# TREATING THE JAPANESE ELDERLY: THE MASKING OF A SOCIAL PROBLEM

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Many of us suspect that culture, that achievement and manifestation of the peculiar nature of our species, has become the sorcerer's apprentice rather than a tool kit to be used in trying to fashion life to our purposes.

> Elizabeth Colson Distinguished Lecture given at the 1975 meetings of the AAA

#### INTRODUCTION

Forays into the vast terrain of comparative systems of ritual and belief were, of course, central to student encounters with Elizabeth Colson. These encounters for me and my contemporaries took place to the accompaniment of the Vietnam War, the People's Park crisis, and the rise of innumerable new and rejuvenated religious groups in North America. Emotions ran high, the campus and department were politicized, and tempers became frayed. Elizabeth at that time, as usual, provided a stabilizing force; as someone who had spent many years studying and analyzing the interrelationships of political action with religious beliefs and practice, she had much to contribute to the flurry of discussion, and her students came away with something all too rare in anthropology: a clear impression of how a thorough knowledge of the societies that anthropologists traditionally study by choice (in this case the Gwembe Tonga) could bring insight into one's own life and times. Part of her conceptual approach is stated succinctly in the 1975 Distinguished Lecture given to the American Anthropological Association:

Fieldwork . . . made it difficult for me to be comfortable with any theoretical scheme that [does] not view social phenomena as in a flux, never reaching an equilibrium, adaptive to such forces [play] upon them, including purposive human beings, but [which are] given continuity and order by the human desire to predict the future and make sense of the past by the creation both of normative rules and a conceptual model of a stable social world. In such a scheme culture or social structure is the passive element. It is people who are the actors, attempting to adapt and use their institutions to attain their ends, always fiddling with their cultural inheritance and experimenting with its possibilities. [Colson 1976:264]

It is this kind of approach that I have tried to nurture in my research both in Japan and North America. It is demanding because it does not make use of a neat, circumspect theoretical doctrine into which empirical data is slotted; it provides no grand answers, since, as Colson states, "we do not yet have any idea of what kind of systems we are dealing with" (1976:270); it is sometimes deceptively simple, since it furnishes us largely with rich empirical data and a string of questions and hypotheses. But it is rarely dull, especially as we turn increasingly to contemporary industrialized society and its belief systems. These days, it is micro-chips and genetic engineering, and their production, distribution, control, and value, rather than steel axes, which act as triggers for change. The analysis of social change and its interrelationship with human culture, society, and biology requires a synthesis of sociological and anthropological approaches, a rigorous questioning of our own conceptual models for providing a sense of order to our existence, and, in particular, an anthropological examination of the tabooed subject of science. A thorough grounding in the comparative study of ritual and belief systems is an excellent beginning to such an endeavor.

In this paper I will focus first on the position of the elderly in Japan today and on the "medicalization"<sup>1</sup> of this part of the life cycle. The incorporation and contortion of traditional medical therapeutics into the biomedical system<sup>2</sup> in an attempt to improve the application of biomedicine to geriatric care will then be discussed. This material is presented in order to illustrate the importance of considering a contemporary medical system not only as a product of political and professional constraints and aspirations, but also as a belief system which is theoretically (if not in application) grounded in science. Some of the problems that arise when scientifically derived assumptions are applied to a traditional medical system will be discussed, and the implications of these findings for the health care of the elderly in Japan will be considered.

## THE GRAYING OF JAPAN

Japan is probably the only country in the world which holds a national holiday in honor of its elderly population. Respect for the Elders' Day (Keiro no Hi) has been in existence for at least three hundred years and functions to the present time as an opportunity for public celebrations in which older members of the community are at the center of activities. Respect for the elders has been fostered explicitly throughout the centuries by means of the Confucian code of ethics and was formally incorporated into modern Japanese society in the 1963 National Law for the Welfare of Elders. This law states that:

The elders shall be loved and respected as those who have for many years contributed toward the development of society, and a wholesome and peaceful life shall be guaranteed to them. In accordance with their desire and ability, the elders shall be given opportunities to engage in suitable work or to participate in social activities.

