



# Cashing in on Shame: How the Popular “Tradition vs. Modernity” Dualism Contributes to the “HIV/AIDS Crisis” in Africa

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## Abstract

Orthodox descriptions and treatment of Africa’s HIV/AIDS crisis are subject to robust controversy among research experts and clinicians who raise questions about the tests used to define the crisis, the statistics used to document the crisis, and the drugs marketed to curtail it. Despite this critical scientific corpus, fanciful misconceptions about chronic illness and mortality in Africa are sustained by ahistorical and apolitical analyses misrepresenting Africans’ contemporary morality, social reality, and public health care needs.

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## I. The Problem

The crisis of HIV/AIDS in Africa, and its \$100 billion global response to date, is best understood as a contemporary example of a tendency in the international arena to misrepresent African social reality with apolitical and ahistorical analyses that incorrectly presuppose universal projections about family structure, social responsibility, and moral propri-

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ety.<sup>1</sup> This article attempts to explain why chronic illness and premature mortality in Africa today are currently perceived, publicized, explained, and treated in the peculiarly dysfunctional way that has been dictated by the orthodox HIV/AIDS medical community over the last two decades.

The orthodox treatment of the HIV/AIDS crisis in Africa is analyzed here as a microcosm of more widely recognized negative impacts that globalization has had on African nonelites.<sup>2</sup> Here we examine how the global effort to fight AIDS in heavily indebted low-income countries reproduces a familiar pattern of shifting hitherto hidden costs of expanding capital from the sphere of corporate responsibility to the moral domain of the individual. Efficiency in the treatment of public health problems is among the most serious sacrifices consequent upon this shifting of blame; for today's medical researchers and health care agents in Africa are artificially constrained in their policy and decision making by the priorities of multinational pharmaceutical companies on one hand, and by stereotypes about Africans and their current circumstances and lifestyles on the other.

Certainly "AIDS *is* real" in Africa, as the saying goes. But in light of the amorphous definition of AIDS used in an official capacity for surveillance (reviewed in section 2), it is not altogether obvious that everybody discussing HIV/AIDS is always talking about the same or nearly the same thing, be they medical practitioners or pathogenetic researchers, public health authorities, community activists, social rights advocates, lobbyists, pharmaceutical agents, or panelists at world health symposia. The HIV/AIDS phenomenon lends itself to various interpretations, and these conflict in their implications for intervention and cure. At root, the problem with the professionally popularized discourse about HIV/AIDS boils down to the twin sins of oversimplification and hasty generalization.<sup>3</sup>

The international health care agenda currently set for Africa appears not to be fulfilling its goals, as observed in June 2005 by the UN Secretary General: "AIDS is spreading faster than ever before . . . on every continent . . . despite all the money being spent to defeat it."<sup>4</sup>

The disparity that exists between what is called "HIV/AIDS" in Africa and the notion of an "HIV/AIDS crisis" in Africa sustained in the global arena as a focus of humanitarian concern will be introduced by reviewing some facts in section 2 about the different ways

1. Cultural geographer Pat Stamp (1989: 124) has advised against treating "the colonial past as over and done with. . . . [D]enying its relevance to explain contemporary problems in development . . . conspires to reinforce a vision of a backward Africa, where present dilemmas have no history other than placeless African 'tradition.' . . ." The international community's responses to Africa's "HIV/AIDS crisis" typifies a general tendency to ignore this advice, thereby exacerbating the continent's overall burden of disease, as I argue here.

2. A wide literature documents the negative social effects of structural adjustment program designs specifically in African countries, and the egregious imbalances in trade and control over resource flows more generally in the global economic order, for example, J. E. Stiglitz (2002) and W. K. Tabb (2002). For an account of the political economics of disease inherited by post-apartheid South Africa where half the people under apartheid were not counted in government censuses and lived in conditions more septic than herded livestock, see M. Wilson and M. Ramphele (1989: 16-17).

3. For example, *The Guardian Weekly* (May 20-26, 2005: 5) presents its readers with a false dilemma polarizing beetroot, garlic, and lemon juice therapy vs. the doctrine purveyed by Mark Heywood of the Treatment Action Campaign by which ARVs will wipe out HIV/AIDS and alone fulfill the fundamental human right to health for all South African citizens ("Dr. Rath's Vitamin cure' divides fight against AIDS," by S. Boseley).

4. Kofi Annan addressing a special forum on HIV/AIDS of the UN General Assembly, broadcast on *BBC World Service News* June 3-4, 2005.

HIV/AIDS is defined worldwide, and in section 3 by exploring the way that HIV/AIDS prevalence rates have been used as indicators to measure degrees of impoverishment and physiological breakdown resulting from economic Structural Adjustment Programs of the 1980s. Next, section 4 surveys contributing factors to HIV/AIDS in Uganda that have not been widely publicized; section 5 reviews the World Health Organization's use of statistics in broadcasting HIV prevalence rates and AIDS-related deaths in Africa; section 6 reviews the divergent means of testing for HIV/AIDS in Africa; and section 7 discusses the performance of pharmaceutical companies and their products in Africa from the perspective of African public health agents. Appendix A reviews common misconstruals about what is typical in African attitudes toward sex, and Appendix B lists the seminal technical papers in the scientific literature that form the foundations in research for the controversies about HIV/AIDS in Africa discussed throughout this essay.

On one side of a repressed but nonetheless virulent controversy, AIDS in Africa is assumed to be caused by prolonged exposure to an overwhelming number of distinct organisms that individually may be harmless.<sup>5</sup> A contrary conviction, that hedonistic and outmoded sexual habits are singularly linked to the high rates in Africa of disease and premature death, is regarded by some to be apparently feasible and widely received not because it is supported by an explanatory theory of a specific pathogenesis backed by confirming evidence, but rather because of well-entrenched Victorian stereotypes that routinely contrast African self-destructive *traditions* with the enlightened correctives supplied by Anglo-American *modernity*.<sup>6</sup> By reconsidering the impact of this latent dichotomy, one can put into perspective the widespread and persistent yet scientifically disputed belief that there exists a single and deadly venereal disease pervasive in Africa, perpetuated chiefly by the hedonistic tendencies that dominate social life on the steamy Dark Continent, which requires (costly) outside intervention to wipe out.<sup>7</sup> Resource distribution within the global health care and medical research industries does not escape the influence of such ideological legacies misrepresenting the worst-off populations that these industries are presumed to serve (Gilman 1985; JanMohamed 1985). Myths about African self-destructive incompetence tacitly ratify monopolizing control over the funds committed to curing the HIV/AIDS crisis from a distance. Whereas if African scientists, community experts, and public health professionals had more of a say in defining what is wrong, and more control over what is done to fix it, then the overall yield of investment would likely be a more germane, more varied, and more effective response to Africa's endemic chronic illnesses, contagious diseases, and high mortality rates currently dubbed HIV/AIDS.

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5. This view was first expressed by Kary Mullis, who won the 1993 Nobel Prize in Chemistry for developing the polymerase chain reaction (PCR) method of tracking HIV (quoted by S. Lang 1998: 629). His view is still shared today among biochemists, pathologists, virologists, and clinicians; see P. Duesberg, C. Köhnlein, and D. Rasnick (2003) and A. Hässig et al. (1998).

6. B. Ahlberg (1992), I. DeVincenza (1994), B. J. V. Voorhis et al. (1991), N. Padian et al. (1997), R. H. Gray et al. (2001), E. Papadopolus-Eleonus et al. (2002), C. L. Gesheker (2003) present evidence disconfirming the hypothesis that HIV is easily transmitted sexually. See Appendix A.

7. Currently a spokesman for the global AVAC (AIDS Vaccine Advocacy Coalition), devoted to fundraising for HIV-vaccine research, reports that \$700 million is inadequate and is seeking over one billion dollars as soon as possible for multiple vaccine production worldwide (*VOA News* May 30, 2005). See footnote 29.

## 2. What Is This Thing Called HIV/AIDS?

“AIDS” around the world enjoys various connotations and different definitions that get conflated without notice. This yields confusion and error at various levels of research critique, product development, health care delivery, political lobbying, public health advocacy, and civic health education. In 1985 AIDS in Africa was defined officially by the World Health Organization (WHO) without reference to any HIV antibody or other test result, and without reference to any specific disease.<sup>8</sup> Yet “AIDS” and “HIV/AIDS” are often used interchangeably with “the HIV disease.”<sup>9</sup> African virologist James Brandful remarked that the most troubling misconception he observes in the public domain is the belief that there is only one microbial form or type of “HIV” that is singly responsible for causing “AIDS” uniformly everywhere, for the reality as measured throughout Africa does not sustain this common assumption. Instead, “the current genomic profile of the HIV is not only widely variant worldwide, but in some regions pure line strains originally observed are now co-existing with recombinant strains which are getting more complex, for example in Ghana.”<sup>10</sup>

At the WHO conference in 1985 at Bangui, Central African Republic (CAR), public health experts and epidemiologists were organized in part by personnel of the Centers for Disease Control and Prevention (CDC) from the United States and convened specifically to overcome the problem of studying chronic immuno-suppression in Africa in regions where laboratory procedures are persistently frustrated by lack of infrastructure (e.g., minimal or absent road networks, interrupted electricity supply, and irregular refrigeration).<sup>11</sup> Since the Bangui conference, the WHO has defined AIDS in Africa operationally by one or more of four clinical symptoms: in a thirty- to sixty-day period, if the individual presents 10 percent or more body-weight loss, chronic diarrhea, cough, persistent fever without evident cause, swollen lymph glands at two or more sites, and anemia, then he or she has AIDS. Different countries’ health ministries depend upon one or more of these defining symptoms, some with and others without supplementary antibody test results. But there is no uniformity in

8. World Health Organization (1986). See E. Papadopoulos-Eleopoulos et al. (1995), R. Richards (2001a, 2001b), and section 6 below. Professor A. B. Akosa, Director-General of Ghana’s Health Service and president of the Commonwealth Medical Association, also stresses that the standard HIV/AIDS diagnosis in GHS hospitals and clinics depends upon the “rapid test” as well as a follow-up, along with other diagnostic criteria (in conversation April 13, 2005).

9. A pathological *syndrome* is not a single *disease* yet “AIDS” is synonymous with both (C. Gesheker 2003: 75).

10. Dr. James Brandful, *Ibid.* (2003) in conversation. “Some of these strains may be coming from neighboring countries, because from recent samples collected in Northern Ghana, types have been found that were first reported in Burkina Faso, on Ghana’s northern border. But once this strain is in co-circulation with other variants, it is possible that recombinations will occur and various more complex variants will begin to emerge unique to the situation in Ghana.” See section 2.

11. “Joseph McCormick and Susan Fisher-Hoch were physicians from the U.S. Centers for Disease Control (CDC) and instrumental in convening the 1985 WHO conference in CAR that produced the Bangui definition of AIDS in Africa. The CDC had just adopted the HIV/AIDS model to explain immune disorders found among American drug injectors, transfusion recipients, and a small cohort of promiscuous urban gay men” (C. Gesheker 2003: 75; 2004: 12).

the diagnosis of AIDS for the African continent.<sup>12</sup> This is a chief reason why some medical researchers and clinicians are provoked to conclude: “The Bangui definition simply relabels symptoms of poverty as AIDS.”<sup>13</sup>

The definition of AIDS provided by the CDC is different in G-7 countries from the way AIDS used to be defined and diagnosed around Africa since 1985 (Papadopoulos-Eleopolus et al. 1995). It is not clear at what exact point the CDC reverted to some kind of laboratory test as a necessary condition for AIDS diagnosis in Africa, nor what impact this change in policy has had, given that every diagnostician and epidemiologist may not be following stipulations of the changing definition with equal rigor (see, e.g., C. Fiala 1998, 2003). The world’s top-level HIV/AIDS research community now assumes a universal definition of the term “HIV/AIDS” developed by the CDC’s following formula: “. . . AIDS in an adult or adolescent age 13 years or older is the presence of one of 25 conditions indicative of severe immuno-suppression associated with HIV infection, such as *Pneumocystitis carinii* pneumonia (PCP), or HIV infection in an individual with a CD4+ T cell count less than 200/cells per cubic millimetre of blood,” or both.<sup>14</sup> As to the types of disease a patient may contract and therefore be said to have AIDS, “anywhere from 24 to 29 have been listed in the definition, depending upon the year” (Lang 1998: 610).<sup>15</sup>

More than one test is required officially by the CDC definition (formerly these were ELISA and Western Blot), since any single test type has been deemed unreliable in isolation as an indicator of HIV presence.<sup>16</sup> For some critics, a hard-pressed point of concern about the testing aspect of the CDC definition (see section 6) is that patients have been observed yielding contradictory results when they undergo more than one type of assay test (Brandful 1997). Another controversial feature of the definition has been its use in diagnosing apparently healthy individuals as having “asymptomatic AIDS.” The level of CD4 cell count

12. E. Papadopoulos-Eleopolus et al. (1995a: prepublication typescript p. 7). Also see R. Richards (2001a) and C. Fiala (1998). In Ghana presently two recently developed tests are used by the Ghana Health Service: the “rapid test” (ELISA) and the standard Western Blot (WB) to back it up. But this has neither always nor everywhere been required by the WHO or UNAIDS in collating data for annual statistical reports, and not typical of the continent overall. For instance in 1991 Tanzania and Uganda recorded AIDS cases without reference to tests at all (Fiala 1998). “Many Africans who qualify for an AIDS diagnosis—perhaps as many as 70%—turn out to be negative when tested for HIV according to the Western Blot” (Gesheker, Mhlongo, and Köhnlein 2004: 10). On the recognized inadequacy of earlier generations of test kits, see N. Hodgkinson (1996: 358) where he refers to the 1994 study in Zaire by O. Kashala, et al. (1994) [“. . . ELISA and WB results should be interpreted with caution when screening individuals infected with *M. tuberculosis* or other mycobacterial species. ELISA and WB may not be sufficient for HIV diagnosis in AIDS-endemic areas of Central Africa where the prevalence of mycobacterial diseases is quite high.”]

13. C. Fiala (1998) interviewed by L. Scheff. Available online at <http://www.virusmyth.net>; C. Gesheker (1995).

14. National Institutes of Health. <http://www.niaaid.nih.gov/factsheets/evid-hiv.htm>.

15. In some of the early 1980s studies conducted in the gay subculture centralized at the San Francisco Health Club, if a subject had esophageal cancer but an HIV-negative antibody-test result he would belong to the control group, diagnosed with esophageal cancer. The same esophageal cancer, located a few millimeters away in the throat, together with an HIV-positive test result, would be diagnosed and studied with the group constituted by AIDS patients (Lang 1998, 2003: 61).

16. C. Johnson (2000). R. Richards (2001a, 2001b) stresses that these tests have never been designed for disease diagnosis, but were created and only ever approved by manufacturers and NIH for blood screening to ensure safety for hospital use in transfusions.



stipulated by the official CDC definition is not always appropriate for distinguishing “symptomatic” from “asymptomatic” AIDS in African populations.<sup>17</sup>

Critics of the HIV-AIDS causal hypothesis complain that the popularization of these definitions commits a threefold conflation of pathogenic retroviral *material* (HIV) with a dysfunctional immunity *syndrome* (AIDS) and also with the notion of a single *disease* (HIV/AIDS).<sup>19</sup> The chief error following from the misappropriation of these definitions that cascades into the public domain is the reference to “HIV” as if it were a single ubiquitous type of pathogen. In reality “HIV” is a family noun that now designates a wide and growing variety of subtyped mutations constituting pure strains as well as evolving recombinants that are undergoing change. No single form of HIV is found to be geographically universal, and in some regions it is changing over time. This is clinically significant because the distinct types vary radically in their potential harm and their susceptibility to vaccine and antiretroviral (ARV) interventions.

Although the Bangui definition does not involve reference to HIV-test results at all, its role in the literature has not been that of a mere formalism. The vagueness of this definition has been inherited by statistical reports of HIV prevalence rates and AIDS-related mortality that appear in publications and press statements released by the WHO and The Joint United Nations Programme on HIV/AIDS (UNAIDS) over the last twenty years.<sup>20</sup> For instance, consider the WHO’s recent press release estimating that “89 million Africans will become infected with HIV in the next twenty years if something is not done” (UN Bulletin broadcast on *BBC World Service*, March 5, 2005). Since “HIV” is synonymous with “AIDS,” and the Bangui definition of AIDS at different times and places both has and has not required HIV-antibody testing with varying degrees of reliability, the meaning of this UN projection remains utterly obscure to some pathologists and trainers in AIDS care and counseling (Gesheker et al. 2004).<sup>21</sup>

17. Some studies have shown CD4 cell counts of sick patients in Africa that were significantly higher than the level stipulated by the CDC definition (J. A. M. Brandful, et al. 1999). Also, unpublished data has shown CD4 cell counts of HIV-infected patients in Africa that were *lower* than the levels stipulated by the CDC definition and yet the patients were *not* symptomatic.

18. The HIV-AIDS causal hypothesis has been criticized for lack of evidential support and the fallacy of mistaking a correlation with a causal connection. It has been argued that the shortfall in theory results in part from a suppression of the eliminative-induction principle, which is a mainstay of empirical science, due to a failure to fund the investigation of rival hypotheses. See S. Lang (1995, 1996, 1998); P. Duesberg (1996a, 1996b); P. Duesberg and D. Rasnick (1998); P. Duesberg, C. Köhnlein, and D. Rasnick (2003). H. Bialy, former editor of *Bio/Technology* and *Nature Biotechnology*, claims: “HIV is an ordinary retrovirus. There is nothing about this virus that is unique. Everything that is discovered about HIV has an analogue in other retroviruses that don’t cause AIDS. HIV only contains a very small piece of genetic information. There’s no way it can do all these elaborate things they say it does” (*Spin* June 1992). Quoted on <http://www.virusmyth.net>.

