

Book Reviews



The Mediterranean Diets in Health and Disease Edited by Gene A. Spiller. New York: Van Nostrand Reinhold, 1991. xvii+303pp. Hardback A\$149.95.

For adults, and adult males in particular, culture can do much more to protect survival chances than can the elaborations of modern medical technologies. The two most notable 'safety zones' in the world today are the Mediterranean basin and East Asia. It is suspected that the protection against chronic disease afforded by dietary traditions is the main reason why male death rates in middle age are lower in Crete and Beijing than in the advanced centres of Western civilization. (Female longevity tends to correlate more closely with *per caput* income and to be less influenced by cultural zone.) This is the background to the burgeoning scientific and popular interest in 'Mediterranean diets' and the rise in olive oil consumption outside its traditional production area.

The book under review is therefore timely. Its 15 chapters are grouped into three sections: overview and history; typical Mediterranean foods and their physiology; and clinical aspects and epidemiology. Of the 29 contributors all 23 with institutional affiliations in the Mediterranean basin are from Italy. Of the other six, five are from north America and one from the UK. It is not surprising therefore that the text is biased towards Italy. Partly, this reflects the distribution of scientific activity, but this cannot explain the exclusion of authors from Greece or 'Yugoslavia', where there has also been considerable work on diet and chronic disease.

The first substantive problem and the necessary foundation of much of the subsequent discussion is the accurate characterization of 'the Mediterranean diets'. This foundation is not well constructed and remains wobbly throughout much of the text.

It is not easy to measure what people are actually eating and data of this kind are in short supply everywhere. In the first chapter Giacco and Riccardi make use of the Food and Agriculture Organization Food Balance Sheets for 1979 to 1981 to describe apparent dietary patterns in 14 countries bordering on the Mediterranean. As they note, this is the only standard data source available for comparing a wide range of countries. In terms of foods, the diets of the Mediterranean countries are characterized by high intakes of cereals and olive oil and low intakes of animal fat and meat. The two most apparent differences in macro-nutrient composition in comparison to the USA, are the lower proportion of saturated fats and the higher proportion of carbohydrates in the Mediterranean countries. There is uncertainty (using this data source) whether the Mediterranean diets really do exhibit higher fruit and vegetable (and fibre) intakes than northern diets, as is widely assumed.

Other available data sources are a Euratom diet survey of west European Countries in the 1960s which included samples in north and south Italy and studies of the Italian, Yugoslav and Greek cohorts in the Coronary Heart Disease in Seven Countries study. Relatively little use is made of the latter. Overall, the book would have benefited from a more rigorous and critical approach to the assessment of dietary intakes.

Against this somewhat uncertain background, the assembled chapters provide many interesting details and a few gems. I particularly enjoyed Thomas Braun's beautifully written and densely packed

chapter on ancient Mediterranean food: I doubt if there is a better brief survey of this topic anywhere. ('The Mediterranean', he writes, 'remained butterless, just as India has always been cheeseless'). The reader moves directly to a longer chapter on cereals, which, apart from some introductory paragraphs, is not explicitly related to the theme of the book: some editorial activity might have helped here. There follow, in the remainder of the second section, chapters on legumes, vegetables and fruits, edible fats and oils, dairy products, on slowly digested carbohydrates and mono-unsaturated fats. In the third section there are chapters on lipids, hypertension, cardiovascular diseases, obesity, diabetes and cancer.

The chapters of the second section contain much of interest: how oil has been extracted from olives, the different qualities of olive oil and its minor constituents, how cheese and yoghurt have been made; all this practical information is blended nicely with a consideration of nutrition. But why nothing on the third part of the classical Mediterranean triad of wheat, olives and grapes? Alcohol is a substantial component of the diet in many Mediterranean populations, supplying over 20 per cent of dietary energy in some. There is little discussion of this in the book and alcohol is often excluded from analyses of dietary composition. The high intake of fish, for example in Spain, is also largely overlooked.

The chapters of the third section consider connections between diet and various health outcomes. One is left with an impression of growing complexity: the connections between dietary fats and cardiovascular diseases now seems more complex than once thought; many dietary factors, not just added salt, influence blood pressure; obesity is not just a consequence of 'overeating'; the cancers of affluence (colon, breast etc.) now seem less related to macro-nutrient composition (high proportions of fat) and more related to micro-nutrients, and perhaps even to non-nutrients, in the diet.

This brings us to the dual attractions of the Mediterranean diets: first, in their consistency with low adult mortality they are a rebuke to the earlier 'northern' idea that the replacement of saturated fats with polyunsaturates was the one true path to reducing mortality risks in middle age (all the more so as the trials to 'prove' this hypothesis have yielded unimpressive effects on all-cause mortality); secondly, in their presentation of a 'non-northern' dietary pattern associated with low mortality they provide multiple stimuli to new hypotheses about diet and chronic disease: the apparent protection against cancer associated with green leafy vegetables is a case in point.

But do the disease-specific details really matter? One cannot eat one diet to prevent heart attack, another to prevent colon cancer and so on. As a guide to dietary choice, what is important is the overall mortality risk and to minimize this, the 'mediterraneanization' of one's diet seems a good bet.