But despite these and other outward signs of care, attitudes toward the elderly were not without ambivalence historically, and this ambivalence has been heightened in modern Japan with urbanization, greater longevity, and changing social values.

There is a mountain 90 miles west of Tokyo called "Obasuteyama" (the mountain for discarding Granny). Although there is no evidence that this mountain has been used for such a purpose in historical times, the folktales associated with it and the modern stories based upon this theme ("The Oak Mountain Song"<sup>3</sup> for example; see also Keene 1957:116 and Tahara 1980:109) express some of the feelings of ambivalence toward elderly relatives. In real life this theme often takes the form of psychological and social abandonment. One Osaka widow is known in her neighborhood as "Koen ba-san" (the park granny) because she sits in the park rather than at home with her daughter-in-law, who, she says, "treats me as though I were a stray dog" (Shioya 1981:41). Very high suicide rates among the Japanese elderly, both men and women (World Health Statistics Annual 1981), reflect a sense of futility with life, as in the case of the unemployed 74-year-old day laborer who had spent his life in poverty and could not afford the hospital care he required. His suicide note simply said, "Too discouraged to live any longer," and he hanged himself on Respect for the Elders' Day (Shioya 1981). Of course, suicide is "psychologically available" for the Japanese (DeVos 1968) in that it is an acceptable, even admirable, way to deal with an apparently unresolvable situation. Although these distressing stories are somewhat counterbalanced by national survey research in which over 80% of the

elderly in Japan responded by saying that their life and circumstances were more or less satisfactory (Maeda et al. 1980), nevertheless both the general public and policymakers realize that they can no longer rely solely on traditional values in which the family is expected to be fully responsible for the care of the elderly, especially as demographic changes are occurring so rapidly, leading to what is popularly known as "the graying of Japan." In Sweden the elderly grew from 5% to 12% of the total population in 100 years; in Japan the same change will take place in just over 40 years. It is estimated that the proportion of the population who are 65 and over will be 12% by the early 1990s, and that it will stabilize at 18% in about 2015 (Kuroda 1978).

#### Family Organization and Obligations

Traditional family life in Japan was centered around the *ie*, the extended family in which vertical ties from generation to generation were theoretically considered more important than horizontal bonds, including those of husband and wife (Nakane 1970). Within the ie, continuity, the survival of the group through time, and the group's needs were considered more important than individual aspirations, and such thinking was reinforced by a belief in the ability of departed ancestors to influence the fortunes of the ie and its members. In return for submission of self to the group one could expect care, particularly in times of sickness and old age. In modern Japan it has been frequently shown that in the family, school, and the workplace, loyalty to and achievement for the group continues to be highly valued (DeVos 1973; Nakane 1970; Rohlen 1974; Vogel 1968). Belief in the influence of ancestors also continues to be widely accepted (Smith 1974). It has been hypothesized that early socialization which fosters dependency needs rather than encouraging a striving for individualism is adaptive in a group-oriented society such as Japan (Caudill 1976). Reciprocal relationships between superiors and inferiors and feelings of interdependence are reinforced by means of the system of obligations to which everyone in Japan continues to be educated, although less formally in recent years.

The proportion of people living in extended families is declining in Japan. It was 74.2% in 1972, but it continues to be much higher than in Europe or North America; in the U.S., for instance, it was less than 25% (Maeda and Asano 1978). Cross-cultural surveys indicate that two of the factors which in general improve the quality of life of the elderly are an extended family and a belief in the importance of ancestors in daily life (Cowgill and Holmes 1972). It has also been suggested that in societies in which individualism is not valued dependency in old age is unlikely to be a significant issue (Clark 1972). These factors undoubtedly continue to ease the problems of aging in Japan, but urbanization and secularization act as powerful opposing forces.

