but, as Kupferschmidt rightly argues here, it was already overturned by French investigations in the Near East in the decade after the publication of Hirst's study. It is now clear that there are three primary means for the spread of plague: (1) transmission by sylvatic rodent populations, which in man results in sporadic endemic plague; (2) major outbreaks in rat populations, which cause pandemic plague in man through transmission by infected rat fleas; and (3) direct infection of one human victim by another, either by droplet infection through the air (as in pneumonic plague) or by human insect parasites, in particular human fleas (bubonic plague). All three of these means are potentially of equal importance, and their relative role depends on prevailing local conditions. For historians this paradigm makes far better sense of the historical record: none of the medieval European or Islamic plague treatises written in the wake of the Black Death in the mid-fourteenth century mentions the vast mortality among rats that would be required by Hirst's doctrine, and in the gaps between the major pandemics there are sporadic reports of local outbreaks or individual cases that are difficult to orient within a rigid schema of rat-based infection.

Perhaps most striking of all is the difference in the overarching attitude toward the endeavour of epidemiology that is so clearly evident in this book, as opposed to its illustrious predecessors. At the hands of Hirst and Pollitzer, writing in the context of a medical science that was discovering miracle drugs and magic bullets, the story of the modern study of plague is largely told—if not emotionally so—in terms of military metaphor, as the account of the victor over the vanquished. For them, plague is a disease subdued and defeated, conquered by modern science. For Kupferschmidt, taking up the same topic in the era of AIDS and other developments calling into question the agenda and efficacy of modern science, plague remains a smouldering threat whose former terrors can once again burst forth against mankind at any time. There is much to ponder here on the influence that cultural context brings to bear on the course and conclusions of scientific thought.

If there is any particular weakness to this book, this would be its discussions, albeit brief ones, of plague prior to the late nineteenth century. For these matters it relies on such long-outdated works as Georg Sticker's *Abhandlungen* (1908–10) and takes no meaningful account of recent historical research on the first two plague pandemics, those associated with the so-called Plague of Justinian in the sixth century and the Black Death in the fourteenth.

But this is a book about the plague and the effort to control and eradicate it since 1894, and in this area it is a very well researched and argued study. One can easily see why it gained the author the Sigerist Prize for 1993, and it is certainly a work that all medical historians and other researchers working on the plague should take seriously into account.

Lawrence I. Conrad, Wellcome Institute

Charles F. Clark, *AIDS and the arrows of pestilence*, Golden, Colorado, Fulcrum Publishing, 1994, pp. xvii, 171, illus., $23.95 (1-55591-146-3).

Charles F. Clark, the author of this book, was a psychiatrist working in NATO Headquarters in Belgium when he first became interested in AIDS. It became apparent to him that each NATO country reacted to the syndrome in a way which was conditioned by its own history and culture.

Clark began to use an historical approach as part of teaching about HIV/AIDS. This book is the result. The early chapters are an historical synthesis, strongly influenced by William McNeill's *Plagues and peoples*, in which Clark examines the impact of epidemic disease on various societies through migration and other means. The recent history of AIDS in the United States is then used to point a number of political morals, among them, the need for radical reform of the U.S. health care system; the legalization of heroin; and the need for...
effective prevention campaigns. This is the 
"lesson of history" used to argue for a liberal 
policy approach.

The book is not a work of original 
scholarship. Clark is bringing together a body 
of historical and current writing about AIDS 
and epidemic disease, much of which is 
familiar. Despite his historical analysis of 
widely different cultures, his focus in the 
present is almost entirely on the United States 
and the impact of AIDS in that particular 
culture. Even within the U.S., he takes no 
account of more recent disease formulations, 
such as the "chronic disease" model, which has 
been widely discussed. AIDS, whether rightly 
or wrongly, is no longer seen within the 
epidemic model; it would have been helpful to 
have some consideration of those more recent 
changes. Outside the U.S., too, AIDS has been 
a much less powerful force for the reform of 
health care systems. In the U.K., for example, 
AIDS funding has been the victim of recent 
health service changes rather than a driving 
force for change.

The book is therefore of limited relevance to 
a non-American audience, although it is well 
produced and illustrated by thirteen full colour 
plates, ranging from a 1350 representation of 
Saint Sebastian to the AIDS quilt in the 1990s.

Virginia Berridge, London School of Hygiene 
and Tropical Medicine

Kurt Danziger, Constructing the subject: 
historical origins of psychological research, 
Cambridge Studies in the History of 
Psychology, Cambridge University Press, 1994 
(hardback edition first published 1990), 
£12.95, $16.95 (paperback 0-521-46785-3).

It is with great pleasure that we can 
welcome the publication in paperback of Kurt 
Danziger's Constructing the subject. Even 
now, Danziger's work remains a lively, 
engaging and completely au courant 
investigation into the nature and development 
of psychology as a scientific endeavour. Not a 
disciplinary history per se, Constructing the 
subject is rather an exploration of the ways in 
which the subject in psychology has been 
historically constructed and reconstructed, 
approached through a series of key episodes 
and figures. Particularly attentive to the 
intellectual history of psychology in Germany 
and America, and deft in its deployment of 
the most recent analytical developments within 
science studies, Danziger's work illuminates an 
issue of profound concern to all those 
interested in the human and medical sciences: 
what are the consequences of transforming 
human beings into objects of scientific inquiry?

Danziger's analysis explores this question from 
two angles. First, following recent trends in 
history and sociology of science, Danziger argues 
that in any scientific investigation, choice of 
experimental method employed, research object 
investigated, and result obtained are all intimately 
linked. Thus the nature of the object at the centre 
of scientific inquiry will depend, at least in part, 
on the style of investigation adopted, and vice-
versa. In terms of psychology, Danziger identifies 
three types of experimental investigation as 
dominant: a Wundtian style of expert-performed 
experimental introspection, a French style of 
clinical-experimental investigation of individual 
subjects, and a Galtonian style of large-scale 
statistical analysis. Each, Danziger claims, was 
organized around a particular set of research 
questions, used distinctive methods of data 
production and analysis, and created a specific 
type of experimental subject.

Second, Danziger insists that this generic 
interrelation of the elements constituting the 
experimental endeavour becomes more 
complicated when human beings are transformed 
into research subjects, because of their 
responsiveness to the social settings in which 
they are placed and the behavioural expectations 
they bring to those situations. Thus, according to 
Danziger, analysis of the experiment as a distinct 
social realm is, within psychology, particularly 
important. Changes in environment, in 
personnel, or in definition of social role can all 
radically alter how a human subject will respond 
under any given circumstance. In addition 
Danziger points out that there exists no prima 
facie assurance that knowledge produced within