

Wars") would be almost impossible to build and unlikely to accomplish its objectives.

Almost 50 years separate FDR's decision to develop the atomic bomb and Reagan's 1983 announcement to go ahead with the SDI. Yet during this half century, Herken notes, "presidential science advising seems only to have traveled full circle." Reagan acted on the advice of a handful of individuals, operating in secret, with little discussion or debate. Life-or-death decisionmaking by political leaders today resembles, in Herken's account, a dangerous modern machine run by an antiquated motor. Einstein put it better: After the atom bomb was dropped in 1945, he wrote, "Everything has changed, except our way of thinking."

THE MALARIA CAPERS: More Tales of Parasites and People, Research and Reality. By Robert S. Desowitz. Norton. 288 pp. \$21.95

First comes the long struggle to identify the cause, then research to find a cure, and finally eradication: Such is the common idea of how medical science vanquishes a disease. But the history of the fight to conquer malaria hardly conforms to any such comfortable, orderly notion of scientific progress.

Two thousand years ago, the Chinese had a drug, Qinghaosu, that could treat malaria. Around the turn of this century, a few isolated doctors, working with inadequate scientific equipment, under dismal conditions, and in spite of colleagues' mockery, finally identified malaria as caused by a parasite borne by *Anopheles* mosquitoes. The result? Malaria today, with 100 to 200 million new cases and one to two

million deaths annually, is a more serious killer than it was 30 years ago.

Thirty years ago, says Desowitz, a specialist in tropical diseases, malaria was on the verge of eradication. In 1964, Sri Lanka had only 150 new cases of malaria, a dramatic improvement over the three million cases recorded a few years before. Indian medical statistics contained a similar success story. Yet in both countries the number of cases has climbed back up into the millions again. What happened?

Quite simply, the governments in both countries ran out of funds to maintain the efficient DDT spraying campaigns that once proved so successful. Desowitz becomes a Jeremiah in his denunciation of "malaria politics": Corrupt bureaucrats in both First and Third World countries, intellectual scientists "more concerned with the exquisite intellectual changes of modish science than with seeking practical solutions," and a "drugs-for-profit pharmaceutical industry [that] gives low priority to the diseases of poor people" all come in for his excoriation.

Desowitz may have succeeded in making a dismal situation sound worse than it is. When he calls most recent funds spent on malaria control "money down the drain," he ignores that 1.5 billion people now live in countries with successful eradication programs. When he calls those scientists researching an elusive malaria vaccine misdirected, he forgets that when parasites and mosquitoes become resistant to insecticides (as one strain of *Anopheles* mosquitoes has), a vaccine is one of the few possibilities left. Yet when poor, malaria-ridden countries lack sustained funding for control, prevention, or cure, Desowitz's plea is timely: "The malarious are still with us and they still need help."