19. C. L. Gesheker (2003: 75; 2004: 1). S. Lang (2003: 5960) exhibits at length the circularity in the official CDC definition, which renders the hypothesis “HIV causes AIDS” untestable, since it is true by definition and therefore, strictly speaking, lacking any empirical content.

20. C. Fiala (1998); C. Gesheker (2003); C. Gesheker et al. (2004); N. Hodgkinson (1996); P. Duesberg (1996b); P. Duesberg et al. (2003); S. Lang (1998); E. Papadopoulos-Eleopoulos (1995a); E. Papadopoulos-Eleopoulos et al. (1995b, 1998); V. Turner (1997).

21. Meanwhile, grassroots HIV/AIDS treatment advocates, who support a political platform with HIV/AIDS prevalence as its central plank, react to complaints about obscurantism as thinly veiled “denial” about the extent of the crisis. This is the stance most often expressed by TAC, the South African anti-ANC political activist coali-

Whether or not such projections are rightly dismissed as obscure, there is ample evidence that a protean variety of criteria for AIDS has been and remains in effect from country to country throughout the continent over time. Hence *variations* in HIV prevalence rates reported by the WHO and UNAIDS through the years cannot provide a reliable baseline to tell what works and what does not work in helping to overcome the HIV/AIDS crisis “on the continent” (even if it were the case that conditions in Africa are uniform). This is because in the long run, variations in the statistics are as likely to reflect uncalibrated differences in the criteria used to identify HIV/AIDS as much as anything else.

Vagueness aside, the Bangui conference’s approach to defining AIDS is consistent with the wide range of disease symptoms (including what was formerly called “slims”) that health workers in Africa would like to see vanish. The chronic diseases leading to death in Africa are most often tuberculosis, malaria, and endemic dysentery for neonates. In fact, 50 percent of the adult fatalities diagnosed as “AIDS” have died tubercular; patients diagnosed with tuberculosis (TB) often register this illness as an HIV false-positive antibody-test result (Kashala et al. 1994). TB can be readily cured for about \$20 and six months to one year of careful treatment and rest. The regimen is simple and effective and nearly 100 percent successful (see section 7). But there is no money in it. Although the drugs to cure it are well known, TB is recorded as still causing 5,000 deaths per day.<sup>22</sup> TB is one of the top five killers worldwide for women. “Two million Africans get TB . . . but spending on AIDS research exceeds spending on TB by a factor of 90 to 1” (Malan 2003). Renaming tuberculosis an “opportunistic infection” transforms a major killer in Africa into another lucrative pillar in the statistical rationale for doubling the \$8 billion currently spent annually on antiretroviral and AIDS vaccine research.<sup>23</sup>

Malaria is also an enormous problem, a “bigger killer in Africa than HIV/AIDS.”<sup>24</sup> In earlier test kits, malaria registered among the false-positive test results (C. Johnson 2003; E. Papadopolus-Eleopulos et al. 1995a). “About 350 million Africans—nearly half the population—get malaria every year; but malaria medication is not a basic human right.”<sup>25</sup> Prevention is an important element of managing malarial epidemics, requiring transformation of city environments through massive clean-up campaigns backed by sanitary drainage infrastructure and regular municipal garbage collection so that litter and filth collecting in shallow pools of rainwater and sewage no longer provide ideal breeding grounds for mosquitoes that carry the parasite. Neither condom distribution nor sexual abstinence is useful in preventing malaria, nor can antiretrovirals at this stage of development help to treat it.

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tion called the Treatment Action Campaign, which has been leveling and broadcasting globally the “irresponsibility” and “denial” ad hominem against Thabo Mbeki and other ANC figureheads since before the Durban AIDS Congress in 2000.

22. From a report released by WHO Technical Director of TB/AIDS Campaign, broadcast on *BBC World Service News Hour*, March 7, 2001. In fact TB is a disease of airborne contagion and is carried by one-third of the population in a dormant, that is, latent stage. In 1999, 8.5 million cases of TB were recorded by WHO, mostly in Africa. In South Africa TB is on the increase, for example in Cape Flats, a highly congested slum. In the white affluent and tourist communities of Capetown, promiscuity is rife but HIV/AIDS is not wiping out the residents with chronic illness, to whom TB is virtually unknown.

23. UN Secretary-General, *op. cit.* Speech to General Assembly special forum on HIV/AIDS June 2, 2005.

24. Dr. A. Moyin, Dept. of Allied Health Sciences, Howard University Hospital, Washington, DC, “New Approaches to the Treatment of Malaria,” speaking on “House Call” phone-in direct-line program broadcast from Washington to Africa, *Voice of America*, May 31, 2005.

25. R. Malan (2003: 6, <http://www.spectator.co.uk>, accessed December 12, 2004).

“Approximately 52% of sub-Saharan Africans do not have access to safe water and 62% have no proper sanitation,” so that the water they drink is mixed with animal and human waste. “An estimated 50 million children suffer from malnutrition.”<sup>26</sup> Even among those who subscribe to the orthodox assumption that HIV exacerbates these endemic chronic ailments, it remains controversial exactly how the presence of different viral strains does in fact increase the prevalence of tuberculosis, dysentery, and other contagious diseases.<sup>27</sup> Biochemists who study pathogenesis expect HIV strains to function differently given distinct antecedent conditions where the viral indicators are seen. So the crux of the problem may be a severe dislocation between the wisdom of research experience and the ultimate source of authority and power that determines how funds are applied.

According to three consultants serving on the South African Presidential AIDS Advisory Panel: “Biomedical funds that used to fight malaria, tuberculosis and leprosy are now diverted into sex counselling and condom distribution, while social scientists shift their attention to behaviour modification programs and AIDS awareness surveys.”<sup>28</sup> Also, since research institutes throughout Africa are not properly funded to monitor even the local changing HIV profile, no baselines of raw data exist to evaluate the efficacy of ARV imports. Given a moment’s blunt reflection, this circumstance may be in the immediate commercial interest of drug manufacturers to maintain, given the high risk of these product ventures (see section 7).

Funding for research and pharmaceutical development thereby continues to favor freely a lucrative one-virus-fits-all model of the problem and approach to finding the solution.<sup>29</sup> Critics of this orthodox approach object when commonly prevalent diseases that have been known for decades get relabeled “opportunistic infections.” These diseases depend upon a combination of factors including inadequate and contaminated water supply, food insecurity leading to cross-generational chronic undernutrition, and septic living con-

26. From the South African Presidential AIDS Advisory Panelist C. L. Gesheker and AIDS researcher M. Turshen (2000: 14) and M. Turshen (1998). Pediatrician V. Hale, founding executive director of One World Health, a nonprofit pharmaceutical company, interviewed on “Health Matters,” *BBC World Service*, broadcast throughout the week of July 20, 2004, that infectious microbes cause fever; diarrhoea results from the body’s effort to rid itself of bacteria; chronic diarrhoea also causes rapid weight loss and drains the immune system because of the loss of salts, minerals and nutrients; compare to the Bangui definition of AIDS. “80% of children die in this manner before the age of five in the Central African Republic,” she reported from her casework. Those that survive do so because of hyperactivity of their immune systems, which can induce a false positive on non-specific versions of HIV-antibody tests, as per an originator of ELISA tests R. Richards (2001a, 2001b).

27. The arguments for understanding HIV as a harmless “passenger” virus have been put forward for over ten years. See Duesberg and Rasnick (1998); Duesberg, Khnlein, and Rasnick (2003).

28. See O. Kashala et al. (1994) in Gesheker et al. (2004: 22); N. Hodgkinson (1996: 358): “In Kinshasa, Zaire . . . about 70% of 57 leprosy patients, and 30% of a group of 39 contacts, tested positive according to two leading versions of ELISA. . . . it was found that proteins from the leprosy agent were causing cross-reactions. . . . Testing with Western Blot was even more misleading. It gave a positive reaction in 85% of the patients who were negative with other tests. . . .” The authors, who included Harvard’s Dr. Max Essex, one of the authors of the theory that HIV originated in Africa, pointed out that the microbe responsible for TB is in the same family of mycobacterial agents as HIV. They concluded that ELISA and WB may not be sufficient for HIV diagnosis in the AIDS-endemic area of Central Africa, where prevalence of mycobacterial diseases is quite high. Some dismiss these concerns as outmoded in 2005.

29. A spokesman for AVAC (Aids Vaccine Advocacy Commission) conceded through the media that the search for a vaccine actually entails searching for a variety of vaccines in response to different regional strains and ever-shifting mutations and adaptations observed in viral activity. Broadcast on *Voice of America* Health News, May 30, 2005. See <http://www.avac.org/handbook>.



ditions. In response, some molecular biologists, virologists, pathologists, and neonatists regard the AIDS solution to be abstinence from all antiretroviral drugs (as well as recreational narcotics like amyl nitrites), combined with adequate nutrition and treatment of AIDS-related diseases with known drugs (for TB, cholera, dysentery, Kaposi's sarcoma, cervical cancer, flu, pneumonia, malaria, leprosy. See Duesberg, Köhnlein, and Rasnick 2003; also Fiala 2000).<sup>30</sup> The various factors impacting upon immunity in Africa are not fully understood, but one thing is clear: variety is the norm rather than the exception in the viral activity associated with AIDS, even when the subchromosomal dimension is the only one considered. Both host and viral factors will determine whether there will be a cause for infection or not.<sup>31</sup>

A common justification for maintaining centrality and top-down management of HIV/AIDS research is the presumption that African researchers and their institutes are inadequate, lacking the skills and equipment for conducting cutting-edge R&D in viral genetics. But in fact the referees vetting project proposals and disbursing major funding from Washington, D.C., London, Brussels, and Geneva do not always know what is operable in Africa. The facts on the ground render generalizations about African incapacity quite untrue. In Ghana, where government support of scientific research has been at a low for decades, Japan supported the Noguchi Memorial Institute for Medical Research (NMIMR) and equipped it to prepare and analyze level 3 biohazardous materials (from 1986 to 2003). In Ghana experts routinely perform viral isolations and produce antigens for ELISA testing and for immunofluorescent assays in lab diagnosis of some infections including HIV (Brandful, *op. cit.* in conversation). There is vast experience and capacity to train technicians within a year or two to top-grade competence at this long-established lab and at nine other leading medical institutions in Ethiopia, South Africa, and Nigeria (A. B. Akosa; see section 7).

Yet the greatest funding sources are controlled from outside the continent, an arrangement rationalized in part by waiving top standards of quality research output and of pharmaceutical development. No one disputes that the diseases long known in Africa (chronic dysentery, leprosy, malaria, parasitic worms, tuberculosis, cervical cancer, leishmaniasis, herpes, and other ailments now identified as "opportunistic infections") can be symptomatic of progressive breakdown of the immune system. But the causes of that breakdown in immunity, and the correct interpretation of an HIV+ test result, remain pieces of an "un-

30. This advice, administered by South African Minister of Health Manto Tshabalala Msimang, has generated a groundswell of outrage, which peaked on June 7, 2005, prior to South Africa's 2<sup>nd</sup> National HIV/AIDS Conference in Durban, when anti-establishment political activists of the Treatment Action Campaign demanded her resignation for being thus "irresponsible."

31. The HIV-1 discovered in the United States in 1983 is believed to originate with homosexuals. A genetically distinct variant was found among West Africans in 1986 who were HIV-1 negative but positive with respect to a different subtype called HIV-2. HIV-2 has been found also in Angola and Mozambique; some have been found in India, South Korea, France, and Portugal. HIV-1 subtypes are distributed as follows: A, D, and G are prevalent in sub-Saharan Africa; C is in South Africa and India; B and E in North America, Europe, and Far East Asia; F in Brazil and Romania; H in Russia; I in Cyprus. Group O viruses are found in Central Africa and Cameroon.

J. A. M. Brandful (unpublished 2003) speculates that this variety as well as host factors may account for why in certain populations it is extremely easy, and in others very difficult, to spot infection via coitus when the genital tissues are not ulcerated. Appendix A lists the relevant studies cited in the bibliography.

solved jigsaw,” the details of which cannot be adequately presented in the purview of this essay.<sup>32</sup> Nevertheless one has to appreciate at least roughly the extent to which the current scientific debate about HIV/AIDS is inconclusive because the phenomenon addressed is not uniform worldwide, although the approach to studying it is. HIV as a viral entity has an escalating number of subtyped variant strains that are regionally divergent. The way the virus behaves in one population is measurably different from its efficiency when infecting another. After infection, there is no telling what HIV in all its variants may get up to, neither whether nor when it will eventuate in AIDS.<sup>33</sup> As is known generally about DNA and especially of RNA, many conspiring environmental factors interact with genotypes to yield the phenotype changes of an organism, and this RNA virus is no exception. This is one reason why “it is necessary to maintain a continuous surveillance on HIV” for optimal accuracy and effective antiretroviral treatment (J. A. M. Brandful, *op. cit.* 2003, and in conversation). The genetic diversity of HIV is especially pertinent concerning treatment. An antiretroviral that appears to get excellent results in one region may not have the same beneficial effect in another, and so will be counterproductive where the mix of viral characteristics and host factors yield a different phenotypic result. Some situations notable for their significant prevalence rates are changing over time. Such is the case in Ghana, where HIV replication is measured as occurring through notoriously unstable recombinant forms cocirculating with HIV-1 subtype B, in contrast with the past, when the dominant strain that was observed in Ghana was HIV-2.<sup>34</sup> And newly identified variants are emerging all the time.

As the current controllers of HIV/AIDS research will say, ultimately an effective HIV vaccine has to include components that reflect subtypes of the virus all over the globe, because human hosts are perpetually on the move. Still, a major obstacle to developing an adequate AIDS vaccine through international efforts like AIDS Vaccine Advocacy Coalition (AVAC) (<http://www.avac.org>) is that global coalitions continue to interpret the feasibility and relevance of specific research proposals, programs, and treatment approaches at a distance. But at a distance the HIV/AIDS phenomenon in all its evolving variety cannot be adequately monitored. This is because the kits and drugs now designed and developed in G-7 countries, with information culled through global databases, are unable to keep pace with the divergent range of considerations affecting pathogenic phenomena differently in distinct parts of Africa where the detected-HIV prevalence rate is significant.<sup>35</sup>

32. Professor A. B. Akosa *op. cit.* does not reject the orthodox HIV-AIDS causal hypothesis, but he stresses that the theory of how the virus functions to undermine helper T-cells, how it is transmitted, and how to eradicate AIDS remain outstanding questions that require a solution in order to find the means of eradicating HIV. In conversation at the Ghana Ministry of Health in Accra, April 14, 2005. Also see A. Hässig et al. (1998) quoting Paul Johnson of the Harvard Medical School: “The riddle of CD4 cell loss remains unresolved.” Web site posted version, p. 3.

33. In Kumasi, Ghana, AIDS symptoms are expressed by patients who yield negative test results on HIV-antibody tests.

34. About 80 percent of the HIV epidemic in Ghana, where the prevalence level is 3.1 percent and the population is 20 million, is due no longer to HIV-2 but rather to various strains of HIV-1 cocirculating with recombinants (J. Brandful, unpublished manuscript, 2003). Recombinant DNA forms have no specific pattern to their combinatorial pairings of nucleotides. So the resulting genome shuffling is random; the gene expression observed in the virus can be anything.

35. For instance, a vaccine currently undergoing clinical trials in South Africa may not work in Ghana because it targets a pure strain of HIV-1 subtype C presumed responsible for 92 percent of the epidemic there,

The study of infectious disease at the genomic level will not always be focused on HIV. But the data may always have this protean nature. The point of decentralizing research policy is that the process of genuinely globalizing the fruits of modern medical science cannot proceed successfully otherwise. Unless central agencies with control over funding begin to facilitate microbiologists and medical experts in African research institutes to monitor and analyze their own local data and pursue their chosen treatment options, the collation of information and development of curative products and measuring devices will not keep pace with illness as it is beginning to be addressed in the twenty-first century, through both cutting-edge genetic interventions and the traditional noninvasive methods. Further, whether or not you are of the growing scientific community that views virology as a science dealing with epiphenomena, one fact remains clear: the diverse regional factors influencing pathogenesis of AIDS are too idiosyncratic to capture in the enveloping responses that have been devised so far by the top managers of the HIV/AIDS research industry. This diversity of relevant factors is evident whether genetic intervention turns out to be the right route to effect a solution to the AIDS pandemic in Africa, or if instead the better approach turns out to be tackling many known intractable diseases of which people have been dying for decades. If good scientific sense were the sole determinant in managing the political economy of world health, then global resources and funding intended to support health care would be more equitably distributed, and decisions about the appropriate use of funding would be more decentralized than is the case now.

To understand why those best equipped to direct the study and treatment of Africans' chronic morbidity and premature mortality fail to determine what happens with the money available, it is useful to look at the current distribution of resources in historical perspective (S. Addae 1994; S. Gilman 1985. See section 7).<sup>36</sup> This allows one to appreciate the extent to which eighteenth- and nineteenth-century attitudes toward Africans' welfare and where-withal still disrupt efficiency in the state-run management of health care delivery systems in postcolonized societies. The orthodox HIV/AIDS doctrine sustains a counterproductive legacy of Eurocentrism in medical practice,<sup>37</sup> according to which African men are supposed to be haplessly destroying their social order because of a perplexing incapacity to rationally

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which is not part of the situation that determines the current 3.1 percent prevalence rate in Ghana (J. A. M. Brandful, *op. cit.* (2003), in conversation June 16, 2005).