### The Work Force

The most important way, traditionally, to show one's loyalty to the group was through dedication to one's role and particularly through work. That such a value is still widely accepted today is apparent from Japan's G.N.P. However, mandatory early retirement is the rule in most businesses in Japan. More than 95% of companies with 100 or more employees have an age-limit system, and more than 70% of the companies which set such a limit put the retirement age between 55 and 59 years of age (The Kanagawa 1982). Despite a Supreme Court ruling against sex-based age-limit systems, more than one-quarter of the companies involved require earlier retirement for women, and many of them have set the limit at 50 years of age (ibid). Hardships are caused by the fact that women are not eligible to receive a pension until they are 55, and men are not eligible until they are 60. These regulations are particularly hard on low-income people, especially since the life expectancy of Japanese women is 78.83 years and that of men is 73.32 years. Although universal pension schemes exist, the payments

are too low to allow a participant to maintain even a poverty-level existence (in 1978 recipients were given about \$70 U.S. per month). Of all the households on public assistance, 31% are those of elderly people (Maeda and Asano 1978).

In order to fight off poverty many retired people take new jobs, which are often poorly paid. In Japan, 26.3% of the population over 65 still work (The Kanagawa 1982), a figure that is three times the level in most Western countries. The other source of income for many elderly is from their children (52% receive this form of financial help) and households who support elderly people receive income tax deductions and other types of financial support (Maeda and Asano 1978:85).

The combination of a desire to work and a marked sense of uselessness if they cannot do so (The Kanagawa 1982), the specter of poverty, and financial dependence on children are the most common problems of Japan's elderly population. Many elders, especially those with no families, suffer very severely, and poor diet, lack of meaning to life, and social withdrawal are probably the major contributory factors to ill health. No amount of curative medicine can combat these problems, which are particularly acute *because* of the Confucian heritage of familial piety. The government, the general public, and the elderly themselves believe that the social problems of the elderly should be resolved almost entirely within families and that it is degrading to lean upon society for help. But, as in the West, there are proportionally fewer adult people to take care of older parents in modern times. Postwar Japanese families are usually limited to two children, who, when they grow up, discover that their retired parents can expect to live another twenty or thirty years, frequently in a small house with one of them, and at their expense. Under these circumstances it is not surprising that social and psychological versions of Obasuteyama are often documented.

### Medical Care

An acute public consciousness of the problems of the aged has emerged in Japan; it is a topic which is widely debated and discussed in popular novels and short stories<sup>4</sup> as well as in economic and social science journals. Part of the response to the demographic changes and public concern has been increased activity on the part of the Japanese Medical Association, spearheaded by its president of thirty years, Taro Takemi, who has only recently retired. Since 1973, with great encouragement from the JMA, free medical care has been available to all the elderly except the financially well off. However, this service does not extend to the cost of hospitalization. By 1977 one-quarter of government expenditure on medical treatments was used for people 65 years and over (slightly less than in the United States). Since that time the JMA has strongly resisted attempts by the government to pay physicians a flat rate for visits by the elderly rather than the usual fee-for-service system, and it has organized and developed the specialty of gerontology in its ranks (Takemi 1982:157).

Physicians clearly profit from these changes, but many doctors complain that their waiting rooms are crowded with old people who come every day for medical checkups and in so doing restrict the doctors' best use of their time (Lock 1980a). Fear of expensive hospitalization and lack of community services for the elderly has exacerbated this situation. It also means that the elderly are subject to excessive medication, since Japanese doctors dispense the drugs that they prescribe and receive the major portion of their income from these sales. The general problem of *yakugai* (pollution by drugs) is widely recognized in Japan (Reich and Kao 1978). It is partly concern about the problem of drug iatrogenesis (induction of illness by a physician) which has stimulated interest in the promotion and dispensing of herbal medication, and this in turn is part of a general revival of traditional East Asian medicine.<sup>5</sup>

With the cooperation of the medical profession, therefore, the problems of the elderly, although frequently the result of social factors, have become "medicalized" and hence subject to reinterpretation as primarily biological in origin. Medicalization is usually depicted in the social science literature as a process in which the medical community attempts to create a "market" for its services by redefining certain events, behaviors and problems as diseases (see, for example, Freidson 1970; Illich 1976; MacPherson 1981; Merkin 1976; Szasz 1970). The form that medicalization has taken in Japan is unique, since physicians have drawn on resources from the traditional medical system in order to supply geriatric care.