If you have a scientific interest in the matter you will find at least some parts of this book rewarding. If you are after a quick read and recipes, go to one of the more popular accounts, for example: C. and M. McConnell, *The Mediterranean Diet: Wine, Pasta, Olive Oil and a Long Healthy Life*, Norton and Company, New York, 1987; or the earlier work by A. and M. Keys, *How to Eat Well and Stay Well the Mediterranean Way*, Doubleday, New York, 1975 (Ancel Keys was the coordinator of the famous 'Seven Countries' study.)

I reviewed this book during a Christmas spent in Spain. For Christmas dinner our first two courses were fish: their long-chain polyunsaturates might just have managed to flush away the cardiotoxic beef fat in the Christmas pudding which I had brought from England!

John Powles
Department of Community Medicine
University of Cambridge

History of AIDS: Emergence and Origin of a Modern Pandemic. By Mirko D. Grmek, translated by Russell C. Maulitz and Jacalyn Duffin. Princeton: Princeton University Press, 1990. xii+279 pp. Hardback US\$29.95.

This is an eminently readable history, which has been assembled with considerable scholarship from the overwhelming mass of AIDS reportage and scientific publications. It is no mere chronicle of events but presents powerful argument that only now, in the late twentieth century, could the phenomenon of AIDS have arisen.

Mirko Grmek was a physician and Professor of Medical History at the University of Zagreb. He is now French naturalized and Director of Studies at the Ecole Pratique des Hautes Etudes at the Sorbonne. Despite his French connections, Grmek's account of the priority claims between Montagnier and Gallow over the discovery of the AIDS virus does not, to me, reveal bias. That part, like the rest of the book, is finely referenced and dated to allow the general reader, as well as the scientist, to understand how and why the controversy arose. The forces seen to be at work driving medically important (and hence lucrative) discoveries are revealed to be somewhat baser than naively one might wish to believe.

The history of AIDS is divided into four parts, One: A Calamity of Our Times, Two: The Oracles of Science, Three: A Look Back, and Four: Disaster: Its Extent and Causes. The references used in the text are presented concisely by chapter, number and author) and then in full in the 47-page Bibliography. Each of the four parts can be read independently and an index is provided for those wishing to use this history for reference work.

I yearn for much lengthier discussion in Grmek's Chapter 14, 'The Biological and Social Conditions of the Pandemic'. Here he assembles answers to David Durak's question posed in the December 1981 editorial of the *New England Journal of Medicine*: 'Why now, and why not before?'. Grmek introduces his concept of Pathocenosis, where he argues that 'the frequency and overall distribution of each disease, above and beyond various endogenous and ecological factors, depends on the frequency and distribution of all other diseases in the same population'. Following this he cites the immunological and technological advances in blood banking and the extraction and concentration of trace components from huge donor pools, which combined with the increased demand created by medicine and haemophilia, road trauma and increased surgery to allow an enormous augmentation of a previously negligible pathway for infectious disease transmission. The next technological advance combined with real-life forces, which he chronicles as facilitating AIDS transmission, is the disposable hypodermic syringe and needle, which is reused without sterilization owing to supply problems, money problems or cultural forces. The last section of this thought-provoking chapter briefly assembles the facts known about the 1970s 'coming out' of the American homosexual population. Between 1969 and 1978 nearly 30,000 homosexuals arrived in San Francisco. By 1982 it was estimated there were almost 98,000 homosexuals living in San Francisco, almost half living in a particular part of the city centre. Importantly for the AIDS virus, the new Western male homosexuals combined both the active and passive roles, unlike the historic and Eastern models of male homosexuality. Promiscuity and the search for physical pleasures were trumpeted as 'fundamental expressions of individual rights'. Not unexpectedly, a dramatic rise in classic sexually transmitted and other infectious diseases in male homosexuals preceded the arrival of AIDS. 'It was thus in the crowded ranks of the American homosexual community that the AIDS virus finally passed the point of no return in its epidemic spread'.

History of AIDS is highly recommended reading to all. Jargon is not used, but familiarity with medical-scientific terminology would definitely be an advantage to the reader. For anyone wishing to

understand what has happened and what may be ahead, Mirko Grmek has successfully grappled with the intellectual and geographic frontiers transgressed by AIDS, its science, its medicine and its politics.

Leigh Hammond
Dorevitch Pathology, Melbourne

Population and Nutrition: An Essay on European Demographic History. By Massimo Livi-Bacci, translated by Tania Croft-Murray and Carl Ipsen. Cambridge: Cambridge University Press, 1991. xiv–149 pp. Hardback A\$85.00.

The Struggle over *Kermis*

At fairs, which they called *kermis*, the people of Flanders indulged themselves extravagantly, eating and drinking to excess. In English translations of titles initially published in Italian, two scholars have reproduced depictions of Flemish fairs on the jackets of books discussing nutrition in the preindustrial era. Piero Camporesi¹ used Brueghel's *Le Pays de Cocagne* to illustrate an argument that Europeans had so little to eat, and were so obsessed with food, that they engaged in autophagy. Massimo Livi-Bacci prefers a more straightforward interpretation of this genre of art, using Jacques Savery's *Kermis* to illustrate an argument that Europeans ate well most of the time, at least in terms of caloric bulk.