36. The Vice Dean of the University of Ghana Medical School, Professor G. Biritwum, is a former consulting epidemiologist for WHO in Geneva. In applying for funds to fight HIV/AIDS, he ensured that an allocation for fighting malaria would ride piggyback, since malaria is a prime cause of child mortality in Ghana and source of contagious chronic illness.

37. Media coverage of the medical work done that substantiates this skepticism is sometimes overtly suppressed, for example for the 1998 World AIDS Day (December 1) on UK's Channel 4 News, a commissioned report by *Meditel* covering work of the Perth Group was revised four times and finally banned from broadcast. The *South African Medical Journal* commissioned a paper from one of the chosen consultants serving on Mbeki's Presidential AIDS Panel in 2000, and subsequently refused to publish it. An experienced medical investigative journalist reported from the scene in attendance at the 9<sup>th</sup> International AIDS Conference in Geneva (2002): during the question period for the panel session, "AIDS and Media Responsibility," she reported her microphone being shut off when she commented on the incongruity of acting "responsibly" as a conduit for drug companies and acting responsibly as a journalist investigating critically and reporting the truth. She reported that later an AIDS health-practitioner delegate from the Caribbean, who had heard her comment, confided to her

modernize their traditional norms and control their characteristically insatiable sex drive.<sup>38</sup> Meanwhile, awkward as this may be to accept, empirical studies undermine the assumption that HIV, “the AIDS virus,” is readily transmitted in a manner that could respond to a uniform treatment worldwide.

### 3. The Legacy of Poverty

Gesheker et al. (2004: 56 n. 111) observe: “The enormous expansion of debt, the globalization of poverty and its impact on public health sectors since the 1980s are the context within which AIDS developed.<sup>39</sup> [For example] the combined effects on Zimbabwe of the World Bank’s SAPs in the 1990s coupled with poor harvests, drought, long-term food deficiencies, a 70% inflation, an unemployment rate of 50%, and the cost of its 1998 military involvement in the Congo left the average Zimbabwean poorer by one-third than at independence in 1980. In West Africa, children’s health status has notably declined along with other measurable negative impacts of Structural Adjustment Programmes (SAP) encouraged by the IMF. Between 1980 and 1989, 36 African countries took a total of 241 loans from international financing institutions under these terms set by the IMF.”<sup>40</sup> The late 20<sup>th</sup> century structural adjustment programs (SAPs) remain infamous for having restricted trade, forced down barriers to food imports, forced devaluation of local currencies through dubious “floatation policies,”<sup>41</sup> and curtailed state expenditure on social services, including health and education. These experiments have yielded rapid and severe declines in life expectancy, in nutrition, caloric intake, health clinic attendance—with frightening long-term implications for human physiology that were not anticipated. In accounting for the AIDS phenomenon, Gesheker et al. (2004) cite data provided by S. Ponte (1995):

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that on her home island there were only eight documented cases of HIV/AIDS that year, but she was afraid to say so because she would be regarded as “irresponsible” by the pharmaceutical giants that staged the multi-million dollar do [sic] and had sponsored her participation (C. Farber 2002).

38. S. Lewis, UN Humanitarian Envoy to Africa, quoted on *BBC World Service News Hour*, January 29, 2003. A current spokesman for UNAIDS, J. Morris, has made this and similar claims in press statements: “The HIV disease is the fastest growing epidemic in the history of Africa” and “the most important factor underlying Africa’s problems . . . threatening . . . utter social breakdown.” The uncontrollable sexuality spreading this killer disease also pervades other formerly colonized countries like India and Thailand. Haiti, for instance, is identified as the poorest country in the Western Hemisphere, where the ratio of doctors to citizens is 1:10,000. Yet in the same sound bite Haiti is said to have a high HIV sero-prevalence because “poverty leads to the high level of promiscuity there, especially among the youth” (*BBC World Service “Agenda,”* June 27–July 4, 2004). For a quick antidote to delusions of the over-sexed self-destructive African, see Appendix A.

39. See also W. Tabb (2002) and R. M. Packard (1992).

40. P. Nugent (2004: 32-89).

41. A. O. Abudu (2003: 169) explains systematically why “the policy of significant devaluation of the national currency fails in developing countries,” how “floating the local currency increases a developing economy’s dependency on producers outside the country.” Not only does devaluation raise the cost of imported essential medications prohibitively, but for most developing countries exports cannot automatically become cheaper because a high percentage of essential inputs for production are imported.

... showing that several countries which UNAIDS claims are threatened with a “plague of HIV” (Tanzania, Uganda, Zambia and Zimbabwe) have been hardest hit by World Bank policies in terms of limited debt reduction and poor institutional capacity building.<sup>42</sup>

In many parts of Africa one out of every five people does not live to be five years old; most often for neonates this is due to diarrhea, and most often for children under five it is due to diarrhea and malaria, both long-term endemic contagions that have been renamed AIDS-defining “opportunistic infections.”<sup>43</sup> Gesheker et al. (2004) have also drawn attention to the work of L. Bijlmakers et al. (1996) who “confirm what is widely believed, that charges for the use of health services, introduced at the behest of the Bank, deter the patients at greatest risk of disabling and fatal illnesses, the very patients for whom medicine has developed preventive, curative and cost effective interventions.”<sup>44</sup>

Severe malnutrition that affects retarded mental development, low birth weight, and retarded bone growth are not restricted to impoverished villages and hamlets. Relatively well-off families can raise children whose development is measurably retarded by micronutrient deficiency. In Ghana during 1998 severe stunting due to malnourishment was observed in as many as 9 percent of children in a cross section of all the economic classes that were studied, not just the lowest-income families (Badasu 2004). Stunting occurred in high-income groups of middle- and upper-income suburbs of Accra where working parents leave their children responsible for their own food intake or dependent upon low-income house helpers who are often themselves hungry older children.

Beginning in 2002 a spike in the mortality of young women born during the 1983 famine was reported in Ghana, ostensibly indicating an increase in HIV-related deaths. Since the 1980s more than 25 percent of all African children have been undernourished. What happens to the immune system of a person who is undernourished *in utero* and survives as a neonate in the midst of famine? Immunity is well known to be hormonally dependent. What happens to the immune system of a young woman at her peak of sexual maturity who was born to a famished mother?<sup>45</sup> Might the severe food shortage in Ghana throughout 1983 account for premature death or immunological problems encountered by these women now in their early twenties? The amazing thing is not that no one has the answers to such questions, but that no one in Ghana, at any rate, is receiving funds to find them out. Professor R. Biritwum, a former UNAIDS epidemiological consultant in Geneva and currently the Vice Dean of the University of Ghana’s Medical School, has been studying the long-term impacts on villagers born before, during, and after Ghana’s 1983 famine. He has measured a retarded menarche and generally slow rate of development in young women due to malnutrition. He agreed the relation between *in utero* malnutrition and HIV-positive test results at maturity would be an important focus of investigation, but he knows of no actual research

42. C. L. Gesheker et al. (2004: 55 n. 111); S. Ponte (1995).

43. Victoria Hale, *op. cit.* (see note 27) interviewed on *BBC World Service*, July 20, 2004.

44. C. Gesheker et al. (2004: 55 n.111).

45. It has been documented that the enzyme leptin, for instance, which plays a substantial role in the performance of the hypothalamus, can be disturbed by chronic protein deficiency of pregnant mothers, affecting fetal development (Dr. Simon Langley-Evans, reporting to the media [*BBC*, June 13, 2005] on recent work published in *Cell Metabolism*.)



concerned with linking malnutrition to AIDS.<sup>46</sup> Funding from the G-7-based agencies has been channeled instead into finding a vaccine and teaching young people to use condoms, to abstain from premarital sex, and to negotiate safe sex when the time comes for it. This would be all to the good if the customary norms of Ghanaian society and of most other African cultures were not already meticulously conservative and circumspect about sexual matters without needing any outside encouragement. (See Appendix A.)

Various countries in Africa have utilized this orthodox discourse of HIV/AIDS in different ways to ameliorate various political, economic, and historical impediments to social welfare specific to their populations. By 1997 Tanzania had reached the world's third-lowest GNP ranking while NGOs were pumping in resources and paying attention to the effect of squalid living standards upon the most vulnerable sector's health and mortality. Villagers in a rural area on the southern shore of Lake Victoria celebrated this sudden attention: "We have everybody coming here now—the World Bank, the churches, the Red Cross, the UN Development Programme, the African Medical Research Foundation—about 17 organisations reportedly doing something for AIDS in Kagera," a missionary working there for decades told *New York Times's* science journalist N. Hodgkinson (1996: 354). "It brings jobs, cars—the day there is no more AIDS, a lot of development is going to go away."

#### 4. Uganda Victorious

Uganda is routinely cited as the model of how to conquer the HIV/AIDS pandemic; after two decades of dislocation and social turmoil it climbed among the continent's fastest up the scale of national prevalence rates. From the Uganda story, the rest of Africa is supposed to learn our ABCs: "Abstinence, Be faithful, or use Condom" is urged as the solution that will bring all of Africa, as it did Uganda, out of poverty-dependent disease cycles (Fiala 1998). Rising mortality and morbidity rates that began during the late 1990s are described as evidence of a moral decline.

But as a matter of historical fact, the background of Uganda's "full blown AIDS crisis" prior to the health renaissance of the 1980s cannot realistically be isolated from the fiscal constraints imposed through IMF supervised borrowing and before that by the chaotic vista of violence that prevailed through the countryside under Idi Amin's rule since 1962 (Gesheker et al. 2004: 7, 21; Gesheker 2000: 131, 147). Prior to embroilment with the IMF, Uganda's eight years of independent state-sponsored turmoil reached a peak by the end of 1971. Two percent of the population (1 in 50) was massacred between 1971 and 1979, according to reporter T. Judah (2005: 63) from Gulu in Northern Uganda. According to historian P. Nugent (2004), Idi Amin had already killed up to 10,000 by the end of 1971; and by 1975 the countryside became a war zone reaching a stage of quasi anarchy. Under such conditions, village life was abandoned; arable lands where heinous atrocities were committed became taboo. People had to be ready to flee at a moment's notice. So the farm

46. In conversation with Professor R. B. Biritwum (2004); Kofi Annan, speaking to a special forum on HIV and AIDS of the UN General Assembly, said that of the escalating numbers of HIV-infected illness and death observed, the greatest number of new cases recorded in 2005 were young women, many of whom presumably were born, if in Africa, during the period of initial shock suffered from the SAPs of the early- and mid-1980s.

productivity and orderliness of daily life required to sustain good nutrition for a healthy immune system were sacrificed altogether in the interest of survival. Amin's errors in economic management are said to have included "expelling the Asian business class and in 1972 co-opting British businesses [leading to] shortages and economic boycotts, resulting in economic breakdown" (Nugent 2004: 230). Apart from a remarkably gory dictatorship, prior to the SAP's impact Uganda also suffered a series of failed experiments in socializing medicine, including a botched blood transfusion movement in the 1960s (Fiala 1998; Gesheker et al. 2004: 30 n. 108). By the time Uganda joined the ranks of HIPC<sup>47</sup> "the expenditure on debt servicing (\$15 per head annually) [was] six times the spending on health, and nearly one in two children was undernourished" (Gesheker et al. 2004: 30 n. 108).

In 1986 the Lord's Resistance Army (LRA) began an intrusive rebellion in Northern Uganda against Yoweri Museveni's new central state. For the last nineteen years the LRA has disrupted the everyday life of 40,000 village children who are obliged to sleep away from home, on hospital floors and verandahs of other public buildings in the larger towns, to avoid kidnap after dark by marauding LRA guerrillas (*BBC World Service News*, May 13, 2005). Since the mid-1980s, 95 percent of the population in the three northern districts have been forced to migrate, and 1.8 million out of the nation's total 24.7 million now live in refugee camps, where sanitary and nutritional conditions are substandard.<sup>48</sup> In a thirteen-month period during 2002–2003, as many as 10,000 children were abducted by the LRA for actual armed conflict and for auxiliary sexual and housekeeping services (Judah 2005: 62). The LRA has thus dramatically increased the nation's overall morbidity and mortality statistics, which are then portrayed by the media as empirical evidence of a mass moral recidivism and fall from ABC vigilance.

But meanwhile in the southern districts, health and welfare improvements developed parallel with a return to normalcy and stability in the countryside. The international community fails to realize that the essence of President Museveni's triumph in resolving Uganda's health crisis in the southern regions did not actually focus on sexual behavior in particular. Reading between the lines of Action-Aid literature, you find that the central state vindicated local traditional authorities and traditional community capacities for self-recuperation.<sup>49</sup> Amidst growing dispute as to whether his reforms have been more autocratic and populist rather than genuinely democratic, since 1986 Yoweri Museveni has "attempted to offer Ugandans a non-party alternative to the incessantly violent infighting of multi-partyism." He imposed a nationwide "decentralised system of local government, in which finances and responsibilities were devolved downwards" (Nugent 2004: 415; Tripp 2000: 66). From 1988, Museveni created a Policy Commission to administrate "over a two way dialogue between the central state and citizens organised through seminars and workshops in the shape of Resistance Councils" (Nugent 2004: 415). The central state nurtured respect for human rights, gender equity, and decentralization of decision making to determine the course of economic structural adjustment.

47. HIPC is the World Bank acronym for heavily indebted poor countries.

48. Regarding the number of abductions and routine displacement of children in Northern Uganda fleeing abduction, T. Judah (2005: 62) quotes Human Rights Watch Report, *Abducted and Abused: Renewed Conflict in Northern Uganda* (July 2003) and the International Crisis Group Report, *Northern Uganda: Understanding and Solving the Conflict* (April 2004).

49. N. Kaleeba et al.

Before the LRA took hold during the late 1980s and 1990s, Uganda enjoyed a health boom largely due to the “success of the women’s movement [in] furthering its own agenda” (Nugent 2004: 416). In most of Africa, liberating and empowering women means ensuring the material conditions of survival because that is where the majority of women’s labor and identities are focused: securing the means for subsistence farming, availability of potable water, primary medical treatment, maternal and infant health, adequate nutrition, sanitary shelter, basic education, and the means of productivity in subsistence agriculture.

Uganda’s golden age of community empowerment was sustained with funding that the central state procured in partnership with international donors. Local experts were funded to mobilize village-to-village campaigns of community health, neighborhood sanitation, spiritual stewardship, home care, and feeding and cleaning for the aged and the infirm. Self-help groups flourished. Foreign nongovernmental organization (NGO) and central state funding and recognition empowered barefoot doctors, local clergy, village elders, traditional healers, school teachers, and visiting NGOs to encourage indigenous styles of consensual governance and values in community life. Funding also turned the plethora of orphans into a soluble problem. Major donors for these continuing programs in Uganda have been Action-Aid, Save the Children, UNICEF, UNAID, UNDEP, and Redd-Barna.

While these communal welfare initiatives may seem progressive to Americans, it should be realized that the strict divide which is so dominant in late capitalist welfare states between the public and private spheres of life is not there in traditional African political cultures.<sup>50</sup> African community leaders, for example those elders who compose a village council and others working directly with and for them, are all at once networkers, capacity builders, resource managers, and life-management counselors. For instance, matters of matrimony, especially sexual scruples, are a major concern shared among all families, not just between two individuals. A problem between two families has potential to become a major threat to the well-being of the whole community, so the whole community is party to what would count in America as intensely private affairs.<sup>51</sup> Nor is it unprecedented in Uganda to expand interdenominationally the social capital inherited through religious tradition and established social networks. In traditional African rural settings, various ethnic and religious groups accommodate amicably in response to the shifting demands of survival. But protracted war and ceaseless grinding poverty destroy all such norms.

In building Uganda back up, the National Community of Women Living with AIDS (NACWOLA), an NGO sponsored by UNICEF and Save the Children, started running workshops with printed materials in local languages (Luganda, Kiswahili, Luo) that trained

50. See H. L. Moore (1988) and M. Z. Rosaldo (1989). In postcolonial societies, the predominate duality is instead a bifurcation marking off social dynamics strictly constrained by morality from arenas where amoral behavior is the tacitly condoned and expected norm; P. Ekeh (1975) marks this difference as the key distinction between primordial and civic public domains; see Appendix A concerning the role this contrast plays in framing sexual mores.

51. The most intimate conflicts and transitions of daily life, for example, reconciliation to an unwanted pregnancy, severe illness, and the upheaval of puberty, are typically arbitrated by the ancestors through the personhood of a village’s oldest lineage family head. Magisterial concerns brought to a traditional royal court include all manner of personal household and intergenerational conflicts, paternity and maternity concerns, land and property disputes, and all money matters; in fact, everything of importance in everyday life is brought into the community courtyard. The local “mayor” is everybody’s father, his council of elders are everyone’s uncles, and his queen mother is everyone’s mother, for the whole village or district is understood as an extended family composed of all the families within the area.

women to take leadership roles to quicken the reestablishment of community cohesion. Women learned oratory, how to manage press relations, how to follow through with a public policy analysis, government lobbying skills, and project planning for neighborhoods. Removing the stigma and disgrace of illness, poverty, and premature death is a primary concern of NACWOLA. So is intestate law, customary property rites, family planning, economic self-sufficiency, and income-generating activities—so-called “women’s issues.” Nurses in the organization counsel alienated women one-on-one through home visits. The first lady Mrs. Janet Museveni raised national awareness and prestige of the project through a visit to a center in the Iganga district in October 1999. This brought rural Uganda to front and center of the political stage, where it belongs in a landlocked agrarian nation-state.

