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THE DISEASED HEART OF AFRICA:

medicine, colonialism, and the black body

Jean Comaroff

A few years ago a line from Cape Town to Cairo was thought to be a romantic dream, and yet most of us now are hoping to travel that way home before many years have passed;...and, what to some of us is more important still, there will be less of human pain and misery and more of healthy enjoyment and progress in the poor, diseased heart of Africa.

Rev. W. C. Willoughby (n.d.[1899]:63)

Medicine held a special place in the imagination that colonized nineteenth-century Africa. In fact, the rising hegemony of biology in Europe can be traced in the control of threatening populations at home and abroad--and, more generally, in the regulation of relations between the "civil" and the "unruly." But the expanding empire also fed the new science with essential "raw material," and with a natural rationale for its emerging vision of physical man. As an object of European speculation, the African personified suffering and degeneracy, his environment a hothouse of fever and affliction. The rhetoric of the "geographical mission" linked the advance of reason in the interior of the dark continent with the biological thrust into the dim recesses of the human person; and early evangelists in South Africa saw social and political obstacles to their "humane imperialism" as natural contagions, responsive to medical control. As their philanthropic dreams hardened into colonial realities, the black body became ever more specifically associated with degradation, contagion, and disease.

In this paper, I explore the relationship of medicine and imperialism on the South African frontier, focusing on three distinct moments widely separated in time: the shaping of an imperial vision in late eighteenth-century discourses of the afflicted continent; the advent of the mid-nineteenth-century healing mission; and the founding of the colonial state in the early twentieth century. I shall suggest that the development of British colonialism in Africa, as a cultural enterprise, was inseparable from the rise of biomedicine as science. The frontiers of "civilization" were the margins of a European sense of health as social and bodily order, and the first sustained probe into the ailing heart of Africa was a "mission to the suffering". It followed that the savage native was the very embodiment of dirt and disorder, his moral affliction all of a piece with his physical degradation and his "pestiferous" surroundings. The early soldiers of Christendom were also the cutting edge of colonialism, and when they tried to domesticate the realities of the "dark" interior, they drew heavily on the iconography and practice of healing. What is more, their accounts of life and affliction in the African "laboratory" served as grist to the mill of a growing natural science.

Yet once they had abetted the rise of the colonial state, missionary healers in South Africa were to find themselves eclipsed by the agencies of a newly assertive public health. By the turn of this century, the discourse about civilizing Africa had given way to one of practical concern with the hygiene of black populations--and to the project of taming a native workforce. Here, as elsewhere in the colonized world, persons were disciplined and communities redistributed in the name of sanitation and the control of disease. For as blacks became an essential

element in the white industrial world, medicine was called upon to regulate their challenging physical presence. It also crystallized the political threat they posed to that world by linking racial intercourse with the origin of sickness. I shall suggest that, whereas mission healing was little more than a persuasive art, the health regimes of the colonial state rested on a much greater authority, one whose global certainties were the product of the mutually sustaining regimes of science and empire.

The point of my analysis, I stress, is not to argue that imperial expansion determined the rise of biomedical science. Neither do I claim that nineteenth-century medicine was merely an ideology of imperial control. Rather, I seek to show that each played off the other within the unfolding of a particular historical process; that, despite their ostensible independence, they were in fact cut from the same cultural cloth. Each came to verify the other through the categories and metaphors of an underlying vision. Thus, notwithstanding its status as an emerging science, medicine drew upon social images to mediate physical realities, giving colonial power relations an alibi in the ailing human body. And colonial regimes, in turn, drew upon medical icons and practices to impose their domination upon subjects and collectivities.

Biology, Romantic Naturalism, and the African's Place in Nature

Writers on the early nineteenth-century life sciences have observed that the period was marked by a restructuring of the "chain of being," with special reference to its lower half (Figlio 1976:20). The real issue underlying debates about man's place in nature was the relationship of the human species to the rest of the living world (ibid):

There was a focusing upon the multi-faceted idea of animality, as opposed to an insistence upon a scalar, uni-dimensional hierarchy, with man at the top of the visible, and God at the top of the invisible, realm.

This implied a preoccupation with continuities, with the properties common to all animate beings. Those who sought such properties had to "define the elusive notion of life; to measure and rank the degrees of its expression" (Figlio 1976:28). Rooted in the contrast between the animate and the inanimate, the enterprise fixed upon man as the embodiment of perfection, for it was he who had distinguished himself by employing reason to discover his own essence. This, in turn, led inexorably to the concept of "generic human nature" (Stocking 1987:17), a notion that separated man from beast, people from objects, and so rendered anomalous anything--like the slave trade--that confused them. Of course, "human nature" notwithstanding, the chain of being was itself to be differentiated and internally ranked, and it used the African to mark out the lowest limits of the human species.

In the epistemology of the time, then, the key to knowledge seemed to lie increasingly within man himself. The essence of life was in the unplumbed depths of organic being, to be grasped through the invasive thrust, the looking and naming, of the new biology (Foucault 1975). Its interior truth--merely signified in outer bodily form--gave rise to meaningful differences in the faculties and functions of living beings. This mode of seeing was becoming increasingly tangible in discourses about exploration in Africa, where the quest for knowledge of the interior likened the continent to the human body (Comaroff & Comaroff n.d.:Chap. 3). But the newly charted surfaces of the African landscape had an even

more direct connection with the human organism, for the geographical mission was also extending European knowledge of the global range of mankind. In investigating the savage, the west set up a mirror in which it might find a tangible, if inverted, self-image. Non-Europeans filled out the nether reaches of the scale of being, providing the contrast against which cultivated man might emerge with clarity. On this scale, moreover, the African was assigned a particularly base position. In treating him as the very embodiment of savagery, the travel literature had given descriptions of his physical form alongside clinical accounts of his "manners and customs" (Pratt 1985). African "nature" was thus grounded in the color, shape, and substance of the black physique.

