

Science dissenters, et cetera

ZIA SARDAR

Science, it is commonly thought, is only concerned with facts and truth. But it also has its establishment and a belief system; there are power seekers and career men. And if someone dares to challenge the establishment, he is simply ignored; or even shut up. Thus if Professor Herbert Dingle (*Science at the Crossroads*, Martin Bryan & O'Keeffe) dares to claim and 'prove' that the famous theory of relativity, one of the foundation stones of the modern science, is false, it is surprising that most scientists just do not want to know?

Individuals who are challenging the very basis of the modern science are slowly, but surely, on the increase. A new addition to those, like Professor Dingle, who are disillusioned with science is Hans J. Morgenthau, an eminent American man of politics and international affairs. His book (*Science: Servant or Master?* New American Library) consists of three essays, two of relatively recent origin and the other much older. The longest essay is based on unpublished manuscript of pre-war vintage which outlines the author's realization of the Fall of Science. One of the other essays makes a beautiful dissection of Herman Kahn's Doublethink about the Unthinkable; the author shows how Kahn consistently slanted assumptions and conclusions in the direction of complacency, so as to make the nuclear holocaust comparable only to a bad hurricane. The other essay analyses the manners in which contemporary scientists have become a tool of military power—an essential source now of political strength and the prime mover of imperialism and repression.

The contribution of the scientific community to military efforts is a controversial issue: pointing at the Vietnam war, many scientists and engineers have recently aired accusations against their co-workers. Techniques such as defoliation, night vision systems, seismic and acoustic detectors linked to a computer network in Thailand, as well as laser guided bombs have been the bitter fruits of recent military research. At the recent Vienna summer school on the history of physics attended by some of the worlds celebrated scientists, the disgust some scientists have developed against the continuous quest for better methods to kill were expressed in the following statement: "The latest tactics of the American war have been made possible by the systematic application of scientific discoveries for military purposes The application of science in the modern society have been at the centre of our debates and we cannot overlook the professional participation of scientists in the waging of a war against the people of Vietnam. Other discussions have convinced us that it is no longer possible to separate our attitude on these issues from

our professional activities. This is why we express, as *scientists and in the publications and institutions of science*, our condemnation of those colleagues, who have willingly involved themselves in the waging of this war; we ask that these issues should be honestly faced within the scientific community wherever it meets." It were opinions such as these which lead to the Massachusetts Institute of Technology's decision to divest itself of its controversial Instrumentation Laboratory. Dorothy Nelkin has just done a case-study of this (*The University and Military Research—Moral Politics at M.I.T.*, Cornell University Press). The book traces over a year of student agitation against weapons-related research, from the first strike on March 4, 1969 to the final day of decision May 20, 1970. *The University and Military Research*, based on original documents, unpublished reports and papers, press statements etc., makes absorbing study. The last chapter on 'University and the Ethics of Responsibility' comes very much against military research in higher education establishments.

Since the coming into fashion of ecology, some three to four years ago, we have faced a huge efflux of literature on the dangers facing the mother earth. Phrases like 'exponential growth', 'technology feeds on itself', 'global trends', 'zero population growth', 'unlimited resources' and 'runaway acceleration' have come into every day speech with remarkable speed. Alvin Toffler's (*Future Shock*, Bodley Head), written in the best tradition of eco-books, has played a major part in spreading the environmentalist message. Result of five years intensive study, and fifty pages of bibliography to show for it, *Future Shock* topped the American best seller list for months. Its declared aim is to describe "the shattering stress and disorientation that we induce in people by subjecting them to too much change in too short a time." Toffler sets out first to scare his readers out of their wits by supposedly pointing at the direction the science is heading ("unless wielded with extreme care . . . the gift of weather control can prove men's undoing"—"man will be able, within a reasonable short period, to redesign not merely individual human bodies but the entire human race"—"the runaway acceleration that is subjecting multitudes to the threat of future shock") and then, suggesting 'Strategies for Survival' which make the remedy look even more formidable than the malady. Like so many of its successors, *Future Shock* is crammed with empty prescriptions such as "we need to initiate . . . a continuing plebiscite on the future." Important though the environmental problems are, the belief that they are almost certain to remain unsolved is a modern

version of the old belief that the future is less familiar than the present.

The contemporary society has much more on its plate than just the environmental crisis. A team in the Department of Social Anthropology and Sociology at the Manchester University has brought together (*The Problems of Modern Society*, edited by Peter Warsley, Penguin), a collection of readings examining the whole range of ways in which society generates problems that are subsequently experienced by individuals. *The Problems of Modern Society* consists of eleven parts and includes amongst others, Amrine on population, Cook on cities, Baumer on industrial relations, Jennings on Housing, Gouldner on bureaucracy, Trotsky on revolution, Laing on the family, Goodner on schooling, Matza on deviancy, Whyte on slum sex, Geis on white-collar crime, Kenneth Zola on culture and symptoms, Goffman on Asylums, Malcolm-X on Black Nationalism, Hanner on Soul, Martin on secularization, Berger on religion, Kahn on nuclear war, Hall on hippies, Ehrlich on ecology and Chomsky on intellectuals.

Whatever impression the doomsday and 'problem' books may give, science is not all destruction and disaster: it has its humourous side too. Adrian Hope's light hearted guide to peculiar patents (*Why didn't I think of it first?* David & Charles) demonstrates science at its silliest extreme. After passing through the familiar perpetual motion machines and gold from sea water we meet a whole parade of crank ingenuity: a snore alarm, a sponge bracelet for 'intercepting the Moisture running down the hands and wrist when eating Crayfish', a system for rolling snowballs down pipelines from the mountains to irrigate desert land, a chocolate spoon for giving medicine to children, winged golf balls, a toilet seat with rollers to prevent friends from standing on it, two-fly trousers which can be worn back to front to equalise bagging at the knees, and so on. All patent numbers are given, so one can look them up oneself.

Finally, how many of us recognise the person whose adventure we have been talking about. Who is a scientist? Is he a different, perhaps a more superior person than the man in the street? Mitchell Wilson's *Passion to know* (Weidenfeld & Nicolson) makes some interesting comments on scientists and what motivates them. Wilson went on a world tour, and most scientists he interviewed showed a powerful motivation to know and to respond to an intellectual challenge; but they do not differ greatly from other people. Scientists, says Wilson, are ordinary men with a little intellect.