggle in South Africa.

 Social Epistemology, 1, 141-154.
- Munster, S. (1550). Cosmographiae universalis libri vi. Basel.
- Murray, J.F. (1963). History of the South African Institute for Medical Research. South African Medical Journal, 37, 389-395.
- Murray, W.A. (1932). The poor white problem in South Africa. Report of the Carnegie Commission, Part IV. Health report.

 Stellenbosch: Pro-Ecclesia.
- Mutwa, C. (1974). The role of the medicine-man in Black society. The Leech, 44(2), 79-81.
- National Health Services Commission. (1944a). Minutes of evidence,

 Vol. 8. 135th sitting, Polela, 3 August 1943 (pp.8647-8670).

 Cape Town: The Government Printer (?).
- National health Services Commission. (1944b). Report of the national Health Services Commission on the provision of an organised National Health Service for all sections of the people of the Union of South Africa, 1942-1944 (UG 30-1944). Pretoria: The Government Printer.
- Native Recruting Company Ltd. (1928). Suggestions relating to the medical examination of native mine labourers. *Proceedings of*

- the Transvaal Mine Medical Officers' Association, 8, 7.
- Nell, V. (1992). The case for an independent licensing board for psychology. South African Journal of Psychology, 18, 17-20.
- Nell, V. (1991). PINS, that trashy, trashing journal. Psychology in Society, 15, 67-70.
- Nell, V. & Butchart, A. (1989). Studying violence in a South African city. Critical Health, 28, 44-49.
- Nettleton, S. (1992). Power, pain and dentistry. Buckingham: Open University Press.
- Newton, A. (1950). 'Traveller's' tales of wonder and imagination. In

 A. Newton (Ed.), Travel and travellers of the middle ages (pp.

 159-173). New York: A. Knopf.
- Ngubane, H. (1977). Body and mind in Zulu medicine. New York:

 Academic.
- N.V.S. & P.K. (1944). Book review. The sick African. The Leech, 15(2), 37-39.
- Oosthuizen, S.F. (1971). Is ons tevrede met die huidige dokterpasientverhouding? South African Medical Journal, 45, 1224-1226.
- Orenstein, A. (1922). Compound sanitation. Proceedings of the Transvaal Mine Medical Officers' Association, 2(5), 1-15.
- Orford, M. (1935). Bodily habitus in the Bantu. The Leech, 6(1), 41-43.
- Packard, R. (1989). White plague, black labour. Pietermaritzburg:
 Univ. of Natal Press. Press.
- Park-Ross, G.A. (1937). Tropical sanitation and its application to native reserves. *Public Health (Johannesburg)*, 2(4), 27-32.
- Parry, C.D.H., Tibbs, J., Cummins, G., Brice, H., Angellos, E.,

 Thompson, F., Stretch, C. & Stoppe, B. (1994). A study of the
 knowledge, attitudes, perceptions and awareness of youth
 towards alcohol and alcohol advertising. *Urbanisation and*

- Health Newsletter, 21, 43-50.
- Paternek, M. (1987). Norms and normalization: Michel Foucault's overextended panoptic machine. *Human Studies*, 10, 97-121.
- Paterson, R.L. (1950). Rural and mission hospitals in relation to disease and health in the Bantu. The Leech, 21(1), 90-94.
- Paterson, W.A. (1790). A narrative of four journeys into the country of the Hottentots and Caffraria in the years 1777, 1778, 1779. (2nd Ed.). London: J.Johnson.
- Pearson, A., & Mouchet, R. (1923). Practical hygiene of native compounds in tropical Africa. London: Bailliere, Tindall and Cox.
- Phillips, H. (1984). Black October. Unpublished PhD thesis. Cape
 Town: University of Cape Town.
- Phillips, R.E. (1948). The Bantu in the city. A study of cultural adjustment on the Witwatersrand. Lovedale: The Lovedale Press.
- Posel, D. (1991). The making of aprtheid 1948-1961. Oxford:
 Clarendon Press.
- Poster, M. (1990). The mode of information. Chicago: University of Chicago Press.
- Potter, J. & Wetherell, M. (1987). Discourse and social psychology:

 Beyond attitudes and behaviour. London: Sage.
- Power, D.J. & Heese, H. de V. (1978). The role of community paediatrics in South Africa. South African Medical Journal, 53, 408-410.
- Pratt, M.L. (1985). Scratches on the face of the country; or, what Mr. Barrow saw in the land of the bushmen. *Critical Inquiry*, 12, 119-143.
- Pratt, M.L. (1992). Imperial eyes: Travel writing and transculturation. London: Routledge.
- Pretorius, C.C. (1977). A comparative study of Tswana schizophrenic patients and 'normal' Tswana subjects by means of the TAT-Z

- test. Unpublished MA dissertation. Pretoria: University of South Africa.
- Public Health Notes. (1894). Public health: Cape Town. South African Medical Journal, 2(3), 75.
- Purchas, S. (1619). Microcosmus, or the historie of man. London.
- Radcliffe-Brown, A.R. (1923). The methods of ethnology and social anthropology. South African Journal of Science, 20, 124-147.
- Rauch, J.H. (1939). The health inspector. *Public Health*(Johannesburg), 6(1), 8 & 13.
- Raven-Hart, R. (1967). Before van Riebeeck: Callers at South Africa from 1488 to 1652. Cape Town: C.Struik.
- Raven-Hart, R. (1971). Cape Good Hope 1652-1702: The first fifty years of Dutch colonisation as seen by callers (volume 1).

 Cape Town: A.A. Balkema.
- Ravenstein, E. E. (1898). A journal of the first voyage of Vasco da

 Gama 1497 99. London: Hakluyt Society (no. 99).
- Reader, D.H. (1963). African and Afro-European research: A summary of previously unpublished findings in the National Institute for Personnel Research. *Psychologia Africana*, 10, 1-18.
- Reid, A. (1927). Sanitation and public health (2nd Ed). Cape Town:

 Juta and Co.
- Rheinallt-Jones, J.D. (1926). The need of a scientific basis for South African native policy. South African Journal of Science, 23, 79-91.
- Rich, S.G. (1917). Binet-Simon tests on Zulus. South African Journal of Science, 14, 477-482.
- Robbs, J.V. & Moshal, M.G. (1979). Duodenal ulceration in Indians and Blacks in Durban. South African Medical Journal, 55, 39-42.
- Robinson, J. (1990). "A perfect system of control"? State power and 'native locations' in South Africa. Society and Space, 8, 135-

- Rogers, P. (1992). Explanatory models of illness amongst primary health care users in Mamre. Unpublished MA dissertation. Cape Town: University of Cape Town.
- Rorty, R. (1986). Foucault and epistemology. In D.C. Hoy (Ed.),

 Foucault: A critical reader. Oxford: Blackwell.
- Rose, N. (1985). The psychological complex: Psychology, politics and society in England, 1869-1939. London: Routledge and Keagan Paul.
- Rose, N. (1988). Calculable minds and manageable individuals.

 History of the Human Sciences, 1(2), 179-200.
- Royal Society. (1665-1666). Philosophical transactions: giving some accompt of the present undertakings, studies, and labours of the ingenious in many considerable parts of the world. London:

 John Mortyn and James Allestrey.
- Sachs, S.B. (1959). The Meadowlands method: An experiment in an integrated curative service. South African Medical Journal, 33, 781-784.
- Sachs, W. (1937). Black hamlet: The mind of an African negro revealed by psychoanalaysis. London: Geoffrey Bles.
- Sandeman, J.C. (1965). The thoracic azygos venous system in the Bantu. The Leech, 35(1), 17-18.
- Schaap, M.E. (1953). Health visiting among the urban Bantu. *Public Health (Johannesburg)*, 17(12), 533-536.
- Schapera, I. (ed.). (1959). David Livingstone. Family letters 1841-1856 (Vol. 1). London: Chatto and Windus.
- Schapera, I. (ed.). (1961). Livingstone's missionary correspondence, 1841-1856. London: Chatto and Windus.
- Schedel, H. (1493). Liber chronicarum. Nuremburg.
- Scheper-Hughes, N. (1990). Three propositions for a critically applied medical anthropology. Social Science and Medicine, 30,