With the ascendance of comparative anatomy and biology, the reduction of African society and culture to such organic bases took on more authority. For much of the eighteenth century it had been civilization that had separated savage man from his European counterpart--moral and politico-economic circumstances rather than physical endowment (Stocking 1987:18). But the vocabulary of natural science was to formalize an existing European association of dark continents with black bodies and dim minds. Comparative anatomical scales and schemes presented the African as the human obverse of the European, the "link" between man and animal (Curtin 1964:38). Late eighteenth-century racial classifications almost invariably placed him at the bottom of the ladder to enlightenment, below such paler peoples as Asians or American Indians (see White 1799; or Cuvier 1827,1:97, who ranks the "fair or Caucasian variety" above the c "yellow or Mongolian," and the latter above the "Negro or Ethiopian"). The hard facts of organic existence, of the ineffable chain of biological being, had come to determine the place of men in the world.

The life sciences, then, drew their terms from the current discour-

se about the human condition that arose out of Europe's encounter with the non-European world. Elevated to a new level of self-consciousness and authority, this "value free" knowledge found a natural validation for cultural imperialism in the inner secrets of existence. Contemporary naturalists read off the degree of animality and the perfection of life from the external forms of different "organisms"; for these forms were a function of the relative complexity, symmetry, and refinement of the faculties within. The influential Dutch scholar Camper ([ed Cogan] 1821), for instance, devised a scale that correlated the shape of the skull with aesthetic appearance and mental capacity. His so-called "facial angle" measured the projection of the jaw, a protruding profile being associated in the European mind with the long snouts, low brows, and sensory-bound state of animals. Applied to an eclectic array of evidence --including African travelers' accounts--this measurement defined and ranked national character, giving physical shape to the current philosophical concern with the relationship of race, nationality, and civilization (cf. Hume 1854). Camper's scale stretched from dog to ape to Negro, and through the European peoples to the ideal form epitomized in Greek sculpture ([ed Cogan] 1821:x; see Figlio 1976:28f). What is more, his pronouncements were publicized beyond the scientific community. The preface to an English translation of his popular lectures addressed a general artistic audience on the practical and aesthetic implications of the science of comparative anatomy ([ed Cogan] 1821:x):

[Camper's] grand object was to shew, that national differences may be reduced to rules; of which the different directions of the facial line form a fundamental norma or canon...the knowledge of which will prevent the artist from blending the fea-

tures of different nations in the same individual.

Here nationality, culture, and physical type are condensed into the language that, in the nineteenth century, would mature into scientific racism. With his apartheid of the sketchpad, Camper imprinted the physical contours of stereotypic others on the European imagination--and, with them, a host of derogatory associations. The bestiality of the sample African profile, for instance, is quite unmistakable (see Plate 1).

Georges Cuvier, the prestigious Swiss comparative anatomist of the early nineteenth century, took the facial angle and the biological reduction of culture to new levels of sophistication: he developed a scale that purported to evaluate the perfection not only of the intellect, but of the introspective self, the moral core of the person. By measuring the proportion of the mid-cranial area to that of the face, he sought to reveal the degree of dependence of an organism upon external sensations; the size of the cranium itself was taken to reflect the development of reason and self-control. On this count, the "Negro" stood between the "most ferocious apes" and the Europeans, who were themselves superseded by the men and deities of ancient Greek sculpture (Figlio 1976:28). But it was the neurological dimension of Cuvier's scheme (1827,1:49f) that addressed most explicitly the spiritual and moral capacity of man. For the nervous system was the site of internal animation, and its complexity determined the higher faculties of life--intelligence and volition (Figlio 1976:24):

Cuvier associated this compactness quite explicitly with the higher faculties, indeed, with the sense of the 'self.' Just as the nervous system coalesced into a centre from which de-

pendent nerves arose, so too was the sense of self increasingly solidified and distinct. Thus, a grading of this...concentrating of the nervous system was simultaneously a grading of animal sentience and selfhood.

And so the bourgeois subject, already secure in the ethic of Protestantism and rational philosophy, was given incontestable grounding in biological nature. Needless to say, the inner density and refinement associated by Cuvier with self-awareness and control were underdeveloped among non-Europeans, especially blacks, who were bound by the bestial reflexes of survival (1827,1:97; see Curtin 1964:231).

As Figlio (1976:35) notes, Cuvier's writings were elaborately summarized in the British biomedical press within months of their publication and were widely discussed by scientists, theologians, and men of letters. In an age when specialist knowledge was not yet set apart by technical language, such work was rapidly directed to a receptive public. Often, as in the case of one widely read translation of Cuvier's Animal Kingdom, some "popular and entertaining matter" was added on the "instincts and habits" of animals and primitive man (1827,1:i-ii). The editors in this particular instance included a description of the "unhappy races" of South Africa, a telling bricolage of current European curiosity, with substantiating material drawn from the accounts of early travelers in the interior (Comaroff & Comaroff n.d.:Chap.3).

