INTRODUCTION

HOW TO DO ANTHROPOLOGIES OF FOOD

Jeremy MacClancy and Helen Macbeth

Anthropology is a broad school. It always has been. During its emergence in the nineteenth century the umbrella term 'anthropology' sheltered a surprisingly wide range of subjects: from the measuring of people's skulls to see if they were of the criminal types to those campaigning against the evils of slavery. So long as any particular approach embraced the study of humans as social beings it could fit in within the broad rubric of 'anthropology' (from the Greek *anthropos*, human). In this sense anthropology is not so much a discipline, more a loose collection of several different disciplines. Even today the term embraces both laboratory-based molecular geneticists and the most abstracted of social theorists, both those interested in the effect of biological variables within human populations and those researching social dimensions of cognitive processes. In the United States the term has an even broader scope, at times encompassing archaeologists and linguists as well. The leading historian of the subject, George Stocking (2001), has gone so far as to call it the 'boundless discipline'.

Anthropology may indeed be boundless but it has a very dynamic boundlessness. The various disciplines usually grouped within anthropology have come together and moved apart more than once over the course of its history. In particular the physical and the social sides underwent a radical separation from the late-1920s on: the intellectual abuses committed in those times by certain racist anthropologists, especially in Nazi Germany, put many off studying almost any form of physical anthropology for a long period. At much the same time many social anthropologists were keen to establish their own academic distinctiveness and independence (MacClancy 1986, 1995). Despite the exemplary antiracist campaigning of some physical anthropologists who destroyed the scientific credibility of the concept of 'race', it still took several decades for an expanded physical anthropology to regain popularity. By then its leading practitioners had renamed the subject 'biological anthropology', since it had become more common to study variations within human populations in terms of gene frequencies than in terms of external bodily measurements. It was not until these changes had taken place that significant numbers of those on either side of the biological/social divide began to consider trying to work together (Stocking 1988).

In this book we look at one particular sub-section of the almost kaleido-scopic variety that we call anthropology: the anthropology of food. Its range is wide, its potential futures even wider and full of promise. However, its history is surprisingly shallow. We shall sketch it in the briefest manner: de Garine in his contribution (Chapter One) gives more detail and background.

The Rises and Fall of Anthropologies of Food

An anthropology of food, recognisable as such, only arose in the 1930s with the pioneering and exemplary studies of Audrey Richards among the Southern Bantu and the Bemba of Zambia (Richards 1932, 1939). Working within the strictly functionalist frame created by her supervisor, Malinowski, she strove to examine the human relationships of a society 'as determined by nutritional needs'; she wanted to 'show how hunger shapes the sentiments which bind together the members of each social group' (1932: 23). The work of Richards and her colleagues (e.g., Firth 1934, Fortes and Fortes 1936) dovetailed with contemporary colonialist concerns about inadequate native diets preventing locals from joining the labour force.

In North America during this period anthropological studies of food were conducted by those within the 'culture and personality' school, of which Margaret Mead was a prominent member. These anthropologists concentrated on the development of attitudes towards food in different cultures and how those attitudes affected later social relationships, behaviour and psychosocial maturation (Messer 1984). In 1940 the United States Government, mindful of the war and well aware that a significant proportion of its citizens suffered from nutritional deficiency, established a Committee on Food Habits. The brief of this interdisciplinary body, whose membership included Mead and Ruth Benedict, was to study the factors involved in the directed change of food habits (Freedman 1977). For Mead, the contribution anthropologists could make towards the problems of dieticians in wartime was (1) to be able to put food-related activities into their appropriate cultural context, and (2) to provide information about the cultural dynamics underlying social acceptance or rejection of certain dietary practices (Mead 1943a: 1, see also Mead 1943b; Guthe and Mead 1945). At the end of the war, the committee was disbanded. It is curious that anthropologists of the time do not seem to have continued this style of work. In Britain at least, it appears that in the immediate postwar decades social anthropologists were usually more interested in developing anthropological theory than enquiring into what seemed like narrowly practical matters like food (MacClancy 1996).

Interest in the study of food re-emerged most prominently in North America in the mid- to late-1950s as anthropologists such as Julian Steward (1955) and Elman Service (1962) began to propound a cultural ecology. According to this approach, human beings were to be viewed 'as intelligent, technologically equipped and culturally conditioned biological actors existing in open feedback systems with other biological units of their environment. Thus, food becomes a means for the transfer of energy among ecosystem components, and nutritional requirements are conditioned by the multiplicity of ecological factors' (Kandel *et al.* 1980). From the mid-1960s Marvin Harris took on the legacy of this approach, while promoting his own cultural materialism, which proved to be as popular as it was controversial (e.g. Harris 1966, 1979, 1987, Harris and Ross 1987).

