

Book Reviews

Chinese Cancer Programs

Cancer in China. The Report of the American Cancer Delegation Visit to the People's Republic of China. HENRY S. KAPLAN and PATRICIA JONES TSUCHITANI, Eds. Liss, New York, 1978. xii, 236 pp., illus. \$28.

This book summarizes the observations of a group of American scientists on the state of cancer epidemiology, research, and treatment in China. Their 24-day visit was organized by the Committee on Scholarly Communication with the People's Republic of China. The account of the visit resembles a report of a site visit to a university cancer center and is quite informative in spite of its brevity. The group visited four major cities (Kwangchow, Shanghai, Soochow, Peking) and two rural areas with high incidence of nasopharyngeal (Chung Shan County, Kwangtung) and esophageal (Linhsien County, Honan) cancer. The individual reports display a spirit of objectivity, with comments ranging from extremely favorable to quite the opposite.

It would be reasonable for the host country to have its best programs on display, and one of these—the Honan Esophageal Cancer Program—is very impressive. The visitors note that the Chinese are close to identifying a natural esophageal carcinogen in food. They have improvised techniques in mass screening and public education that are proving effective in the early diagnosis and treatment of esophageal cancer. This program is the result of the coordination of local and national programs. On the local level, youth theater groups dramatize the usefulness of screening programs for early diagnosis, paramedical personnel obtain and interpret cytology specimens, and surgeons remove esophageal tumors. This approach has achieved a 5-year survival rate of 43 percent for a group of 1308 patients, of whom 95 percent were operated on with a 5 percent mortality. These are superb results when compared to American experience and are explained by the fact that 54 percent of the Chinese patients had either in situ or early invasive cancer. In a recent

American series of 415 patients, only 67 percent were considered operable, operative mortality was 22 percent, and the 5-year survival rate was 1.2 percent (W. C. Lowe, *Ann. Intern. Med.* 77, 915 [1972]). In regard to early diagnosis and treatment of esophageal cancer, it is not China that is the undeveloped country.

Studies of the epidemiology and etiology of esophageal cancer have also been carried out in China. Because medical care there is exclusively a government function and the government is centralized, epidemiologists have been able to amass accurate data concerning the incidence of tumors that are the targets of special effort. This has enabled the Chinese to prepare maps that indicate areas of especially high risk in provinces with high rates of certain tumors. In the case of Honan, esophageal carcinoma is most common in the northwest of Linhsien County, and as the frequency increases within this area the male-female ratio decreases to unity. Epidemiologic investigations are now concentrated upon a regional diet staple consisting of a mixture of boiled vegetables stored for about 6 months. This vegetable mulch becomes

covered with mold, which is eaten with the vegetables. The pH of the mixture is 3 to 4, at which level secondary amines undergo conversion to nitrosamines. Preliminary tests of this material by the Ames procedure indicate that it contains mutagens. Linhsien County chickens fed on table scraps develop gullet carcinoma, as do chickens in Chung-hsiang County (a low-risk area) when fed Linhsien food. This interesting observation points to the food of the Linhsien population as the source of the carcinogen.

Two other tumors—nasopharyngeal carcinoma (NPC) in Kwangtung and hepatoma in Shanghai—have been the targets of special effort. The NPC work reviewed by the study group was fragmentary and incomplete and not as systematic as the work on esophageal cancer. The approaches to NPC carcinogenesis were not well integrated. Mass screening has discovered probable NPC precursor lesions. This is an exciting reward for the type of effort that the Chinese medical and social system is best able to provide. The Chinese did not appear to have a firm basis of information on hepatoma. They have employed the alpha-fetoprotein assay as a screening procedure, but there is no way of assessing its cost-effectiveness. They have reported discovering small resectable tumors but presented no data indicating that early diagnosis improved the cure rate for this tumor. The site visitors noted serious defects in the experimental design of the Chinese biologic studies of this tumor, and they learned little about its etiology.



"Children of Linhsien performing educational song and dance on warning signs of esophageal cancer." [From *Cancer in China*]

Chinese experience with other tumors was also reviewed. There was a surprising insensitivity to the place of cigarette smoking in the genesis of lung cancer, especially since there has been a marked increase in smoking since 1949 and the Chinese lung cancer incidence has doubled in the past decade. One can only surmise that it is politically inconvenient for the Chinese government to acknowledge this link. This attitude is comparable to that of American politicians, who acknowledge the link but make no substantial effort to deal with the problem. As might be expected, cervical cancer is effectively handled by mass screening in China. The Chinese approach to breast cancer is up to date in most respects but is not innovative, and no interest in estrogen or progesterone receptors was displayed. It is surprising that gastric cancer, the second or third most common cancer in China, has not been given a more prominent place among the Chinese study objectives, especially since screening programs are a Chinese specialty and have been shown to lead to the discovery of increased numbers of early tumors in other countries. Only 2 percent of the gastric cancers in a Shanghai hospital were confined to the mucosa, in contrast to current Japanese reports of 35 to 50 percent early carcinomas among newly diagnosed gastric tumors. Chemotherapy would appear to be based on Western treatment protocols, and x-ray therapy is handicapped by the limitations of obsolete equipment. Thus it would appear that the Chinese have given higher priority to the prevention and early detection of cancer than to its treatment. This is not surprising in view of the heavy investment in equipment and personnel that modern cancer therapy requires and the low cost-benefit ratio it provides. This report makes it obvious that the Chinese have the skills necessary to make important contributions to the basic science of oncology, but they are constrained by limitations of equipment, supplies, and budget. For example, experimental immunology has developed slowly and programs in this discipline have been exclusively focused on applied research.

