Book Reviews

Hindsight and Prospects

The China Cloud. America's Tragic Blunder and China's Rise to Nuclear Power. WILLIAM L. RYAN and SAM SUMMERLIN. Little, Brown, Boston, 1968. xiv + 309 pp. $7.95.

Two veteran Associated Press newsmen, William L. Ryan and Sam Summerlin, point up what it cost the United States to permit the narrow-minded "anti-Communist" frenzy of the early 1950's to determine the treatment of various outstanding Chinese scientists then resident in the United States. In essence, they condemn the political sin of ideological rigidity. Given the patent current need for reappraisal of our China policy, their work has a special timeliness.

Ryan and Summerlin presented a preview of their story in an article in *Look* of 25 July 1967; now we have the matter in detail. The authors relate how, during World War II, Tsien Hsue-shen (Ch'ien Hsueh-sen to the purists) and some of his colleagues in the American scientific community experimented, far ahead of their time, with rocketry and jet propulsion. Tsien in particular demonstrated real genius in that field and received various official awards and citations for his services to the United States.

But the war's end was followed by a Communist victory in China, and American bureaucracy under the whiplash of Senator Joe McCarthy and the sting of the taunting demagogic question "Who lost China?" turned to a witchhunt for Communists among State Department personnel, scholars, and scientists. Tsien and various of his scientific colleagues, American and Chinese, were shadowed, detained, and interrogated.

In 1955, after five years of harassment, Tsien was deported from the United States to China. Many other Chinese scholars departed the United States for the same destination, some doubtless for reasons which would have prevailed in any event, others as certainly because of American official attitudes. In an appendix, the authors list 80 scientists, including mathematicians, aerodynamics experts, and nuclear physicists, who thus returned "home"—to make up, in large proportion, the scientific cadre for a Chinese nuclear-weapons program.

This was of course not the end of the story, but in a sense the beginning. In 1964, much earlier than expected, China exploded its first atomic device. It has now exploded eight, including (in 1967) its first H-bomb. Its first guided-missile test was performed in October 1966. China is on the way to becoming a nuclear power. In their *Look* article the authors in conclusion put the question: "When, years ahead of expert forecasts, a Chinese missile with a nuclear warhead landed on target in the desert wastes of Sinkiang, Americans could look back and wonder: what was the security percentage in driving into enemy arms a man who could fashion such instruments of destruction?" In the light of the evidence Ryan and Summerlin have marshaled, the question must be viewed as purely rhetorical. The whole logic of their book leads inescapably to the conclusion that the U.S. government, by alienating through blundering ineptitude certain important Chinese scientists in the United States, rendered substantial service to Communist China's aim of becoming a nuclear power.

The book has a major relevance to present developments. Ryan and Summerlin endeavor to place Tsien and his fellow scientists within the context of Mao Tse-tung's Great Proletarian Cultural Revolution. Here, the text is knit less closely around the central theme. The reader gets a picture not so much of scientists at work in China's nuclear establishment as of the political convulsion in process, with informed speculation on the probable effects for China's nuclear-arms program. The interest lies in the steady progression recorded in the estimates: even allowing for the dislocating effects of Mao's political mania, the United States will probably soon confront a hostile, nuclear-armed China in the West Pacific. A current estimate (New York *Times*, 3 Feb. 1969) suggests that China may test-fire a 6000-mile-range rocket in 1969 and that at the present rate of progress it should be able to deploy 15 to 20 ICBM's by about 1975. That, of course, is (at least in part) what the American ABM project is about.

The political application of all this is clear. American officialdom has its strategic thinking locked in an anti-Chinese position. The Chinese nation, of which the Tsiens are a part, therefore cannot expect to find sympathetic official attitudes on this side of the Pacific; and one may venture the assumption that they do not in fact expect that American understanding of their problems, their needs, or even their thinking will be forthcoming. The militarization of China's national strategy already in course will consequently probably be continued. The problems facing the Chinese on the way to becoming a major military power are immense. But, as Tsien Hsue-shen wrote on a flower sketch he sent to a friend in the United States, "This is a flower that blooms in adversity" (p. 270). Chinese recollection of past "wrongs," some fancied but some real, and not-ungrounded fears for the future, will be a goad to accomplishment even in adversity. American suspicion and animosities will be reflected in Chinese reactions, with corresponding influence on the scale of probabilities that there will be a thermonuclear World War III. The "tragic blunder" of the 1950's cannot be undone. But the present book evokes in the reader's mind a final crucial question: can the U.S. government find the understanding and wisdom to avoid a Sino-American war and the disaster this would bring upon all humanity?

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Not a Cause for Jollity

Overweight. Causes, Cost, and Control. JEAN MAYER. Prentice-Hall, Englewood Cliffs, N.J., 1968. x + 214 pp., illus. $5.95.

Considering all the unhappy events that can mar human existence, it is perhaps arbitrary to label some as diseases and to regard other events as the result of a bad choice or immoral action on the part of the afflicted individual. In Samuel Butler's *Erewhon,* disease is a criminal offense and what we call crime

elicits great sympathy and understanding.