# THE KAMPO BOOM<sup>6</sup>

Since the 1960s there has been a marked and accelerating revival of the use of the East Asian medical system in Japan. Many factors have contributed to this revival, but two of the most important have been the postwar changes in epidemiology of disease from predominantly acute to chronic illnesses, and fear of long-term ingestion of synthetic drugs, which has been reinforced by outbreaks of diseases caused by industrial pollution. The prevailing mythology about traditional medicine among medical professionals and the public alike is that it is particularly useful for long-term therapy and that it does not cause any unwanted side reactions. The kampō boom is part of a larger social movement in Japan in which many aspects of traditional culture are being reexamined and revived (Lock 1980a). Other factors contributing to the revival of traditional medicine have been the interest of the West in the system and also its widespread use in China.

Since the end of the last century traditional medicine in Japan has been almost exclusively practiced by licensed practitioners, who use combinations of acupuncture, moxibustion, and massage techniques in their treatment. In order to prescribe herbal medication one had to be either a pharmacist or a specially trained M.D. Until recently, with a few exceptions (see Lock 1980b), traditional medicine was not covered by the various health insurance systems, and the prescription of herbal medication outside of a pharmacy was almost completely limited to private practice by the hundred or so M.D.'s in Japan who had specialized in the use of kampo. Traditional clinics and pharmacists selling herbal medication enjoyed a thriving business during the 1960s and '70s (Lock 1980a), but the medical profession as a whole remained skeptical and cautious. During this period certain pharmaceutical companies increased their experimentation with production of herbal medication for sale in pharmacies. At the same time the mass media produced numerous articles in leading newspapers and magazines and several series of television programs, all on the traditional Japanese medical system. A large number of serious books were also published on the topic (Kōmasu 1969; Nishiyama 1963; K. Otsuka 1971; Oiu 1962; Teraishi 1973), including one edited by a prominent kampoi (physician who specializes in herbal medication), with a contribution by the head of the Japanese Medical Association (Y. Otsuka 1973).

In 1975 representatives of the largest drug company involved in the production of herbal medications approached the head of the JMA, and in a very short time meetings were arranged between representatives of the Ministry of Health and Welfare, the drug company, and the JMA. A senior kampõi who was present at these meetings was opposed to the immediate inclusion of herbal medication in the health insurance system; he wanted it to be introduced slowly and only after careful experimentation and reeducation of physicians and other involved personnel (Y. Otsuka, personal communication). The kampõi was overruled, the law was changed, and mass production and promotion of herbal medication commenced in 1976.

Since that time more than one hundred prepared prescriptions of herbal medication have been made available for use with health insurance. This availability has led to a further escalation in the revival of traditional medicine; a survey reported by Nikkei Medical (1981) indicates that 37% of all Japanese doctors now prescribe herbal medication with some frequency, much of it for use in geriatric care. Physicians were also asked in the survey why they had started to use herbal medication, and the majority reported that they were influenced by reading materials and drug salesmen. They added that their patients had not requested herbal medication directly.<sup>7</sup> On closer examination, what is known as a "boom" in traditional medicine turns out in reality to be only a boom in the use of traditional *medication*, the preparation and prescription of which have been absorbed into the commercial and biomedical sectors of the society. The philosophy and theories underlying the traditional system are generally ignored or despised, as are traditional techniques of preventive medicine and diagnosis. Consequently, traditional theories and methods for the selecting, mixing, and prescribing of herbal medication (Lock 1980a) are also ignored, and herbs are prescribed as though they are synthetic drugs to be applied against specific named diseases or specific symptoms.

This move is ostensibly to make traditional medicine available to all patients, but it has simply made pre-prepared and packaged prescriptions of herbal medications available to all doctors for use as they see fit. Since the late 1970s there have been huge promotional campaigns by drug companies for the adoption of these medications by the medical profession. Doctors are not required to undergo any special training in the use of traditional medicine, but a printed document is available, containing advice on uses of prescriptions and possible contraindications (Tsumura Juntendō n.d.).