The Mobil Home Care Project also continues, based in Kitovu Hospital with funding from the British donor CAFOD. Set up in Masaka by an Irish Catholic Mission in 1955, its purpose is to revive community self-sufficiency through a multirange provision of extension services. From 1992 to 1999, the program trained 2,500–3,000 nurse practitioners each year to facilitate community organization. A bus of nurses spent two to three hours in each village surrounding Masaka. They not only distributed primary health care and medicines (blankets, soap, housing, schoolbooks, school uniforms, and school fee stipends). They also supervised villages in exposing and filling the needs of orphans and the most vulnerable families, acting as a conduit for community-organized proposals for agricultural and husbandry projects, house construction, and repairs. Grants and loans have helped directly to increase subsistence crop yields. Nurses teach the value of healthful eating and “positive living” that sustain people living with HIV/AIDS (Kaleeba 2000: 73). Villages are organized to devise a rotating schedule for home visits to their neediest, fetching firewood and water, washing clothes, cleaning houses, and counseling and educating on inheritance laws those who are elderly or terminally ill.<sup>52</sup>

In Uganda, AIDS organizations focus on youth through the Stepping Stones Programme and the Straight Talk Foundation. Visiting speakers bring to schools and churches their expertise in youth counseling, nursing and midwifery, and medical practice and development work, which reinstitutes the schools as recognized structures of social cohesion, valuable and safe places to be and to learn. Preadolescents are brought back under collective parental scrutiny and supervision as would have been their lot in “former times,” but now the social importance in coming of age is highlighted through association with the artifacts of modernity: radio teen talk shows, public forums, and newspaper production.<sup>53</sup> Global donor funding has expanded the work of the Islamic Medical Association of Uganda (IMAU). Paid for by USAID, UNDEP, and UNICEF, from 1992–1997 IMAU trained 6,800 community workers, half of them women, through 850 mosques in eleven of Uganda’s forty-five districts (Kaleeba et al. 2000: 65).

*This* is how Ugandans overcame their national AIDS crisis: by validating indigenous forms of consensual democracy and social values. In short, HIV/AIDS Awareness Workshops help people to survive who have lost property and family members to poverty, war,

52. In 1988 a precursor of this extension service into communities from Kitovu Mission Hospital was helping twenty-eight abandoned, unsupervised, or orphaned children; and by 1994 the Mobile Home Care Project was servicing 8,127 children in need of parental care.

53. A local monthly newsletter produced by Young Talk grew from a print run of 155,000 in 1998 to 270,000 in 1999.

political turmoil, and social dissolution, as well as to persistent and terminal illnesses. These workshops do not teach people personal integrity or sexual self-control. The fact that foreigners could imagine otherwise is neither remarkable nor of much objective importance to most Africans. In Uganda, overcoming the AIDS crisis meant overcoming twenty-five years of social upheaval and family breakdown. Lectures about abstinence and condom use were incidental, a sideshow that titillates the global community of technocrats ever fascinated by their collective fantasy of how irrationally primitive sex dominates and cripples traditional life in Africa.

## 5. The Statistics

Sampling African populations in order to test for HIV prevalence has been criticized as systematically biased (Fiala 1998; Gesheker et al. 2004; Lang 1998; Malan 2002, 2003).

Consider an HIV surveillance report on Uganda published in *The Lancet* and critiqued by members of the South African AIDS Advisory Panel of President Thabo Mbeki (Gesheker, Mhlongo, and Köhnlein 2004: 26).<sup>54</sup> The study sampled 9,389 Ugandans with HIV-antibody test results.

Two years after enrolling in the study, 3% had died, 13% had left the area, and 84% remained. There had been 198 deaths among the seronegative people and 89 deaths in the seropositive ones. Medical assessments made prior to death were available for 64 of the HIV-positive adults. Of these, five (8%) had AIDS as defined by the WHO clinical case symptoms. The self-proclaimed “largest prospective study of its kind in sub-Saharan Africa” tested nearly 9400 people in Uganda, the former epicenter of AIDS in Africa. Yet of the 64 deaths recorded among those who tested positive for HIV antibodies, only *five* were diagnosed as AIDS-induced.

An Austrian doctor (Fiala 1998) reflects on clinical practice in Uganda, Tanzania, and Thailand, working as a general practitioner and OB/GYN specialist:

All registered AIDS cases world wide are recorded with the WHO in Geneva. It is assumed that an unknown percentage will not be registered, so the WHO multiplies the registered cases in order to reach an estimate of an “actual” figure. But the multiplication factor increases arbitrarily every year. In 1996 the WHO multiplied number of registered AIDS cases in Africa by a factor of 12. In 1997 this had jumped to 17. But in the following year’s report, from January 1997 to June 1998, 116,000 actual cases of AIDS in Africa were registered with the WHO. But for this same 18 month period the estimated AIDS projected for Africa had been raised to a whole 5.5 million. Thus the multiplying factor moved from 17 to 47.<sup>55</sup>

It appears that the main problem is an apparently growing differential between the progress made at the highest theoretical level of genetic engineering worldwide, and the pedestrian way that clinical services continue to be delivered on the ground in Africa. Fiala

54. D. Mulder et al. (1994)

55. C. Fiala (1998). See also interview by L. Scheff (2003) at <http://www.virusmyth.net>.



(1998) is concerned about the latter, so he concludes that the way to treat most people who are dying in Africa *now* is to tackle known and treatable infectious diseases such as malaria, pneumonia, or diarrhea.

It is worth noting how the global community often confuses the notion of “AIDS orphan.” Cross-cultural variations in the way “family” is envisaged may be responsible for some of the distortion of HIV/AIDS statistics. Fiala (1998: 36–38) quotes from a WHO report issued in May, 1991, where the confusion is acknowledged:

One of the confusing aspects is the extent to which the absence of one parent is the norm in a given society. . . . Yet in the Uganda enumeration study, an orphan is a child who has lost one or both parents (the standard Ugandan definition of an orphan) . . . no distinction was made as to the cause of orphanhood, which in some areas included the effects of war. . . . Projection studies carried out by WHO and studies done elsewhere have used different criteria. UNICEF defines an orphan as a child whose mother has died, [whereas] WHO defines an orphan as a child who has lost both parents or only the mother.

But “lost” parents may not be dead. On the Ugandan-Tanzanian border, where the migration for employment is compulsory and road systems are tenuous at best, grandparents often take over the role of child care while parents are away earning income to send home. Other children are abandoned due to polygamy and prostitution, while their parents are living but unaccountable, for lack of resources and not because of HIV-related illness or death (Hodgkinson 1996: 354). Therefore enumeration of orphans may mushroom erroneously because such anomalous details of family life that deviate from the seemly norm are unlikely to be divulged voluntarily without any prompt from the interrogator. Yet the percentage of parents in these circumstances may be considerable since personal remittances from abroad constitute a surprisingly substantial portion of African gross domestic products (GDPs).<sup>56</sup>

The waywardness of HIV/AIDS statistical reportage is not restricted to African countries. In the prestigious journal *Science*, a “special news brief” reported by Cohen (1994a) reviewed data collected by Weniger et al. in Thailand that ostensibly “present[ed] strong epidemiological arguments that HIV is indeed the cause of AIDS.” Here is an example of astonishing incompleteness in the presentation of data in the confirmation of a hypothesis based on statistics.<sup>57</sup> At the end of 1987, out of 200,000 HIV-test results recorded, fewer than 100 were positive. In 1988, 12,850 HIV-positive test results were recorded. By the end of 1993, however, 708,000 HIV-positive test results were reported, 8,114 of which were recorded as the cumulative number of reported cases of AIDS, 6,026 being new cases reported that year. So you are supposed to recognize that an increase in AIDS has followed an increase in positive HIV-test results. But unless we are told how many total HIV tests were conducted in 1993, there is no way to analyze whether or not the report of 700,000 positive

56. In 2002 private remittances to Ghana reached \$1.4 billion, more than the money coming for one year from overseas development aid and foreign direct investments (*Daily Graphic*, Accra, August 20, 2004, quoted by T. Manuh, Asante, and Djangmah 2004).

57. Apart from astonishingly transparent statistical fallacies demonstrated in the text here, the entrenched debate about the cause(s) of AIDS in Africa may reflect a divergence in views about what is required to supply a gold standard. Some organic chemists reject the existence of HIV *in vivo*, since they regard as bogus the claim of virologists to have produced a “gold standard” for HIV *in vitro* (as discussed by R. Richards 2001a, 2001b).

test results constitutes an increase of HIV prevalence in the population. It is known that an explosion of HIV *testing* began in 1989. So because the HIV-test data presented is incomplete, the 700,000 HIV-positive test results as reported here tell nothing. It is also generally assumed that a radical escalation in drug abuse among Thais occurred over the same period, including long-term amphetamine dependency. But the potential connection between prolonged drug abuse and AIDS has never been tested in Thailand (according to P. Duesberg 1996a). In that case the data has not been tried against alternative hypotheses, for example, that AIDS in Thailand has increased in consequence of chronic drug abuse over decades.<sup>58</sup>

Gesheker et al. (2004) have analyzed the quality of statistics reported for AIDS in Canada and the United States. They found a widely publicized misreading of the figures by the CDC (Gesheker et al. 2004: 59 n. 124).

. . . In Canadian reports, [b]y December 31, 1998 there [was] a cumulative total of 16,236 cases of AIDS . . . [over 17 years] since 1981. In 1995 alone, 2,009 adult cases of AIDS were reported . . . 175 (8.8%) were females. In 1996, there were 1,385 adult cases of AIDS reported in Canada, a decrease of nearly 30% in one year . . . and 165 were females (12%). In 1997, there were just 573 adult cases . . . 88 females (15.4%). In 1998, there were only 279 cases . . . 38 females (13.7%), a total decrease of almost 90% in three years.

The actual number of adult female AIDS cases reported in Canada had decreased by 50% from 1995 to 1997. In a country of 32 million people . . . there were only 38 female AIDS cases in 1998. Yet because the *percentage* of women with AIDS went from 8.2% in 1995 to 13.7% in 1998 even though the *actual number* sharply decreased . . . the Bureau of HIV/AIDS and STD at the Canadian Laboratory Centre for Disease Control issued an alarmist warning that the risk of AIDS among Canadian women had *dramatically increased* by 25% to now comprise nearly 14% of all diagnosed cases, “the highest proportion observed since monitoring of the epidemic began,” re-affirming how statistics are easily misrepresented to advance claims of an ever-expanding AIDS epidemic.

By 2003, the total number of AIDS cases annually reported in Canada had shrunk to 218, of whom . . . 54 were females. [As of 2004] women account[ed] for 25% of all AIDS cases in Canada, but the latest report drew little attention to the fact that the total number of female AIDS cases in Canada had *dropped 82%* from 1996 to 2003.<sup>59</sup>

Similar reductions are in evidence from the raw data of reports culled in the United States. And yet no increase in condom use is reportable in the United States. Americans were not practicing safe sex and teen pregnancies and venereal diseases were on the rise. Yet AIDS cases continued to decrease sharply. “Even the fraction of Americans assumed to be HIV-antibody positive declined from an estimated 1 million in 1985 to 700,000 in 1996.”<sup>60</sup>

58. See Appendix B for work on the hypothesis that prolonged drug abuse causes AIDS. P. H. Duesberg was among the first to propose it, and independent researchers have since discovered results corroborating this hypothesis as a plausible alternative to the hypothesis that HIV causes AIDS (Duesberg et al. 2003). A third rival hypothesis denies the existence of such a virus, and interprets AIDS test results as indicating “hypergammaglobulinemia” (Z. Bentwich, Kalinkovich, and Weisman 1995; C. L. Gesheker 2003, 2004; E. Papadopoulos-Eleopoulos et al. 1995; R. Richards 2001a, 2001b). There may be an error here in assuming that the situations described by these hypotheses are mutually exclusive.

59. Canadian Laboratory of the CDC (2004: 2830).

60. Gesheker et al. (2004: 59 n. 124) quoting J. L. Catania (1995). In America this stereotype is an important myth to maintain to support the persistence of gross distributive injustices.

Should we regard such misrepresentation of AIDS in North America ten years ago as a foretaste of what to expect of current statistical profiles portraying AIDS in Africa? Or should we suppose that improvements in test-kit technology and data analysis will naturally incur over time greater accuracy in the clinical diagnoses and monitoring that occur on the ground?

Hard-line subscribers to the *tradition vs. modernity* theme attribute routine shortfalls in data collection to African medical incompetence and inadequacy.<sup>61</sup> Yet in truth, top-ranking research institutions and teaching hospitals are conducting first-rate research in Africa and providing the backbone of trained medical personnel for the United States and UK.<sup>62</sup> Meanwhile fieldworkers have commented that “in Kenya, South Africa, Tanzania, Uganda, Zambia,” “verbal autopsies” are the standard way of learning the cause of a death.<sup>63</sup> These are accounts given by reputable community elders or professionals chosen by their neighbors as responsible spokespeople.<sup>64</sup> At the July 3–4, 2002, meetings in Durban, C. Gesheker recalls:

. . . many people maintained that 100,000 South Africans died of AIDS in 1999. When I asked them to provide a breakdown of those AIDS deaths by province, then disaggregated by age, race, and gender, no one could tell me where to get such data. They did, however, offer projections that 200,000 South Africans would die of AIDS in the year 2000. When I asked how many death certificates were issued in 1999, how many post-mortems were performed and how common were “verbal autopsies,” my questions were dismissed. Nonetheless the Panel’s draft report’s initial paragraphs refer to the “worst and fastest growing HIV/AIDS epidemic.”<sup>65</sup>

61. R. Horton, the 1960s anthropologist, started a fashionable revival of Levy-Bruhl’s myth of the “prelogical mind” to account for the shortfall of science and technology in Africa, carrying forward a false “ideology of African incapacity” from August Comte’s eighteenth-century formula for social progress. The Ghanaian philosopher K. Gyekye is one of many to perpetuate this view that developing countries must strive to cast off the attitudinal deficiencies fundamentally responsible for the dual bondages of “traditional” belief and “material want.” To presume blandly that diverse cultures are moving universally along a single “civilisational trajectory of humankind” in the words of K. Gyekye (1997: 265, 297) leaves unchallenged the most egregious inaccuracies about contemporary African cultures. Gyekye accounts for the 40-50 percent understaffing of medical facilities in Ghana by making reference to a peculiarly Akan worldview which is metaphysically opposed to and suspicious of scientific inquisitiveness and probity (Gyekye 1997: 244-252). For antidotes to this mystification of postcolonial impoverishment see G. P. Hagan (2000) and H. Lauer (2004).

62. “Ten schools in only four countries (Ethiopia, Ghana, Nigeria, South Africa) are responsible for providing nearly 80 percent of the émigré physicians to the USA . . . [O]f America’s 771,491 physicians (as of 2002 AMA-registered file): 23 percent trained outside, and 64 percent of those trained outside come from lower-income or middle-income countries” (A. B. Akosa 2005 *op. cit.*).

63. N. Hodgkinson (1996), C. Fiala (1998), C. Gesheker et al. (2004). The study population has had little or moderate formal education, so age reporting may be inaccurate. The exact cause of death may not have been known, particularly for conditions such as anemia, septicemia, genito-urinary disorders, and some cancers. Third, an unknown amount of overlap may exist among HIV/AIDS, TB, chronic diarrhea, and others causes of death.

64. See N. Hodgkinson (1996) re: verbal autopsies in Zimbabwe, Zambia, and Kenya. In Tanzania, verbal autopsies were also the norm, as encountered by P. W. Setel et al. (2000). In South Africa, as reported by C. Gesheker quoting from personal correspondence: “Dr. Alan Whiteside of the University of Natal, a leading AIDS researcher, confirmed that he ‘totally agreed’ with me ‘that the data on AIDS cases is unreliable.’ He added that the ‘situation is so bad in South Africa that we have currently stopped collecting information on actual AIDS cases until such time as we can develop a way of collecting it so that it is meaningful’” (letter, Whiteside to Gesheker, October 6, 1997).

65. H. Lauer (2003: 337) quoting Gesheker in his communiqué to the Panel’s Secretariat commenting on the South Africa Presidential AIDS Advisory Panel Report of the 2000 Durban Congress.

In South Africa until the mid-1990s half the population of South Africans were forcibly displaced to live in segregated “townships” within “homelands” or Self-Governing Territories, with no electricity, no running water, no sanitation, and no health or medical facilities. Legally, long-distance travel was denied except for monitored migration to and from the mines. Township residents never visited hospitals. Their births and deaths went unrecorded.