Although Camporesi makes an overstated version of the case that early modern Europeans ate poorly to the point of malnourishment and worse, a version that few will credit, it is nevertheless true that many scholars continue to repeat and credit the argument that poor nutrition was the dominant cause of high mortality in the early modern era and that better nutrition played the dominant part in improving survivorship across the period 1750–1900. This argument is perhaps best known in the case made by Thomas McKeown, who studied causes of death in England and Wales in the decades after 1840 with the aim of linking specific groups of diseases to specific means of disease transmission. By narrowing the entrance through which causes of death might be assigned, McKeown opened a residual category, made up of diseases that he associated with poor nutrition rather than with specific means of transmission. Because the causes of death that McKeown associated with poor nutrition, such as tuberculosis, diminished in importance across the nineteenth century, he inferred that improvements in nutrition made the crucial difference in mortality decline in England and Wales after 1840, and more generally in Europe across the period 1750–1900. Although he tested the case for other putative causes of mortality decline, such as medical improvements and public-health reforms, McKeown did not bring the same careful scrutiny to bear on the case for nutrition.

In *Population and Nutrition* Livi-Bacci scrutinizes the claim that high mortality in the preindustrial era should be attributed to poor nutrition, concluding that the effect of poor nutrition has been exaggerated and also that mortality declined for reasons other than improvements in nutrition. 'In the long run ... there appears to be no real relation between nutrition and demographic development' (p. xiii). Livi-Bacci's examination of nutrition as a factor in demographic development considers both biological and historical evidence. From the biological literature he stresses not evidence about the synergy between malnutrition and certain infectious diseases detected among infants and weanling children in some developing countries in the mid-twentieth century, but evidence about the effects of temporary food shortages on people who are ordinarily well fed. Proponents of the case that

¹ Piero Camporesi, *Bread of Dreams: Food and Fantasy in Early Modern Europe*, translated by David Gentilcore, Chicago: University of Chicago Press, 1989.

malnutrition mattered a great deal like to draw an analogy between preindustrial Europe and less developed regions in the modern world, an analogy that favours using evidence about health conditions in poor countries today as a way of making arguments about health in early modern Europe. Livi-Bacci, in contrast, prefers to draw an analogy between twentieth-century Europe, which has occasionally experienced dire food shortages, such as in the Venetian territories in 1917–1918 and in the Netherlands in the winter of 1944–45, and preindustrial Europe. Which analogy should be preferred?

The view that Europeans were poorly nourished has rested chiefly on the belief that too few calories were produced. Many scholars have collected evidence about the quantities of foodstuffs available for consumption in certain places and periods, and some of them have also translated quantities of food into estimates of quantities of calories. Livi-Bacci assembles a large body of evidence of this type, all of which tends to understate the supply of foodstuffs by reporting items subject to taxation or to exchange in markets but omitting items of auto-consumption. Even leaving aside that understatement, Livi-Bacci shows that almost all of the evidence about food supply shows that it was, in ordinary times, more than sufficient to provide the calories that the population required in order to lead active lives. Harvest failures occurred, sometimes coinciding with peaks in mortality and sometimes not. Although Livi-Bacci acknowledges that poor nutrition played a role in health, he argues that even in crises the death rate more often rose because changes in social behaviour assisted disease transmission than because food shortage lowered resistance to disease. In this way he provides evidence suggesting which biological analogy should be preferred: in ordinary times Europeans were at least adequately fed.

Studying price histories, Livi-Bacci notices not only that high food prices, which are suggestive of shortage, did not regularly coincide with peaks in mortality, but also and more tellingly that low prices, which are suggestive of plenty, did not have any positive effect on survival. Examining socioeconomic differences in mortality Livi-Bacci notices that elites did not gain an advantage in survivorship until the eighteenth century, though they must always have eaten more than the poor. In terms at least of caloric bulk, nutrition probably deteriorated toward the end of the eighteenth and in the early nineteenth century, but life expectancy improved.

Most specialists in the history of survivorship in Europe will probably find that they had reached many of the same conclusions as Livi-Bacci for many of the same reasons. Nevertheless, this book is an important contribution in two ways. First, for specialists it assembles familiar evidence into a forceful case that exalts the importance of epidemiologic factors and diminishes the importance of nutritional factors in explaining the mortality decline. Second, for the much larger body of demographers who do not specialize in the history of survivorship, this essay shows why it is no longer counted persuasive to explain the health transition in Europe as the consequence of better nutrition.

James C. Riley
History Department,
Indiana University

From the Fat of Our Souls: Social Change, Political Process and Medical Pluralism in Bolivia. By Libbet Crandon-Malamud. Berkeley: University of California Press, 1991. xi–267 pp. Hardback US\$45.00.

