reviews

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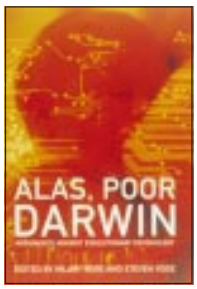
Alas, Poor Darwin: Arguments Against Evolutionary Psychology

Eds Hilary Rose, Steven Rose



Johnathan Cape, £17.99,
pp 292
ISBN 0224 06 0309

Rating: ★★★

In 1977 Edward O Wilson, the renowned entomologist, published *Sociobiology: The New Synthesis*, which insisted on the biological foundations of social relations. In 1998 he published *Consilience: The Unity of Knowledge*, which attempted to bring together all the branches of knowledge under the umbrella of the natural sciences. He concluded the book by declaring that the workings of all social institutions are ultimately reducible to the laws of physics.

It is against this reductionist desire that *Alas, Poor Darwin* is directed. Edited by the biologist Steven Rose and the sociologist Hilary Rose, it brings together writers from the natural and social sciences who take aim at the claims of evolutionary psychology (as sociobiology has become) to explain individual and social behaviour.

Why, it might be asked, have eminent writers such as Steven Jay Gould become so exercised with an offshoot of mainstream psychology that they go to the extent of writing 270 pages about it? The answer partly lies in the attractiveness of what Gould calls "ultraDarwinism" at a time when all the certainties of religion and politics have disappeared. Evolutionary psychology at its simplest attempts to explain the social world in terms of a fairly consistent human nature that was formed in the distant past. According to evolutionary psychologists, the human brain has evolved to accomplish a number of basic tasks in order to ensure human genetic survival. Accomplishing these tasks, they believe, explains most aspects of human life and culture.

Citing research that "demonstrates" that there are cross cultural universals in male ideals of female beauty, evolutionary psychologists go on to claim that men are attracted to women who have a particular "fertile" shape. Equally, women are attracted to men who can provide them with the resources necessary for bringing up children. In this way the "selfish gene" intrudes into all our lives.

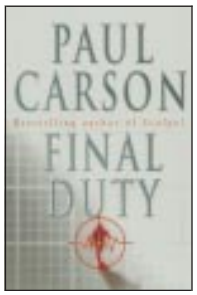
From the perspective of evolutionary psychology, too much thinking about society and social policy has assumed that human beings can change if their environments change. The challenge to the social sciences is clear, but, as Steven Rose and others point out, it is a misreading of the idea of evolution. Making a distinction between distal and proximal explanations, Rose points out that the processes of biology have a distal relation to human actions rather than being causal. He also emphasises the importance of locating phenomena at the level appropriate for them. For example, trying to explain crime in terms of biology is unlikely to help change matters, and it might simplify things to the point of prejudice.

This book challenges the rush into such simplistic explanations, and it does so extremely well. Ironically, in challenging the reductionism of evolutionary psychology, the book accomplishes a genuine engagement between different branches of knowledge, one that provides real opportunities for cross fertilisation. The idea that everything is ultimately reducible to the laws of physics has once again been refuted.

Paul Higgs *senior lecturer in sociology, Department of Psychiatry and Behavioural Sciences, University College London*

Final Duty

Paul Carson



William Heinemann, £10,
pp 321
ISBN 0 434 00825 7

Rating: ★★★

Jack Hunt, Irish academic cardiologist, has a CV as long as your arm and a compelling sense of vocation. Temperamentally hostile to the least suggestion of compromise, he is "totally unused to the commercial realities of clinical medicine." With his long suffering wife Beth and his eight year old son Danny, he has travelled the world—Sydney, London, Philadelphia, New York—in search of the right job. Until now, his career has been waiting to happen.

But no sooner has he arrived at the Carter Hospital in Chicago, than the apparently motiveless murder of his professor catapults him into the top job. An unlikely big cheese, he soon comes to realise that the hospital wants political skills (not his strongest suit) as much as medical ones. On the other hand, the $300 000 salary has its compensations.

For a while, all Jack has to cope with are the things that go with the territory—a punishing medical and administrative schedule, and the sudden need to grow into an affluent lifestyle. But then he drops his bombshell: "As from now all contacts with the pharmaceutical industry are banned." This comes at a particularly difficult time for the hospital which has just done a deal with multinational drug company Zemdon to help launch its new cardiac wonder drug, which they hope will be bigger than Viagra.