. . . At the July 4<sup>th</sup> panel session, Dr. Malegapuru Makgoba [used a] slide presentation alleged to “show” the effects that “AIDS” was having on mortality in South Africa by contrasting statistics from 1989 with those of the year ending the decade in 1999. When asked how he could consciously offer such a tautology, knowing that his numbers for “South Africa” in 1989 excluded the 14.3 million impoverished Africans of the TBVC countries [Transkei, Bophuthatswana, Venda, Ciskei] and the SGTs [self-governing territories], while those for 1999 included them, he had no explanation. . . . A closer examination of the total deaths in South Africa reported for the period April 1999–May 2000 revealed that approximately 360,000 people between age 15 and age 90 had died. But out of a total South African population now estimated at 42 million, this indicates a [per annum] death rate of only eight-tenths of one percent, a rate that is comparable to that of the United States. When asked . . . upon what basis we were supposed to be alarmed . . . Dr. Makgoba had no answer.<sup>66</sup>

But Dr. Makgoba does not need to have an answer. After more than a century of legally enforced exclusion from institutionalized medical care and clean running water, apartheid has yielded a public health crisis of unprecedented proportions, a crisis uncovered only in the last ten years by post-apartheid census taking. Until the mid-1990s, when the apartheid regime was finally defeated, the majority of South African births and deaths were not officially recorded at all, because the majority of South Africans under apartheid did not exist as citizens of the republic; they did not vote. Shortfalls in epidemiological rigor remain inexplicable unless one recognizes that the significance of HIV/AIDS statistical projections need not be restricted to their accuracy as measurements of discrete past and future events. Their purpose is also to authenticate the magnitude of an outrageous inequity and to legitimate a collective demand for reparation. The significance of these statistics goes beyond their empirical content. Estimates of HIV sero-prevalence also provide an objective ethical basis for negotiating judicial and economic redress; for example, some schedule of entitlements must be reckoned for miners who suddenly now qualify for workers’ compensation, which is generations overdue. HIV/AIDS statistics supply a legitimizing basis for creating new legislation to protect the civic interests of South African subsistence farmers who never officially existed before 1994.<sup>67</sup> The HIV/AIDS debate in South Africa concerns

66. Excerpted from text of Professor Gesheker’s e-mail communiqué to AIDS Panel Secretariat, in his solicited critique of the Panel Report initial draft (March 1999). The clearest and most obvious account to be given of a sudden rise in deaths throughout South Africa between 1989 and 1999 is the fact that the country’s entire population (births and deaths included) *doubled* with the end of apartheid in mid-decade, because the political boundaries expanded to define Black South Africans as citizens with rights and claims to state services. In Lauer 2003.

67. Thus the AIDS medical experts Alan Whiteside and Clem Sunter provide lists and explanations of recent legislation in their most recent South Africa AIDS advocacy training materials: Employment Equity Act No. 55 of 1998, Promotion of Equality and Prevention of Unfair Discrimination Act No. 4 (2000), Labour Relations Act No. 66 (1995), Occupational Health and Safety Act No. 85 (1993), The Mines Health and Safety Act No. 29 (1996), Compensation for Occupational Injuries and Diseases Act No. 130 (1993), and the Basic Conditions of Employment Act No. 75 (1997).

social justice. It is a discourse expressing the empiric urgency involved in redistributing economic resources and political powers, which include the majority's right to health care for the first time in national history.<sup>68</sup>

So let us suppose HIV is easily transmitted sexually, and does not spread within a population in the ordinary ways that all sorts of viruses are known to attack severely compromised, highly susceptible immune systems in tropical climates (via air, water, and contaminated food). Still, this does not imply that AIDS is best tackled and prevented everywhere through behavior modification.

Prevention is indeed better than cure, but what Africans need is safe water as much as safe sex. Given that the risk factors for tuberculosis,<sup>69</sup> fatal childhood dysentery, and chronic malaria<sup>70</sup> all over Africa have been known for a long time, it is not clear whether the most effective measures are being taken to curb contagions and high mortality given the huge investments that are being made and talked about.<sup>71</sup> It is clear, however, that behavior modification programs and toxic drug regimens have helped sustain huge profits by building new markets for the multinational pharmaceutical industry. For instance, the AIDS Vaccine Advocacy Commission has been very effective in using public emergency and crisis discourse to attract funding and blanket support for groundbreaking research, but the resources for research tend to stay in G-7 countries (<http://www.avac.org/handbook>).<sup>72</sup>

## 6. The Tests

If you ask researchers and diagnosticians, they are quick to correct a popular misconception about the HIV-positive test result: they understand it as a surrogate marker for high risk of AIDS onset, not as a definitive sign of the presence of a manifest single disease. Critics of the orthodox HIV/AIDS causal hypothesis allow a broader reading of the test's significance in Africa: "Recent research among African populations suggests that a person with an over-active immune system that is constantly assaulted by various pathogens or bur-

68. The right to health is listed in the Universal Declaration of Human Rights (1948) Article 25.1, and in the International Covenant on Economic Social and Cultural Rights (1976) Article 12.1.

69. Eight million new cases of TB occur each year globally, 5,000 per day, mostly in Africa. TB kills more women than any other disease worldwide. The treatment requires a six-month strict regimen of four drugs costing ten dollars. These are not antiretroviral drugs; they are 95-98 percent effective, but fewer than one in three in need receive the full course. TB is increasing 6 percent each year in Africa (WHO Technical Director of TB/AIDS Campaign, March 7, 2001, *BBC World Service News Hour* and July 15, 2003, *BBC World Service News Brief*). See also R. Malan (2003).

70. 3.6 million people worldwide die of malaria annually; 300,000 to 600,000 people contract malaria each day worldwide. A child dies of malaria every twenty seconds ("Pills, Patients and Profits," presenter Nigel Wrench, producer David Cook, August 2, 2004, *BBC World Service* documentary, first in series). <http://bbcWorldService.com/documentary/archives>.

71. At the 15<sup>th</sup> International AIDS Congress in Bangkok, July 2004, a main theme broadcast on *BBC* was the fact that after twenty years of antiretroviral and vaccine research, the numbers of estimated HIV seroprevalence continue to climb.

72. "90% of the world's burden of disease is carried by low-income countries, and 90% of the money devoted to medical research and pharmaceutical development is invested in G-7 countries" (A. B. Akosa, *op. cit.*, in conversation April 13, 2005).



dened with chronic infections is more susceptible to a positive HIV antibody test result.”<sup>73</sup> On this view, the condition indicated by HIV testing properly may be called “hypergammaglobulinemia.”<sup>74</sup>

Arguably the legitimacy of this rival interpretation is limited to test kits that are nonspecific for the populations for whom they are being used.<sup>75</sup> But test specificity depends upon how well the test designer collates information about the virus in the target population. There are now more than fifty test kits constituting four generations of design (tests to study proteins, fragments of DNA, antigens, antibodies, and viral load). Test technology has developed dramatically over the last twenty years; so it is feasible that early HIV tests used in Africa might have revealed little more than a condition of excess immunoglobulins, while later test-kit designs have gradually provided more accurate viral profiles of hosts situated in widely divergent infectious environments.<sup>76</sup>

A fundamental criticism of all HIV testing, regarded by some as decisive, was forwarded in 2001 by an organic chemist who helped design the original tests in the 1980s.<sup>77</sup> R. Richards (2001a, 2001b) says the major HIV tests (ELISA, Western Blot, branch DNA, p24 antigen, PRC “viral load”) have contributed to confusion about AIDS in Africa because from the outset they were “not approved for diagnosing an individual infection with a virus called HIV.” Neither the National Institutes of Health nor the test manufacturers themselves authorized diagnostic applications of these tests in packaging literature published up through 1997.<sup>78</sup> So the question arises whether all subsequent improvements on the original tests are mere elaborations of a flawed protocol. Richards emphasizes that the test kits up through the 1990s were designed for AIDS risk *groups*, for screening blood to ensure safety of blood transfusions, and to indicate surrogate markers. Tests might just “indicate an underlying abnormal propensity to develop a number of illnesses, some of which may prove fatal. A positive ‘HIV antibody test’ is no more than a non-specific marker for this proclivity.” According to Richards, “the inappropriate use of antibody tests for the purpose of diagnosing infection with HIV can be traced back to 1987, when the U.S. Center for Infectious

73. Z. Bentwich et al. (1995).

74. The hypergammaglobulinemia interpretation of HIV tests is elaborated by Z. Bentwich et al. (1995); C. L. Gesheker (2003, 2004); E. Papadopulos-Eleopoulos et al. (1995); R. Richards (2001a, 2001b).

75. Ghana Health Director-General A. B. Akosa, *op. cit.*, in conversation April 13, 2005.

76. It is on this basis that staunch critics initially complained about the original test kits having no business being used in Africa from the start. C. Johnson (2003) discovered that a key problem with initial false-positive results in Central African Republic was the omission of Africans from the original test samples. She found that “. . . [n]either healthy Africans [n]or Africans with similar non-AIDS conditions that might elicit cross-reactions” were included in the base samples.

77. R. Richards (2001a, 2001b) codesigned the first generation of the antibody test ELISA; and subsequent tests produced by the leading U.S. laboratories in this field in the 1980s, Applied Molecular Genetics (Amgen) in consortium with Abbott Laboratories.

78. R. Richards (2001a) details disclaimers by manufacturers of HIV test kits:

EIA testing alone cannot be used to diagnose AIDS, even if the recommended investigation of reactive specimens suggests a high probability that the antibody to HIV-1 is present. . . . At present there is no recognized standard for establishing the presence and absence of HIV-1 antibody in human blood. Therefore sensitivity was computed based on the clinical diagnosis of AIDS and specificity based on random donors. (Abbott Laboratories, Diagnostic Division, 66-8805/R5, January, 1997)

Do not use this kit as the sole basis of diagnosing HIV-1 infection (HIV-1 Western Blot Kit, Epitope, Inc., Organon Teknika Corporation PN201-3039 Revision #8).

Diseases Control and Prevention declared: "The presence of antibody indicates current infection" (CDC 1987). Richards complained that "the CDC had never offered any reference to any scientific study to substantiate this claim" (Richards 2001b).<sup>79</sup> The CDC proclamation was quickly accepted as fact and has formed the foundation of all subsequent diagnoses of HIV infection, including the most recent UNAIDS/WHO estimates of 40 million current global infections and 25 million cumulative AIDS deaths.<sup>80</sup> Meanwhile physicians had been using nonspecific versions of the tests to tell people they are infected with a deadly virus and that transmission is a high risk for their children. Decisions to initiate toxic therapy have been based on these tests (Richards 2001b). Subsequently some of these diagnoses and prescriptions have been challenged in law courts, proven false, and overturned.<sup>81</sup>

There remain many unknowns among the factors that facilitate HIV infection.<sup>82</sup> HIV surveillance at the biomolecular level in Africa is necessarily both a highly advanced and regionally specialized occupation, the mastery of which is far more sophisticated than re-

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The Amplicor HIV-1 Monitor test is not intended to be used as a screening test for HIV or as a diagnostic test to confirm the presence of HIV infection. (Roche Diagnostic Systems, Inc., Amplicor HIV-1 Monitor Test Kit, US:83088, June 1996, 13-06-83088-001)

Test kits are designed, he says, for screening blood for safety in transfusions, and are accurate as indicators of surrogate markers of AIDS, but not for diagnosis of the presence of HIV infection. The reasons for the test restrictions and complications in diagnosis arise chiefly from the nonspecificity of the test kits and nonuniformity of their interpretation, detailed in Richards (2001).

79. The disregard for standard methodological protocols in the seminal research by Robert C. Gallo which gave birth to the HIV/AIDS industry has been stressed most notably by the Nobel Laureate molecular biologist Kary Mullis. See footnote 5.

80. Quoting from a letter to the editors of *British Medical Journal* by Dr. Rodney Richards, <http://bmj.com/cgi/eletters/326/7381/126/e#30151>. In this passage Richards refers to UNAIDS/WHO, *AIDS Epidemic Update*, December, 2001; UNAIDS/01.74E - WHO/CDS/CSR/NCS/2001.2 (<http://www.unaids.org>).

81. In 1998 a district court judge in Newport, Maine, acquitted the defendant Valerie Emerson, whose children had been seized by the Department of Human Services in the interest of child protection because mother Valerie had refused aggressive AZT drug therapy. She also intentionally violated the state's ban on breastfeeding for her second child since the adverse side effects of following these directions for her firstborn had been detrimental. Judge Douglas Clapp dismissed the State's proceedings against the mother, recognizing her judgment to have been correct with hindsight. "Maine mother wins custody appeal," *Reappraising AIDS Newsletter* 6(11), 12 Nov./Dec., 1998. Hindsight also disproved earlier AIDS diagnoses of her first child, who died while receiving AZT. The Emerson victory in resisting AZT treatment for their second child through court battles was in national news (*New York Times*, September 20, 1998; *Associated Press*, September 15, 1998; *Boston Globe*, September 15, 1998). See District Court Judgment (1998).

Kathleen Tyson, who appeared several times up through 2000 before a Juvenile Court in Eugene, Oregon, was threatened by the State with losing custody of her child over dispute concerning AZT therapy (April, 1999) <http://www.televar.com/tysn/>. *CNN* covered the story on February 17.

82. HIV remains enigmatic despite 23 years of top level scientific study, leading some molecular biologists to conclude it is phantasmagorical; see Appendix B. Arguably a comparable impasse was reached after three decades of oncological research had been tightly controlled by the American Cancer Association. "Cancer" was initially stigmatized as a single, self-inflicted type of virally induced disease. After forty years of research some cancers are known to be caused by viruses interacting with varying environmental and genetic factors, the interconnections of which are still not fully understood. The link between HIV and former cancer research is also circumstantial. According to E. De Harven (1998), an electroscopic virus isolation expert: "The current reverse transcriptase research programme follows upon a history of unusually large levels of federal support [that] resulted in the creation of a retrovirus research establishment 'in the 1960s' . . . [when] large numbers of research jobs were created in this venture. The intellectual freedom to think along other avenues of cancer research was

cent media reports of HIV self-test kits selling in South African supermarkets would lead the public to believe.<sup>83</sup>

Overall it appears that decentralization of decisions about funding would improve the returns on investment in R&D for HIV/AIDS—returns measured not in dollars and cents, but in benefits for the afflicted local populations. As of now the funding dispensed for AIDS vaccine research and pharmaceutical development continues to support a universalizing, monopolizing, market-enlargement approach. This may be the most lucrative strategy because it protects against loss of copyright control over products with even a modicum of therapeutic potential, helping to ensure the greatest annual dividends for drug company shareholders. But for cost-effective management of specific diseases associated with AIDS in Africa, the current top-down management of R&D appears to be far less promising.

## 7. The Drugs and Their Manufacturers

The most surprising thing about AZT is that it doesn't even claim to work: Retrovir is not a cure for HIV infection. . . . The long-term effects of Retrovir are unknown at this time. The long-term consequences of *in utero* and infant exposure to Retrovir are unknown, including the possible risk of cancer.<sup>84</sup>

AIDS has subsided altogether in affluent countries, and a common but false perception is that this is because people in rich countries can get their hands on antiretroviral drugs (ARVs).<sup>85</sup> But ARVs do not *cure* AIDS; nothing yet can. Antiretrovirals do extend life of otherwise terminally ill patients, but it is not known exactly why, nor whether the perceived clinical improvements have anything directly to do with a retrovirus.<sup>86</sup>

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rapidly dwindling, especially when major pharmaceutical companies started to offer tantalizing contracts to support polarized retrovirus research. . . . The top priority was to demonstrate at any cost that retroviruses had something to do with human cancer, a hypothesis, however, which didn't receive the slightest support throughout the 1970s. . . . Unfortunately, the emergence of . . . AIDS in 1981 gave the retrovirus establishment an opportunity to transform what could have been only an academic flop into a public health tragedy. . . . The events which have lead to today's crisis have been reviewed and analyzed most convincingly by Peter Duesberg. . . ." See Duesberg (1996).

83. According to the *BBC World Service News* (May 24, 2005) Pick 'n Pay Marketing Manager Jonathan Ackerman claims the supermarket chain was selling the kits without permission of the manufacturer, Homelab. They were removed from retail marketing after complaints of the South African Medical Association. But it remains controversial in the public domain whether access to such kits ought to be a civic right. Currently South Africa has no legislation governing self-test kits.

84. L. Scheff (2003) quotes from the warnings in the crimp published by the manufacturer (GlaxoSmithKline, formerly Burroughs Wellcome).

85. This view was purveyed by J. Morris, current head of UNAIDS, on *BBC* "Instant Guide to the World Health Organization," May 22, 2005. The attitude of urgency first propelled by a powerful gay lobby in California changed the pace of FDA safety clearance of prescription drugs, much to the detriment of pregnant women who were once carefully protected, after the thalidomide fiasco. See E. Ely (2000). Dr. Arnold Weinberg, former Director of the Medical Center of M.I.T. in Boston, now semiretired, uses ARVs to keep some affluent terminally ill patients alive who would have otherwise succumbed to AIDS. On the quality of life when prolonged by ARVs, see W. R. Lenderking et al. (1994).

86. Concorde Coordinating Committee (1994); P. Duesberg, ed. (1996); P. Duesberg and D. Rasnick (1998); P. Duesberg et al. (2003); E. Ely (2000); C. Farber (1998); P. Duesberg, ed. (1996); R. Giraldo et al. (1999); R. Johnston, Irwin, and Crowe (2003); H. Kremer, Larka, and Hässig (1996); R. Kumar Hughes, and Khurranna

As expressed by A. B. Akosa (*op.cit.*), a pathologist and public health administrator in Ghana, to deal with contagion and infection most effectively in biodiverse climates, the first line of investigation is into plant materials indigenous to the very region where the pathogenic varieties are proliferating.<sup>87</sup> But this requires making an about-face from the direction that the global HIV/AIDS drug crusade has pursued so far. Increasingly from within Africa, such a turnaround looks long overdue.

