details. Cultural factors were also at work. Thus in Britain the tradition of conservatism was much more open to paternalistic measures—despite the Thatcherite stress on individualism—than was the case in the United States, where conservatives have viewed government with much greater hostility.

As important as the differences noted by Leichter is the fact that public health officials on both sides of the Atlantic learned from each other. "The diffusion of ideas between the United States and Britain . . . helped set the agenda, framed the parameters of debate, even suggested the content of policy in a number of life style and health issues." In the case of AIDS, the British looked to America as a model both for what to do and for what not to do. In the case of seat belts the process of diffusion moved from Britain to the United States.

It is one of the great assets of this fine volume that it will permit not only policymakers but citizens more generally to consider the questions raised by the passionate debates over health promotion and disease prevention without the national insularity that often characterizes discussion of such matters. The comparative perspective employed in this volume is especially valuable because the issues involved are among the most difficult for all liberal societies—societies that purport to be committed to the protection of individual freedom as well as the collective welfare.

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Vignettes: Earth Health

Economics used to be the dismal science; environmental science is now taking its place.

—Talbot Page, in *Ecological Economics* (Robert Costanza, Ed.; Columbia University Press)

We need to do something in haste
About the production of waste
For if we do not
Then what have we got
But a world that is not to our taste.

—Kenneth E. Boulding, in *Ecological Economics*

Intelligent hypochondriacs do not consult a biochemist or a molecular biologist about their worries; they go instead to their doctor, a general practitioner of medicine. A good doctor knows that hypochondria often masks a real ailment different from the one imagined by the patient. Could it be that our deep hypochondria about the state of the global environment also masks a real disease of our planet? How can we find out, and who should we ask for advice? . . . . It could be that the real planetary malaise is beyond the understanding of specialist scientists in fields like climatology or geochemistry . . . . If the history of human medicine is a guide, planetary medicine will grow from guesses and empiricism, from practical solutions to immediate problems, from common sense and good hygiene. And its scientific basis will be physiology, the systems science of living organisms—or rather, geophysiology, the systems science of the Earth.

—James Lovelock, in *Healing Gaia* (Harmony Books)

German Imports

Secret Agenda. The United States Government, Nazi Scientists, and Project Paperclip, 1945 to 1990. LINDA HUNT. St. Martin's, New York, 1991. xii, 340 pp. + plates. $19.95. A Thomas Dunne Book.

As the constrictive strands of the Cold War are unraveling, Americans are beginning to come to terms with the meaning of that conflict and with its costs. Many of these costs—structural distortions of the economy, environmental damage due to the production and testing of weapons—are tangible. Others are more subtle, such as the institutionalization of attitudes and policies that were responses to some perceived immediate Soviet threat.

Linda Hunt's *Secret Agenda* addresses one set of such responses—postwar programs for appropriating German experts that American officials saw as useful in an era of increasingly sophisticated weapons. In addition to exploiting the skills of these specialists, Operation Paperclip and other such classified projects were meant to deny the Soviets access to German expertise. This could best be achieved, it was believed, by bringing the researchers and technicians to the United States.

Hunt's central claim is that the dossiers of Nazi adherents were altered to obscure their affiliations, specifically in order to evade visa restrictions that would otherwise have applied to them. Such acts reveal patterns of high-handed behavior in government agencies that persisted throughout the Cold War. Furthermore, since many of the Germans became prominent in the U.S. space effort, the procedures and priorities of military and NASA programs are called into question. Some government aviation medicine and biological warfare research projects have been similarly tainted.

This is not the first time such claims have been made. There were already whistleblowers in 1947, when Drew Pearson repeatedly published stories on Nazi scientists brought to the United States. Historian Clarence Lasby's account of these importations, *Project Paperclip* (1971), was limited by the classification of relevant files and the ongoing protection still provided to Paperclip participants, but since the Office of Special Investigations was established in the Justice Department in 1979, and especially since the much-publicized proceedings against NASA's Arthur Rudolph in 1984, those records have largely been subjected to review.

Hunt has been particularly vigorous in prying out the details from buried files and reluctant sources. The results of her labors first appeared in the *Bulletin of the Atomic Scientists* in 1985 and in a CNN investigative report a year later. There and in the present book she has firmly documented the circumvention of law and public policy that occurred in the name of national security. *Secret Agenda* is based on sound historical evidence, even if it retains much of the breathless tone of an exposé. More effectively than other works on the subject, it keeps before the reader the human consequences of Nazi rule with which the scientists were directly associated—especially the murderous research experiments on human subjects at Dachau and elsewhere and the conditions of the Dora-Nordhausen concentration camp that supplied slave labor for V-2 rocket production. Hunt graphically depicts the gruesome scenes recounted in Nuremberg Trial records and by survivors she has interviewed. She minces no words about the involvement of Walter Schreiber, Hubertus Stughold, and other Paperclip medical spe-

cialists in the experiments. She documents the presence of Rudolph, Wernher von Braun, and many of their Paperclip associates in the midst of the human devastation at Nordhausen. For each of the scores of names introduced, Hunt provides evidence of Nazi sentiment and activity. And she scathingly indicts specific American military and civilian officials who, motivated by Cold War exigencies or bureaucratic opportunism, shielded useful Germans from war crimes investigation and public scrutiny.

