

AIDS in the Twenty-first Century is surprisingly easy to read. Though the subject is complex, and at fourteen chapters the book is relatively long, the authors assume no prior knowledge on the part of the reader. They communicate skilfully and support their main text with abundant diagrams, tables, graphs and boxes. They have clearly intended the book to be accessible. Unlike some writers on AIDS, who appeal emotively to compassion and a sense of injustice, Barnett and Whiteside explicitly address the reader's pragmatism, self-interest and capacity to reason. Somehow, this makes the book's underlying humanity and call to action all the more compelling. If it is read and acted upon, as the authors hope, AIDS would still change history, but perhaps for the better.

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Dephlogistication, Imperial Display, Apes, Angels, and the Return of Monsieur Emile Zola

BY EDWARD HOOPER

Rome: *Accademia Nazionale dei Lincei. Atti dei Convegni Lincei, 2003;187:27-230.*
Soft cover.

<http://www.uow.edu.au/arts/sts/bmartin/dissent/documents/AIDS/Hooper03.pdf>

Few research papers are ever reviewed in professional journals, but even fewer are 204 pages in length, have 434 footnotes and cover so many topics in such interesting detail. Still fewer invoke the nineteenth century French novelist Emile Zola's famous cry of '*J'accuse!*' (I accuse) to substantiate an argument (pp 220-222), recalling the Dreyfus Affair that scandalized late nineteenth century Europe, in which a Jewish army officer in France was falsely imprisoned. A rare paper indeed worries its reviewer about being sued – not by the author, mind you, but by one of his detractors (pp 210-212).

Edward Hooper's central thesis is that the origins of HIV (human immunodeficiency virus) and AIDS (acquired immune deficiency syndrome) are iatrogenic, that is, medicine-

and/or physician-caused. To his credit, the tone and pace of his argument are never shrill or hysterical but measured and careful. Even other such medical historical classics as Jay Katz' compendium of *Experimentation with Human Beings* (1), James Jones' study of the Tuskegee Syphilis Experiment, *Bad Blood* (2), or G.J. Barker-Benfield's exposé of Victorian-era gynaecology, *The Horrors of the Half-Known Life* (3), are not this careful and humble in the face of what must seem to the author to be a Sisyphean task. Time and time again, pushing that boulder of lay and scientific reticence to consider fairly his thesis up the mountain, only to have it roll back down – it must be extremely tiring. Mass scientific hoopla, a recently released documentary film, scorching private and Internet-based correspondence, a new website to monitor <http://www.aidsorigins.com>), threatened

lawsuits, replies, responses and rejoinders galore – Monsieur Hooper must be on to something big. Few readers will dip only toe-depth into this debate, and any serious consideration will leave readers fundamentally changed.

Following upon the publication in 1999 of his *magnum opus*, entitled *The River: A Journey Back to the Source of HIV and AIDS* (4), Hooper extends his already impressive research into the geography, epidemiology, clinical outcomes and public relations aspects of 27 ‘feedings’ of oral polio vaccine (OPV) to roughly 1,000,000 Central Africans between 1957 and 1960. Non-specialists might appreciate knowing that when OPVs first began to be produced in the 1950s, they were first attenuated (made less lethal) before then being produced in homogeneous pools and non-homogeneous batches in both home and commercial laboratories. Samples were then sent to local laboratories (for example, in Stanleyville), where fresh batches were propagated in locally available tissue culture. Because this process boosted concentration and volume, more persons could be vaccinated, as and when orders for such were received.

On the basis of painstakingly gathered documentary, archival and other evidence, Hooper argues strongly that some OPVs were contaminated with simian immunodeficiency viruses (SIVs) found in chimpanzee fluids and body parts, most notably kidneys. Several witnesses have confirmed independently that such were surgically removed from live, but anaesthetized animals. Although this has been repeatedly denied by the major protagonists, Hooper presents dramatic new evidence here that the crucial preparation of these OPVs in chimpanzee kidney cells occurred in Stanleyville. Ironically, this now shifts the locus away from the Wistar Institute in Philadelphia, though not necessarily away from Drs Hilary Koprowski and Stanley Plotkin. Was world history’s worst sociomedical disaster literally made by men?