Dr. Anthony S. Fauci, the director of the National Institute of Allergy and Infectious Disease, cochair of its AIDS Treatment Panel, told *Newsday*:

It's clear we're not going to eradicate the virus with the drugs we have now. And we're starting to see a greater and greater realization of the accumulation of toxic side effects . . . the longer we treat, the more long-term toxicity we see.<sup>88</sup>

Dr. Gordin, the head of infectious diseases at the Veterans Administration Medical Center in Washington, D.C., recently observed: "We've gone from an era when most people were dying from the illness to a time when they are getting complications from the therapy that are almost as bad."<sup>89</sup>

The current manufacturer of AZT (GlaxoSmithKline, makers of Retrovir, Combivir, and Trizivir) is enjoying excellent returns for what was once a shelved product developed and rejected in 1986 as an anticarcinogen. "Drugs containing AZT as an ingredient account for about \$1.5 billion in GSK's 2002 sales alone. Other nucleoside analogues provide another \$750 million in the year's sales" (L. Scheff 2004a). According to M. Angell (2004: 52 n.1), the annual domestic profit of the U.S. drug industry is \$200 billion altogether, with estimated annual worldwide sales of \$400 billion. As for profits drawn from sales in Africa alone, she said, "The big drug companies keep the details of their profits secret. We only know the total, not the breakdown, for either drugs or countries. Furthermore, the drug companies move costs and profits around globally to maximize the latter. For example, on May 8, [2005] Alex Berenson of *The New York Times* reported how drug companies ascribe their profits to international sales to take advantage of tax breaks."<sup>90</sup> M. Bailey, speaking for Oxfam, the British-based humanitarian not-for-profit aid agency, told the press that not much for Africa can be expected from the drug multinationals. When queried by Oxfam over recent years, the pharmaceutical companies have indicated no plans in their future re-

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(1994); E. Papadopoulos-Eleopolus (1999); also Professor A. B. Akosa, Director-General of Ghana Health Service, and Professor R. Biritwum, Vice-Dean of University of Ghana Medical School, both in conversation, April 13 and January 15, 2005, respectively.

87. Viral-geneticist J. A. M. Brandful (2003) urges, "In Ghana, it is advisable to collaborate very seriously with traditional medical practitioners in order to scientifically evaluate the benefits of their indigenous products to manage HIV infection. There is already anecdotal evidence that some of these medications may be beneficial to HIV/AIDS sufferers." But without scientific investigation and certification such anecdotal evidence remains idle.

88. "Change in Guidelines for HIV/US Officials to Tout New Treatment Policy," *Newsday*, January 17, 2001.

89. Gordin, "HIV Cocktails: Better Later Than Sooner?" *Business Week*, Feb. 5, 2001. See also E. Ely (2000).

90. In e-mail conversation, May 12, 2005. Professor M. Angell is former editor in chief of *The New England Journal of Medicine*, and currently with the Harvard Medical School.

search and development programs to reflect the needs of consumers in Africa, India, or China.<sup>91</sup> Yet there are drugs that poor countries in Africa badly need. For example, in treating tuberculosis, the combination-therapy rifampin, isoniazid, pyrazinamide, and ethambutol that costs \$20 has a success rate of 95–98 percent (see section 2).

Nutritional prevention of AIDS plays a greater role in Africa than the pharmaceutical companies would have us believe.<sup>92</sup> On June 7, 2005, the Minister of Health in South Africa fanned the fire of controversy by stressing nutritional approaches to fighting HIV/AIDS and by emphasizing the toxic side-effects of the standard ARV treatment (*BBC World Service News*, June 7, 2005).<sup>93</sup> Individual women in the United States occasionally have publicized their court fights with state welfare agencies threatening seizure of child custody, women legally defending their right to pursue doctors' advice that contradicts invasive procedures involving AZT and nevirapine. And they have won.<sup>94</sup> These HIV+ mothers have reported personal experiences from affluent communities that they and their children are doing well, not by taking toxic drugs but by sustaining a healthy lifestyle, excellent nutrition, and using antibiotics as necessary for specific infections that arise (P. H. Duesberg, C. Köhnlein, and D. Rasnick (2003); also see Appendix B).

In nonaffluent communities, the impact of the nutritional integrity of the diet has proven surprisingly critical to precluding AIDS diagnoses so that potentially doomed and stigmatized villagers never need see antiretroviral therapy nor suffer the stigma of the HIV/AIDS scourge. N. Hodgkinson (1996: 352–353) quotes the experience in Northern Tanzania of “Phillipe and Evelyn Krynen, medically trained charity workers employed by the French group Partage in Kagera Province, [who] report that when ‘appropriate treatment was given to villagers who became ill with complaints such as pneumonia and fungal infections that might have contributed to an AIDS diagnosis, they usually recovered.’”

91. *BBC News Hour*, September 3, 2003. When Pfizer Corporation visited Accra's top five-star hotel in September, 2003, the week before the Pharmaceutical Society of Ghana held its annual conference, Pfizer displayed beautiful hi-tech posters all around the place to feature their own current product promotion. It was a medication to cure “erectile dysfunction (E.D.) . . . an under-reported and under-diagnosed condition that is affecting more than 100 million men worldwide . . . its prevalence is expected to increase significantly as the population grows and ages. Data on file, Pfizer Inc. information on request.”

92. The tremendous resistance to any non-ARV therapy today is reminiscent of the legal assault in the 1970s by the American Cancer Association against noninvasive therapeutic alternatives to radiation and chemotherapy. See footnote 82.

93. Discussed in Z. Bentwich et al. (1995); W. Fawzi et al. (1998); J. Hornsy et al. (1999). C. Gesheker (2000c: 12) cites a 1998 study where “HIV-positive women in Tanzania showed that simply providing them with inexpensive micronutrient supplements produced beneficial effects and decreased adverse pregnancy outcomes.” Regarding the impact of vitamin A supplements studied in Malawi, see R. D. Semba et al. (1999). C. Farber (1998a: 55) refers to the Malawi study where measurement of purported HIV transmission from mother to child correlated inversely with Vitamin A deficiency: the lowest levels of Vitamin A dispensed to mothers yielded highest HIV transmission rates of 32.4 percent, while the highest levels of dispensed Vitamin A correlated with HIV transmission of only 7.2 percent, a result lower than the lowest figures achieved with AZT treatment. Lynne Francis, a white 57-year-old in Zimbabwe, was diagnosed with HIV, and after twelve years remains healthy due to careful eating and runs an organization to urge people to live positively, and eat well (*BBC World Service*, “Everywoman,” May 24, 2005). She discovered that the best approach is to deal with HIV like any virus. On June 11, 2004, *BBC Network Africa* presented the views of David Patient, a Zambian UN consultant in Eritrea and South Africa, who described his own focus on nutritious diet and vitamin therapy as the basis for sustained health over twenty years despite his HIV positive status.

94. See footnote 81 above.



Even though antiretroviral therapy cannot eliminate HIV and does not cure AIDS, it is an important component in the current treatment profile.<sup>95</sup> So despite its high toxicity and dangers when dispensed without proper continual supervision, Professor A. B. Akosa, as head of the Commonwealth Medical Association and Ghana Health Service, stresses the duty of the world health community to strive for parity between poor and rich countries in patient access to the panoply of partially helpful treatments to prolong life.<sup>96</sup> Not all ARV drugs that are now in use are equally effective; some are known to be more risk prone and toxic than others.<sup>97</sup> The promotion in Africa of nevirapine, an NNRI (non-nucleoside reverse transcriptase inhibitors, the second generation of anti-HIVs) drug, provides an extreme example of the breakdown of standard precautionary medical protocols assumed to be universal in industrially advanced countries. As reported before 2000 by Boehringer-Ingelheim, the German manufacturer of nevirapine, the results of trials thus far render the drug's efficacy dubious and more fatally toxic than the previous AZT. In 2002 *BBC World Service News* broadcast only once the fact that nevirapine was discovered to induce mutation in HIV, exacerbating the virulence of the very virus it is supposed to suppress.<sup>98</sup> The drug manufacturer and the NIH Working Group on AIDS Therapy warn not to use it as a monotherapy.<sup>99</sup> Nevirapine babies may become dependent upon the drug for life if it is administered to them as neonates, according to the manufacturer's crimp.<sup>100</sup>

95. Pathologist A. B. Akosa, *op. cit.*, in conversations April 13, 2005.

96. In conversation at the Ministry of Health, Accra, April 13 and May 15, 2005, where he runs public health. Professor A. B. Akosa trained for several advanced degrees at the London Royal College of Pathologists, served as a registrar at Hammersmith Hospital and as a consultant for five years at Whipps Hospital also in UK. He is president of the Commonwealth Medical Association.

97. The most recent incriminating news breaks concern the drug nevirapine and suppression of knowledge about its dangers by the National Institute of Health and the Institute of Medicine, detailed in J. Solomon (2002, 2004a, 2004b, 2005). See also P. Sidley (2002), S. Lang (1995, 1998) for details of the politics that have dogged the AIDS research funding establishment for twenty years, and the distorting impact this has had on the scientific process of eliminative induction essential to corroborating any empirical hypothesis. See also Craddock (1996: 130): "People who ask simple, straightforward questions are labelled as loonies who are dangerous to public health." Medical researchers publishing over two decades sustain the basis for skepticism about the orthodox HIV/AIDS models and their tenets. See Appendix B.

98. This information was broadcast only once, in the first morning edition of *Newshour*. But the manufacturers of nevirapine (Viramune) indicate this effect as anticipated in their packaging insert. See Boehringer-Ingelheim packaging insert (2002, 2005): "Resistant virus emerges rapidly and uniformly when VIRAMUNE is administered as a monotherapy. Therefore, VIRAMUNE should always be administered in combination with other antiretroviral agents." Also in public information warnings of the Centers for Disease Control and Prevention (2001a, 2001b) and the Working Group on Antiretroviral Therapy (2000). Serious problems with nevirapine have been documented for years: Cattelan (1999); CDC (2001a, 2001b); S. Johnson et al. (2000); P. J. Piliero and B. Purdy (2001); also reported in L. Scheff (2004a, 2004b).

99. Previous generations of anticarcinogens including AZT have been used in combination because it is known that individually they encourage mutation, but even in combination ARVs do not eliminate HIV, so drug-resistant strains are to be expected to increase.

Drug-induced resistance is not unfamiliar: TB is resistant in most parts of the world to streptomycin, which in 1947 was the first antibiotic used to combat it. Malaria in Ghana is now generally resistant to chloroquine, although that drug is still used due to its low cost.

100. The manufacturer, in its doctor/patient information crimp (and the U.S. Department of Health in public information), has also published that there are no definitive results concerning the correct dosage of Viramune

And yet since 2000, pressure exerted by anti-Mbeki activists composing the Treatment Action Campaign resulted in nevirapine now being legally mandated by court order, ratified by the High Court in Pretoria in July 2002, for free distribution for five years to poor black pregnant women in Kwazulu-Natal.<sup>101</sup> One month before, in June 2002, Boehringer-Ingelheim withdrew its application for registration of Viramune® as a prescription drug in the United States.<sup>102</sup> So South African critics of the HIV/AIDS orthodoxy raise the question: Why is nevirapine now mandated for free distribution by court order in Kwazulu-Natal over the next five years?<sup>103</sup>

Originally the South African government's central health monitoring agency, the MCC (Medicines Control Council), came under heavy political attack for challenging the relevancy of Ugandan research cited to demonstrate nevirapine's efficacy in reducing mother-to-child HIV transmission. The study done in Uganda and others through the early and mid-1990s did not involve nevirapine.<sup>104</sup> During and subsequent to the period of legal wrangling ending in a court order enforcing administration of nevirapine to women during pregnancy and labor in Kwazulu-Natal in South Africa, studies have been run in Uganda to contrast nevirapine and AZT<sup>105</sup> with effects so devastating that they were initially covered up.<sup>106</sup>

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nor any known treatment for overdosage and no knowledge of other potential risks for mothers' future fertility and infants' health. The drug also undermines the effectiveness of oral contraceptives and is known to produce many toxic side effects, including 80 percent likelihood of mild to severe skin rashes, hepatitis, and related liver damage, which in many of the trial cases has been fatal. See A. Cattelan et al. (1999); CDC (2001a); S. Johnson (2003); P. J. Piliero and B. Purdy (2001).

101. At a four-day health conference in Durban, TAC delegates petitioned the health minister to resign for "irresponsible" advocacy of vitamin and nutritional approach to HIV/AIDS management. *BBC World Service News*, June 7, 2005. See footnote 21 for more about TAC.

102. *BBC World Service*, June 2002. Registering the drug with the U.S. Food and Drug Administration (FDA) requires that the manufacturer be accountable for its safety and for reporting the results of ongoing tests to determine the drug's actual efficacy and its contraindicative effects. Very recently the foolhardiness of this decision has come to light in a scandal involving the NIH suppressing known dangers of nevirapine. See P. Sidley (2002); J. Solomon (2002, 2004a, 2004b, 2005).

103. This question was posed to the press by an ANC spokesperson, Smuts Ngonyama, March 10, 2002. <http://www.anc.org.za/ancdocs/pr/2002/pr0310.html>.

104. See, for example, J. Saba (1994); R. S. Sperling, D. E. Shapiro, R. W. Coombs et al. (1996); P. S. Eastman, Coombs et al. (1998). The drug actually tested was the among the earliest-produced protease inhibitors AZT or ZDV (Zidovudine initially marketed by Burroughs-Wellcome Co., later Glaxo-Wellcome Co., and now sold by the company merger GlaxoSmithKline under other names mentioned earlier). Originally, AZT had been created but rejected as a potential anticarcinogen drug, and was later featured in Uganda to test its impact on the placenta of women preparing for delivery, shortly before nevirapine had been invented. The effectiveness of AZT, highly toxic and contraindicated for use with neonates for other reasons, varied in these studies between 30 percent and figures less than 50 percent. The extrapolation to the 50 percent figure for efficiency of nevirapine on its own was therefore generally regarded as contentious, since nevirapine was produced in the later generation of drugs (NNRIs), which function differently. See E. Papadopoulos-Eleopolus et al. (1999) as a primary source for comprehensive review of AZT research results since it was created as a chemotherapy forty years ago.

105. See L. Guay et al. (1999); S. Johnson et al. (2000); P. Piliero and B. Purdy (2001).

106. "An NIH whistle-blower named Jonathan Fishbein, an AIDS researcher charged with overseeing clinical trials here and abroad . . . disclosed that NIH AIDS research chief Edmund Tramont had airbrushed and cooked damning clinical data from a large experimental trial in Uganda that tested a drug called Nevirapine against AZT, in pregnant HIV-antibody-positive women, intended to reduce HIV transmission. Tramont had

International AIDS conferences sustain the orthodox HIV/AIDS ideology and the urgency of antiretrovirals as the singular solution to the HIV/AIDS crisis.<sup>107</sup> They are organized biannually by pharmaceutical companies that have invested billions of dollars in antiretroviral research and development. According to medical journalist Celia Farber (2002), who has been covering such events for more than fifteen years, these gatherings of invited, sponsored experts and activists are “funded, driven by, and controlled by the pharmaceutical industry. In the Geneva conference, there were pharmaceutical ads plastered right onto the *luggage-conveyer belts* at the airport. At every conference, the leading pharmaceutical giants set up a display village filling an entire stadium-sized floor with video screens, towering pillars, interactive displays, booths full of give-away goodies, including CDs, videos, carry bags, condoms, ice cream, chocolates, to advertise anti-HIV products.”

The G-7 countries have dumped unwanted products and surpluses on the African continent before, especially targeting as “beneficiaries” poor and illiterate people who have no recourse if a treatment course has detrimental consequences.<sup>108</sup> If antiretrovirals were known to cure AIDS or even to eradicate HIV so sero-positive blood could be reversed,<sup>109</sup> and if the staffing and infrastructure of health care delivery in Africa were able to compensate for the drugs’ dangerously toxic effect on patients,<sup>110</sup> then the advisability of their unsupervised use among vulnerable groups would not be contentious.

In Ghana only 39 percent of the total 20 million people rely on the state-run health services. Sixty-one percent rely on alternative medical expertise and herbal preparations when they fall ill, reserving the hospital (if they have the means) as a prestigious place to go in order to die. Within the Ghana Health Service, 40 percent to 50 percent of the personnel postings are vacant. This alienation is historical. From the inception of Ghana’s hospital system under colonial rule until independence, the only Ghanaians legally entitled to rely on institutionalized medicine were those who posed an immediate health risk to British administrators and their families. Until 1952, law prohibited any African from receiving certification to practice medicine in Ghana beyond the role of assistant “Native Medical Officer,” “. . . in order to obviate any possibility of any European doctor being subordinate to an African

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censored reports of thousands of toxic reactions to the drug, and ‘at least 14 deaths,’ concealing from the White House the truth about the drug, just before Bush rolled out his \$500 million plan to push Nevirapine across Africa” (C. Farber 2005, *New York Press*, December 28, 2004, in 17(52). [http://www.nypress.com/print.cfm?content\\_id=11845](http://www.nypress.com/print.cfm?content_id=11845). See also J. Solomon (2004a, 2004b, 2005).

107. TAC activists attending the 2<sup>nd</sup> National AIDS Conference in Durban, South Africa, are petitioning for the resignation of Minister of Health Manto Tshabalala Msimang, on the grounds that she is “irresponsible” for pointing out the toxic side effects of ARVs and stressing that alternative methods of managing HIV and preventing AIDS exist as options. Antigovernment campaigners and lobbyists equate the demand for basic human rights with the demand that government spend more to increase access to antiretrovirals. Media coverage pictures street demonstrators with huge high-tech cardboard advertisements for nevirapine produced by the drug manufacturers (*BBC World Service News*, June 7, 2005).