- 189-197.
- Schimlek, C. (1950). Medicine versus witchcraft. Marianhill:

 Marianhill Mission Press.
- Schlebusch, L. (1990). An overview of bridging the mind-body dichotomy within the health care system. In L. Schlebusch (Ed.), Clinical health psychology: A behavioural medicine perspective (pp.3-23). Halfway House: Southern Books.
- Scrooby, C. (1994). Illness experience and brain damage: A narrative window on stroke and Alzheimer's disease. Unpublished Master of Arts dissertation. Pretoria: University of South Africa.
- Seager, J. (1993). Addressing the impact of urbanisation on health in South Africa. In D. Yach and G. Martin (Eds.), Building a healthy nation through research (pp.73-85). Cape Town: Medical Research Council.
- Searle, C. (1965). The history of the development of nursing in South Africa 1652-1960. Cape Town: Struik.
- Seedat, M.A. (1993). Topics, trends and silences in South African psychology 1948-1988. Unpublished Doctoral dissertation. Cape Town: University of the Western Cape.
- Seftel, H.C. (1964). Diabetes in the Johannesburg African. The Leech, 24(4), 82-87.
- Segal, I. & Ou Tim, L. (1979). The witchdoctor and the bowel. South

 African Medical Journal, 56, 308-310.
- Seymour, M. E./Mandeville (1967). Mandeville's travels. Oxford: Clarendon.
- Sharp, J. (1988). Introduction: Constructing social reality. In E. Boonzaier and J. Sharp (Eds.), South African keywords: The uses and abuses of political concepts (pp.1-16). Cape Town:

 David Phillip.
- Sharpe, W.D./Isidore (1964). Isidore of Seville. The medical writings. An English translation with and introduction and

- commentary. Transactions of the American Philosophical Society, 54(2), 1-75.
- Shearer, O.L. (1938). A national physical and health education scheme. Public Health (Johannesburg), 3(3), 13-20.
- Sherwood, E.T. (1957). On the designing of TAT pictures, with special reference to a set for an African people assimilating western culture. *Journal of Social Psychology*, 45, 161-190.
- Sherwood, R. (1958). The Bantu clerk: A study of role expectations.

 The Journal of Social Psychology, 47, 285-316.
- Shotter, J. (1984). Social accountability and selfhood. Oxford:

 Blackwell.
- Silbert, M.V. (1970). The Cape morbidity survey and its significance in the training for general practice. South African Medical Journal, 44 (supplement), 1-28.
- Silove, D. (1990). Doctors and the state: Lessons from the Biko case. Social Science and Medicine, 30, 417-429.
- Simon, C.M. (1988). Dealing with distress: A medical anthropological analysis of the search for health in a rural Transkeian village. Unpublished MA dissertation. Grahamstown: Rhodes University.
- Singer, M. (1990). Reinventing medical anthropology: Toward a critical realignement. Social Science and Medicine, 30, 179-187.
- Singer, R. (1959). The coronary arteries of the Bantu heart. South

 African Medical Journal, 33, 310-315.
- Singer, R. (1959). Coronary arteries of the Bantu heart. South

 African Medical Journal, 33, 467-468.
- Siraisi, N.G. (1990). Medieval and early Renaissance Medicine.