Hooper’s deliciously improbable title suggests that we replace the hot air and inflammation (dephlogistication) of disciplinary posturing and chest-beating (imperial display) with greater scrutiny of the nature and function of scientific discourse regarding medical experimentation with human and non-human primates. Both *Dephlogistication, Imperial Display, Apes, Angels, and the Return of Monsieur Emile Zola* and *The River: A Journey Back to the Source of HIV and AIDS* (4) beg the question as to which of us are the angels, since all of us are apes. Supporters of the OPV thesis were roundly shut out of the much ballyhooed Royal Society of London conference held in 2000, which is detailed nicely here and which has been detailed elsewhere in print and by Hooper himself through his main Internet patron, the sociologist, Brian Martin (see especially <http://www.uow.edu.au/arts/sts/bmartin/dissent/documents/AIDS/Hooper04/evidence.pdf>) (5). Opponents of the OPV thesis prematurely claimed that finding neither SIVs nor HIVs in stored sera disproved it, but Hooper argues that this is not so because of the common practice of ‘boosting’ vaccines in passage through locally available tissue culture so as to make up for what they may have lost in transit from temperate to tropical countries, from laboratory to field-site. Multiple witnesses and lines of evidence suggest that chimpanzees were involved.

Hooper’s 2001 address to the Accademia Nazionale dei Lincei in Italy has been expanded greatly here for three reasons: 1) to summarize old data, 2) to present significant new information, and 3) to address the obvious cover-ups. “By a strange quirk of fate”, he writes:

“... just two weeks before Dr [Robin] Weiss published his comments in *Nature* [allegedly disproving the OPV hypothesis], I was visiting Kisangani, where . . . I learned that, more than forty years earlier, CHAT vaccine had been prepared in the local medical laboratory – and almost certainly in a culture of chimpanzee cells

. . . So much disinformation and untruth has now been written in response to the OPV hypothesis [that] I believe that a deliberate attempt has been made to obfuscate the issues, and that it is important that this obfuscation should be revealed for all to see." (pp 42-43)

Dephlogistication, Imperial Display, Apes, Angels, and the Return of Monsieur Emile Zola is for neither the casual reader nor those who have not yet read (or more likely, read about) *The River: A Journey Back to the Source of HIV and AIDS* (4). Most readers will need to be at least passingly familiar with the properties of vaccines and components of their manufacture, with colonial administration in Central Africa, with virology, non-human primate speciation, and with the sociology of medical science. Nevertheless, Hooper's presentation is fresh, well written and remarkably accessible, since he has taken great pains to introduce ideas, personalities, places and processes in their proper context, slowly, brick by brick. Readers will delight especially in the tone and content of the footnotes. Around this one work alone could revolve several graduate seminars or upper-division undergraduate courses. There are remarkably few typographical errors to be found, and it is available freely on the Internet. It is fun to read, however strange it may seem to say so.

Dephlogistication, Imperial Display, Apes, Angels, and the Return of Monsieur Emile Zola contains an Abstract and eight helpfully titled sections. Those familiar with social studies of science will find little surprising about Section 1, 'Introduction: "experts" and expertise', insofar as Hooper effectively skewers the discursive function of authority when "the non-scientist, the non-expert" (ie, an overly humble Hooper) proposes "a controversial hypothesis" that is "supported by good science" (p 32). He also provides important personal and historical backdrop to the OPV debate. Section 2, 'Background: the origin of HIV-1 Group M: transfer via African cuisine, or modern medicine?',

compares the OPV thesis with the more widely accepted (although increasingly implausible, he argues persuasively) 'natural transfer' or 'cut hunter' thesis proposed by the lesser known Hahn, Sharp and Korber and supported by the better known Plotkin, Koprowski and Osterrieth.

In Section 3, 'The historical debate: was CHAT made in chimp cells?', Hooper answers resoundingly 'yes!' via old and new documentary and archival sources, which are helpfully presented in tabular form. Hooper cinches up here tightly what few remaining loose knots there were in *The River: A Journey Back to the Source of HIV and AIDS* (4), but, again, there is a geographic shift of emphasis. One source (see: <http://www.uow.edu.au/arts/sts/bmartin/dissent/documents/AIDS/Hooper04/Weiss.html>) (6) puts it that "Hooper got it wrong in the book. The vaccine wasn't made in America [at the Wistar Institute] or Belgium [at the Lederle Laboratories]. It was made here in Stanleyville". Although Koprowski "denies everything", he also admits his vaccines "were routinely amplified in labs all over the world" (p 70). Insofar as one of the OPVs "was fed to humans in Africa before it was tested on chimpanzees" (p 93), and given the historical backdrop of medical experimentation on largely poor and powerless peoples (for example, in Auschwitz and the Amazon, in Tuskegee and Manchuria, and at Bellevue and Charité hospitals), it is reasonable to ask to what extent such trials were designed to test the safety of the vaccines, not simply to prevent polio outbreaks.