In the preface to her book, Libbet Crandon-Malamud writes that 'It is an argument for medical pluralism, not for medical, but for political reasons. Deriving from research that asked why people

choose different or multiple medical resources, its thesis is that they do so for nonmedical reasons. It builds upon an idea...that people use medicine as a primary resource through which they get access to secondary resources, particularly where multiple resources exist and choice between them becomes socially and politically significant' (p. ix).

She argues that the residents of the town of Kachitu (not its real name) in the Bolivian Altiplano share both a common culture and medical belief system, as well as a common biological heritage, whether they are Mestizo or Indian, and, if Indian, whether Catholic or Methodist. Despite these commonalities, there are important divisions within the town. Usually they are phrased in racial terms, but those are simply markers for social class, that is to say, for access to resources.

The entire stratification system as it had developed in the early decades of this century was first weakened and then overturned by the arrival of Methodist missionaries in the 1930s, and then by a revolution and land reform in 1952. The original system saw Mestizos acting as managers of estates for an often absentee elite, as well as owners of significant resources themselves, overseeing a large population of Aymara Indians. Some of the Indians were ensorfered on haciendas, others lived in free communities. The arrival of the Methodists was a threat to the Mestizos, for they taught literacy and a variety of trades, and provided medical care to the Indians who became Methodists. As a result of the land reforms in 1952, the Mestizos lost power and control of land, and the Methodist Aymara began to ascend to a dominant position.

In this fluid situation, Professor Crandon-Malamud argues, the various explanations of disease that people used became metaphors for their changing social relations and class positions. So, for example, dŽclassŽ Mestizos began to invoke Aymara explanations for their disease experiences. She writes that four themes may be distinguished in the national political economy, for each of which there is a corresponding aetiological category in Aymara thought, and that these categories are used increasingly by downwardly mobile Mestizos. She writes:

These four themes emerged from integral components of the national political economy which have become entrenched institutions in Bolivian society. First, the notion of race has differentiated the elite (or 'whites'), mestizos, and Indians to justify unequal access to political participation, the legal system, and economic resources -- the very resources Kachitunos try to obtain through medical dialogue. Second, unequal access led to the development of an irrational economy dependent on the wasteful exploitation of Indian labor and the allocation of greatest economic risk to the Indian population which, after 1952, shifted to include the rural mestizo in the altiplano as well. Third, the entrenchment of caudillo political structures and use of suppression to maintain civil order has inhibited effective political mobilization of the agriculturally based Indian population and the rural mestizo as social classes. Fourth, a consequential antagonism between Indian and non-Indian has expressed itself among the rural Indian population as aversion to non-Indians, and among the mestizos in the countryside as a terror of Indian retaliation. From these four historical processes, the four metaphors that are expressed in etiology, diagnosis, and medical dialogue emerged as salient to contemporary medical dialogue, and today these metaphors are persistent referents in the strategies Kachitunos employ in that dialogue (pp. 46f).

The translation of these themes into aetiological categories, and their adoption by Mestizos, is as follows.

They had learned to share with the Aymara a lack of confidence in the national government as an institution serving their interests. The majority described their relationship to the Bolivian government in much the same terms as the Aymara are said to have used to describe their relationship to the vecinos (mestizos) before 1952. As a consequence, the themes of hunger

(for resources they no longer have), the vulnerability of subordination (now to the urban sector), victimization (to forces now beyond their control), and exploitation (by interests in the La Paz government that has neglected them) exacerbate the trauma of toil that Indians once performed for them but that they must now perform for themselves. These themes are the central metaphors running through their medical dialogue. They restructure Bolivian history as they are perceived to affect all Kachitunos, be they mestizo, Indian, or Methodist Aymara (p. 69).

It is not necessary here to provide details of the various aetiological categories that Professor Crandon-Malamud has described. I shall comment instead on what I view as the very considerable strengths as well as weaknesses of the book. Among the former is the very useful description of the historical changes in Bolivia over the past century; how they have been manifested at the local level; and how individuals have responded to, and coped with, them in their explanations of the misfortunes that have befallen them and their kin and neighbours. On the other hand, the 1:1 equation of historical processes with explanations of disease is not entirely convincing and seems to reflect a straining for consistency that may not be there.

Another strength is the rich detail that we are given concerning a variety of illness episodes. Often these are very well done, and in at least one case very humorous. Sometimes the result is confusion as characters appear and disappear without adequate explanation or reminders of who they are and why they are significant, but for the most part they enrich the argument enormously.

A third strength is that the author tells us much about herself and the circumstances of her stay in the field. Indeed, this is a deeply personal book: her then eight-year old daughter accompanied her (and has provided the very nice drawings which illustrate the book but do not illuminate the text); she became involved with the lives of a number of her informants, and so on. It is good to know all this, for it reminds us that the observer is not omniscient but has interests and values of her own which contribute to the way she gathered and understood her data.