The vivid focus on specific enterprises effectively dispels the myth of innocuous association conveniently promulgated for so long and displays the skills of a seasoned television investigative reporter. Yet there are problems with the way the story is told. The power of television emanates from the immediacy of its images and the visceral character of the emotions they can arouse. In the CNN report Hunt could skillfully position a Dora survivor in front of a display of rockets associated with von Braun's German design team, thus guaranteeing that a subliminal connection between Nazi concentration camps and German rocket scientists in the United States would be made. The medium of print, however, allows a reader time to reflect on both content and presentation. For example, as Hunt fires out names and information and implicitly places practically all Paperclip personnel under suspicion, one wonders actually how many of the more than 1000 experts brought to the United States under the program were indeed "ardent Nazis." Only a few percent of that number figure in this book, and it would seem that to begin to address the question adequately a thorough survey of the Nazi Party records at the Berlin Document Center would be required. Furthermore, though Hunt notes an occasional confrontation between Germans who had and Germans who had not viewed the Nazis favorably, the latter are given no voice here.

The tone of *Secret Agenda* clashes rather strongly with that of Tom Bower's *Paperclip Conspiracy* (1987), which tells much the same story in more measured fashion and gives a more balanced sense of who participated in the program. Bower, a BBC producer, also weighs the contrast between the prewar and the postwar perceptions of the value of scientific research in British and American military circles, stressing how decisive such research had come to be considered by battle-hardened junior officers who had to outflank hide-bound superiors during the war. (These junior officers often emerged as the managers of intelligence and technological programs in the postwar period.) Along with the perception that pragmatic deception had become endemic comes Bower's judgment of the overwhelming success of Paperclip and other programs designed to exploit German expertise and keep it from the Soviet Union. The result is more nuanced but less provoking than Hunt's presentation.

A different kind of contrast is offered by historian John Gimbel's more sympathetic treatment of the Cold Warrior position. In his *Science, Technology, and Reparations* (1990), he places Paperclip in the context of war reparations (both military and commercial) that were an important national interest in the postwar world. Elsewhere he has argued that Paperclip involved no secret cover-up, conspiracy, or criminal activity, since so many responsible people in and out of government knew exactly what was happening and formally approved it: Paperclip was simply a natural outcome of the defeat of Germany and the onset of the Cold War, and even revisions of criteria for favorable security reports were "procedurally unremarkable" (*International History Review* **12**, 464 [1990]).

However, the historical context into which Paperclip and other projects must be fitted is the ambiguous boundary between World War II and the Cold War. The Cold War is sometimes dated from the Truman Doctrine of 1947 or the Berlin Crisis of 1948, but in the world of technical intelligence it started well before the end of hostilities and was directed at anyone who could conceivably drag the United States into another war. Explicit efforts to mislead the American public flowed at least as much from a distrust of prewar isolationist sentiment and traditional American military unpreparedness as from the cynicism regarding democratic institutions that Hunt suggests.

Of course, Hunt is concerned less with placing Paperclip in its historical context than with generating a new context for assessing such ventures. From the vantage point of the end of the Cold War, what were initially moral compromises seem blatant perversions when maintained over decades: "Certainly no one can argue with the urgent postwar need to obtain German scientists' knowledge. Yet the way that was done seems unthinkable today. Was it really necessary to cover up Nazi crimes? Evade presidential policy? Harbor murderers?"

These are serious questions of means and ends, and their correlatives are being asked in every area where the Cold War has affected our lives and our institutions. For the sake of the democratic ideals we claim to hold, such questions must be asked. Although they are often phrased in terms of the past, the way we answer them has everything to do with our future, including how we deal with Soviet specialists whose expertise could soon appear on the open market.

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Some Other Books of Interest

Major Events in the History of Life. J. WILLIAM SCHOPF, Ed. Jones and Bartlett, Boston, 1991. xvi, 190 pp., illus. Paper, $28.75. From a symposium, Los Angeles, Jan. 1991.

Though nominally a "proceedings," this volume is different from others of the genre—the symposium of origin was intended not for specialists but for first- and second-year college students, and the results are presented not by some rapid-reproduction process but in the polished format of the textbook. Six authors (whose biographies are given in the opening pages) present the history of life on earth in as many chapters. Stanley L. Miller opens the story with a discussion of prebiotic organic synthesis, beginning with the geological setting and including results of relevant laboratory experiments and evidence from extraterrestrial sources. Schopf then gives an account of "the oldest fossils and what they mean," covering the Precambrian from the earliest microfossils through the emergence and decline of eukaryotic phytoplankton. In chapter 3 Bruce Runnegar recounts the evolution of the earliest animals, beginning with a summary of the Metazoa as viewed cladistically and proceeding to the Ediacarian fauna, the "small shelly fossils" of the Burgess Shale, and the "Cambrian explosion." The earliest plants are then taken up by John B. Richardson, with emphasis on adaptations that enabled them to colonize the land environment and a postulated "spore-based evolutionary succession" culminating in the Late Devonian. Proceeding to more generally familiar forms, John H. Ostrom then recounts "vertebrate successes" up to the origin of birds, with particular attention to dinosaurs and their departure. The only mammal given more than passing attention in the volume is the hominid family, whose evolution through the Pleistocene is treated by Philip V. Tobias in the final chapter; here major anatomical and relevant environmental events are identified, and Tobias sets 2.5 million years ago as the point at which cultural and behavioral mechanisms became driving forces in the evolutionary process. Each chapter has its own reference list (or suggestions for further reading),