Jack's research interest is the role that infection during childhood might have in the early development of heart disease, and this—as much as his refusal to meet Zemdon representatives—spells major trouble. Following an assault on his son, the daylight trashing of his car, and the mysterious death of a co-researcher, he fails a random drug test and is sacked. At this point he decides to fight back, a decision that takes him to the West Coast and involves him in a life and death struggle to expose the corruption at the heart of Zemdon.

Final Duty is an accomplished page-turner of a medical thriller—a self-styled tale of "falsified lab tests, back-stabbing colleagues and murderous corporations."

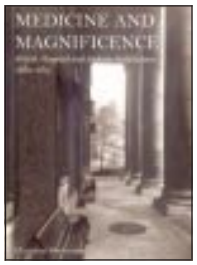
The medical profession does not come out of it conspicuously well. Jack's two most senior lieutenants at the Carter, for example, are a lush and a gambling addict who is operating a stock market scam in his spare time.

But at least the bad guys know what they're about, from the elderly Swiss doctor, beneath whose immaculately double-breasted exterior there beats a heart of pure evil, to the bleached-blonde, South African hit man. Their job is to be as nasty as possible, and their enthusiasm for their role is beyond question.

John Melmoth *freelance journalist*

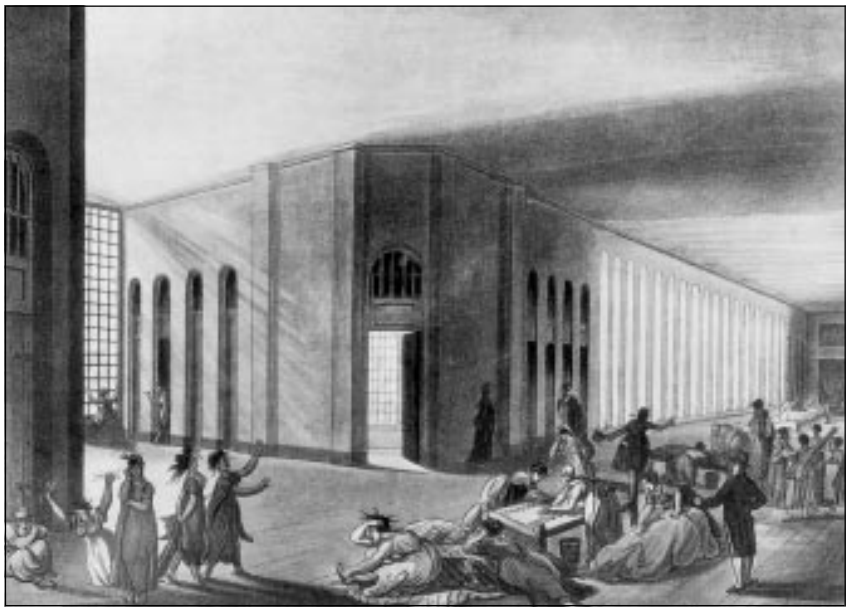
Medicine and Magnificence: British Hospital and Asylum Architecture 1660-1815

Christine Stevenson



Yale University Press, £30, pp 312
ISBN 0 300 08536 2

Rating: ★★★★



Large, arched windows illuminated the galleries at St Luke's asylum, London, built 1782-87

There were more than a thousand medieval English hospitals, almost all modest. From the middle of the 15th century, rulers in western Europe commissioned great new hospitals for their own and their cities' glory, as well as deeds of charity that might secure them and their families life everlasting. Their motives included piety, prestige, and pleasure. Our renaissance ruler Henry VII based his vast 100-patient Savoy hospital on these motives and Italian models. He ensured there were Tudor roses on the gowns of the staff and on the Tudor coloured counterpanes of the beds; the roof and stained glass windows were also of royal quality.

Offering ample precedents, Christine Stevenson focuses on 1660-1815 for her splendid book on the "high" architecture of British hospitals. She concentrates on two Vitruvian principles, commodity and firmness, with little consideration of the third, delight, my specific interest of art in hospitals. Thus she describes how in 1456 the duke of Milan sent his ambassador to Florence, and his architect to Siena, for details of staffing, finances, and layout. I would have added that the duke also learnt that in Siena the sick, poor, and pilgrims would find "pulchros muros" (beautiful walls), so that he instructed Filarete to make his Ospedale Maggiore beautiful as well as functional.