An ingredient of this bricolage was the direct observation made by Cuvier and others of the so-called Hottentot Venus, an unfortunate living exhibit of the "essential black" from the Cape Colony, who died in Paris in 1815 (1827,1:196; see Gilman 1985:212). These descriptions show early nineteenth-century representations of Africa hardening into ste-

reotypes as travel tales and salon exotica were given scientific credentials and directed toward a seemingly insatiable popular readership. Furthermore, such images had a perceptible effect on the eyes of subsequent European visitors to Southern Africa. The epithets brought into association in the Animal Kingdom--the Hottentots described as "degraded and disgusting," or as "swarthy, filthy, and greasy"--were to flow from the pens of many later writers who claimed the authority of first-hand observation.

Like others before them, Cuvier and his editors focused on the exotic, simian qualities of the reproductive organs of black women, legitimating, as medical inquiry, their barely suppressed fascination with such torrid eroticism (Gilman 1985:213). Travelers like John Barrow (1801-4) had also written in this vein of the "genital aberrations" of Bushman and Hottentot women, and Mungo Park (1799), if in somewhat different idiom, had reduced Africa to the body of a black female yielding herself to white male discovery (Comaroff & Comaroff n.d.:Chap.3). This mytheme also appears in both the poetry of romantic naturalists and the sober prose of our missionary crusaders. But, as the Cuvier text shows, in the early nineteenth century it was science that articulated and authorized such imagery; in fact, the various products of current European fancy at the time sailed under the colors of biological knowledge, knowledge about "nature", health, the body, and the self.

While the internalizing focus of biological science would eventually draw attention away from man's transactions with his social and material environment, in the early nineteenth century there was still a lively concern with maintaining an equilibrium between organism and context. There had long been controversy over the role of climate in the origin of human diversity, some early naturalists (eg Buffon 1791) and

biologists (eg Blumenbach 1969 [1775; 1795]) having argued that negro physical characteristics grew out of sustained life in the tropics (Curtin 1964:40). Here, scientific thought drew on European notions of environment dating back at least to the sixteenth and seventeenth centuries; in particular, to the humoral theory that "as the air is, so are the inhabitants" (cf. Hodgen 1964:283). In this legacy, the "southern climes" were associated with heat, sensuality, depletion, and decay, a connection that recurs repeatedly in the perceptions of eighteenth-century Europeans. Lichtenstein (1928,1:58), for instance, blames the Cape Dutchman's "phlegm" on the African climate, quoting Goethe's similar observations about the indolent Neapolitans. Whites in warm climates mediated between the "antipodal constitutions" of the languid Negro and the "sanguinous Anglo-Saxon" (Cartwright 1853; Jones n.d.:48). The virulent effects of febrile disease on those Britons who attempted to establish a colony in West Africa in the late eighteenth century only reaffirmed the image of the "white man's grave," a continent inimical to civilized existence.

The writings and actions of the early missionaries to South Africa reveal a sense of contagion lurking in the dark continent and its inhabitants. But their vision was most directly informed by the discourses of abolitionism and romantic naturalism, which also drew upon images of corporality and health. Rooted in the early romanticism of the mid-eighteenth century, these discourses expressed a reaction to urban bourgeois society and a celebration of preindustrial rural simplicity. Here the conventionalized savage innocent steps forth. Joseph Warton's "The Enthusiast; or the Love of Nature" ([ed Park] 1811:39), written in 1740, captures the mood well:

Happy is the first of men ere yet confin'd
To smoky cities; who in sheltering groves,
Warm caves, and deep-sunk valleys liv'd and lov'd,
By cares unwounded; what the sun and showers,
And genial earth untillag'd could produce,
They gather'd grateful.

But paradise has been blighted by those who, having tasted the fruit of knowledge, can no longer remember simple virtues. By 1750, Warton ([ed Park] 1811:52) had put the following words into the mouth of an Andean Indian:

I see all Europe's children curs'd
With lucre's universal thirst;
The rage that sweeps my sons away
My baneful gold shall well repay.

Africa's gold was its manpower, and, by the closing years of the eighteenth century, the rising strain of abolitionist sympathy had blended with romantic naturalism to depict a vanquished African Eden and an exiled native son. Thus Roscoe (1787:10) writes of the blissful state from which the royal Cymbello is snatched by the slave-traders:

Lord of his time, the healthful native rose,
And seiz'd his faithful bow, and took his way
Midst tangled woods, or over distant plains,
To pierce the murd'rous Pard; when glowing noon
Pour'd its meridian fervours, in cool shades
He slept away th'uncounted hours...

The garden was overtaken by a "foul plague" from Europe--slavery--and "Nature recoiled, and tore with frantic hands her own immortal features" (1787:12). Disease and despoliation follow: Southey's (1815:39) invocation of the "Genius of Africa" recounts the violation of the enchanted landscape. Maternal Africa is despoiled, her offspring torn from her breast by slavery:

Ah heed the mother's wretchedness
When in the hot infectious air
O'er her sick babe she bows opprest,
Ah hear her when the Traders tear
The drooping infant from her breast!

Here we encounter a theme that links the romantic poetry of the time to the accounts of famous travelers like Mungo Park, a theme that was to shape the imperial vision of Africa. It is the myth of a continent bereft of its virile manhood, exiled from Eden, awaiting the restorative attentions the heroic white man. The suffering abandon of Africa cultivated in such romantic poetry, especially when in the service of abolition, provided fertile ground for an ideology of colonial healing.