108. The recent cover-up of nevirapine’s test results is the most recent evidence that this risk is not fantastical. See J. Solomon (2004); J. Piliero and Purdy (2001); Working Group on Anti-retroviral Therapy (2000). But the concern over risks outweighing benefits is not new: see Ely (2000), and especially for Africans, see Bekele (2000).

109. Director-General of Ghana Health Service, interviewed April 15, 2005.

110. ARVs are regarded as a potential *cause* of AIDS in the view of some researchers (P. H. Duesberg et al. 2003).

one.” In 1952 the ratio of registered doctors practicing Western medicine in Ghana was 1 to 30,000 (Addae 1994: 3).

Today, what the big pharmaceuticals do in Ghana and elsewhere around Africa is to promote their own products.<sup>111</sup> According to A. B. Akosa, they should be urged or required to train qualified African personnel and to build the infrastructure necessary to conduct their health and safety trials in-country.<sup>112</sup> But for American pharmaceuticals to carry out clinical trials overseas would integrate foreign researchers and other personnel deeply into the product development process, and this might run the risk of ultimately disqualifying such products from exclusive patentability by the American companies.<sup>113</sup> The same threat to multinational pharmaceutical products is risked by studying indigenous products already in use in African populations through traditional herbalists and developing these local resources into a scientifically scrutinized product that is certified as safe, regulated, and effective.

The drug companies have played a central role in the social conditioning that has instilled mainstream beliefs about the urgency of disseminating antiretrovirals to undermine an essential, known, clearly defined, and scientifically established link between HIV and AIDS in Africa. There may be such a link. But to find out, money has to be put in the institutes where the virus is richest in its evolving diversity, so that the necessary cutting-edge infrastructure is in place where it is needed most, not where it can reap the most capital profit. The microbiological reason is that recombinants of HIV are unstable and evolving; distinctive variants of HIV are mutating throughout Africa differently from the variants that dominate in the countries where HIV/AIDS is observed to be subsiding. Yet the lion's share of resources for scientific research and drug development remains at the disposal of insti-

111. An example is the \$15 million training center and clinic facility built by Pfizer in Kampala, Uganda. While the investment in outpatient care is appreciated, the center's long-run limitation lies in its narrowly designed purpose to build and sustain a retail market exclusively for Pfizer drugs ("Pharmaceutical Firm Pfizer Opens AIDS Training and Treatment Center in Uganda," *Associated Press*, Oct. 20, 2004). To date, according to the Director General of Ghana Health Service, none of the large pharmaceuticals retailing in Ghana (including Bristol-Myers, Johnson & Johnson, Merck, Novartis, Pfizer, Roche, Squibb, Wyeth) have provided any R&D or other supporting services to the country, with the exception of GlaxoSmithKline, which has just signed a contract to help nominally in supporting child health care services. Three South African AIDS Advisory Panel members from three continents (North America, Africa, Europe) recounted that: "In 1997 Glaxo-Wellcome [now GlaxoSmithKline] negotiated with the South African Department of Health to have the government subsidize the cost of importing AZT. As part of this 'bouquet of assistance' to provide HIV-positive women with AZT, the [savings] from the difference in cost between the actual and the discounted price is devoted to fund training for 'AIDS counsellors.'" Some pharmaceutical companies now urge pregnant African women who test HIV-antibody positive to take these toxic drugs and to stop breastfeeding their infants (C. Gesheker et al. (2004: 32 n. 117), quoting *The Weekly Mail and Guardian* (Johannesburg), August 22, 1997).

112. A. B. Akosa (2005), president of CMA and J. Johnson British Medical Association, organized a joint meeting in London, April 13–15, 2005. The assembled participants issued a communiqué, "The Healthcare Skills Drain: A Call to Action," April 14, 2005. The consortium included also the Canadian Medical Association, the American Medical Association, the American Nurses Association, Commonwealth Nurses Federation, Health Canada, Medical Council of Canada, the Royal College of Nursing, and the South African Medical Association.

113. See the WTO trade-related intellectual property rights agreements, section 5, Article 27 exemption 3 a and b, and also the Dispute Settlement Understanding article 24 re: special procedures involving least-developed country members, WTO Uruguay Round of Trade Agreements (WTO 1999: 133, 373).

tutes based in G-7 countries. One of the injustices of the received political economy of HIV/AIDS research is that it risks perpetuating the pursuit of potentially lucrative high-profile experimental drug and vaccine research programs at the expense of advancing that research in the very developing countries where intervention is currently needed most, using indigenous germplasms found in local environments from which populations are already suspected of benefiting.<sup>114</sup> Currently victims of childhood leukemia and other diseases are doomed to a premature death, although the cures for these diseases are found in the countries where they live.

Nonexperts are obliged to understand if not how AIDS in Africa is caused (which nobody can explain at the moment), then at least how it has become virtually impossible to address. Given what is known about management and reduction of the diverse range of illnesses with which AIDS has come to be associated, it is evident that nonélites in Africa do not need lectures on sex but do need prevention programs involving access to clean water, anti-mosquito-treated bed netting, sanitation infrastructure, and adequate nutrition. They need a range of known specific antibiotics and medications or a vaccine to tackle malaria, TB, maternal septemia and tetanus, chronic neonate anaemia and dysentery, and pneumonia. But the world is given to believe that the test kits and the ARV products manufactured in G-7 countries are the magic bullets for AIDS sufferers in Africa, and that the only focus for concerned, responsible world citizens must be a narrow one that ensures the current stock of antiretroviral formulas will be made available as quickly and widely as possible for the lifetime course of treatment anticipated (Ely 2000; Boehringer-Ingelheim 2002, 2005). Even the briefest familiarity with facts on the ground reveals that such unilateralism in foreign health care policy is quite plainly counterproductive, yet it persists.

Transforming the health status quo of formerly colonized nations requires rectifying centuries of disparaging indoctrination. A central tenet of this indoctrination is that Africans lack the “capacity” to apply new medical knowledge and technologies that will reverse haplessly self-destructive normative behavioral trends. But progressive health initiatives are not in fact the expression of innate or acculturated *capacities* at all; an improvement in public health reflects a range of political economic *entitlements*. The entitlement to be trained and funded to float and test competing hypotheses, to publish and purvey all relevant results, to set policies and implement them for the immediate and future public’s welfare and

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114. “A plant in Madagascar, *Catharanthus roseus*, has been used for several years in treating diabetes and cancer. Research on this plant yielded two very important anticancer drugs: *vinblastine* and *vincristine*. Vincristine is now the drug of choice for the treatment of childhood leukemia, and it has an annual retail value of over \$US 150 million. Before the discovery of vincristine, the survival rate of children with leukemia was about 20%. Now the success rate for this drug is over 80%. But a 5mg ampoule of vincristine sulfate injection costs about \$US 80, making the drug virtually inaccessible to most leukemia children outside the industrialized world” (Addae-Mensah 2000: 168).

Virologist Brandful, *op. cit.*, reports that Noguchi Memorial Institute of Medical Research, in collaboration with other institutions in Ghana, intends to study HIV/AIDS management with indigenous products, comparing the effect of local herbal therapies with antiretroviral drugs on viral load. As vital as this research program appears in the view of leading health pathologists in the region, as well as to nonorthodox AIDS researchers in Germany, Austria, Canada, and Australia, the modest \$850,000 required is difficult to procure. Pathologist A. B. Akosa, head of Ghana Health Service, is enthusiastic about pursuing a malarial cure from the local plant *kryptolepis*, an analogue to the *artessimin* plant of Southeast Asia, from which China has successfully developed and marketed worldwide the antimalarial preparation Artesunate.



health care delivery, to build up and enjoy the material conditions for a decent minimal standard of living, to decrease national mortality and morbidity rates—these are not the result of propensities or dispositions of the technocratic mindset; they are fiercely contested political rights.<sup>115</sup>

### Appendix A: What's Sex Got to Do With It?

The modern fetish that now obsessively connects a uniform source of disease and premature death with “traditional” African sexual habits is not a new feature of the medical literature generated in Europe. According to S. Gilman (1985), throughout the nineteenth and early twentieth centuries the chief concern of the medical establishment in Europe was to eliminate sexually transmitted disease through social control. With respect to the colonies this was a critical motive in social reform programs, because native sexuality was understood to be primitive, so it required monitoring, reformation, and control. It was asserted as a fact through the 1800s and in the early twentieth century that syphilis was a type of leprosy that spread to Europe from Africa some time during the Middle Ages; blackened skin was regarded as a symptom of leprosy. Prestigious medical journals of the late eighteenth and nineteenth centuries detailed the observable physiological signs of African females’ inferior character (S. Gilman 1985). The received explanation for the spread of syphilis and gonorrhea attributed these epidemics to the sexually deviant behavior of lower-class European prostitutes, whose immorality was evidenced in drawings that highlighted their similarities in jaw, earlobe, genitalia, body shape, and color tone to African females ranked just below them in the Great Chain of Being.<sup>116</sup>

Today’s popularized HIV medical expertise assures us that just *looking* at someone cannot reveal whether he or she is infected with HIV (*BBC*, November 23, 2004). Instead, now it is a set of behavioral traits and the disposition to exert pious, rational self-control that separates the polluted, the degenerate, and the diseased person from the clean, the pure, and the healthy.<sup>117</sup> But conventional researchers today perpetuate Victorian “stereotypes about insatiable sexual appetites and carnal exotica. They assume that AIDS cases in Africa are driven by a sexual promiscuity parallel to what produced the early epidemic of immune dysfunction among a small subculture of urban gay men in the West, who were also affected by decades of perpetual abuse of recreational drugs, narcotics, sexual stimulants, widespread venereal disease, and the overuse of antibiotics.”<sup>118</sup>

115. For evidence of this conflict in the global arena consider the ironic disconnect between the WTO’s preservation of patent laws protecting big pharmaceutical shareholders, and its simultaneous written agreements to respect IMF goals of greater global consistency in sharing the growth opportunities and the benefits of liberal trade policies. “Declaration on the Contribution of the WTO to Achieving Greater Coherence in Global Economic Policy Making,” circa 1997 at [http://www.wto.org/english/docs\\_e/legal\\_e/32\\_e.htm](http://www.wto.org/english/docs_e/legal_e/32_e.htm). On failure to fund the modern method of eliminative inductivism in HIV/AIDS research, see S. Lang (1995).

116. S. L. Gilman (1985). In the Great Evolutionary Chain of Being understood by the medical establishment of the nineteenth century, female Africans were ranked closest of all to the apes; empirical evidence was demonstrated by sketches of their excessively large private parts and buttocks, heavy facial structure, swarthy skin tone, body mass, ear shape, skull and jaw size. Just above them were European prostitutes of the lower classes. See also A. R. JanMohamed 1985, demonizing the cultural Other. Appendix A discusses in more detail European stereotypes of sexual depravity in Africa; see footnote 135.

117. B. Ahlberg (1994); C. Fiala (1998); C. Gesheker (2003); R. H. Gray et al. (2001); N. Padian et al. (1997). See Appendix A.

118. C. Gesheker et al. (2004: 9) cites for a compendium of these assumptions; John C. Caldwell et al. (1999). Caldwell is notorious for purveying the claim that Africans do not distinguish between the need for food

Through the 1990s the number of AIDS cases increased in Uganda. During the same period, in G-7 countries the incidence of AIDS subsided rapidly although promiscuity did not. Neither was there any reported reduction in U.S. or Canadian cities of recorded sexually transmitted disease and infection (gonorrhea, chlamydia, syphilis, herpes simplex, *candida albicans* yeast, cystitis), nor did reported condom use increase significantly in the United States or Canada through this period (Gesheker et al. 2004: 58 note 124). Studies (including Gray et al. 2001) have shown that the probability of HIV being transmitted heterosexually was the same in Uganda as in the United States and Canada during the 1990s (Padian et al. 1997; Rasheed et al. 1996). This shows that something other than sexual behavior must be responsible for HIV/AIDS prevalence in Uganda (Johnston et al. 2003).<sup>119</sup>

Given the epidemiological evidence to date, some infectious disease differentials between the sexes are explicable simply by referring to sexual divisions of labor and eating customs.<sup>120</sup> For instance, urban household environmental insults have been observed to impose negatively upon women's health more than upon men's. The routine symptoms of upper respiratory infections (persistent cough, bronchial and throat irritation, pneumonia) are interpreted as clinical signs of HIV/AIDS "opportunistic infections." So in the absence of adequate testing, it is unclear to what extent the conclusion "women are more vulnerable than men to HIV/AIDS" is based on the accumulation of evidence such as the perceived effects of poorly designed stoves.<sup>121</sup>

Generally in Africa, it is possible that infections now relabeled as AIDS-defining diseases occur in roughly even numbers among men and women "not because of heterosexual transmission, but because the socio-economic conditions that produce those symptoms are caused by environmental insults to which impoverished Africans [of both genders] are regularly exposed."<sup>122</sup>

Far from being careless or blasé about sexual relations, cultural norms indigenous to West Africa render even the coolest cats and "hip-life" social rebels highly sensitive to their family reputations and community obligations.<sup>123</sup>

In West African communities enjoying relative stability, prim and proper "family values" reign supreme and are extolled incessantly, with an enthusiasm unimagined in the circles of expertise that insist Africans need to learn from enlightened foreigners about sexual sobriety.<sup>124</sup> The notion of

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and the need for sex. At least one Ghanaian social statistician who is now a leading attractor of HIV/AIDS research funding in Ghana, K. Amoah, trained with Caldwell in Australia and sustains the widely accepted hypothesis that prostitutes are responsible for introducing the HIV to Ghana after working in neighboring countries. This thesis was first proposed in Ghana by the country's initiating AIDS research team, A. R. and J. A. Neequaye; see (1987); Ahlberg (1994).

119. The statistics for American youth's sexual behavior cited in Catania (1995) are corroborated by formal studies done since and elsewhere. See Appendix B.

120. In Ghana, children and women still eat less protein than adult men even in affluent urban homes (Badasu 2004). Professor A. B. Akosa, General Director of the Ghana Health Service, identifies the cause of many diseases as customary attitudes toward filth and inattention to nutrition, speaking on December 31, 2004, at the Adult Education program, the 65<sup>th</sup> Annual New Year School, University of Ghana, Legon. Concerning the significance of gender differentials in caloric intake, see also H. Moore (1988) and M. Z. Rosaldo (1989).

121. Badly constructed stoves used in low-income, poorly ventilated households generate air pollution that provokes upper respiratory infections more often in women than in men (J. Songsore and G. McGranahan 2003).

122. C. Gesheker (2000: 147); E. Papadopulos-Eleopulos (1995: in pre-publication manuscript, p. 10).

123. Dominant norms among urban young adults in West Africa resemble those that were transplanted during colonial and antebellum years to the old-fashioned U.S. Deep South (and mocked by Tennessee Williams in his play *The Glass Menagerie*). Ghanaian hip-hop star "Batman" was confronted on a call-in radio show (Happy FM, Accra, January 15, 2005) concerning a front page headline featuring the opinion of a local NGO that his rap lyrics were demonic: "Hiplife is Satan Music," (*The Statesman*, Accra, January 14, 2005). The singer was seriously nonplussed and denied the allegation vehemently.

124. Dr. Yuichi Shiokawa, at the 10<sup>th</sup> International AIDS Conference in Yokohama claimed that the African AIDS epidemic cannot be brought under control unless Africans "restrain their sexual cravings" (as quoted by

anonymous sex as it is tacitly understood by Americans born in the Playboy Club era is not a norm in Africa where the “swinging singles scene” looks more clownish than sophisticated.<sup>125</sup> African urban élites who indulge in recreational promiscuity are often mimicking Western mores when relating to foreign tourists and residents in the public domain, taking a moral holiday away from the primordial domain where they maintain their “real” life and personal identity.<sup>126</sup> Transvestism explicitly performed in African traditional culture is a religiously and socially condoned ritual, not an exhibition of personal eccentricity pursued for erotic titillation. Of course there are exceptions to all these generalities, but invariably they generate from a cross-cultural limbo influenced by foreign films, DVDs, advertising, tourists, and expatriate residents. In Africa prostitution is more strictly business than it is entertainment, a needs-driven formal transaction rarely rationalized by the service provider as something else approximating lucrative “fun” or social autonomy. Norms of feminine maturity require one to be totally absorbed and identified both physically and emotionally with one’s role as dutiful spouse, parent, and extended-family member.

The widespread ritual practice of female genital cutting (FGC) in West and East Africa reveals that being properly socialized rules out sexual adventurism.<sup>127</sup> Any misfortune suffered by a woman or a newborn stricken with illness or any kind of setback gets linked up implicitly with a wayward or drunkard uncle or father or husband or ancestor. A complication during delivery is attributable to some secret infidelity committed by the woman suffering the difficult labor.<sup>128</sup> Correlatively, a successful man’s virility in traditional West African eyes is measured not by how many women he penetrates vaginally, but by how many women he codepends upon economically, how many children he is able to support, and how many households’ social capital he can command.<sup>129</sup> Sexual relations are social arrangements at core. To indicate a man’s most incidental sexual attraction to a woman, Africans will describe her jestingly as his “wife.” Even when civility breaks down altogether and children are

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C. Gesheker 1995: 9). A Belgian HIV expert, Professor Nathan Clumeck, interviewed in *Le Monde* in 1993, echoed Japanese prejudices: “sex, love, and disease do not mean the same things to Africans [as] to West Europeans . . . the notion of guilt doesn’t exist for them the same way it does in the Judeo-Christian culture of the West” (also quoted by Gesheker 2004: 20, from Jean-Yves Nau, “AIDS Epidemic Far Worse Than Expected,” *Le Monde* section in *Manchester Guardian Weekly*, December 14, 1993). Similar myths have been purveyed by J. Caldwell (1999) of the National Centre for Epidemiology and Population Health at Australian National University in Canberra, who teaches sociologists (among them Ghanaians now leading the fight against AIDS) that in African value systems, no distinction is drawn between the need for food and the need for sex.