 Chicago: University of Chicago Press.
- Skaife, W. (1925). Discussion on tuberculosis detection and prevention of tuberculosis during work period. *Proceedings of*

- the Transvaal Mine Medical Officers' Association, 5(5), 1-8.
- South African Native Affairs Commission. (1905). Report and minutes of evidence. Cape Town: The Government Printer.
- Sparrman, A. (1786). A voyage to the Cape of Good Hope, towards the Antarctic polar circle, and round the world, but chiefly into the country of the Hottenots and Caffres, from the year 1772 to 1776. Volumes 1 and 2 (2nd Ed.). London: J. and J. Robinson.
- Spencer, I.F. (1975). Postgraduate training and qualification in community medicine in South Africa. South African Medical Journal, 49, 35-43.
- Stavorinus, J.S. (1798). Voyages to the East Indies. The whole comprising a full and accurate account of all the late posessions of the Dutch in India, and at the Cape of Good Hoop (vols. 1,2 and 3). London: G.G. and J. Robinson.
- Steele, R. (Ed). (1893). Medieval lore: An epitome of the science, geography, animal and plant folk lore and myth of the middle age: Being classified gleanings from the encyclopaedia of Bartholomew Anglicus on the properties of things. London: Elliot Stock.
- Steinberg, M. (1993). Halting the spread of AIDS in South Africa:

 The MRC's strategy. In D.Yach and G.Martin (Eds.) Building a

 healthy nation through research (pp.89-99). Cape Town: Medical
 Research Council.
- Steuart, G.W. (1958). The physician and health education. British Medical Journal, 2, 590-592.
- Steuart, G.W. (1962). Community health education. In S.L Kark and G.W. Steuart (Eds.), A practice of social medicine (pp.65-92).

 London: E. and S. Livingstone Ltd.
- Steyn, K. (1993). Chronic diseases of lifestyle: A threat to all South Africans. In D. Yach and G. Martin (Eds.), Addressing

- the impact of urbanisation on health in South Africa: The Medical Research Council's response. Cape Town: Medical Research Council.
- Stoney. (1923). The use of a breathing screen in the examination of natives. Proceedings of the Transvaal Mine Medical Officers'

 Association, 3(8), 4.
- Storr, N.V. (1950). Medical diseases in the Bantu. The Leech, 21(1), 49-51.
- Stott, N.G.H. (1975). Do we identify our patients' needs? The Leech, 45(3/4), 33-34.
- Sutherland Strachan, A. (1932). Haemosiderosis. The Leech, 4(1), 29-31.
- Swanson, M. (1977). The sanitation syndrome: Bubonic plague and urban native policy in the Cape Colony, 1900-1909. *Journal of African History*, 18, 387-410.
- Swartz, L. (1991). The politics of black patients' identity: Ward rounds on the 'black side' of a South African psychiatric hospital. Culture, Medicine and Psychiatry, 15, 217-244.
- Swartz, L. (1988). Some comments on the draft ethical code for South African psychologists. South African Journal of Psychology, 22, 228-239.
- Swartz, L. (1985). Issues for cross-cultural psychiatric research in South Africa. Culture, Medicine and Psychiatry, 9, 59-74.
- Swartz, L. & Foster, D. (1984). Images of culture and mental illness: South African psychiatric approaches. *Social Dynamics*, 10(1), 17-25.
- Swartz, L., & Levett, A. (1989). Political repression and children in South Africa: The social construction of damaging effects.

 Social Science and Medicine, 28, 741-750.
- Taylor, C. (1984). Foucault on freedom and truth. *Political Theory*, 12(2), 152-183.

- Ten Rhyne, W. (1970/1686). A short account of the Cape of Good Hope and of the Hottentots who inhabit that region. In I. Schapera and B. Farrington (Eds.), The early Cape Hottentots described in the writings of Olfert Dapper (1668), Willem Ten Rhyne (1686) and Johanus Gulielmus de Grevenbroek (1695). Westport Connecticutt: Negro Universities Press.
- The Transvaal. (1904). Report of the Transvaal Labour Commission:

 Minutes of proceedings and evidence. London: His Majesty's

 Stationery Office.
- The Transvaal, (1905). Report of the coloured labour compound commission. Pretoria: The Government Printer.
- Thompson, G. (1827). Travels and adventures in southern Africa.