The Healing Mission

The rhetoric of the first generation of British evangelists in South Africa was to make effective use of the theme of Africa as savage and suffering. Robert Moffat, father-in-law of David Livingstone and illustrious pioneer of the London Missionary Society [LMS] among the Tswana, once addressed a large and admiring philanthropic public as follows (1842:616):

Africa still lies in her blood. She wants...all the machinery we possess, for ameliorating her wretched condition. Shall we, with a remedy that may safely be applied, neglect to heal her wounds? Shall we, on whom the lamp of life shines, refuse to disperse her darkness?

Thus did the metaphors of healing justify "humane imperialism," making of it an heroic response rather than an enterprise of political and economic self-interest.

Is it surprising, then, that those responding to this call should think of their mission in medical terms? Writes David Livingstone (1857: 5): "I soon resolved to devote my life to the alleviation of human misery...and therefore set myself to obtain a medical education, in order to be qualified for that enterprise." While Livingstone was the first, and for many years the only medically trained missionary among the Tswana, his colleagues all provided some medical aid to their would-be converts (Seeley n.d.:75).¹ For the early evangelists conceived of themselves as restorers both of body and spirit, bearers not only of salvation, but of a healing civilization.

Within that civilization, however, medicine remained, at least in the middle decades of the nineteenth century, a relatively unrigorous and speculative form of knowledge. While there had been pressure on the state to regulate the profession for several decades (Turner 1959:154), access to formal training remained open to the likes of Livingstone, who started his working life as a piecer in a Scottish mill--though we are told that he almost failed to gain the licence of the Faculty of Physicians and Surgeons in Glasgow in 1840 because of his advocacy of the stethoscope, an instrument whose usefulness his examiners disputed (Gelfand

1957:24). Livingstone had The Lancet sent to him during his years in the field so that he might keep abreast of innovations; the ethos of rational discovery was as alive in respect of the "body space" of medicine as it was in the domain of geography. Yet the pharmacoeopia at his disposal consisted mainly of herbal compounds, emetics, and purgatives which he himself saw as close enough to Tswana medicaments to warrant his borrowing the latter to enhance his own stock (Gelfand 1957:63; Seeley n.d.: 79; Livingstone 1857:692f).

As this suggests, the salience of medical practice in the early mission did not arise from its indisputable and universal status as science. This is confirmed by Livingstone's own reflections on the similarities and differences between European and Tswana healing, presented to us most succinctly in his famous dialogue with a Kwena healer (1857:25; see also [ed Schapera] 1960:239f).² The conversation is ostensibly evidence of the fallacious reasoning of the superstitious mind. But, as the following extract demonstrates, the text is structured to convey a more ambivalent message:

MEDICAL DOCTOR:...you can not charm the clouds by medicines. You wait till you see the clouds come, then you use your medicines, and take the credit which belongs to God only.

RAIN DOCTOR: I use my medicines, and you employ yours; we are both doctors, and doctors are not deceivers. You give a patient medicine. Sometimes God is pleased to heal him by means of your medicine; sometimes not--he dies...When he is cured, you take the credit of what God does...When a patient dies, you don't give up trust in your medicine, neither do I when

the rain fails. If you wish me to leave off my medicines, why continue your own?

MD: I give my medicine to living creatures within my reach, and can see the effects, though no cure follows; you pretend to charm the clouds, which are so far above us that your medicines never reach them...Could you make it rain on one spot and not on another?

RD: I wouldn't think of trying. I like to see the whole country green...

Livingstone concludes the dialogue with a remark about the Tswana genius for argument; and, to be sure, it is he who has had to shift ontological ground in the exchange. The parallel use of the term "doctor" seems to reinforce the logical equivalence of the two positions. This conversation, presented in varying versions in Livingstone's writings, must surely be read as a rhetorical device in which the author rehearses what he was beginning to see as the intellectual impasse of the mission. It is not mere evangelical zeal that prevents him from asserting the indisputable superiority of medical science. At the time, biomedical knowledge had no clear hegemony and, in the African interior, its practitioners could not be confident that their ability to deal with serious illness exceeded that of their native counterparts (cf. Jeal 1973:17).

Indeed, if healing was salient on the colonial frontier, it was as a technique of civilization, carrying with it a pervasive philosophy about health and contagion, propriety and degeneracy; about the relationship of bodies and contexts, matter and morality. Ironically, while they continued to foster the image of African affliction, nineteenth-century

missionaries acknowledged that Tswana populations tended to be "remarkably" free of disease (Seeley n.d.:81; Willoughby n.d.[1899]).³ In the eyes of the churchmen, it was their spiritual "suffering"--their "sentence of death"--that was at issue; and this was a function of their lack of self-determination, their filthy habits, and their brazen nakedness. The unclothed heathen body posed an especially acute threat to the fragile colonial order, and became something of an obsession with the evangelists. The latter soon declared that it was impossible to open up a spiritual discourse with the Tswana, who seemed to have hopelessly "carnal views to all spiritual things" (Broadbent 1865:178), and were captivated by the white man's goods and techniques. So, instead, the whites commenced their reform of the native person from outside, working on the humble terrain of everyday practice. Here, in the name of decency, cleanliness, and health, they attempted to make the Tswana into Protestant persons, molded by the cultural forms of empire.