Along with these strengths, there are some accompanying weaknesses. A common thread runs through most of my criticisms. That is, Professor Crandon-Malamud has a tendency to set up straw men against which she poses her arguments and methods. But on closer inspection, she has done or assumed much that she objects to. For example, at the start, when acknowledging the help and influence of Robert Murphy, she writes: 'More than anything else in anthropology, that book (*Dialectics of Social Life*) helped me realize the significance of the fact that rarely do people mean what they say or say what they mean. That social law is the basic assumption of this book and perhaps the most notable difference between this book and those works in medical anthropology which apply positivist models and rely heavily on survey data' (p. xiii). (Parenthetically, this is undoubtedly why Professor Murphy's blurb on the dust jacket claims that 'the book's theoretical framework is impeccable'.) Having distinguished her work from positivist medical anthropology, she reveals surprisingly that she has relied heavily on a survey that she herself collected. In an Appendix she writes 'To assess any differences in health and disease notions among the cultural and religious segments of Kachitu which might affect medical dialogue and decision, I administered a scheduled interview to thirty-eight individuals representing these social divisions. Significant disparities between groups would render the political interpretation of their discussions and actions false' (p. 211). This was the case because she had to be certain that there was a common repertoire of disease explanations upon which all informants could draw equally. For if there was not, then it would make no sense to say that people were making choices from a common fund of information, and selecting those items which suited their particular (non-biomedical) needs.

The analysis of the survey was done by assuming that the 38 informants knew of 93 diseases. Thus there were 38x93 items of information (actually somewhat fewer since not everyone could answer all the questions). The 38 informants were drawn non-randomly and unequally from five different social categories. The responses were grouped and analysed as if they were independent items. For example, the seven Mestizos gave 399 responses about aetiology (whether magical, natural, or psychological); the three Methodists gave 136 responses; and the 11 Campesinos (Catholic Indians) gave 359 responses. But clearly, the responses are not independent of one another, and it is misleading to analyse them as if they were. It is the 38 respondents who ought to be the units of analysis. Thus, for each particular disease condition, one would have a table like the following:

Social Category	Magical Aetiology	Natural Aetiology	Psychological Aetiology	Total
Vecinos	*	*	*	7
Catholic Cholo	*	*	*	3
Methodist	*	*	*	3
Campesino	*	*	*	11
Yatiri (traditional Aymara healer)	*	*	*	14
Total	*	*	*	38

In the body of the table would be the distribution of responses. Almost certainly with five social classes and three aetiological categories, the chances of finding any significant differences are vanishingly small, even if a true difference existed in the population. Thus while the medical repertoire may well have been shared among all classes, Professor Crandon-Malamud's survey does not demonstrate it. But what is the point of criticizing surveys, then saying the results of her survey are vital to the validity of her interpretation, and then doing to small a survey (and analysing it inappropriately) to establish the validity of the point she says is so crucial?

A second example comes from her critique of previous medical anthropological studies which 'construct patient and healer as Rational Man, in the classical economic sense, looking for medical efficacy and understood in positivistic, or scientific, terms' (p. 10). The problem here is that the assumptions underlying the notion of Rational Man in the classical economic sense have to do with the consistency with which preferences are ordered. For example, if I prefer A to B, and B to C, if I am rational I should also prefer A to C. Moreover, it is assumed that I will act to maximize the preferences that are of most value to me. There is no assumption about what the preferences are or ought to be. For instance, if Australians prefer leisure to longer hours of work and higher incomes (as they seem to), then one would expect their choices to be made in such a way as to maximize leisure while still managing to keep body and soul together. Why they might prefer leisure to ceaseless hours of toil is another issue, and not one that is related to the assumptions underlying the construct of Rational Man in the classical economic sense. Furthermore, it is perfectly clear that people may not act rationally in the classical economic sense. They may choose what they don't prefer for any number of reasons: someone is holding them hostage; they have bad information, or low IQs, and so on. I am told that even some economists understand that.

In view of all this, it comes as a distinct surprise to discover on the following page Professor Crandon-Malamud's description of the model that underlies her explanations. 'This model is predicated not only on the assumption that ideologies are conditioned by material conditions and class relations,

but that individuals select from them and use them to accomplish their own ends' (p. 11). Sounds like Rational Man ('in the classical economic sense') to me. Indeed, throughout the book the language of choice, negotiation, and maximization is used to make the point that the Kachitunos behave rationally to achieve the ends that they regard as desirable, which might be described as the acquisition of social capital.

A third example is related to the first, the distinction Professor Crandon-Malamud makes between her work and 'those works in medical anthropology which apply positivist models and rely heavily on survey research'. I have already talked about the problem of survey data. Here I want to say something about the problem of 'positivist models'. My interpretation of what she means is that data correspond to something in the objective world, what is sometimes called the dogma of the immaculate perception. If this is indeed what is meant by positivistic models, then it is a caricature. Positivism does assume there is a world out there which can be known increasingly accurately, though how that happens is an issue to which I shall return. Professor Crandon-Malamud seems to believe that too, for she writes that people don't often mean what they say, or say what they mean, but it is possible for the observer to know what they mean. ('By asking why people entertain various medical beliefs and why they choose different medical resources, we can understand medical behavior and medical pluralism' [p.11].) Indeed, her whole book is meant to be an explanation of what people mean, and why they mean it. And she uses a variety of 'positivist' tools and rhetorical devices to substantiate her claim.