Stevenson begins with the major attitude of philanthropists in her centuries—that the poor should indeed receive health care, but they were to be segregated from the rich, and there should be no lavishness. My own favourite relevant quotation is from J E Smith in 1793: "Hospitals should not be made too comfortable as the poor would … then be too fond of having recourse to them." However, in the 15th century, before Stevenson's period, hospitals such as Beaune and Toledo were built with magnificence for both the wards for the poor and private rooms for the rich, because the latter, and their friends and visitors, would be inspired towards charitable activity by the sumptuous embellishment. This is the principle that today successfully drives the Mayo Clinic in the United States, whose grandeur and visible costliness guarantees high quality medical care to prospective patients, as well as large donations from them and their families.

Stevenson skilfully explores the philosophy, politics, and theology of building new hospitals. She starts with the monarchical glories of Bedlam, Chelsea, and Greenwich, and she cites Peter the Great advising William III to hand over Whitehall to the sailors and keep Greenwich for himself. She then describes the battle of the styles between Baroque, Palladian, and astylar (no columns) designs for the great voluntary hospitals in Britain. Their Protestant charity was based on societal duty, and building committee members had no expectation of immortality. Hospitals in Calvinist Scotland were denied any useless "ornament," and I have no record of any works of art in those hospitals until the last 30 years.

All the major British hospitals and asylums of the period have been analysed with contemporary views and plans, rarely solid blocks but mostly courtyard, H or U shape. Stevenson traces the separate pavilion hospital with what we call Nightingale wards (in which I worked until I retired) from the planned rebuilding of the Hotel-Dieu in Paris after its destruction by fire in 1782 to the enlightened international collaboration at the end of the 18th century. The prototype was probably the Plymouth naval hospital of 1757, much admired by foreign expert visitors.

Most *BMJ* readers have worked in hospitals (some still pre-1815) and would be enlightened by this excellent monograph.

The Plymouth naval hospital of 1757, probably the prototype for the Hotel-Dieu in Paris

Books reviewed are rated on a 4 star scale (4=excellent)

Jeremy Hugh Baron *honorary professorial lecturer, Mount Sinai School of Medicine, New York, USA*

Science and the Swastika

Channel 4, Mondays at 9 pm,
19 March to 2 April

Nazi Germany spent vast resources on medical and biological research. Doctors were prominent in Auschwitz and in other killing centres. These films claim that the "Final Solution" was driven by a Nazi "biological revolution." This leaves us with the unresolved questions of whether the Nazis slavishly followed the laws of genetics as then understood and practised, or—as Sir Richard Doll's recollections of cancer cells depicted as Jews suggest—that Nazism perverted and debased science. German medicine was experimentally oriented, and research consumed ever increasing resources. Yet after the war allied doctors concluded that its record of clinical innovation was poor and that release of the full story of Nazi human experiments would shake public confidence in clinical research.

These programmes present testimonies of victims who speak with dignity and compassion about their ordeals. In the first programme, about Nazi sterilisation and euthanasia, a civil servant describes how, as a boy, his case was referred to the tribunal for compulsory sterilisation. A sister of a child euthanasia victim remembers how she parted from her brother, who, although not mentally ill, was sent to a psychiatric hospital where he was given a fatal injection for having stolen to feed children who were being deliberately starved to death.

In the second programme, on human experiments, survivors of Josef Mengele's experiments on twins in Auschwitz explain how many of their number were mercilessly mutilated and killed. One, in an artificial voice, describes how Mengele destroyed his capacity to speak, and another tells how his brother died in his arms. Ella Lingens, a courageous Austrian doctor sent to Auschwitz for assisting Jews, explains how Mengele showed her falsified research protocols.

The programmes do not explain that some doctors refused to take part in sterilisation, euthanasia, or human experiments. The Nazi medical voice comes across as unscrupulous, racist, and unrepentant. A Leipzig children's doctor asserts that Jews had dominated his clinic. Yet—and it's a recurrent failure of the films not to draw on fresh historical research to endorse or refute oral testimony—it has been established that only one of a large staff in the Leipzig children's clinic was classified as a Jew in the professional register.

CHANNEL 4

A German genetecist conducts research on twins, 1933

We are presented with a crudely uniform view of German doctors hungry for promotion and research funds. These motives are used to explain rapid implementation of sterilisation (one of the historical "talking heads" understates the numbers of victims by at least 50 000). We are told repeatedly that doctors formed the largest occupational group among SS members and that doctors ruthlessly exploited the concentration camps. We are left with a caricature of the German doctor as a power crazed, human vivisector.