Contemporary mission correspondence gives insight into the disquiet which underlay the industrious effort to enclose the African body. It also shows how the churchmen tried to intervene in the uncontained physicality that seemed to pervade the natives' life, from their techniques of production and reproduction to their unruly architecture and undisciplined speech (Comaroff & Comaroff n.d.:Chap.8). Take the following passage from the writings of Moffat (1842:287):

As many men and women as pleased might come into our hut, leaving us not room even to turn ourselves, and making every thing they touched the colour of their greasy red attire... They would keep the housewife a perfect prisoner in a suffocating atmosphere, almost intolerable; and when they departed,

they left ten times more than their number behind--company still more offensive.

This may have been a world not yet informed by bacteriology, but there was a persistent association of the African body with noxious organisms that threatened to invade the inviolable world of white order. The image of the infested, "greasy" native--indistinguishable from his pestilential surroundings--had gained currency in the texts of travelers and anatomists in the late eighteenth century. The expression probably derived from the use, especially in the hottest and driest regions of Africa, of animal fat as a moisturizing and beautifying cosmetic. But the epithet carried other derogatory associations. It suggested a body surface that was porous, dirty, and damp; that "gave off" contagion and odor to those with whom it came into contact. Like the "grotesque body" of renaissance representation, the native person was "never closed off from either its social or ecosystemic context" (Stallybrass & White 1986:22). Nothing could have been further from the discrete, sanitized, conserving individual of the mission ideal. On the African colonial frontier, the "lubricated wild man of the desert" contrasted with the "clean, comfortable and well-dressed believer" as did "filthy" animal fat and skin with the "cotton and woollen manufactures of Manchester and Leeds" (Hughes 1841: 523). Creating a need for "healthful" attire was also a self-conscious effort to hitch Africans to the European commodity market, itself perceived as a moral order with cultivating effects (Moffat 1842:605; Livingstone 1857:34). Skin costume was "disgusting" because it failed to separate mankind from bestial nakedness, and could only foster immoderate emission and disease. Moffat (1842:503) writes of the Tswana:

The child, as may be seen, is carried in a skin on the moth-

er's back, with its chest lying close to her person. When it requires to be removed from that position, it is often wet with perspiration; and from being thus exposed to cold wind, pulmonary complaints are not infrequently brought on.

The style of writing, here, objectifies "native habit," describing it in distancing, almost subhuman terms.

Such observations reveal the cultural logic behind the civilizing mission. They also give insight into the images of Africa relayed to a large and diverse reading public in Britain. When Moffat published his Missionary Labours and Scenes in 1842--it was dedicated to Prince Albert --he was a heroic figure whose account was eagerly awaited by adventurers, evangelists, and imperialists (1842 [1969]:x). But more influential by far was Livingstone, whose writings enjoyed enormous circulation, both in the scientific and general communities. Interestingly enough, he invoked images of disease very similar to those of his medically untrained colleagues: of illness as the product of exposure and contagion, the result of bodies improperly set off from each other and from the natural elements. Of course, these constructs underpinned European etiological theories of the period, which were still part of the "externalizing discourse" (Young 1978) of humoral pathology. Vital bodily processes were widely held to depend upon outside stimuli--especially heat, a property dense with social and moral value.

These constructs confirmed established beliefs about the debauched condition of Africa, and they were continually reinforced by the "evidence" collected in the natural laboratory along the colonial frontier. Thus Livingstone ([ed Schapera] 1961:129) asserted that conditions such as inflammation of the bowels, rheumatism, and heart disease seemed to

decline among the Tswana with the adoption of decent European dress. And he found particularly appealing the current theory of "noxious miasmus," in terms of which fever was caused by the inhalation of emanations from "marshy miasmata," "effluvia, poisons, and human ordure" that fermented into a substrate of contagion in moist, densely vegetated situations (Carlson 1984:38). Livingstone thought Africa especially hospitable to such dank rottenness, and imagined that he had found the cause of the virulent malaria that so threatened whites on the dark continent (Gelfand 1957:297; [ed Schapera] 1960:24). These conclusions were transmitted to The Lancet (1861) by the Hydrographer to the Admiralty, the intense medical interest in tropical fevers at the time being an apt example of the marriage of imperial concern and biological speculation.

But beneath the "theory" lay a familiar set of associations: disease arises from dirt, and dirt comes of the confusion of bodies and bodily secretions, especially in torrid climes, which open the pores and encourage a process of organic and moral degradation. Yet the image of decay never totally eclipsed the earlier romantic vision of the "healthy native" (see above). Thus Livingstone ([ed Schapera] 1960:24) was also challenged by the fact that, by comparison to white men, black women seemed to display a much lower mortality from malaria. He speculated (with fellow evangelist, John Mackenzie) that this was due to the latter's unusually heavy menstrual discharge, which flushed the poison from their bodies, presumably to swell the tide of effluvia in which the disease was held to grow. In terms of the humoral pathology that obtained in Britain in the mid-nineteenth century, fever was associated with excess, and menstruation was regarded as a "natural" form of therapeutic bleeding (Jones n.d.:81). Again, etiology found meaning in immoderate

sexuality, the uncontained body of the African female being a tangible threat to European male viability. Gilman (1985:231) reminds us that the black woman served widely as an icon of sexually transmitted illness in the late nineteenth-century European imagination. At the time, in fact, some medical opinion claimed that syphilis was a form of leprosy which had long been present in Africa and had spread into Europe in the Middle Ages.

