

basis in fact. Indeed, as Huber notes, fear itself has become a basis for litigation.

Galileo's Revenge came out too soon to record two recent victories over junk science. Earlier this year, a woman in Florida claimed that she had lost her psychic powers when some timber fell on her at a local store. Although the judge declared before the case got under way that psychic powers had been scientifically established (a chilling pronouncement for the defence lawyers), the jury was more sensible and awarded her \$5,000. She had asked for \$1 million and had been offered \$40,000 to settle out of court. Sanctions against her took away the award and put her in debt to the court. Then in September, a federal jury absolved the Lilly Company from claims that their drug Prozac had caused users to commit murder and suicide, and had caused one woman to be an "insatiable nymphomaniac". The anti-Prozac cause had been supported by the Church of Scientology. In both these cases, junk science was rejected and reason prevailed, in spite of evidence given by paid 'scientific experts'.

Huber says that if an expert authority declares that something is in fact not the cause of a grievance, all the lawyers need to do is "ask a jury. And then another, and another, as many times in succession as the trial bar may deem to be justified by either visceral conviction or speculative greed. We find, once again, that our modern liability system is all accelerator and no brake." He is justifiably angry at jurists who deny the established scientific facts and accept pseudoscience: "It is simply unacceptable for any judge to insist that there is no such thing [as scientific truth] Claims dressed up in the form of serious science but lacking serious empirical and conceptual credentials will continue to be junk science. We do not hesitate to denounce charlatans and frauds when they peddle snake oil in country fairs or on network television. We need not hesitate to denounce them when they are primed and primed by lawyers and solemnly ushered into court." He contends that the rules of evidence must be changed to reflect science's definition of cause as the only one that is objectively verifiable.

We would do well to remember Huber's opinion when advocates of cold fusion and homeopathy object to the publication of valid commentary about the evidence for their claims. □

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Intellectual dissent

Michael Shepherd

Final Analysis: The Making and Unmaking of a Psychoanalyst. By Jeffrey Masson. HarperCollins/Addison-Wesley: 1991. Pp. 212. £15, \$18.95.

PSYCHOANALYSIS has proved to be an important influence on Western thought during the twentieth century. Now that it is in decline, the reasons for its long run can be discerned more clearly. Scientific validity can barely be included among them. As Peter Medawar pointed out, the system is constructed on a quasi-scientific psychology; the ideas are essentially unbiological; the thinking is mythological, more akin to imaginative literature than to science; and the doctrines are "cunningly isolated from the salutary rigours of disbelief". Further, it has failed to justify the therapeutic claims advanced by its proponents.

Jeffrey Masson would agree, but from a very different standpoint. Most of the critics of psychoanalysis have examined it as informed outsiders. Masson has been an insider, a participant-observer who briefly entered the sanctum sanctorum of the psychoanalytical hierarchy when he was appointed projects director of the Sigmund Freud Archives by Kurt Eissler and formed a close professional relationship with Anna Freud. A former professor of Sanskrit, Masson rose rapidly within psychoanalytical circles during the 1970s and edited and translated the Freud-Fliess letters. Gradually,

however, he began to entertain doubts about several aspects of the world in which he appeared to be so successful, and in 1981 an article in the *New York Times* he gave public expression to his critical assessment of Freud's seduction theory, one of the cornerstones of psychoanalytical dogma. In the process he accused Freud of moral cowardice. Shortly afterwards he was relieved of his directorship of the archives and his links with the International Psychoanalytical Association were severed.

Masson has repented with his pen. In 1984 he published his views in a book with the self-explanatory title of *The Assault on Truth: Freud's Suppression of the Seduction Theory*. In 1988 he turned against the whole psychotherapeutic enterprise with another volume, again with a revealing title, *Against Therapy: Emotional Tyranny and the Myth of Psychological Healing*. This third volume is largely autobiographical, tracing the steps of the professional and personal journey that has led to his present position.

The story has been told before. In the United States, where psychoanalysis flourished as nowhere else, Masson's career was of sufficient interest for Janet Malcolm, a journalist on the *New Yorker*, to make it the springboard of her memorable exposé, entitled *In the Freud Archives* (Cape, 1984). Malcolm, whose earlier investigation of psychoanalysis as "an impossible profession" had familiarized herself with the background, provides a searching account of the issues and the people involved, including a vivid portrait of Masson himself, a man who "gave off the sheen of the intellectual big time that even those who disliked him from the start were impressed by".

The sheen is largely missing from *Final Analysis*, in which Masson presents himself more modestly as a man who looked for truth and was disillusioned by what he found, a man who was more sinned against than sinning and who gradually came to realize that he had landed in a nest of vipers. Making use of a succession of anecdotes and comments, he castigates the closed societies of the analytical institutes and depicts most of his former colleagues as venal, backbiting, envious and all too often incompetent. From this judgement he exempts Kurt Eissler and Anna Freud, who emerge as sincere but misguided fanatics. His verdict is unequivocal: "In my experience, psychoanalysis demanded loyalty that could not be questioned, the blind acceptance of unexamined 'wisdom'. It

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Freud — accused of moral cowardice.

is characteristic of religious orders to seek obedience without scepticism, but it spells the death of intellectual inquiry. All variants of 'because I say so', or because the Koran says so, or the Bible says so, or the Upinashads say so, or Freud says so, or Marx says so, are simply different means of stifling intellectual dissent."