The book would have benefited from the inclusion of a large map to indicate the sites visited and of district incidence maps of specific tumors such as are tantalizingly described for the esophagus and nasopharynx.

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Ethnoarcheology

Explorations in Ethnoarchaeology. Papers from a seminar, Santa Fe, N.M., Nov. 1975. RICHARD A. GOULD, Ed. University of New Mexico Press, Albuquerque, 1978. xiv, 330 pp., illus. Cloth, \$17.50; paper, \$6.50. School of American Research Advanced Seminar Series.

This collection of papers begins with an introduction to ethnoarcheology (ethnographing for archeological purposes) by Gould that is thoroughly enjoyable—a good mixture of information, orientation, theory, and wit, including the great truth that “all our ideas about past and present-day human behavior are founded on rubbish.” The chapter should be reprinted for use in introductory archeology and anthropology courses; there is nothing better on the subject. Of special interest are Gould’s affirmation that refuse is a truer indicator of behavior than has been obtained with traditional anthropological methods of inquiry; his reaffirmation of the primacy of cultural materialism while not denying the role of ideational explanations in some circumstances; and the justified relegation of the emic to irrelevancy for archeologists. Two other aspects deserve particular comment. The claim that ethnoarcheologists can identify long-term adaptations in the cultures they study I find questionable; certainly they look for such adaptations, but these are always difficult to identify or prove from short-term observations, especially in the context of rapid acculturation. Short-term observations and acculturation contexts are inevitable characteristics of contemporary ethnography and have been major impediments to postulating and proving long-term adaptations in anthropology as a whole.

The second aspect is more provocative. This is the delineation of fundamental human behavioral regularities in regard to material culture: “‘laws’ of behavior that are universal to mankind,” or “‘deep structures.’” In the introduction we are left in the lurch waiting for these laws, although John Bennett and Melvin Tumin’s *Social Life* (1948) might have at least been used as a springboard and Schiffer begins to crack the ice in a later chapter.

Jones’s chapter is Welshly entertaining and a delight to read. However, to explain the abandonment of the second most important staple in the Tasmanian diet (fish), given seasonal nutritional stress, as due to the sudden appearance of a food taboo among all of Tasmania’s

tribes is an abnegation of materialism and an embrace of nonexplanation. Jones claims that this was only one instance of traits’ disappearing from the cultural inventory of the island (biogeographical pauperization); however, there is no evidence that ground stone axes or boomerangs or hafted tools, examples he cites, ever existed on Tasmania, and fish was such a clearly needed resource that his explanation is unconvincing. He claims that there is no evidence that diseases were prevalent in the waters around Tasmania. However, on a survey of aboriginal settlements on the South Australian coast I stayed at Wilson Bluff with Mr. and Mrs. Harvey Gurney, Mrs. Gurney being a registered nurse. They informed me that a number of years ago a commercial fishing enterprise had been started off the coast but had been abandoned because the fishermen consistently developed large skin lesions that were difficult to treat. I would propose that the occurrence of similar diseases in the coastal waters of Tasmania is a more plausible explanation for the abandonment of the Tasmanians’ number two staple.

Many readers will undoubtedly be familiar with Rathje’s *Projet du Garbage*, of which he presents an updated account.

Hole’s chapter on Luri pastoral nomads is readable and interesting, especially concerning the use of wild acorns and game and cultivation and cutting (with sickles) of fodder. However, there is not enough precise information to make the account really useful, and objections and exceptions come readily to mind regarding many of the proposed archeological implications. There are enlightening moments, but not enough.

Tringham’s chapter is one of the best in the book. If Watson, LeBlanc, and Redman’s polemic on the philosophy science did not convince many people to adhere to strict tenets of “Science,” Tringham’s brass-tacks arguments will probably be more persuasive. The article is in the vanguard of a new concern in archeology with the relation of the properties of materials to the tasks they are chosen for. As Tringham (and subsequently Stanislawski) argues, there is a lot of hard work involved, but further progress in archeological interpretation is likely to be minimal until much more basic research concerning material properties has been done. Although Tringham argues against continued use of “high-level” theory without “low-level” foundations, I am sure she would agree that high-level theory is necessary initial-