At the end of her book, Professor Crandon-Malamud writes: 'Opinions about health are social commentary about multiple facets of the life of the person under discussion. Opinions are also a dimension of the author's self; they tell other people more about the author than about the subject being discussed' (pp. 206f). That she has told us *more* about herself than her informants is of course possible. Certainly she has told us a lot about herself, and we may infer that much about her has shaped the report she has given us. This is not something to which a positivist would necessarily take exception. Positivists like Karl Popper (1976) believe that science is a social activity and that through debate, challenge, new methods, and free discussion a clearer picture of the truth will emerge. This may happen only some of the time, but it does speak to a serious problem in anthropology. For much of the time anthropologists work alone in settings where other anthropologists cannot examine their work, debate their methods, or challenge their interpretations. In those instances where two or more anthropologists have worked in the same community on similar problems, debate has occurred: one thinks of the differences between Robert Redfield and Oscar Lewis on the nature of the village of Tepotzlan; of the differences among many anthropologists who have worked with Hopi Indians; and most recently of the Mead-Freeman debate on the nature of Samoan society. It is because anthropologists have so often worked alone that it is especially important that they be rigorous in their methods and honest and complete in their descriptions of how they collected their data (as Professor Crandon-Malamud has been). It may also be for this reason -- among others -- that many anthropologists have argued of late that the field can only produce 'coherent ethnographic fictions' (Clifford and Marcus 1986).

Professor Crandon-Malamud seems to be of two minds in this debate. On one hand she is critical of 'positivist science' and claims to have told us more about herself than about the Kachitunos. On the other hand she has asserted that it is possible to explain the behaviour of her informants, and she writes as if she believes she has produced something other than a 'coherent ethnographic fiction'. I believe she probably has, and that what she has written is a valuable description of one of the ways in which large historical changes may be refracted in the most intimate details of daily life.

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Stephen J. Kunitz
Department of Community and Preventive Medicine
University of Rochester Medical Center

Taming the Wind of Desire: Psychology, Medicine and Aesthetics in Malay Shamanistic Performance. By Carol Laderman. Berkeley: University of California Press, 1991. xvi+356pp. Hardback US\$39.95

In this book, Carol Laderman introduces the reader to the world of the Malay shamanic healer through an account of her own fieldwork in the state of Trengganu. It is a fascinating book in which the author combines her own analysis of healing seances with annotated transcriptions of three seances, as well as music and interview transcriptions.

The author describes how spirit seances (called *main peteri*) have been the subject of study by Westerners for many years. Early writers from the colonial period presented them as examples of colourful exotica of the native mentality; later anthropological accounts stressed the social relations of the seance and the way they revealed the core values and beliefs of Malay culture. Recent research has focused more on analyses of the therapeutic effectiveness of the seances, as a therapeutic system not unlike the Western theory of psychoanalysis. Laderman herself views the Malay seance as a powerful healing ritual which encourages patients to look to their own personality dynamics at the heart of their problems. In this sense, she views the Malay seance as a unique case in the anthropology of non-Western healing in that it 'is, to my knowledge, the sole example of the ethnographic record of an indigenous non-Western method of nonprojective psychotherapy existing within the context of a shamanistic seance' (p.85).

To give weight to this assertion, Laderman introduces the reader to the Malay humoral theory of the 'inner winds' (*angin*) of the person. The chapter on inner winds is placed in the context of the most comprehensive historical and cross-cultural survey of Southeast Asian humoralism that I have come across in the extensive but patchy literature on this topic. The inner winds or *angin* is one sense approximate the Western idea of the 'temperament'. Each person needs the opportunity to express his or her *angin*, or various forms of illness and unhappiness will result. The shaman's role is to provide a ritual space where patients can be put in touch with their inner being through trance. The inner winds become an 'experiential reality' for the patient in the hands of the skilled shaman.

Of the three shamanistic performances transcribed in Part II of the book, only one explicitly illustrates the argument about the seance as a context of non-projective psychotherapy, developed by Laderman in the first part of the book. The other two seances concern cases of the spirit exorcism, not dissimilar to those encountered elsewhere in Southeast Asian seances. In one case, a seance for a sick shaman who was a key informant of Laderman's, there is also a strengthening of the patient's inner winds.

The transcriptions of the seances, while quite long (179 pages in all) make for fascinating reading. The text is well-annotated to convey the complex symbolism that is being drawn upon by the shaman and interpreted by his audience of patient, relatives and onlookers. Laderman's translations give the flavour of the poetic range of the shaman and his assistant as they engage in dialogues while imitating the persona of a vast pantheon of Malay spirits. She justifiably likens their skills to those of the bards of ancient oral traditions in European culture.

In this book, Laderman successfully conveys the powerful systems of meaning evoked by the shamanic healer. She takes issue with scholars who would argue that the efficacy of ritual symbols is primarily non-semantic: in the Malay seance, it is the words that heal, as a primary element of the total context. She takes pains to explain the ways in which the shaman's imagery evokes layers of previously acquired understandings among the audience.