Newspaper articles, magazines, and journals are now beginning to report for the first time side effects, some serious and many of them in the elderly, in connection with the use of herbal medication (Mainichi Shinbun 1981; Yomiyuri Shinbun 1981; Nikkei Medical 1981). A 1982 questionnaire revealed that most doctors use it on an ad hoc basis in combination with synthetic medication (Modern Medicine 1982). Experimental evidence indicates that the quality control on these medications is not adequate—something which is not highly significant when mixtures of crude drugs are used in small quantities in traditional prescriptions. The clinical effects of mixing herbal extracts with synthetic drugs is a topic on which there has been virtually no research.

The combined influences of popular interest, the mass media, and capitalist expansion therefore seem to be major factors in the widespread revival of herbal medication in Japan. Members of the medical profession became belatedly involved in the kampō boom in the belief that they would be prescribing medications that had virtually no side reactions and thus were particularly suitable for chronic and geriatric care. Once the drug companies and the medical profession became actively involved in the revival, then traditional medicine was subjected to the standards and assumptions of biomedicine, which in turn has led to problems of iatrogenesis.

## APPLICATION OF HERBAL MEDICATION: TRADITIONAL AND BIOMEDICAL APPROACHES

The correct selection and prescription of herbal medicine in traditional East Asian medicine is a very complex process in which as many as fifteen or twenty crude drugs are mixed together. The ingredients are chosen according to each individual patient; his or her age, sex, weight, and all of the presenting complaints are taken into account. The final prescription is designed to remove symptoms, both major and minor, and as the symptoms change the prescription is adjusted accordingly. Such an approach requires an intense doctor/patient relationship in which the patient's subjective experience of illness is central to the diagnostic procedure. In geriatric care such an approach has obvious advantages, since the course of diseases and reactions to drugs in the elderly are different from those in younger patients (Greenblatt et al. 1982; Ouslander 1981).

Herbal medication usually produces generalized rather than highly specific changes in the body, and is not used to combat specific diseases. There is now considerable experimental evidence that many prescriptions of herbal medicine do what has been claimed of them for many hundreds of years: they build up general body resistance, apparently through stimulation of the immune system (Y. Otsuka 1983). Some traditional prescriptions also have well-established

bacteriostatic properties (Arakawa et al. 1980), and many have an anti-inflammatory action (Cyong and Otsuka 1982) and are, therefore, beneficial for a wide range of chronic problems.

When herbal medication is prescribed in the traditional style, even though potentially toxic materials are involved, the presence of several crude drugs, tested and modified empirically for over two thousand years, acts as a powerful limitation on unwanted side reactions (see Sakaguchi 1962, for example). Medication is given in small doses and over a long period of time; the emphasis is on gradual change. For patients with chronic diseases and frail constitutions, this conservative approach can have an advantage.

When medication is prescribed by biomedically trained practitioners, certain assumptions are made about the nature of the disease and healing processes which are quite different from those made by traditional practitioners. Whereas traditional practitioners believe that one cannot generalize readily from one individual patient to another and that the form and course of each illness is unique, biomedical practitioners assume that they are working with standardized and universal units, that named diseases are biologically specific, and, therefore, in general, that individual variation is minimal and unimportant. Treating symptoms is considered secondary to curing diseases, and specific drugs, including, in Japan, herbal medications, have been developed to combat diseases. Standard doses, with a very general note about being cautious with elderly patients (Tsumura Juntendo n.d.), are therefore recommended for use with all patients.

The problems of iatrogenesis that are being reported for herbal medication today appear to be connected with its use as a concentrated extract to counteract specific diseases. The observed side effects are particularly severe in the elderly and include confusion and vomiting (Nikkei Medical 1981).

These problems have arisen because the physicians involved believe that their biomedical view is *the* representation of reality, that their knowledge is scientifically based and, therefore, both accurate and neutral. Their faith allows them to snatch at small segments of the traditional medical system and to subject it to biomedical practice; the assumption is that if herbal medication has been efficacious for two thousand years, it is because there are certain active ingredients, now scientifically demonstrated, in the crude drugs. Concentration of these ingredients should lead to more specific reactions in the body and to more effective recovery rates. Such an attitude means that not only is the traditional belief system about therapy undermined but other potentially valuable attributes of the traditional system are not systematically applied in biomedicine. Preventive medicine is one such attribute; another is the symbolic value of traditional medicine.