 London: Henry Colburn.
- Thompson, H.P. (1932). Medical missions at work. London: Society for the Propogation of the Gospel in Foreign Parts.
- Thornton, R. & Fuller, T.E. (1868). The epidemic in Cape Town. Cape
 Town: J. Phillip and Co.
- Tilsley, G.E. (1924). The careless Ethiopian. Conquest by Healing, 1(2), 43-47.
- Tobias, P.V. (1947). Studies in Bantu anatomy. Introduction. The Leech, 17(1), 17-30.
- Tobias, P.V. (1978). Reflections on anatomy and physical anthropology. South African Medical Journal, 53, 1066-1071.
- Tobias, B. & Reddy, P. (1993). Tracing the health promotion

 movement. In M. Westaway (Ed.), Health promotion Proceedings

 of six one-day workshops heald in Cape Town, Durban,

 Bloemfontein, Pietersburg and Port Elizabeth 1-12 November.

 1993. Pretoria: Medical Research Council.
- Tomory, D.M. (1913). Medical inspection of school children. South

 African Medical Record, 11, 361-370.

- Torrington, M. (1971). The preponderance of chronic medical diseases and the value of continuing socio-medical care. South African Medical Journal, 45, 42-44.
- Transvaal Archives Depot. (202/10 LD 1786). Dr. J.G. Visser: Re liberation of native lunatics from the lunatic asylum. February-March, 1910.
- Transvaal Archives Department. (CS 863/14966). Lunacy Amendment Act, 1908.
- Transvaal Archives Depot. (SNA 162 275/02). Secretary for Native

 Affairs to Chief Labour Inspector. "Mine natives": emaciated

 condition of". 4 February, 1902.
- Transvaal Archives Depot. (FLD 15 147/57). Notes of a meeting held in Pretoria between his excellency the lieutenant governor and a deputation from the Chamber of Mines in regard to the air space provided in Chinese compounds. 8 July, 1904.
- Transvaal Archives Depot. (GNLB 5/2910). Medical examination of native labourers before leaving the Transvaal (correspondence between G.H. Coke, assistant medical officer of Government Native Labour Bureau compound, compound manager and Secretary for Native Affairs). August-September, 1909.
- Transvaal Archives Depot. (GNLB 211/29151). Medical dispute re condition of native Nontswaku. December, 1920.
- Transvaal Chamber of Mines. (1903). Report to the commissioner for Native Affiars on the mortality amongst natives on the mines of the Witwatersrand. Johannesburg: Transvaal Chamber of Mines.
- Tuberculosis Research Committee. (1932). Tuberculosis in South

 Arican natives with special reference to the disease among

 mine labourers on the Witwatersrand. South African Institute

 for Medial Research, Publication No. 30. Johannesburg, South

 African Institute for Medical Research.

- Turler, J. (1575). The traveiler of Jerome Turler, divided into two bookes. The first containing a notable discourse of the manner, and order of traveiling oversea, or into straunge and forrein countreys. The second comprehending an excellent description of the most delicious realm of Naples in Italy. A wooke very pleasaunt for all persons to reade, and right profitable and necessarie unto all such as are minded to traveyll. London: Abraham Veale.
- Turner, B.S. (1987). Medical power and social knowledge. London:
 Sage Publications.
- Turner, G. (1903). Special report. Contagion as a cause of leprosy.

 Pretoria: Government Printing Works.
- Turner, G.A. (1907). Report on the alleged prevalence of pulmonary tuberculosis and on some of the principal diseases existing in the kraals of the natives in Portuguease East African territory. Johannesburg: Hayne and Gibson.
- Turner, G.A. (1911). Some of the tribal marks of the South African native races. Transvaal Medical Journal, February 11, 12-15.
- Turvey, M. (1951). Waiting for health at Mkambati. An account of the leper settlement. London: Society for the Propogation of the Gospel in Foreign Parts.
- Union of South Africa. (1914). Report of the tuberculosis commission (U.G. 34-14). Cape Town: Cape Times Limited, Government Printers.
- Union of South Africa. (1916). General report of the miners' pthisis prevention committee. Pretoria: The Government Printing and Stationery Office.
- Union of South Africa. (1919). Report of the influenza commission.
- Union of South Africa. (1924). Report of the tuberculosis survey of the Union of South Africa. Cape Town: The Government Printer.