Section 4, 'The scientific debate: could a chimp-based vaccine have sparked AIDS?', investigates other possible origins of HIV and the phylogenetic dating methods said to have disproved the OPV thesis. In typically playful but muscular prose (Hooper is in fact a highly polished writer, not the labouring, hack-journalist-who-has-a-chip-on-his-shoulder some critics have dubbed him), he argues that testing the infamous stored Wistar Institute vaccines for presence of HIV or SIV

was already mooted by the issue of *local* (that is, in Stanleyville) amplifications through, he argues, chimpanzee tissue and sera. He explores the suitability of such as OPV substrate, examines the issues of trypsinization and the survivability of SIVs in OPV, re-reads the early history of HIV and AIDS, looks at the statistical methods used to estimate rates of recombination, and discusses the 1958 outbreak of fatal *Klebsiella* infections in humans and chimpanzees nearby. Regarding the theoretical claim of some geneticists that the first HIV existed in or around 1931, Hooper responds that “phylogenetic dating analysis is essentially an inappropriate tool for calculating the age of a retrovirus like HIV” (p 171) owing to its properties of recombination. The alleged disproof is illusory (p 229).

‘The political debate: even if it did happen, do we really want to know about it?’ and ‘Conclusion: the importance of the level playing-field’, Sections 5 and 6, take the reader from the Royal Society meeting in London and the pages of *Nature* and *Philosophical Transactions of the Royal Society of London* into quite disturbing private correspondence, hallway talk and legal wranglings. Zola’s cries of ‘*J’accuse!*’ are levelled at Doctors, famous, infamous and not-so-famous, who, having lost “scientific arguments about how CHAT was made [. . .] have instead resorted to fabrication and spin. Instead of trying to get to the truth of the matter”, he says, “they have instead invested rather a lot of time and money attempting to construct a position that they believe can be defended” (pp 187-188).

Briskly and persuasively, in Sections 7 and 8 Hooper responds point by painstakingly made point to the particular rebuttal of Osterrieth (7) (<http://www.aegis.com/news/misc/2001/PO011101.html>). Lies, all lies, Hooper says, though with admirable restraint: “these statements are directly contradicted”, “he told me the exact opposite”, and “much of the key information he provides is demonstrably inaccurate” (pp 225-227).

Even the most sceptical reader will allow that Hooper is not the crazed conspiracy nut they may have heard, hanging on by an increasingly slender thread to a thesis that should be allowed to die. Like the shortest of his letters and longest of his books, *Dephlogistication, Imperial Display, Apes, Angels, and the Return of Monsieur Emile Zola* is a scrupulously reasoned and presented piece of work, being neither merely a journalistic gambit nor the manic editorial of a gadfly.

Like Hooper’s biggest supporter, the evolutionary biologist, William Hamilton, who died in the Congo while collecting biological specimens he believed would clarify the issues, I have become “95% persuaded” (p 200) by Hooper’s argument as to the origins of HIV, okay, maybe 98%. His final suggestion (pp 229-230) that an epidemiological and virological survey be conducted “of CHAT vaccinees and non-vaccinees in the DRC [Democratic Republic of the Congo] and Burundi” seems sound but will not probably occur, due to logistic, political and other reasons. Worse, I feel that his detractors know this, and that they gloat inwardly as the goalposts of ‘proof’ seem ever to shift.

The few criticisms I have are designed mostly to help him persuade a few more critics and to draw out a few tensions in his work. For starters, the ‘*J’accuse!*’ that Monsieur Zola levels at Hahn, Sharp, Korber and De Cock (p 220) for displaying a “bunker mentality in promoting a version of events which is increasingly far-fetched” seems naive in surprise that people stick to ‘facts’ that aren’t, as if arguments are carried out in a sociological or historical vacuum. Having followed this debate for some time, however, I sympathize greatly with Hooper insofar as his detractors do not seem often enough to follow the rules of engagement. His distinction between science and phantom science and between good science and not (p 32), and his desire to find independent laboratories that will (or worse, have the World Health Organization) adjudicate the

facts (pp 210, 229) suggest an expectation that somehow Truth and Good Guys will out over Falsehood and Bad Guys. To a medical sociologist, his expectation of having someone be 'neutral' in closing the London conference seems odd. To this medical anthropologist reviewer, his expectations ignore the history and political economy of international aid, sickness and health. It is predictable on sociological grounds alone (that is, not necessarily epidemiological or clinical) how little or much debate will ensue as highly active anti-retroviral therapy (HAART) is introduced to this or that country to fight HIV infection. For similarly predictable reasons, it is unlikely that this debate will be solved by appeal to the epidemiological facts, either.