The philosophy and belief systems used in East Asian medicine are very close to many of the values that the elderly were socialized into. Traditional medicine has symbolic associations which can act as powerful sources of healing among the older Japanese population. The herb used in moxibustion (*Artemisia vulgaris*), for example, and many of the herbs used in kampō are also used in the home as self-help remedies and culinary additions. Massage is used in many Japanese families, particularly for the elderly. The techniques and materia medica of East Asian medicine, therefore, act as links with basic family activities involving nurturance and dependence, and in so doing they stimulate family responsibilities in connection with health and illness. They also evoke childhood memories and encourage self-reflection, and they act to induce a sense of family unity, harmony, and purpose; that is, they can help to give meaning to life in a uniquely Japanese fashion (Lock 1978). This symbolic potential is unlikely to be released upon the ingestion of a few pills stored in a plastic container: boiling one's individual herbal infusion after an hour of receiving relaxing forms of therapy for the body seems more appropriate.

But traditional medicine, even when applied skillfully, is not a panacea for the elderly. The complete repertoire of East Asian medicine has never been available for most of the Japanese people. It was developed primarily for use by the elite ruling classes through the centuries. Maintenance of health in this system has always been defined as the responsibility of individuals and their families. The responsibility of the state, workplace, and other collectivities has been acknowledged to a limited extent, but, on the whole, the individual has been expected to adjust his or her needs to the welfare of the group, even at the sacrifice of personal health (Lock 1980a). Traditional East Asian medicine will not, therefore, aid in promotion of the idea that care of the elderly in an industrialized, urbanized society should be largely the responsibility of the state; nor, since traditional medicine, like biomedicine, focuses on somatic treatment modalities (Lock 1982), will it encourage the realization that the origins of many geriatric problems are social. Like biomedicine, it will foster the medicalization of care for the elderly, although, if applied properly, it should create less iatrogenesis.

### SUMMARY

Several sets of actors in this story, including the elderly, have been "fiddling with their cultural inheritance," each striving for a sense of equilibrium. There are at least three sets of core values which have not been examined carefully by most of the actors involved. Although these values are highly adaptive in certain ways, they also contribute to the problems of the elderly and those involved with them. Firstly, Confucian values, which have always inhibited criticism of the social order and which emphasize subjection of individuals and families to the state, are very much alive and well in contemporary Japan. These values have facilitated industrialization but have stunted the growth of a welfare state. Secondly, the development of an efficient capitalist system has promoted phenomenal economic growth. Continued growth and expansion is virtually unquestioned, and individuals, such as the elderly, who do not contribute significantly to the economy tend to be neglected. Lastly, belief in the analytic and predictive powers of science, in its rational basis, neutrality, and power to create order, is a value which is also rarely questioned. If we are to control the sorcerer's apprentice, we can do so only by undertaking a ceaseless critique of all of our systems of belief, not in the hope of finding a representation of the truth, but simply in order to try to achieve some equilibrium, however tenuous.

> I can see her face— The old woman, weeping above, The moon her companion.

Bashō, "On the Moon at Obasute in Sarashina" (1968; transl. Keene 1957)

#### NOTES

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<sup>&</sup>lt;sup>1</sup> The term "medicalization" is used to refer to the process whereby problems and behaviors become reinterpreted as "diseases." A mandate is then given to the medical profession to provide treatment for these problems (cf. Zola 1972).

<sup>2</sup> The medical system usually referred to as "Western," "scientific," or "modern" will hereafter by referred to as biomedicine.

<sup>3</sup> Translated in the Japan Quarterly, April-June 1957.

<sup>4</sup> See, for example, A Man in a Trance (Ariyoshi 1972) and The Hateful Age (Niwa 1950).