Not surprisingly, venereal disease was another of Livingstone's explicit concerns. Though he noted its presence among the Tswana, his faith in the luxuriance of black fertility led him to the conviction that syphilis was "incapable of permanence in any form in those of pure African blood" ([ed Schapera] 1961:128). His optimism was ill-founded. The disease was already following the path of migrant laborers, who left the region for the colonial towns to the south. By the turn of the century, communities of black workers were being seen as cesspools of syphilis in the white man's cities, calling forth the regulatory intervention of public health authorities (Seeley n.d.:124). But, once again, Livingstone's misperception was not random. It reinforced the contours of a well-established European mythology. In the late nineteenth-century vocabulary of sexuality, miscegenation was a particularly threatening source of pathology, a cause of decline in white populations at home and abroad (Gilman 1985:237). It was also a matter of particular sensitivity in the racially marked order of domination established along the frontier. Albeit unwittingly, mission medicine reinforced the ideological bases of this order by giving it an alibi in the defiling black body.

As this implies, missionary healing had far-reaching effects--although it was more successful in making the blacks into subjects of empire than citizens of Christendom. With the colonial state ever more vi-

sibly at their back, the churchmen had a considerable impact upon African modes of production, dress, and architecture. The natives, in turn, strove to gain some control over the evident power of the Europeans--power residing in diverse objects and practices, from guns and mirrors to irrigation and literacy. In the Tswana world, power existed in its most condensed form in the diviner's medicine, and they were soon asking the nonconformists for concoctions to make them read, to promote conception, or to ensure successful hunting (Livingstone 1857:146, 622; Moffat 1842:599). In seeking the white man's healing, they attempted to imbibe something of his tangible might. And while his treatment did little to displace indigenous magic, it was so much in demand that the evangelists were sometimes driven to despair.⁴ But they encouraged the enthusiasm, for they believed that the African was most impressionable on the "bed of affliction"; and they seldom missed an opportunity to give moral instruction along with their treatment (Seeley n.d.:82f). They also seem to have charged "the wealthier natives" for their potions and services, hoping thereby both to cover costs and to teach a useful lesson in monetized value.⁵

Indeed, western medicine (at least of the sort provided by the missionaries) was one of several civilizing commodities by which the church ushered the Tswana into the marketplace. Perhaps the most blatant example of how this was done is provided by the Rev. Roger Price. In 1880, Price set up a flourishing "hospital" at his station at Molepolole and, from the proceeds, eventually bought himself a farm and handsome herd of cattle.⁶ However unsystematic missionary treatment might have been, it projected a logic drawn from evolving biomedicine, and shared by other facets of the culture that colonized nineteenth-century Africa. In this

vision, the unit of production was the individual, and values such as health, wealth, and salvation were moral achievements to be secured by hard labor, effective management, and rational consumption. Illness was no longer a sign of disrupted social relations. If not caused by natural accident, it was the mark of personal indigence or self-abuse.

In the South African interior of the late nineteenth century, then, the evangelists were the bearers of an expansive European worldview. Their mission was regulated neither by government nor by professional monopoly. But, as they ministered to the peoples of the interior (even to isolated white settlers),⁷ they introduced a coherent mode of seeing and being, a specific definition of person, body, health, and society that anticipated the culture and economy of the colonial state.

The Emergence of Colonial Public Health

The era of the healing ministry was in fact coming to an end. The expansion of white settlers into the interior took on a totally new momentum with the discovery of diamonds near Kimberley in 1867. An influx of capital fueled the burgeoning market for goods and labor, and, by 1871, Britain had annexed the diamondfields and surrounding region, including land that was claimed by the Southern Tswana. In 1895, after a long period of political struggle among Boers, Britons, and blacks, Southern Bechuanaland was transferred to the Cape Colony, and the Tswana territories to the north became a British Protectorate. As part of its new governmental machinery, two medical officers were appointed, and a military hospital was built at the administrative headquarters at Mafeking.

At the level of local practice, biomedicine rapidly ousted missionary healing, its hegemony now being underwritten by the state. Although

colonial medical officers provided little actual health care for the Tswana until well into the twentieth century (Seeley n.d.:125), their appointment was accompanied by immediate restrictions on the churchmen. By the end of the nineteenth century, government officials were actively discouraging unqualified evangelists from giving treatment where the services of a District Surgeon were available, and, in 1894, the LMS issued instructions that no charge should henceforth be levied for care offered by its untrained agents.⁸ In their letters from the field, the latter became increasingly apologetic about their healing techniques, bemoaning the burden of the work, their lack of qualifications, and the dearth of "Christian medical men."⁹ But there is also the suggestion that, along with their resistance to overrule, some of the peoples of the interior resisted government medicine. The missionaries note that they were frequently consulted--by blacks and whites--in preference to the resident District Surgeon.¹⁰

The first objective of colonial officials was to ensure the well-being both of government employees and of the expanding "European" communities in the interior. But the sine qua non of white welfare in this context was its thoroughgoing dependence upon black labor. Thus the control of the latter loomed large in the public health project from the start, official rhetoric expressing the contradiction built into the very constitution South African society--that "natives" be central to its economy yet marginal to its political and moral community. The defiling tropes used to distance and subjugate the black other came back to haunt the whites, whose material world was actually dependant on the proximity of native labor.