The course of medical science seems to have been that of accepting more and more human misery as part of its concern; thus human psychosis is now part of the medical curriculum. Yet the feelings and even writings of some individuals concerning psychosis and our behavior toward the insane make us realize that this addition to medical science is still rather tentative and troubling. The less catastrophic but more prevalent condition, obesity, is dealt with in a similar way; anything to do with obesity makes some people laugh. Like stuttering and insanity, these disorders provide good subjects for jokes, yet they are about as funny to the afflicted person as a crippling congenital defect. It is not a great or new insight to observe that problems which many of us must deal with in ourselves, such as the tendency to be a bit overweight or to be a bit criminal, are the same problems which seen in others become subjects for a sermon or a laugh rather than an investigation.

Jean Mayer has done more than anyone I know to advance the humanism of medicine in regard to obesity by bringing the unhappy sufferer from this disorder into the arena of scientific inquiry. There is still very little fundamental understanding of the problem of obesity, but this book, which documents Mayer's work, leaves little doubt that there is more to it than the simple tautology that obese people eat too much. Obese people nearly always do eat too much (even here there is a major exception that Mayer discusses), but that is about as helpful an observation as the one that alcoholics drink too much or addicts take too many drugs.

The book discusses obesity from a biochemical and physiologic standpoint as well as from the viewpoint of the social scientist and the epidemiologist. Several appendices have excellent tables dealing with the caloric expenditures of various forms of activity, the caloric values of foods and alcoholic beverages, and also recommended dietary allowances. The multidisciplinary approach has led the author to deal with some parts of the problem with good scientific documentation, but other chapters, such as one entitled "Social attitudes and the obese," are largely anecdotal and conjectural. The book is well written and will serve nutritionists, physicians, and biologists as an excellent review of the subject. It will be rough going, in some sections, for the layman. There are flashes of humor like "the rhythm method of girth control," which make one wonder if even Mayer with all his insights doesn't still find obesity a little bit funny. Since some readers may continue to find obesity a humorous subject, this reviewer would have liked all humor deleted, but this is perhaps a matter of taste and judgment rather than scientific substance. What is more important is that the scientific content is well presented and accurate. One can squabble with Mayer's classification of obesity into regulatory and metabolic types, but until more information is at hand this can be a useful division for heuristic purposes. Finally, and most important, the message comes across loud and clear that this is a condition that can be studied and treated. Approaching the problem as a disorder of will or of morals has been neither helpful nor humane.

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A Life in Science and Politics

Raspail. Scientist and Reformer. DORA B. WEINER. With a chapter by Simone Raspail. Columbia University Press, New York, 1968. xvi + 336 pp., illus. $11.

It is a commonplace among historians of science that one recurrent obstacle to a better understanding of the development of science is the paucity of thorough studies of secondary scientific figures who made substantial contributions to their disciplines. According to this proposition, any historical synthesis of the growth of scientific thought depends in part on detailed historical investigations, by qualified scholars, of the lives and achievements of those personages whose scientific accomplishments stand as less than heroic but nonetheless are representative of their time. Weiner's biography of François-Vincent Raspail (1794–1878) helps to fill this need in the history of science by giving, for the first time, an authoritative account of the career of this prominent figure in 19th-century biology and medicine.

Raspail's life and work will command the interest of any student of French culture and society in the post-Revolutionary era. Drawn to Paris as a young fugitive from the anti-Bonapartist citizenry of his native Carpentras, Raspail attained a certain recognition in biology during the relatively short time that he engaged actively in scientific research, even though he lacked much formal scientific schooling. The novel use to which he put the microscope effectively created a new branch of science—histochemistry—and he played a significant role in the development of cell theory and of parasitology. It is only since his death, however, that Raspail's scientific reputation has reached a really high level. To his compatriots Raspail was known not chiefly as a scientist but as a man of medicine and politics. He was famous (or notorious) as an unlicensed physician with an active sense of the individual's claim to health as a social right, and as the purveyor of a medical doctrine built around the medicinal qualities of camphor. He was probably even better known as a republican politician, a newspaperman and pamphleteer full of self-righteous energy to expend in the denunciation of injustice, and a socialist crusader with a broad vision of the salutary uses to which medical knowledge could be applied. Weiner has attempted to present a unified portrait of Raspail in which all these facets of his intellect and personality serve to illuminate one another, and she has very substantially succeeded.

The major virtues of this biography are the thorough manner in which the author has searched out and made use of source material, including numerous hitherto unexamined documents, and the fullness with which the general setting for Raspail's varied activities is described. The author has regularly put each major event of her subject's life into a larger context, so that its broad significance can be understood. We are offered, for example, a picture of what it was like for a young man without credentials to struggle for scientific recognition in the 1820's; and we are given detailed information concerning Raspail's proud, suspicious, and bellicose disposition, so that in the imprisonment and exile he endured he emerges not merely as a man under trial, but as a recognizable revolutionary type, capable by his psychological nature of assisting the fulfillment of his predictions of personal misfortune, as well as of social and political change.

Beside such strengths any reservations about Weiner's work must be mild. It does seem that she is the occasional victim of a tendency to judge scientific achievements of Raspail's time in terms of the "correct" science to which we