failure to teach them the lesson of contemporary social science, namely, that the painstakingly acquired tools of social investigation are better utilized for this purpose than the traditional rule of thumb.

J. A. BANKS

¹ H.R.H. the Duke of Edinburgh's Study Conference on the Human Problems of Industrial Communities within the Commonwealth and Empire, 2 (London: Oxford University Press, 1957).

² *Social Implications of Technological Change* (Paris: International Social Science Council, 1962).

AFTER THE SCIENTIFIC REVOLUTION

Inventing the Future

By Professor Dennis Gabor. Pp. 231. (London: Secker and Warburg, Ltd., 1963.) 21s. net.

WE should have realized a long time ago that it is really P. G. Wodehouse's Bertie Wooster who is riding the wave of the future, and that barring accidents the widely acclaimed disappearance of the Leisure Class looks like being followed, after only a very few years, by an overwhelming comeback. The Age of Plenty is already dawning and, although at its first appearance, we are tempted to greet it as cheerfully as people who have spent a long cold night out of doors see the first rays of the Sun, we are already beginning to realize that by mid-day it's going to be a real scorcher. No need to work, no diseases, no need to read, travel from any part of the globe to any other within a few hours—how in the world are we going to fill our time?

Of course, in those old best-sellers whenever the sheer vacuity of Bertie Wooster's perennial leisure had led him into some particularly disturbing piece of mischief, he turned for advice to his ever-capable and far-sighted manservant Jeeves. Dr. Gabor has set himself nothing less than the task of playing Jeeves—and this time one who has first-rate scientific expertise at his fingertips—to the whole leisured world of the future. An extraordinarily good job he makes of it. This is a short book, only 190 pages of text and about another 30 of notes. There are very few scientists, and practically no reasonably educated non-scientists, who would not get great profit from devoting to its reading the few hours which is all it demands. On almost every page there is something which, if not always entirely novel, is put into a way which is fresh and thought-provoking and often witty.

A great number of these points, of course, call aloud for discussion. The book is so compressed that it is impossible to summarize all the numerous arguments it contains, or to indicate particular points of agreement or doubt. In the broadest possible outline the main framework is made by the three major problems which mankind now faces: of nuclear annihilation, of being swamped by a flood of babies, and of being bored to death. About the first two Dr. Gabor shows a robust, and reasonably convincing, optimism. The equilibrium in the balance of nuclear power is, as he points out, a remarkably stable one as between the United States and the U.S.S.R., and probably strong enough to absorb the potential threat of China long enough for that country's crusading ardour to die down to a manageable level. The population explosion is perhaps more challenging, but technological advance in the production of foodstuffs is, or could be, rapid enough to give us a certain breathing space. From a moderately long-term point of view there are clearly several ways in which the human birth-rate could be controlled, many of them involving social influences on individual behaviour which we, our generation, might find difficult to stomach but which our successors may easily take in their stride. There is, after all, an extraordinary capacity for homeostasis in almost all biological systems, and if *Homo sapiens* succeeded in breeding itself out of a livelihood this is something almost no other species has been able to accomplish.

It is when he turns to the problems of an age of leisure and plenty that Dr. Gabor becomes most stimulating. I can perhaps best indicate the character of the book by a few quotations: "Between 1947 and the end of 1961 the U.S. work force had expanded from 60 million to 71 million, but the total number of production line workers had decreased by 7 per cent. . . . They have a good conscience, working so hard at their telephones and typewriters or rushing from one place to the other for urgent conferences. This is just the wonderful thing in this modern system of waste . . . that it makes people believe that they are useful" (pp. 109, 110). "... as C. E. M. Joad said: 'Work is the only occupation yet invented which mankind has been able to endure in any but the smallest possible doses'. The truth is rather that in a country in which the economic game is played passionately, this threatens to produce a dull conformity, the very opposite of freedom" (p. 135). "Stagnation, at whatever level, remains an ugly word to intellectuals who have grown up in an epoch of material progress" (p. 135). "In the first years of childhood probably not much harshness will be needed to educate citizens for the age of leisure . . . but there can be little doubt that hardship will be a necessary component in the education of the adolescent" (p. 138). "Western object-mindedness and work addiction is one extreme, Eastern quietism and introversion is another. . . . We must not give up hope that we shall be able to assimilate something from the East which will be better for the restless Western mind than alcohol or opium" (pp. 140, 141). "There is no limitation to the number of those who can enjoy science other than their own ability to comprehend it. My idea of the amateur scientist is that he shall be a *knower* not a *doer*" (p. 144). "Certainly, the masculine valuation of strife and progress has created our civilization; it will just as certainly destroy it if it goes on much longer unmitigated by feminine principle" (p. 149).

This last quotation brings me to the one point of criticism I should like to make of this book. It is, in some rather indefinable way, a peculiarly impersonal work, rather like an engineer's rough drawings trying out a series of ideas for some major design. I find it difficult to pin down exactly from where the impression arises; possibly from the fact that Dr. Gabor scarcely mentions religion or any activities related to it; possibly again from the fact that although he values something that he refers to as a "feminine principle", he does not mention sexual activity and indeed scarcely refers to inter-personal relations, although surely religion, sex and personal relations have always in the past filled the greater part of the lives of those few individuals who have enjoyed ample leisure. However, few people will—and I am sure the author would not expect them to—read this book in order to be told exactly how to solve the problems of the future. What they will find in it is a most provocative list of problems with which mankind is likely to be confronted, and a large number of positive and buoyant suggestions for some of the things we might do about them.

C. H. WADDINGTON

THE FLOODTIDE OF MANKIND

Our Crowded Planet

Essays on the Pressures of Population. Edited by Fairfield Osborn. (Sponsored by The Conservation Foundation.) Pp. 192. (London: George Allen and Unwin, Ltd., 1963.) 21s. net.

THIS volume, sponsored by the Conservation Foundation, comprises a series of twenty-one specially commissioned essays from authors of international fame long associated in their writings with varied aspects of the population problem. In a brief introduction by Fairfield Osborn, we are reminded that the "inordinately rapid