One of the earliest communications from the medical officer in Ma-

feking reveals the driving force of this contradiction. Writing of the need, in 1890, to enforce the Contagious Diseases Act in the "native location," he says: "The public should have some protection against the spread of syphilis which is frequently effected through the servants attending children as nurses."¹¹ In parentheses, this statement displays important refinement in lay medical usage: specific infections have replaced the more diffusely conceived contagion of an earlier epoch. But science still found its voice in the contradictory culture of colonization: infection continued to emanate from the black female body, a body more immediately threatening because it had been given entree into the enclosed white world. Indeed, the gateway to infection had become the innocent and vulnerable European infant, whose care, increasingly in the hands of African women, had brought blacks into the most private reaches of colonial life. Tellingly, the medical officer did not acknowledge the possibility that disease might be communicated by sexual congress across the lines of color, although this was an equally present reality of life in settler society. But miscegenation was an inadmissible challenge to the basic premise of inequality on which the entire society was founded: in modern South Africa, interracial sex would be known as "immorality" in everyday and legal parlance, robbing the term of all other meanings and implying a crime against humanity itself.

More important still, the report of the medical officer indicates how public health was to serve in the discipline of black populations whose ambiguous physicality was a source of both wealth and danger. Evidence of the relation of state medicine and social control exists--in highly graphic, literal form--in local historical records: the only mention of health facilities for Tswana in the Mafeking District at the turn of the century, for example, was that of the "gaol hospitals" atta-

ched to local police stations (Seeley n.d.:124). But this was merely a refraction of a more embracing disposition of government: Swanson (1977: 387) has argued that public authorities in South Africa at the time displayed a noticeable "sanitation syndrome"; a preoccupation with infectious disease that shaped nation-wide policies and practices of racial segregation, especially in the burgeoning cities. Of course, it was a disposition shared with other colonizing regimes (Lyons 1985; Headrick 1987; Cohn n.d.), one influenced by nineteenth-century European sanitary reform and discipline imposed upon indigent urban underclasses at home (Jephson 1907; Stedman Jones 1971; Foucault 1977).

The actions and interests of the government at the time certainly support Swanson's claim. In 1903, a commission was appointed in response to the felt need for a coherent "native policy"; its members investigated current African "life and habits," and made recommendations for the control of labor relations, taxation, and education. In addressing the problems of building a stable workforce, their report showed a preoccupation with black "hygiene," especially amongst migrant populations. Where, before, local health officials had been concerned to limit the threat posed by female servants in the white household, the national administration now focused on the promotion of the "health" and control of black males in the urban workplace. The specter of disease flooding the white cities along with unregulated African labor lurked just below the surface. Nor was any of this new: as early as 1881 Sir Theophilus Shepstone, influential Secretary for Native Affairs in Natal, had called the mushrooming multiracial towns, with their populations of unemployed or casual native labor, "the pest spots of our body social and political" (Swanson 1977:391). Not surprisingly, the 1903 Commission kept returning

to the topic of sanitation, urging that it be given priority in the education of blacks, and that those responsible for transporting and housing migrant workers pay special attention to the control of their toilet arrangements (South Africa 1905:73).

In fact, as Swanson (1977:390) shows, the social and architectural character of South Africa's multiracial cities were already being transformed in response to contagion and medical emergency. The outbreak of bubonic plague in 1900 focused more diffuse notions of danger: while blacks contracted the disease in smaller numbers than did whites or so-called "coloureds," they were immediately targeted as the source of infection, to be expelled from the body public. The Medical Officer of Health in Cape Town, for one, declared that "uncontrolled Kafir hordes were at the root of the aggravation of Capetown slumdom brought to light when the plague broke out" (Swanson 1977:392). As an immediate measure, sanitary inspectors were dispatched to rout out such "scattered nests of filth" throughout the city, but the longer-term solution was to be nothing less than the mass removal of the black population (Swanson 1977:393). In the name of medical crisis, a radical plan of racial segregation was passed under the emergency provisions of the Public Health Act. It established an enduring system of black, periurban "locations" that were to spread from the cities of the Cape Province to become an enduring feature of the South African landscape. Swanson shows how powerful the sense of medical menace really was: inseparable from the fear of an unregulated "native" presence in the white world, it repeatedly overcame all efforts to resist the social engineering of the regime.

What was the role in all this of the mission? The evangelists were forced to adapt their project to changing circumstances; to the fact that their field had become the rural periphery of South Africa, and now

served as a recruiting ground for migrant labor. In the upshot, formal education became their primary civilizing technique; it is, therefore, in the provision of native schooling that we must trace their impact upon the everyday world of black South Africans in the early twentieth century. As we have seen, the churchmen had long participated in a moral discourse about pollution and reform. But they, too, were children of their time, and their activities also seem to have been organized by an increasingly precise biomedical conception of infection and hygiene. At the turn of the century, their letters display a growing anxiety about effluent and the management of the dirt generated by populations around their stations. It is no coincidence that, when Rev. Willoughby arrived to take command of the mission at Phalapye (Bechuanaland Protectorate) in 1894, he found that the "W.C." (lavatory) built by his predecessor was "the most prominent object" on the skyline.¹² It is also noticeable that specific names were now frequently being given to diseases in missionary correspondence: generic "fever" gave way to "malaria" or "typhoid," conditions which, although rare in Southern Africa, were invoked as a rationale for replacing indigenous residential arrangements with more "hygienic" alternatives (Willoughby n.d.:21).

