## **BOOK REVIEWS**

## A Mission to Japan

Science Has No National Borders. Harry C. Kelly and the Reconstruction of Science and Technology in Postwar Japan. HIDEO YO-SHIKAWA and JOANNE KAUFFMAN. MIT Press, Cambridge, MA, 1994. xx, 137 pp. + plates. \$22.50 or £19.95.

Did Japan build an atomic bomb during World War II? We know that Japanese physicists attempted to do so on a very small scale. Though there have been claims that they completed an atomic weapon and were able to transfer the technology to North Korea prior to Japan's defeat, there is no real evidence to support them. However, during the Allied Occupation, fears of a bomb prompted the U.S. Army to destroy Japanese cyclotrons. The ensuing uproar in Japan and the United States led to the appointment of two senior scientists to the Occupation to ascertain what progress the Japanese had made on the bomb and to help the Allied Forces distinguish between military research and appropriate peacetime activities. One of the men chosen was Harry C. Kelly.

A Scientific Intelligence Survey of Japan, led by MIT's Edward L. Moreland and Karl T. Compton, had already found that Japanese science posed no immediate military threat. Nevertheless, scientists were needed to maintain surveillance over R&D in Japan and to advise the General Headquarters (GHQ) of the Occupation on policy and action relating to science. The two men deemed suitable for the job were Kelly, who had worked on radar during the war at MIT's Radiation Laboratory, and his lab colleague Gerald Fox. Both understood physics and, not having been involved in the Manhattan Project, were unlikely to be in a position to give away U.S. atomic secrets.

Fox and Kelly arrived in Japan in January 1946 and were assigned to the Scientific and Technical Division of GHQ to advise on science. Fox stayed only for eight months, but Kelly remained for four years and became deputy chief of the division in 1948. The book under review traces Kelly's years in Japan and the attempts to reorganize Japanese science and technology along democratic lines, rebuild Japan's R&D base, and promote economic growth. The events leading up to the establishment of the Sci-

ence Council of Japan and Kelly's role in facilitating links between the Occupation Forces and the Japanese scientific community are described in detail.

The Japanese formed various committees to determine how the Science Council might be elected and what form its charter would take. Meanwhile, Kelly did his best to encourage their activities and was instrumental in bringing about visits to Japan by two high-powered U.S. scientific advisory groups, one led by Frank Jewett, president of the National Academy of Sciences, in July 1947, and a second that included the physicist I. I. Rabi in late 1948. The groups assessed the Japanese situation, encouraged the reorganization of the sciences, and lent their support and prestige to the moves under way by the Japanese. The Science Council of Japan was established in July 1948 as an independent consultative body consisting of 210 elected members and met for the first time in January 1949. A Scientific and Technical Administration Commission was also created as a governmental coordinating body located in the prime minister's office.

Kelly was keen to encourage scientists to cooperate with industry and government, but Japan's wartime experience made academics suspicious of such links. One who was not reluctant to embrace private enterprise was Yoshio Nishina, one of the leaders of Japan's wartime bomb project and a highly respected physicist. With Kelly's help, Nishina was able to save the Institute of Physical and Chemical Research (Japan's premier prewar research organization) by embarking on the production of penicillin to keep the institute solvent. The story of the friendship and mutual respect between these two men shows how "science has no national borders," but the emergence of Cold War tensions certainly made for better U.S.-Japan scientific cooperation.

Joanne Kauffman has transformed what was an anecdotal text that lacked references into a scholarly, highly readable, concisely written book on the reorganization of Japanese science. Insufficient knowledge of Japan and the language has allowed a small number of inaccuracies with respect to names, customs, and dates to creep in, but these do not detract from the overall achievement of the book. The book resembles a diary in format and invites reading. It is unashamedly a tribute to Kelly and provides strong evidence of the importance of individual actors in the shaping of Japanese science, science policy, and U.S.–Japan relations. It is a harbinger of a number of major studies on this theme that will be published over the next few years.

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Young Men of Today

**No Man's Land**. Men's Changing Commitments to Family and Work. KATHLEEN GER-SON. BasicBooks, New York, 1993. xvi, 366 pp. \$25.

Kathleen Gerson reports here on the results of her study of the varying ways in which contemporary young men have configured their lives with respect to family and work roles. Although the book bespeaks a serious effort of sociological data-gathering and interpretation, it is likely to appeal more to a general readership than to Gerson's colleagues in the social sciences. That this is so should be taken as a tribute despite the academics who might say that her study reveals little that is new to them. Maybe, but that is beside the point. In contrast to most academics, and, most unforgivably, sociologists, who actually do know a great deal about issues of the day but tend to share their expertise only among themselves in tortuous and arcane language, Gerson writes about the dilemmas and directions, satisfactions and dissatisfactions of men's lives in such a way that they, and others like them, will have no trouble finding themselves in her book.

Gerson's approach to the study of emergent and changing patterns of men's lives is also refreshing. Her book is emphatically not cast in the tradition of "men's studies," in which men are too often portrayed as victims, either because of the alleged burdens of power and privilege, or because they have been stripped of those by feminists and others associated with "alternative lifestyles." Gerson is clear in recognizing the privileges and advantages enjoyed by men at the same time as she insists on the "need to examine how social opportunities and constraints shape men's lives no less than women's."