125. Irresponsible sex as understood in American culture has to be redefined to fit African contexts. Ritualistic polygamy of royal households like that of the current King of Swaziland, contrary to derisive stereotyping by the *BBC*, is tightly controlled and formalized. Among one man and several wives in a high-profile household, there is neither opportunity nor incentive to interlope with “strangers.” So even if it were empirically established that HIV is transmitted sexually in every population uniformly, it is mistaken to accusingly belittle the King of Swaziland for exacerbating the spread of HIV through his traditional customs, as the *BBC World Service* routinely does when reporting from Mbabane (e.g., Alisdair Liefhead, “From Our Own Correspondent,” September 4, 2002; “BBC News,” November 12, 2003; “Focus on Africa,” January 22, 2004).

126. Nigerian social scientist P. Ekeh (1975) famously offered the “primordial” vs. “public” domain model to represent the different value criteria operative in postcolonial societies.

127. J. Tornui (2005), currently a Research Fellow of the Noguchi Institute for Medical Research and formerly the Coordinator for the Accra Central Region of Ghana’s National Commission on Children, observes: “The pressure for conformity in small communities with traditional taboos is much greater in contemporary West African cultures than in most European communities. In Ghana, FGC is practiced by an estimated 86 percent of the rural female population in the Upper East and Upper West regions. In the Kassena-Nankana district of the Upper East region, it was found (1998) that as many as 77 percent of a total of 5,275 women surveyed in the reproductive age group (15-45 years) have had some version of FGC.”

128. G. P. Hagan (2003: 44).

129. R. Dowse (1973).

forced to perform as war machines under the crudest of depersonalizing circumstances, the girls who function as sex slaves for guerrilla commandants are referred to as their “wives” (Judah 2005: 62).

Apart from Africans seeming old-fashioned about sex by American “adult” standards, social scientists concur that there is not all that great a difference between the peer pressure experienced by young people in Kampala and in Buffalo. A girl in Uganda in the 1980s would have had to rely upon a health care system badly undermined by twenty years of political terror prior to Museveni’s period of rehabilitation. But her sexuality would not be much different than that of any teenager growing up in the United States, according to a study done ten years ago by *Médicins Sans Frontières* in Moyo, Northwestern Uganda.<sup>130</sup> This study revealed that most Ugandan women lose their virginity by the age of 17, most men by the age of 19. Only 2 percent of female informants and only 15 percent of the males reported having had casual sex in the year preceding the study. In the month preceding the study, only 1.6 percent women and 4.1 percent men had engaged in casual sex.

There is data that indicate a literal difference between male-to-female HIV transmission through vaginal fluids vs. female-to-male transmission. Padian et al. (1997) demonstrated that the infectivity rate for male-to-female transmission is “approximately 0.0009 per contact,” while “female-to-male transmission is eight times less efficient.” In other words, an HIV-negative woman may convert to positive on average after *one thousand* unprotected contacts with an HIV-positive man. An HIV-negative man may become positive on average after *eight thousand* contacts with an HIV-positive woman. So the general belief that women are more vulnerable to HIV infection than men is confirmed by this evidence, but in the same sense as you are likelier to stand in closer proximity to the moon than I at any given time if you reside on the fifth floor of a building where I occupy the basement flat.

A community-based study in Uganda involving 15,127 people (R. H. Gray et al. 2001) confirms the conclusion that “there is no more heterosexual transmission of HIV in Africa than anywhere else, including UK, U.S.A., Australia and Europe. So the explosive epidemic in Africa” cannot be explained by sexual transmission.<sup>131</sup>

No one has ever shown that people in Rwanda, Uganda, Zaire, or Kenya (the so-called AIDS belt) are more sexually active than people in Nigeria, where only 1,148 cases of AIDS are reported out of a population of 100 million, or Cameroon, which reported 3,072 cases out of a population of 10 million.<sup>132</sup>

However, it is well documented that social welfare in these same countries (Rwanda, Uganda, the DRC [formerly Zaire], and Kenya) has been undermined by years of political terror and a variety of socioeconomic dysfunctions.

In the words of Dr. Christian Fiala, an OB/GYN physician based in Vienna with many years experience observing AIDS patients in Uganda and Tanzania:

. . . [T]he supposedly “hyper” sexual behaviour of Africans is frequently alluded to by the WHO and the Western medical establishment. But apart from the fact that the first European Christian missionaries in Africa held this belief . . . and a long Christian tradition of fantasizing about the supposedly licentious sex life of Africans, there is absolutely no scien-

130. D. Schopper et al. (1993), cited by C. Gesheker (1995: 10).

131. R. M. Johnston et al. (2003) compare the Gray and Padian studies. See E. Papadopoulos-Eleopoulos et al. (2002); also D. Gisselquist et al. (2003a, 2003b). B. J. V. Voorhis et al. (1991) found infectious HIV in the semen of only 25 percent of the men identified as HIV infected. S. Rasheed et al. (1996) discovered no correspondence between HIV in the blood and in the vaginal secretions of HIV-infected women. C. Fiala (1998, 2000) discusses these studies.

132. C. L. Gesheker (1995: 10).

tific evidence for this view. On the contrary, Americans lead the world as far as changing sexual partners is concerned. They are followed by France, Australia and Germany. In contrast, South Africa like Thailand are well below the world average, according to an international study published by the condom manufacturer, Durex.<sup>133</sup>

Moralistic discourse about sexual scruples is a centerpiece of traditional socialization in West Africa.<sup>134</sup> And accommodation to foreign missionaries' indoctrination programs and social interventions has been a constant ancillary component of traditional life for centuries. Postcolonial African societies have a long history of hosting missionaries, absorbing what is of use in their dogmas and services while bracketing and graciously disregarding the rest.<sup>135</sup> So in most respects, there is nothing novel in the HIV/AIDS behavior modification program model; it is just another package design of imported evangelism.

Despite their awareness that HIV is not easily transmitted sexually, public health officials in Ghana continue to propagate safe sex advice for a variety of reasons.<sup>136</sup> First and foremost, reproductive health depends upon awareness of, protection against, and treatment for a host of known sexually transmitted diseases. Second, the likelihood of HIV transmission increases exponentially when genitals are ulcerated, and the percentage of sexually active women living with vaginal ulcers in Ghana is unknown. Third, most of the general public is naively superstitious about sexual behavior. In order to preclude destructive "cures" such as drinking bleach and penetrating young virgins to purge evil spirits, practicality requires simplifying the information purveyed as a public health message in the community.<sup>137</sup>

The obsession with connecting death with sex on the Dark Continent is documented and analyzed in literary critical theorists of racist literary genres (e.g., S. L. Gilman 1985). The implication of the orthodox HIV/AIDS doctrine, that the good health enjoyed by white women in affluent countries is due to their greater fidelity and chastity, in contrast to African women, who are victims of traditions that make them ill, has not been established empirically.

Quoting C. Gesheker of the South African Presidential AIDS Advisory Panel:

133. C. Fiala (1998); Durex (1997).

134. J. Tornui (2005) points out that the central importance of scrupulously formalizing and sanctioning sexual relations through rites of passage is the chief reason why it is so difficult to discourage the ritual practice of FGC in traditional cultural contexts.

135. The author observed this graceful tolerance for Roman Catholic interventions to local welfare when accompanying the Roman Catholic Holy Child Sister Ann Shulte on her mission rounds, where she makes vital contributions to the villages and surrounding hamlets in Ghana's impoverished North East Region. Villagers celebrate her generosity while indulging affably her persistent curiosity concerning paternity. The local liaison officer for the Society of Friends of the Holy Child in Bolga Tanga is a lay clergy woman of the town's United Methodist Church, who is married to a well-to-do Muslim construction contractor and lives amicably with her three children, her three senior cowives, and all their children in one communal compound.

136. Youth participants and community leaders are entertained in HIV/AIDS workshops by the novelty of talking about sex "frankly" in the public domain, and by recycling old, standard moralistic lectures as relevant in a context of modernity. When it comes to basic moral principles and the right way of living, most Africans automatically dismiss as irrelevant and inferior the variations of worn-out racist colonial stereotyping to which they have been subjected for over three centuries through missionaries.

137. In conversation (July 2002) with Professor Dr. J. Neequaye, initiator of the theory that HIV came to Ghana through cross-border prostitution and who is head of Child Health at the University of Ghana Medical School. Also, Professor A. B. Akosa, Director-General of the Ghana Health Service and Commonwealth Medical Association (April and May, 2005); Dr. M. Tagoe, Project Coordinator of University of Ghana's Campus-Wide HIV/AIDS Counselling and Care Programme (UNFPA-IAE); Minister of Health Retired Major Quarshiagah; Vice Dean of the University Ghana Medical School Professor R. Biritwum.



. . . No continent-wide sex surveys have ever been carried out in Africa. . . . So there is little evidence to support Western perceptions of African sexual promiscuity. Africa is a continent of 11½ million square miles and fifty-three nations, a far more culturally, linguistically, religiously and socially diverse region than North America or Europe. . . . How can we possibly generalise about risk taking behaviour across such a huge and internally diversified continent? In many African societies, where strict modesty codes are enforced for women, chastity is by far a more cardinal virtue than it is in the modern West.

In fact, if young people are dying in the poor fishing province of Kwazulu-Natal in South Africa, then it cannot automatically be assumed it is because they are shagging each other more than kids do in the rich neighborhoods of Lagos and Amsterdam in Holland, where HIV-prevalence rates, respectively, have significantly diminished and virtually disappeared.<sup>138</sup> The phenotypes of distinct strains of HIV are perceived to vary considerably in different populations, and this may be one expression of that difference.<sup>139</sup>

Kwazulu-Natal is the province where lobbying for medical rights has become a central plank in the platform of a vocal anti-ANC opposition party.<sup>140</sup> The province had been a flashpoint of tribal rivalry all through the anti-apartheid struggle. No issue there could be more expedient than a viral epidemic sprung into service at the precise point in history when the ruling African National Congress assumed responsibility for public health. As the epicenter of Chief Buthelezi's Inkatha Freedom Party, still at residual odds with Nelson Mandela's now ruling ANC, Kwazulu-Natal is a region where civil society is well-mobilized politically and culturally, and where the felt tensions of silent daily war with racism and neoliberal economics are currently among the most fraught and intense on the continent.

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## **Appendix B: The Critical Scientific Literature**

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The most fundamental criticism of the HIV/AIDS orthodoxy dates back to the mid-1980s and was revived again in the mid-1990s. More recent medical research further substantiates and develops these early criticisms of all six main tenets of HIV/AIDS theory. The majority working in the field are unaware or dismissive of these critiques as outdated. Meanwhile, technology and theory of viral immunology has been progressing steadily, and many of the flaws that did plague early testing techniques for HIV and analysis of the data have been worked through. But surely these advances at top institutional venues of research in Africa have not filtered uniformly down through to the more public channels of national health care delivery systems.

The main tenets under controversy are:

- (i) HIV uses T cells as its primary receptor.
- (ii) HIV is a unique exogenously acquired infectious retroviral particle.
- (iii) The antibody tests are proof of HIV infection.

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138. For evidence that HIV is not easily sexually transmitted, see Nancy Padian et al. (1997). See E. Papadopulos-Eleopulos et al. (2002). Also in R. Johnston, M. Irwin, D. Crowe (2003).

139. See footnote 31.

140. The politicization of disease is evident in the ad hominem attacks on Mbeki and the Ministry of Health by officials of the AIDS Treatment Action Campaign.

- (iv) The cause of what is called AIDS in Africa and Thailand is either HIV or sexually transmitted.
- (v) Anti-retroviral medicines can eradicate HIV or solve the AIDS pandemic in Africa.
- (vi) HIV is transmitted through breast milk.
- (i) & (ii) The earliest critics of the first two theses listed above that appear in the references for this article include Barre-Sinoussi, Chermann, and Rey (1983); Levy et al. (1984); Papovic et al. (1984). M. Roederer (1998) published the first summary rejection of the received model ostensibly confirmed by Ho et al. (1995) and Wei et al. (1995) that a retrovirus called HIV “attacks” T helper cells and that CD4 cell counts change inversely in proportion to “viral load” counts. Roederer referred to his contemporaries’ work—Gorochov et al.(1998); Pakker et al. (1998)—to support his rejection of the Ho and Shaw model of T-cell dynamics. Although the Ho and Shaw model did not wholly succumb, the causal progression of AIDS in relation to CD4 counts is still viewed as opaque according to D. D. Brewer (2003) and E. Papadopulos-Eleopulos et al. (1999), and many other molecular biologists, organic chemists, and virologists, the most prominent of whom are quoted at [http:// www.virusmyth.net](http://www.virusmyth.net).
- (iii) For detailed critical discussion of antibody testing accessible to nonspecialists, see one of the HIV-antibody test originators, R. Richards (2001a, 2001b), and also the citations mentioned by H.E.A.L. researchers who are listed individually below. Hässig et al. (1998) discuss more technically the general hesitancy against proponents of the orthodoxy beginning with Gallo (1984) with seventy-six references to the professional journals.
- (iv) Data demonstrating the falsehood of the sexual transmission theory are found in Padian et al. (1997); R. Gray et al. (2001); D. Gisselquist et al. (2003a, 2003b); B. J. V. Voorhis et al. (1991); E. Papadopulos-Eleopulos et al. (2002); S. Rasheed et al. (1996); and discussed by C. Fiala (1998, 2000); Johnston et al. (2003); Papadopulos-Eleopolus et al. (1993–2002).
- (v) Regarding antiretroviral drugs, see L. Guay (1999) and other citations clearly indicative by their titles throughout the bibliography. R. Giraldo et al. (1999) give 265 citations for a comprehensive overview of why ARVs are challenged and the questions arising about the existence and transmission of HIV and its role in AIDS. Work done suggesting that the ARVs may be a cause of AIDS is found in P. Duesberg and D. Rasnick (1998) and P. Duesberg et al.(2003).
- The infamous case of the Concorde AZT trials is a classic example of how fundamental protocols of standard medical research practices are thwarted in the field of ARV research. The Concorde study of AZT yielded the unexpected result that the drug was “ineffective for otherwise healthy HIV positive subjects . . . provoking two coauthors to pull out their support” (R. Horton 1996: 19). The research was publicized at a press conference conducted by the Wellcome Foundation that had funded the research, to which financial page journalists were invited, to learn from the company officials representing Wellcome what the public needed to hear that would destroy the study’s credibility (Concorde Coordinating Committee 1994; Cohen 1994b).
- (vi) Studies that challenge the significance of the evidence that HIV transmits in breast milk are cited by C. Farber (1998b). Nutritionists D. W. Newburg and J. Street (1998) indicate “breast milk’s possible ability to combat HIV.” See also R.W. Ryder et al. (1991); O. Hishida et al. (1992).

*The critical experts*

The expert sources of skepticism about the HIV/AIDS orthodoxy include: the medical group in Toronto called H.E.A.L. (Health, Education, AIDS Liaison) established in 1981 (<http://www.virusmyth.net> and <http://www.healaims.com>).

Also established in 1981 was the Perth Group at the teaching hospital of University of Western Australia, which is an active multidisciplinary research collective of biophysicists, clinicians, emergency physicians, and pathologists including E. Papadopoulos-Eleopoulos, V. Turner, J. Papadimitriou. Publishing with them from another continent is clinician Dr. D. Causer in Colombia. In Germany, C. Köhnlein (see Gesheker et al. 2004) and H. Kremer, S. Lanka, W-X. Liang, K. Stampfli, publish generally accessible material in *Continuum* (London). Some of their joint technical work appeared in *Schweiz Zschr Ganzheits Med* in 1996, 1997 [see their (1998: 7 on Web site) notes 11–14].

In South Africa, D. M. Mhlongo and the internationally selected members of the Presidential AIDS Advisory Panel (see bibliography 2001) also publish and post on <http://rethinkingaids.com>.

In Austria the GP and OB-GYN specialist C. Fiala publishes his years of AIDS research experience in Uganda, Tanzania, and Thailand.

Now in Mexico, clinical microbiologist H. Bialy (former editor of *Nature, Bio/Technology* 1984–2000) is often cited in the literature.

In the United States, great weight is placed on the views of the 1993 Nobel Laureate in chemistry K. Mullis, who originated the polymerase chain reaction technique used to count viral load. The biochemist R. Richards, who helped design the first HIV-antibody tests (ELISA) at AMGEN Inc., California, and later test designs with Abbott Laboratories; R. A. Giraldo, an infectious-disease specialist and president of the Rethinking AIDS Group; and oncologists and virologists D. Rasnick and P. H. Duesberg, all have published critiques. See <http://rethinkingaids.com>.

Also the dozen scientists on the Board of Alive and Well AIDS Alternatives, founded and directed by C. Maggiore in Los Angeles, can be located on <http://aliveandwell.org> along with recent testimonies and citations in the technical journals.

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