<sup>5</sup> The term "East Asian medicine" is used to refer to the medical beliefs which were dominant until the nineteenth century among the literate populations of China, Korea, and Japan, and which are usually referred to in the literature as classical Chinese medicine or Oriental medicine.

<sup>6</sup> Kampō literally means the "Chinese way." It refers to the entire medical system brought to Japan from China in the sixth century. In modern Japan, it is also used to refer to the application of herbal medicine as distinct from acupuncture, massage, and moxibustion (a cauterization technique in which the herb Artemisia vulgaris [mugwort] is burned at designated points on the body for therapeutic purposes). Any clinic that makes herbal therapy the center of its medical system is defined in Japan today as a kampō clinic.

<sup>7</sup> Since Japanese patients would usually consider it inappropriate to ask their doctor for specific medications, especially traditional medicine which they believe their physicians are opposed to, it is unlikely that they would influence their physicians directly in the adoption of herbal medication.

#### **REFERENCES CITED**

Titles of works published in Japan are in Japanese unless otherwise noted. Translations of titles supplied by Margaret Lock.

Arakawa, Kazuo, Jyong-Chyul Cyong, and Kiyomichi Hanabusa

1980 Effect of *Rhei rhizoma* on the Intestinal Anaerobic Bacteria. Proceedings Symp. Wakan-Yaku 13(85):85-89.

Ariyoshi, Sawaka

1972 A Man in a Trance. Tokyo: Shinchōsha.

Caudill, William

1976 Everyday Health and Illness in Japan and America. In Asian Medical Systems. C. Leslie, ed. pp. 159-177. Berkeley and Los Angeles: University of California Press.

Clark, Margaret

1972 Cultural Values and Dependency in Later Life. In Aging and Modernization. Donald O. Cowgill and Lowell D. Holmes, eds. pp. 263-274. New York: Appleton-Century-Crofts.

Colson, Elizabeth

1976 Culture and Progress. Distinguished Lecture, 74th Annual Meeting of the American Amthropological Association, San Francisco, 1975. American Anthropologist 78:261-271.

Cowgill, Donald O., and Lowell D. Holmes

1972 Aging and Modernization. New York: Appleton-Century-Crofts.

Cyong, Jyong-Chyul, and Yasuo Otsuka

- 1982 A Pharm. Study of the Anti-Inflammatory Activity of Chinese Herbs: A review. (Text in English.) Manuscript in files of authors.
- DeVos, George
  - 1968 Suicide in Cross-Cultural Perspective. In Suicidal Behaviors. H. Resnick, ed. pp. 105-134. Boston: Little-Brown.
  - 1973 Socialization for Achievement: Essays on the Cultural Psychology of the Japanese. Berkeley and Los Angeles: University of California press.

Freidson, Eliott

1970 Profession of Medicine. New York: Dodd, Mead.

Greenblatt, David V., Edward M. Sellers, and Richard I. Shader

1982 Drug Disposition in Old Age. New England Journal of Medicine. 306:1081-1088.

Illich, Ivan

1976 Medical Nemesis: The Expropriation of Health. New York: Pantheon.

- 1982 The Graying of Japan: Its Problems in the High-Age Society. 28(6):1-5.
- Keene, Donald
- 1957 Bashō's Journey to Sarashina. In Transactions of the Asiatic Society of Japan, Series 3, 5:74-79. Kōmasu, Takahashi
- 1969 The Knowledge of Kampo. Tokyo. NHK Books.
- Kuroda, Toshio
  - 1978 Demographic Aging in Japan. In Aging in Japan. S. Nasu, ed. pp. 81-89. Tokyo: Metropolitan Institute of Gerontology.
- Lock, Margaret M.
  - 1978 Scars of Experience: The Art of Moxibustion in Japanese Medicine and Society. Culture, Medicine, and Psychiatry 2:151-175.
  - 1980a East Asian Medicine in Urban Japan: Varieties of Medical Experience. Berkeley and Los Angeles: University of California Press.
  - 1980b The Organization and Practice of East Asian Medicine in Japan: Continuity and Change. Social Science and Medicine 14B:245-253.
  - 1982 Traditional and Popular Attitudes Toward Mental Health and Illness in Japan. In Cultural Conceptions of Mental Health and Therapy. A. Marsella and G. White, eds. pp. 215-233. Boston: D. Reidel.
- MacPherson, Kathleen I.
  - 1981 Menopause as Disease: The Social Construction of a Metaphor. Advances in Nursing Science 3(2):95-113.
- Maeda, Daisaku and Hitoshi Asano
  - 1978 Public Policies for the Aged. In Aging in Japan. S. Nasu, ed. pp. 81-89. Tokyo: Metropolitan Institute of Gerontology.