This is the voice of a disillusioned apostate, about whom several questions remain unanswered. The significance of his story, however, resides more in what it reveals of his former creed than in what it reveals of the author himself. He has provided a striking and well-publicized illustration of Ernest Gellner's dissection of the psychoanalytical movement as a highly organized secular faith, a complex belief system applying a scientific idiom to a variety of social and personal needs. But those needs will not be dispelled by reason and logic. Pierre Janet's history of psychological healing (*Psychological Healing*, Volumes 1 and 2 (translated by E. and C. Paul), Allen

and Unwin, 1925) demonstrates clearly that such denunciations may serve to modify, but will not eradicate, the responses to the continuous and widespread call for hope, support and consolation on the part of numerous people who are ready and willing to believe in what is offered for the purpose. Stripped of its scientific pretensions, psychoanalysis is merely an elaborate example of the many forms of psychotherapeutic activity that arise in response to these demands. The counsellors, the scientists, the cultists of various persuasions and some 'alternative' medical practitioners all testify to this phenomenon. As medicine attempts to shake off the trappings of magic and theology it is having to accept the old adage that while the physician's scepticism may be the best means of attaining truth, the patient's faith is often needed to attain health. □

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In for a penny, in for a pound

Norman Myers

Linking the Natural Environment and the Economy. Edited by C. Folke and T. Kaberger. *Kluwer*: 1991. Pp. 305. Dfl. 150, \$100, £52.

Values for the Environment. By J. T. Winpenny. *HMSO*: 1991. Pp. 277. £14.95.

ENVIRONMENTALISTS have much to learn from economists. For instance, can a natural resource such as a species really be 'beyond value', as many conservationists claim? Americans gladly pay \$15 million to save the California condor, but they might well jib at \$15 billion. Similarly, that key tool of economics, marginal analysis, has much to say about value where it most counts, namely at the margin: we would presumably pay more to save the tenth last panda than the thousandth last.

Conversely, economists have much to learn from environmentalists. Economics has little to say about the long-term future; a discount rate of 10 per cent effectively proclaims there is no future beyond seven years. Yet some of today's environmental assaults will leave their effects for centuries and millennia — in the case of mass extinction of species, for millions of years. Moreover, many economists assume that the welfare of future generations will continue to be better than that of the previous generation, so we should not worry unduly about the problems we may be passing

on: our descendants will find a way to sort them out, just as their forebears have always done. This thesis no longer holds when present-day environmental degradation looks set to deplete the world of many of its crucial natural resources. Most importantly, economics is largely based on an incrementalist approach to analysis, where situations change little by little rather than by big jumps. But ecosystems often undergo large shifts in make-up and dynamics, as is likely to be the case today as humans irreversibly transform the planetary ecosystem itself.

In short, it seems that economists and environmentalists do not talk enough to each other. They have been urged to compare notes for decades, and on all kinds of cogent grounds. But in my experience, the gulf of misconception is greater than ever.

All the more welcome, then, are these two books, each of which tries to bridge the gap. *Linking the Natural Environment and the Economy*, edited by two Swedish aficionados of the fields, is the more erudite and professional, dealing with "the dependence of socioeconomic systems on healthy environments and functional ecosystems". It seeks to demonstrate that "it is no longer possible to take environmental goods and services for granted". Instead they must be methodically taken into account by decision-makers at all levels. The book does a sound job, with much fine-grain analysis, while eschewing econometric minutiae.

The first part delineates several types of ecological and economic linkages, assessing their scope and importance through factors such as institutions, en-

vironmental effects and energy flows. The second part presents empirical analyses of the part played by environmental resources in economics, and contains examples from landscape change, agriculture, wetlands, and coastal and marine systems. Useful measurements such as plant growth, industrial energy, cropland nutrients, grain yields, soil erosion, eutrophication of water bodies and outputs of fisheries are invoked throughout, and there is a preliminary evaluation of trade-offs between competitive forms of land use. The third part looks at human impacts on environments in developing countries, through assessment of, for example, pesticidal pollution in Kenya and conservation in Central America.

The final chapter provides an overview of the eight case studies and their findings. This is the most illuminating chapter because it attempts, with some success, to define operationally the key concept of environmental economics, sustainable development.

By contrast, Winpenny adopts a sternly pragmatic approach. The author is a development economist with extensive field experience, and he hopes that his book will be "of operational value in project appraisal and, ultimately, policy formulation"; his intended reader is "an economist working with project responsibilities". He quickly plunges into a summary consideration of important habitats (such as watersheds and rainforests, as well as urban and industrial ones), and follows this with a review of evaluation techniques including cost-benefit analysis and "environmental benefit estimators". In the second half of the book he deals with practical applications of economics to, for example, desertification, loss of biodiversity, pollution and climate change, and includes sections on project appraisal and policy adjustment. All this is supported by many examples and small case studies.

The book is a fine analytical aid for project managers. But Winpenny seems to accept the situation 'outside the window' as given, with virtually no critical assessment of whether we are right about general environmental trends, or of what environmental economics as a discipline can offer if we decide we are not.

Both books can be commended to those trying to straddle the unfortunate divide between economics and environment; they are especially timely in the light of the United Nations Conference on Environment and Development to be held in June 1992, where interdisciplinary and intersectoral linkages will be central to the deliberations of the world's nations. □

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