Hooper rightly complains that his detractors press and shoot down arguments by claims to authority and title, but he does so often enough himself. William Hamilton is the "universally respected" biologist (p 31). Dr Maurice Kivits was "an impeccable source" (p 67). Hooper checked his findings with three "eminent virologists" (p 79). Robert Hull was a "respected virologist" (p 140). Professor Mikkel Schierup is lauded as "a geneticist who is not afraid to express an interpretation that is different" (p 171). Hooper has undoubtedly earned the right to write defensively, and the phrasings may be true enough, but they seem to lack force in context of the sociology of argument.

Hooper wends and weaves his way admirably through the meaningful minefield of the difference between 'amplification', 'dilution', 'passage', 'seed', 'challenged', 'infected', 'exposed', 'vaccination', 'inoculation', 'pool', 'batch', 'substrate', 'fact' and 'theory' (especially p 211), although 'model', 'theory' and 'hypothesis' are used interchangeably. The cause of death of forty million people (putatively, via HIV-1 Group M) but who have not yet died is proclaimed (p 33). Although it is true that such is a common practice, given their content (highly transmissible iatrogenic viruses), readers may justly rankle at OPVs being repeatedly

referred to as having been 'fed' to experimental subjects at mass 'feedings', as if anything taken orally must therefore be nutritious food. Readers outside the allopathic tradition will surely disagree when singular cause (HIV) and multitudinous effects (AIDS) are aligned tautologously. To say repeatedly, for example, that AIDS (not HIV, much less HIV antibodies) has been 'confirmed serologically' (eg, pp 38, 160, 162) is to close off valuable debate, to be ensnared further by and in some of the very language that helped to facilitate precisely the activities Hooper so rightly decries. To his credit, Hooper shows that other mega-breakdowns in immune system function have occurred in this same time (the late 1950s) and place (several regions in Central Africa) without any seeming presence of HIV. This reviewer hopes that such is not lost in the shuffle to find a single cause (unitary, unvarying) of such a protean disaster as the Acquired Immune Deficiency Syndrome.

These minor quibbles aside, research this complicated and important deserves far greater airing than will likely occur or that this too brief review will inspire. Too many people will dismiss his case with little more than a nod of the head, as if to say 'it cannot be so because X, Y, or Z says it cannot', which is just about precisely how it has been put to me about 18-20 times in the past couple of years. Monsieur Hooper is in big, big trouble because he immersed himself in the same nasty truths that philosophers (such as Kuhn and Feyerabend), sociologists (for example, Latour and Woolgar), historians (among them, Oudshoorn and Hausmann) and anthropologists of medical science (Martin and Good, for starters) have each and collectively lain bare: scientific paradigms don't change simply because 'the facts' no longer support them. Even assuming that in a critical mass they become known about in the first place, the horrors of Stanleyville and the Lindi Camp (where lovable chimpanzees were kept and 'sacrificed') will likely be forgotten anyway, which ought to sadden and anger readers of this journal. That HIV might be iatrogenic remains a barely thinkable,

much less publicly utterable thought. It cannot - it *must not* - be true. Thankfully, there are many others pursuing the OPV thesis. One sociologist, Brian Martin, has almost spawned a cottage industry around the sociological and philosophical implications of the thesis and ensuing cover-up (see: <http://www.uow.edu.au/arts/sts/bmartin/dissent/documents/AIDS/>) (8).

Hooper has spoken Truth to Power, and for that alone, *Dephlogistication, Imperial Display, Apes, Angels, and the Return of Monsieur Emile Zola* and *The River: A Journey Back to the Source of HIV and AIDS* (4) deserve a wide, engaged and respectful reading. They are two of the five or six most challenging, most thought-provokingly disturbing works I've ever read. Readers who seek the truth, not just the right answer, will never forget either one.

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