Part of the problem is that the interviews are clumsily put together. Also, the footage is dreadfully muddled: thus a picture relating to "Madaus/Koch" herbal extracts, tested for experiments on mass sterilisation, banally appears in a section about experiments on sulphonamide wound treatment. Shots of trains on bridges, maidens exercising, and pharmaceutical production have no apparent meaning. The numbers who died from the sulphonamide experiments is understated. The year of the so called Nuremberg physicians' trial (the programme fails to point out that some on trial were SS administrators) is incorrectly captioned as 1948.

Such errors are symptomatic of a deeper malaise in these programmes. Bland assertions are made about medical concerns with the master race. But issues of health care, rising maternal and child mortality, and increasing rates of infectious diseases are nowhere mentioned. Instead, the viewer is subjected to ill informed bombast about "the first European gas chambers" (sorry, but gas chambers were widely used for delousing in the first world war, and carbon monoxide euthanasia gassings and Zyklon gassings in Auschwitz have different historical pedigrees). The film sidesteps the controversies about the role of German pharmaceutical companies profiting from human experiments (try typhus vaccines and malaria treatment).

Part three (not viewed) is on allied exploitation of Nazi medical research. Must we brace ourselves for more garbled presentation of intrinsically important medical events and testimonies?

Paul Weindling *Wellcome Trust research professor in the history of medicine, Oxford Brookes University*

WEBSITE OF THE WEEK

Benzodiazepines A rich language has developed on the street to describe drugs, and some of the terms give a fair idea of the user's experience. According to the extraordinary US government archive of over 2000 street terms for drugs (www.whitehousedrugpolicy.gov/streetterms), heroin is known as the "galloping horse," crack cocaine is the "devil's dandruff," and opium is "God's medicine." A mixture of crack and phenylcyclidine is called a "Beam me up Scottie." Is cataloguing these names a good use of government funds? The White House thinks so, because "the ability to understand current drug-related street terms is an invaluable tool for law enforcement, public health, and other criminal justice professionals." How frightening that the US government considers public health professionals to be part of the criminal justice system.

Benzodiazepines ("downers," "dolls," or "tranqs") continue to form part of the repertoire of drugs that people become addicted to. US News Online gives a lively history of the rise and fall of Valium (www.usnews.com/usnews/issue/991227/sternbach.htm), immortalised by the Rolling Stones in their 1967 song *Mother's Little Helper*. Those wishing "to end benzodiazepine addiction and recover from the withdrawal syndrome" can join the online support group www.benzo.org.uk, while those who "have suffered medical and legal problems resulting from these drugs" can find guidance from Victims of Tranquillisers (www.benzo.org.uk/peart.htm). The Royal College of Psychiatrists publishes a balanced factsheet on the risks and benefits of tranquillisers, helpful for doctors and patients, at www.rcpsych.ac.uk/info/factsheets/pfactranq.htm.

But the much hyped concerns about benzodiazepines are not, it would seem, always justified. A paper in this week's *BMJ* (p 704), for example, shows no association between these drugs and hip fractures in elderly people. Searching the online version of the *British National Formulary* (www.bnf.org) gives a reminder of the huge range of indications for these drugs, including epilepsy, movement disorders, and temporomandibular joint dysfunction.

Gavin Yamey *BMJ* gyamey@ewjm.com

PERSONAL VIEW

Learning respect

See pp 685, 709

When as a medical student you dissected a cadaver, were there things said and done that left you deeply worried about the respect that you might be shown when you are dead? Do you remember the first time you performed a vaginal or a rectal examination? Were you in a queue of students lining up to practise on an anaesthetised patient who might or might not have known what was going to be done to them? Were you a bit embarrassed then as well? Perhaps this was expressed as ribald humour, a common defence in ethically challenging situations. Or was the examination performed on an uncomplaining conscious patient, who felt that they did not have the right to question why this nasty thing had to be done again and again? You may have felt a sense of unease at the time. You may even have decided that the procedure was wrong. But you were quickly taught that those doubts were immature and not to be heeded. And you lost something valuable.

A while ago the practice of students performing vaginal or rectal examinations on anaesthetised patients who had not given proper consent was discussed in the literature and condemned, but it still continues. Some surgeons, unduly enamoured of the initiatory aspects of a training in medicine or with a misapplied concern for the sensitivities of their patients, are continuing to encourage students to perform examinations on anaesthetised patients who have not properly given consent. They appear to labour under several misapprehensions. Firstly, their action implies the belief that warning patients that a student might be present functions as informed consent. Secondly, they may be confusing the act of putting fingers into an orifice with that of sensitively performing an examination, which is a blend of communication, respect, and technical skill. Thirdly and most importantly, they seem to believe that anyone minds less what is done to them when they are unconscious than when they are awake.