Her book challenges stereotypes of and generalizations about typical men and traditional men. Where the latter are concerned, she incorporates a lucid historical



## **Vignettes: Military Manoeuvres**

On a bright spring morning in 1845, the *Princeton* steamed out into Chesapeake Bay for the initial tests of its 12-inch guns.... The first gun tested was designed by Captain Stockton of the Navy.... When it exploded, as it did, it killed the Secretary of State, the Secretary of the Navy, a naval captain, a Congressman from Maryland, and, as the newspaper reports of the day had it, "sundry other dignitaries." Had it not been for the fact that President Tyler had been detained briefly to finish a military ballad below deck, he, too, would surely have been killed. This is the sort of thing that gives technology a bad name!

—D. Allan Bromley, in The President's Scientists: Reminiscences of a White House Science Advisor (Yale University Press)

I was a part-time cadet in the Reserve Officer Training Corps (ROTC), which was compulsory for all male students at the University of Alabama. I was by then in my late-teens radical period. . . . At ROTC drill one day, I explained to our sergeant, a regular Army lifer waiting out his retirement in this remote outpost, that marching and rifle practice had been made obsolete by the atom bomb. What we were doing on the parade ground, I declared, was a useless exercise to commemorate the past, like dancing around maypoles. Without changing expression, he growled something inaudible that might have been an expletive.

-Edward O. Wilson, in Naturalist (Island Press/Shearwater Books)

summary that is an important reminder that the ideal of the male (dominant) goodprovider role is rather newly arrived on the social scene as a product of the structures of work associated with industrial capitalism. Her central concern is with variations among men now, at a time when employment conditions may constrain the possibilities for male breadwinning and prevailing social ideologies of gender equality and individual autonomy have opened up new roles for men.

To this end Gerson has studied 138 middle- and working-class, predominately white, men in their 30s. She employed indepth, "life-history" (a word about the utility of this approach to study these men later) interviews to assess how much, in what directions, and under what circumstances men's current orientation toward family and work represents a change from their childhood orientation, particularly with reference to the breadwinning role. Gerson constructs ideal types according to which the men are categorized. Those who are not "primary breadwinners" are either "autonomous" or "involved fathers." She has cast these categories as mutually exclusive, but it is arguable whether a man who is a primary breadwinner cannot also be an involved father.

By concentrating her analysis almost entirely on those men whose current orientation is different from what Gerson terms their "points of departure," her interpretation becomes somewhat skewed. In fact, fewer than half the men interviewed have actually changed from their initial orientation. Also slightly fewer than half of the men were oriented toward breadwinning even in childhood. Now, in young adulthood, only about a third of her sample are primary breadwinners. These are big and notable changes compared to what we would have seen in a comparable sample of the preceding generation.

Gerson's assiduousness in teasing out individual variations and patterns of movement from one subgroup of one ideal type to another has two unfortunate results. The first is the difficulty produced by her use of percentages-and percentages within percentages-with such a small sample. At numerous points one becomes infuriatingly tangled up in sentences like these: "Among the married breadwinners (86 percent of all men with a breadwinning outlook), 21 percent had wives who were employed full-time and 35 percent had wives who were employed part-time. Among married breadwinners with children (74 percent of the group), 16 percent had wives employed full-time and 35 percent had wives employed parttime" (p. 192).

A more serious problem is that in micromanaging her data Gerson overlooks the big picture of what these men have in common as a cohort. Nearly all of them were children in the 1960s and adolescents in the '70s, and the almost two-thirds of the men she studied who are not defined by the breadwinner role must surely illuminate the dramatic social changes and unrest of the particular histor-

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ical period that contained their vouth. In addition, these men are themselves just plain young. Over and over I found myself questioning Gerson's life-history approach when that history is still so much in the making and the likelihood is great that major life changes, both in circumstances and values, lie ahead. In this connection, Gerson's discussion would have been richer had she probed more fully the lives of those men whose point of departure and current orientation appear to have remained consistent. We cannot assume that they simply stood still and life just happened to them as planned or that they arrived at their present place for the same reasons that motivated them initially.

As Gerson herself is surely aware, when we close the covers of her book we have hardly closed the book on the lives of the men in her study. She has captured them at a particular time and place in their lives. She has shown us with persuasive detail and clarity of expression the mutability of the life course as a function of social forces and personal experiences. These lives will continue to change long after we stop reading, and Gerson has given us considerable hope that men are moving slowly but surely in the direction of mutuality and sharing in family and work. She is right to plead for supportive social policies to reinforce and bolster this trend.

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## **Plains Rangers**

**Bison.** Mating and Conservation in Small Populations. JOEL BERGER and CAROL CUN-NINGHAM. Columbia University Press, New York, 1994. xxiv, 330 pp., illus. \$55 or £43.50. Methods and Cases in Conservation Science.

A simple statement, "Days of free-ranging large mammals are rapidly ending," opens the preface and describes the central problem addressed in this book. Berger and Cunningham are behavioral ecologists who, applying their discipline to the conservation biology of large mammals, sensibly chose the American plains bison (Bison bison bison). Their subject is easily observed, and its demographic and management history are well known. It barely escaped extinction with numbers of no more than 1000 but has since recovered to roughly 140,000 in the United States and Canada. Like most other mammals, it is polygynous and, given the bottleneck through which it passed in the