Maeda, D., M. Sussman, J.C. Romeis, H. Nemoto, M. Naoi, H. Asano, Y. Shimizu, S. Okuyama, M. Honma, K. Yaguchi, and T. Okanoto

1980 Japan-US Cross-Cultural Study on the Knowledge of Aging, the Attitude Toward Old People, and the Sense of Responsibility for Aged Parents. Paper Presented to the XIth International Congress of Gerontology, Hamburg.

- Mainichi, Shinbun
  - 1981 Excesssive Use of Kampö Medicine is Ill Advised. December 19.
- Merkin, D.H.

1976 Pregnancy as a Disease: The Pill In Society. Port Washington, N.Y.: Kennikat Press.

Modern Medicine

1982 Kampōyaku: An Essay on Side-Reactions. 1:80-81.

Nakane, Chie

1970 Japanese Society. Berkeley and Los Angeles: University of California Press.

Nikkei Medical

1981 A Survey of the Use of Kampōyaku by Practicing Physicians. 10:28-31. Nishiyama, Hideo

- 1963 Kampō Medicine and Folk Medicine. Tokyo: Sōgensha.
- Niwa, Fumio
- 1950 The Hateful Age. Tokyo: Sogensha.
- Otsuka, Keisetsu

1971 The Special Qualities of Kampo. Tokyo: Sogensha.

Otsuka, Yasuo, ed.

1973 In Search of East Asian Medicine. Tokyo: Nihonhyöronsha.

1983 An Introduction to East Asian Medicine. Tokyo: Sogensha.

- Ouslander, Joseph G.
- 1981 Drug Therapy in the Elderly. Annals of Internal Medicine 95: 711-722. Qiu, Yung-han
  - 1962 The Story of Kampō. Tokyo: Fujinsha.

The Kanagawa

Reich, M.R., and J.J. Kao

1978 A Comparative View of Health and Medicine in Japan and America. Public Affairs Series, No. 6. New York: Japan Society.

Rohlen, T.

1974 For Harmony and Strength: Japanese White-Collar Organization in Anthropological Perspective. Berkeley and Los Angeles: University of California press.

Sakaguchi, Hiroshi

1962 Concerning an Infusion of Peony and Licorice. Kampö Kenkyü (Tokyo) 2:46-55. Shioya, Ko

1981 The Greying of Japan: A Hidden Crisis. Asia. August. pp. 38-52.

Smith, Robert J.

1974 Ancester Worship in Contemporary Japan. Stanford: Stanford University Press. Szasz, Thomas S.

1970 The Manufacture of Madness. New York: Harper and Row.

Tahara, Mildred M., trans.

1980 Tales of Yamato: A Tenth Century Poem tale. Hawaii: University of Hawaii Press. Takemi, Taro

1982 Socialized Medicine in Japan. Tokyo: Japan Medical Association.

Teraishi, Bokusai

1973 The Book of Kampō. Tokyo: Shinhyōsha.

Tsumura, Juntendō

n.d. A Catalogue of Extracts of Kampo for Clinical Use. Tokyo: Tsumura Juntendo.

Vogel, Ezra

1968 Japan's New Middle-Class: The Salary Man and his Family in a Tokyo Suburb. Berkeley and Los Angeles: University of California Press.

World Health Statistics Annual

1981 New York: World Health Organization.

Yomiyuri Shinbun

1981 Even Kampo Medicine Has Side Effects. December 19.

Zola, Irving

1972 Medicine as an Institution of Social Control. Sociological Review 20:487-504.