How would you feel if you knew as you were wheeled into the anaesthetic room that you would be stripped of your rights the moment you fell asleep and your body would be fair game? Many of us might consent to students practising a rectal examination on us awake, but most of us would be incensed if the same act was performed on us unconscious and without our knowledge or consent. Those surgeons and their students probably believe they are sparing the feelings of the patient by going through this ritual while the patient is asleep. In the short term they may be right, but in the practice of medicine the longer term should hold sway.

Doctors need to have even more respect and care for patients' feelings when patients are asleep, or for that matter dead, than when they are awake. The patient's consent is needed for training procedures as well as treatment. If a doctor is in training then we should explain this to the patient. A specific contract needs to be drawn up with each patient. They must be fully aware of what is proposed and in a position to decline without feeling under any moral obligation. "What the eye does not see the heart will not grieve" may have seemed valid at a time when most people were treated as if they had neither the knowledge nor the sense to make rational decisions for themselves. The medical profession will not survive if it continues to assume that this attitude is acceptable in a sophisticated democracy. There may have been a time when doctors could get away with being trustworthy in public but despicable in private, but this is an age when no secret is kept for long and really all doctors should know better. As soon as the practice of students practising examination technique on unconscious and unconsenting patients becomes widely known, what remaining trust the public has in the medical profession will be further undermined.

> Doctors need to show even more respect when patients are asleep than when they are awake

Doctors are now required to be accountable, and cannot afford to pretend ignorance of that fact. If as clinicians and trainers we can manage to be honest and open about the problems arising in training and in making decisions, then we may be able to retain the trust that patients have so far been only too willing to offer. In doing so, we may stand as sorely needed role models for our students. In the long term this would make for a better respected and more trustworthy profession.

In the short term, however, there is an uncomfortable path to be trodden as the weaknesses and insecurities of the profession are addressed. If anyone is wondering what the weaknesses might be, they should ask the nearest medical student. Provided we have not yet trained the perception or intimidated the honesty out of them, they will be able to spot those weaknesses long before we can. The medical profession urgently needs to learn respect for the living and for the dead, and thereby earn the public respect that is its lifeblood.

Andrew West *psychiatrist*
Christopher Bulstrode *surgeon*
Victoria Hunt *a person uncorrupted by medical training, Oxford*

SOUNDINGS

No surrender

Every now and again the tranquil progress of our little multidisciplinary team round the acute ward is disrupted by a troubled visitor: not the kind of relative who is there from the beginning and whom we get to know quite well as things move along, but a sudden, anxious presence from another world.

The details vary, but the basic story doesn't, and the distress is always palpable. "I live four hundred miles away. I can't take my mum. And you can't just send her home because she lives on her own. And, um, I live four hundred miles away."

The distressed daughter from England, let us call her. Straight from the airport, deeply suspicious and obviously distraught, she requires careful handling. She explains about her job, and her family, and how she can stay for a few days at most. She doesn't want her mother just put in a home. And she lives near enough to worry but not near enough to help.

We listen. Eventually, when she has got through everything she has been rehearsing all the way from somewhere like Essex, we try to explain: no rush to judgment; no precipitate discharge; no knee-jerk nursing home disposal.

Suspicions may linger, but we mean what we say, and yet again we find ourselves wondering about what sort of experience of care of the elderly 400 miles away has shaped the expectations that cause such distress.

We do things differently here. In Scotland the care of the elderly survived the depredations of the internal market rather better than in the south. More beds, cannily managed by a relatively confident and thriving specialty, allow a decency of provision that continues to surprise our flustered friends from the south.

The NHS in general survived better in Scotland. Mrs Thatcher's whim of iron—the market solution that burst upon the NHS in 1989—seemed distant: the answer, perhaps, to problems elsewhere. With a few exceptions, enthusiasms were tactical and restrained, and largely to do with damage control.

But there was something else too: something we might call the Scottish version of the Dunkirk spirit. For those not familiar with it, here it is. Two jocks, Jimmy and Wullie, are rowing home across the Channel in June 1940. After several hours of thought, Jimmy confides to his friend a strategic insight we all still recognise: "Wullie, if England surrenders, this is gonnae be a long war."

Colin Douglas *doctor and novelist, Edinburgh*