This book will be a valuable resource for a wide readership, as it explores issues of healing, performance and cultural change. Medical anthropologists and practitioners interested in non-Western therapies will be drawn to Laderman's account of the seance as a healing ritual. The quality of the ethnographic research revealed in this study, and the manner of presentation and analysis, make the book accessible to an audience of non-Southeast Asian specialists. Its significance lies not least in the fact that these healing ceremonies have virtually disappeared in the last decade or so, a response to the increasing political power of Islamic orthodoxy on the Malay peninsula.

Linda Connor

*Department of Sociology and Anthropology
University of Newcastle, Australia*

Disease, Depopulation and Culture Change in Northwestern New Spain, 1518-1764. By Daniel T. Reff. Salt Lake City: University of Utah Press, 1991. xiii-330 pp. Hardback US\$30.00.

About 500 years ago the contact between Western European civilization and the Amerindian cultures was initiated. It marked the onset of one of the most catastrophic population downturns that we know of, not because of the numbers involved – since we either suspect or have recorded vast mortalities elsewhere – but because of its suddenness, its speed and the implacability with which, in a short period of time, it managed to inflict an irrecoverable blow on an extraordinarily rich cultural diversity. Although the data are spotty at best, archaeologists, historians and demographers have, in their own ways and within the boundaries of their study domains, managed to painstakingly reconstruct plausible scenarios that make it possible to evaluate the magnitude of the catastrophe. To date most of the work, however, has been focused on what were not only some of the most densely populated areas but also those for which the recorded information was strongest. These roughly correspond to the main areas of domination of the Aztec and Inca Empires in Central Mexico and Peru respectively.

The book by Reff is a welcome addition, for it documents the nature, dimensions and consequences of Spanish penetration in Northwestern Mexico, an area about which little is known despite its being of great importance not only for the sake of completeness but because it provides a very different ecological, cultural and historical setting to test hypotheses that have emerged from studies in the other, much better known areas. The main objective of the book is to document the demographic and cultural impact of the contact between Spaniards and indigenous people in the area comprising what are now Northwestern Durango, Sinaloa, Sonora and Southwestern Chihuahua (or the

'greater Southwest'). The historical period under study is composed of two distinct time intervals. The first corresponds to the initial contact with Spanish explorers and stretches up to about 1591, a year in which the Jesuits established their first permanent mission in northwestern Mexico. The second period starts with the onset of sustained Jesuit influence and ends in 1767 with their expulsion from the Spanish overseas empire. Not only do these two periods differ in terms of the type of contact with the indigenous population and the nature and magnitude of its effects, but they also constitute two separate historical entities that can only be reconstructed by drawing from very different types of information. For the first period the main sources are a blend of archaeological records with the accounts and chronicles of the Spanish explorers who penetrated the area between 1530 and 1565. Taken by themselves these are not always reliable, accurate or very informative or penetrating accounts of indigenous society; but when used in combination with of the archaeological record and with some of the evidence for the second period, they undeniably shed light on the size and structure of the indigenous population. Information about the second period is in the form of annual reports (*anuas*) and other documents written and filed by Jesuits for the benefit of their Father Provincial; although a great deal of these documents are still preserved, many have been lost or remain to be found. The author assigns to this information much more reliability and accuracy than he does to the Spanish chronicle, since Jesuits had less interest in exaggerating certain conditions and were educated, perceptive and careful observers.

What was the magnitude of the population decline experienced after the initial contacts? How did the decline come about? Was there any variability across communities, depending on their original make-up, their location and their reaction to the initial contacts? How did the structure of indigenous society and its cultural superstructure change as a consequence of the decline? How was the Christian message received and absorbed in the various communities exposed to Jesuit influence and how did it modify indigenous beliefs?

These are important issues that get to the heart of some recurrent, unresolved controversies straddling not one but several fields. First there are problems that belong to the territories of the demographer and epidemiologist: was there a uniform collapse of the indigenous population or were there important variations? And if there were variations, what were the conditions that account for them? To what extent can the spread of infectious diseases be held responsible for the collapse of the indigenous population? What was the impact of violence and malnutrition that almost surely preceded and followed the destruction of infrastructure? Second, there are issues that are more properly dealt with in the realm of the theory of culture: what was the degree of acceptance of Christian values and how did it vary across communities? To what extent did indigenous culture absorb Western values and techniques? These questions, however, cannot be dealt with in isolation from population issues since there is always the possibility that acceptance of missionization or the selected absorption from an extraneous culture is more a function of the population collapse itself and the ensuing social disorganization than an admission of Western superiority.

The treatment of these issues, however, is somewhat uneven and though Reff is suggestive enough, in the end the reader is left with a sensation of inconclusiveness. In Chapter 2 the author reviews and extracts information from explorer chronicles to define what we could call the 'initial conditions' of the indigenous population: the size, age, sex and spatial distribution, their political and social organization, and their economic infrastructure. Unfortunately the 80 or so pages provide more detail on the itineraries of the various explorers than elaboration on the items enumerated above. There is a fair amount of repetition as each chronicle is dealt with separately but almost no view of ensemble emerges at the end of the review. The main message that one can draw from these pages is that the cultural, social and economic organization was quite sophisticated, that despite the absence of large

concentrations of population in city-like agglomerations, there were areas of high population density, and more importantly, that these initial conditions were highly variable in a fairly circumscribed territory. The reader is given few clues to discerning the nature of the variability and its geographic representation in the area under study. What one would have liked is to be able to recreate, by estimation from the chronicles, the various population settlements, their estimated size, their physical location, their characteristic culture, social organization, economic system, and lines of mutual contact, and then to piece them together in a less atomized view of the area.