- Union of South Africa. (1928). Department of public health. Report for the year ended 30th June, 1928. Pretoria: The Government Printer.
- Union of South Africa. (1930). Department of public health. Report for the year ended 30th June, 1930. Pretoria: The Government Printer.
- Union of South Africa. (1935). Department of public health. Report for the year ended 30th June, 1935. Pretoria: The Government Printer.
- Union of South Africa. (1937). Department of public health. Report for the year ended 30th June, 1937. Pretoria: The Government Printer.
- Union of South Africa. (1940). Department of public health. Report for the year ended 30th June, 1940. Pretoria: The Government Printer.
- Union of South Africa. (1941). Department of public health. Report for the year ended 30th June, 1941. Pretoria: The Government Printer.
- Union of South Africa. (1945). Department of public health. Report for the year ended 30th June, 1945. Pretoria: The Government Printer.
- Union of South Africa. (1947). Department of public health. Report for the year ended 30th June, 1947. Pretoria: The Government Printer.
- Van Heyningen, E. (1989). Public health and society in Cape Town 1880-1910. Cape Town: Unpublished Phd thesis, University of Cape Town.
- Van Onselen, C. (1982). Studies in the social and economic history of the Witwatersrand. Vol. 2. New Nineveh. Johannesburg: Ravan Press.

- Van Velden, D.D. (1943). A case of developmental malposition of the intestine. The Leech, 14(2), 33-34.
- Van Wyk, C.W. (1970). Mouth pigmentation patterns in a group of healthy South African Bantu. South African Medical Journal, 44, 177-186.
- Vaughan, M. (1991). Curing their ills: Colonial power and African illness. Cambridge: Polity Press.
- Walzer, M. (1986). The politics of Michel Foucault. In D.C. Hoy (Ed.) Foucault: A critical reader. Oxford: Blackwell.
- Wasserman, H.P. & Heyl, T. (1968). Quantitative data on skin pigmentation in South African races. South African Journal of Clinical and Laboratory Medicine, 8, 98-101.
- Watkins-Pitchford, W. (1908). Hygiene in South Africa. *Transvaal Medical Journal*, 4, 67-75.
- Watts, H.L. (1980). Some reactions to illness of urban Black and Indian families in Durban. South African Medical Journal, 57, 589-591.
- Webster, E. (1986). Excerpt from "Servants of apartheid". Psychology in Society, 6, 6-28.
- Wells, L.H. (1933). The more important dimensions of the bony pelvis in the native races of South Africa. The Leech (supplement), 19(3), 1-6.
- Wells, L.H. (1949). The possible field of anatomical research in South Africa. South African Journal of Science, XLII, 78-89.
- Wilcocks, R.W. (1932). The poor white problem in South Africa.

 Report of the Carnegie Commission. Part II. Psychological report: The poor white. Stellenbosch: Pro-Ecclesia.
- Williams, H. (1887). First experiences in the Kuruman district. The Chronicle of the Church Missionary Society for the year 1887.

 London: The Church Missionary Society.

- World Health Organisation. (1983). Apartheid and health. Geneva: World Health Organisation.
- Yach, D. & Tollman, S. (1993). Public health initiatives in South Africa in the 1940s and 1950s: Lessons for a post-apartheid era. American Journal of Public Health, 83, 1043-1050.
- Zwart, W. (1958). The effect of polyclinic services in a lower income group community. South African Medical Journal, 32, 1037-1040.
- Zwi, A.B. (1987). The political abuse of medicine and the challenge of opposing it. Social Science and Medicine, 25, 649-657.
- Zwi, A.B. & Ugalde, A. (1989). Towards an epidemiology of political violence in the third world. Social Science and Medicine, 28, 633-642.