These orientations became particularly evident in the mission school itself. In writing a proposal for the establishment of a training college among the Tswana, LMS evangelists devoted three quarters of their report to issues of hygiene, sanitation, and the regulation of daily ablutions.¹³ And, when it was actually founded in 1904, the Tiger Kloof Native Institution (initially for male students alone) was equipped with accommodation specially designed for the close supervision of toilet arrangements (Comaroff & Comaroff n.d.:Chap.9). Furthermore, dor-

mitory chiefs ensured that pupils made their beds "in that neat and uniform manner that prevails in some hospitals"; and a "General Officer of Health" did weekly inspections of student quarters (Willoughby 1912:90). Rules of dress, comportment, and table manners all reinforced these rituals and routines which, even more relentlessly than the formal curriculum, worked to create persons of individual, robust, and uniformly regulated identity. Their stated goal was to instil in the native inmates "moral backbone," the wherewithal to live "clean and healthy" Christian lives (Willoughby 1912:70). Although not altogether intentionally, the desire of the churchmen to produce self-controlled and wholesome subjects resonated well with the politico-economic interests of the state: the LMS strove to mold just the kind of disciplined worker of whom policy-makers dreamed.

It is no wonder that, over the years, student resistance in South African mission schools would often protest against regimes of bodily discipline. In the Tswana case, its earliest expression--already in the 1890's--took the form of a refusal to comply with sanitary prescriptions, particularly the use of the "privy." It was a practice the black youths deplored, ironically, as "defecation in the house."¹⁴

Conclusion

Medical icons are no more "real" than "aesthetic" ones. Like aesthetic icons, medical icons may (or may not) be rooted in some observed reality. Like them, they are iconographic in that they represent these realities in a manner determined by the historical position of the observers...Medicine uses its categories to structure an image of the diversity of mankind...The power of medicine, at least in the nineteenth century,

lies in the rise of the status of science.

Sander L. Gilman (1985:205-6)

I have tried to show something of the dialectical interplay of nineteenth-century medicine and the colonizing project in South Africa. The two were in many senses inseparable. Both were driven by a global sense of man that had emerged out of the enlightenment. Both concerned the extension of "rational" control over domains of nature that were vital and dangerous. While ostensibly an autonomous field of knowledge and practice, medicine both informed and was informed by imperialism, in Africa and elsewhere. It gave the validity of science to the humanitarian claims of colonialism, while finding confirmation for its own authority in the living laboratories enclosed by expanding imperial frontiers.

While imperialism and biomedicine have not been engaged in precisely the same reciprocal relationship everywhere, there is any amount of evidence of their elective affinity. Whatever else it might have been, nineteenth-century western medicine had a powerful ontology, finding confirmation, in bodies at home and abroad, for the universalist claims of European reason. Neither did its role in this regard end with formal colonialism. Notwithstanding their contribution to the human condition, biomedical knowledge and technology have played a large part in sustaining the economic and cultural dependency of the nonwestern world. What is more, we are still all too ready, in the west, to seek the origins of virulent disease in the uncontained nature of "others"; in the undisciplined sexuality of Africa, for example. In that regard, it might be worthwhile reminding ourselves that the preserved relics of the Hottentot Venus are still on display at the Musee de l'homme!

NOTES

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1. See also Willoughby to Thompson, 21 July 1894 [CWM Archives, LMS Home Correspondence (South Africa) 51-1-D].
 2. Similar attempts to "reason" with rainmakers are recorded by several other evangelists from this field (Comaroff & Comaroff n.d.:Chap.6).
 3. In contrast, mission correspondence gives clear evidence of the toll taken on the health of evangelists and their families; the death of infants and women in childbirth was particularly high, but dysentery, unidentified "fever," and accidents also took many lives. See, for example, Broadbent to WMMS, 31 December 1823 [WMMS Archives, Home Correspondence (South Africa) 300]; Archbell to WMMS, 20 March 1832 [WMMS Archives, Home Correspondence (South Africa) 303]. There is also evidence that faithful care was extended to ailing missionaries by their black attendants (Moffat 1842; Gelfand 1957:276ff).
 4. See, for example, Livingstone ([ed Schapera] 1961:14); Willoughby to Thompson, 21 July 1894 [CWM Archives, LMS Home Correspondence (South Africa) 51-1-D].
 5. Brown to LMS, 9 July 1894 [CWM Archives, LMS Home Correspondence (South Africa), 51-1-D].
 6. Brown to LMS, 9 July 1894 [CWM Archives, LMS Home Correspondence (South Africa), 51-1-D].

7. Brown to LMS, 9 July 1894 [CWM Archives, LMS Home Correspondence (South Africa), 51-1-D]; Willoughby to Thompson, 21 July 1894 [CWM Archives, LMS Home Correspondence (South Africa) 51-1-D].
8. Willoughby to Thompson, 21 July 1894 [CWM Archives, LMS Home Correspondence (South Africa) 51-1-D].
9. Willoughby to Thompson, 21 July 1894 [CWM Archives, LMS Home Correspondence (South Africa) 51-1-D].
10. Brown to LMS, 9 July 1894 [CWM Archives, LMS Home Correspondence (South Africa), 51-1-D].
11. Great Britain (1891-2); see also Seeley (n.d.:124).
12. Willoughby to Thompson, 22 September 1894 [CWM Archives, Home Correspondence (South Africa), 51-2-B].
13. Willoughby to LMS Bechuanaland District Committee, 1 February 1898, "Proposal for the Establishment of an Institute for the Teaching of Bechuana and Other Native Youth" [CWM Archives, Home Correspondence (South Africa) 55-1-A].
14. Willoughby to LMS Bechuanaland District Committee, 1 February 1898, "Report on a Visit to Certain Native Boarding Schools in South Africa" [CWM Archives, Home Correspondence (South Africa) 55-1-A].

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