An articulated view of settlements is of profound importance in understanding the information that Reff presents in Chapter 3, and it is accordingly missed. Here he presents the chronology of epidemics that were unleashed with full force shortly after the first contacts and surely long before the contacts with the Jesuits. One has to be prepared to accept at face value the rather rough criteria by which the nature of the various diseases is identified, although frequently it is difficult to single out one disease as the main culprit. It is very likely indeed that postulating the occurrence of clusters of diseases would represent better the actual epidemic episodes. Reff organizes his accounts along a time axis but neglects an equally if not more important part of the story, its spatial dimension. He acknowledges this when he invokes the existence of transport routes (*El Camino Real*) but, apart from a faint effort apparent in the drawings of several maps, there is no organized and coherent treatment of the spatial spread of epidemics. This is a difficult endeavour, requiring the deployment of sophisticated analytical techniques, perhaps more detailed information and surely a more articulated view of the patterns of settlements.

In addition, Chapter 3 does not rest solidly on a sound epidemiological foundation. The account given by Reff invokes somewhat haphazardly factors related to nutrition, immune function, pathogenicity, infectivity, lethality, relation between infections, and rapport between host and agent of disease to explain the presence or absence of this or that disease. Admittedly a more coherent treatment with the information that Reff has at hand is a tall order. But it is possible and even though it may leave glaring gaps at crucial points, it could have resulted in something more illuminating than a year-by-year account of sequels of epidemics.

The magnitude of the population decline and approximate assessment of the time scale in which it took place are presented in Chapter 4. Although the method used by Reff to arrive at his figures varies depending on the information that is available to him, a fairly typical application involves the estimation of the size of the initial population, usually from the Spaniards' chronicles or accounts, and estimates of the size of the same group or population from Jesuits' accounts. The difference is attributed to losses experienced during the period of maximum impact of epidemics. One can point to problems everywhere, from the use of household counts and approximate estimates of average number of members per household (or by estimating first the number of adults and then applying a guessed value of the fraction of the total population which is at adult ages) as a technique to derive total population, to the precise identification of the boundaries separating the group from others. It would be unfair to Reff and to the nature of the undertaking to demand absolute rigour or accuracy. But what one lacks is a sense of the magnitude of errors involved: by how much could estimates change if some assumptions are changed? Providing information on the robustness of the estimates ought to be an important part of the undertaking itself. Finally, I raise the issue of articulation yet again. One would think that population losses, frequency and intensity of epidemics and pre-existing conditions – the themes of Chapters 4, 3 and 2 respectively – are related; and yet the author does not give the reader a sense of how they are related at all. The only exception to this is the extraordinary case of the Tarahumara, a people who suffered relatively little after withdrawing to an inhospitable terrain. But surely initial density and pre-existing lines of contacts as well as the social, political and economic organization of the group are

related to the magnitude of depopulation. The connections are made here and there – reference to Apaches, Seri and Navaho nomad existence and Tarahumara post-contact reclusiveness – but never in any systematic way to shed light on the existence of possible regularities.

The nature of the cultural transformation is dealt with in Chapter 5. This, and the conclusion of the volume, are engaging if tentative sections of the book. More speculatively but also displaying a very good sense for what the data reveal, Reff disparages the hypothesis of cultural adaptation as a result of indigenous recognition of Western superiority. He goes to great lengths to show that there was no such thing as technical superiority and argues, in my mind fairly convincingly, that the acceptance of religion, in all sorts of syncretic forms, can probably be explained by the population debacle itself: the sudden disappearance of the adult and older generations, the disruption of the process of socialization and the complete dissolution of the indigenous political system weakened the basis of indigenous religiosity and created a vacuum promptly filled by an assortment of indigenous adaptations of Jesuits' Christian teachings.

The book ends abruptly, for in its final pages Reff poses a tantalizing puzzle that is left unresolved. Archaeologists have postulated that a cultural collapse affected northwestern Mexico and the American Southwest during the late fourteenth and fifteenth centuries. It is widely assumed that this was the result of climatic conditions, resource mismanagement and warfare. Reff offers a different interpretation, namely, that these cultures vanished as a result of the impact of diseases brought about by their contact with Spaniards. To do so he must first of all dispute the precise timing of their disappearances: collapse should have occurred closer to the middle of the sixteenth century, not in the fourteenth or fifteenth century. Reff invokes a combination of fairly well accepted archaeological evidence and a mistaken interpretative framework as the main culprit for the error in the dating of these peoples' disappearances. But his argument is not forcefully compelling. He succeeds, however, in planting the doubt and in showing that his and future work on these cultures may have important implications for the manner in which we conceive the unfolding of history not just after but possibly before the initial contact with Western Europe.

Alberto Palloni
Center for Demography and Ecology
University of Wisconsin-Madison