The leading opponents of Harris and his followers tended to be structuralists. They were inspired by the work of Claude Lévi-Strauss, who had given the symbolism of food and cooking a primordial position within his vision of the world. The most prominent of these structuralists in the United Kingdom was Mary Douglas, author of the seminal *Purity and Danger* (1966), who was later to co-found the International Commission on the Anthropology of Food. To stereotype slightly, one might say that structuralism tended to attract those who took pleasure in abstracted interpretation and the formal beauty of diagrammatic solutions, while Harris's cultural materialism seemed to appeal to those who saw themselves as more 'down-to-earth' types concerned with supposed facts 'on the ground'. The distance between those interested in either of these approaches was unfortunately exaggerated by the proselytising zeal of their respective advocates. As Messer stated (1984: 212), it was 'a brave soul' who tried to straddle the two.

It was not until the 1980s that social anthropologists of food started to move away from these self-styled polar opposites and to publish sophisticated monographs which were not strictly tied to either structuralist or cultural materialist agendas. Instead, quite simply, the best among them were exemplars of a discriminating eclecticism. The key texts here are above all Sidney Mintz's *Sweetness and Power* (1985), and Mary Weismantel's *Food, Gender and Poverty in the Ecuadorian Andes* (1988).

In the meantime Westerners' increasing awareness of the calamitous consequences of overproduction and undernutrition throughout the world food system stimulated a number of predominantly biological anthropologists to work within the confines of a new sub-field they termed 'nutritional anthropology'. Its development was further encouraged in the late-1970s and early-1980s by the United Nations University and UNICEF; both offered assistance to anthropologists who were concerned with nutritional issues in any part of the globe, whether industrialised or not. The biological anthropologists, Stanley Ulijaszek and Simon Strickland (1993: 1), have defined this new sub-field as 'the study of human diet and nutrition within a comparative and evolutionary perspective'. Typical work carried out by nutritional anthropologists involves the assessment and further development of programmes of nutrition and primary

health care. Some focus on the interactions between genes, physiological processes, population characteristics and a host of nutrition-related diseases, while others concentrate on the interrelationships among community health programmes, dietary patterns and other facets of local cultures (Pelto *et al.* 1989). In 1980 the nutritional anthropologists Randy Kandel, Gretel Pelto and Norge Jerome somewhat brazenly declared that their sub-field had already yielded 'new insights into areas which could barely be foreseen five years ago. These include:

- 1. a new perspective on the cultural sensitivity of nutritional standards and the question of biological adaptation,
- 2. the role of maternal feeding practices in fostering differential nutritional status among children within a single socioeconomic community,
- 3. the role of social networks in changing dietary models,
- 4. the nutritional implications of the cognitive structure of meal planning,
- 5. the impact of dietary anomalies, such as chronic hypoglycemia, in influencing the culture focus of entire isolated ethnic groups,
- 6. the precise description of the behavioral consequences of differential nutritional status' (Kandel *et al.* 1980: 6).

Nine years later the Peltos and Ellen Messer felt able to proclaim that the patent value of the interdisciplinary methods employed by nutritional anthropologists had quickly been taken on board by nutritional epidemiologists and those who wished to carry out nutrition surveys (Pelto *et al.* 1989).

From the late-1980s, within social anthropology, a version of postmodernism enjoyed some popularity. Its main value was to make many anthropologists far more conscious of the inescapably literary nature of everything they wrote. However, this 'literary turn' within the subject failed to fulfil its revolutionary promise; to its critics, it only resulted in work even more rarified than before. What is perhaps surprising is that its predictable demise, which started in the mid-1990s, chimed with the belated re-emergence of a 'socially relevant' or 'public' anthropology. In Britain at least this shift is to an important extent a consequence of a shift in funding priorities by the major foundations and above all the research councils of their government. British academics, under pressure from their universities which are in turn being financially squeezed, strive increasingly to win research grants which will help balance their departmental budget. A likely way to secure funds is to investigate topics which fit the funders' agendas for research which they regard as socially relevant. In this context of an ever more hard-nosed pragmatism, an anthropology of food can assume a level of significance previously denied. This current rage for 'relevance' has helped to move, if not to push, the anthropology of food towards the centre-stage of the subject, and this time in a purposefully interdisciplinary guise.

A modern anthropology of food has a very broad remit. It may include human dietary needs and traditional dietaries, hedonic responses and hedonism,

subsistence strategies and ideologies of food, famine and cultures of consumption, the aid industry and Western food disorders, agricultural organisation and McDonaldisation. If, as Ahmed and Shore (1995: 15) claim, contemporary anthropology is saddled with a problem of relevance, then anthropologists of food are particularly well-positioned to respond to that challenge. Two examples will suffice here. First, it is a commonly stated fear that the ever-increasing spread of American fast-food franchises will affect both culinary variety and nutritional adequacy throughout the world. Yet, as Watson (1997) and his contributors argue, in East Asia locals have managed to adapt these outlets to their own particular ends and so make them, in some sense, their own. Globalisation is vanquished, at least for the time being. (But see Messer's chapter, this volume, for criticisms of Watson's book). Second, Pottier (1999) contends that over the last decade anthropology has been at the forefront of debate about food and food policy, informing discussions about food security, injecting new life into debates on 'free market' policy and 'real' markets, and proffering novel insights into the nature of biodiversity. What is now needed is for anthropologists of food to exploit their expertise in order to extend and deepen their participation in relevant public debates (e.g. Messer and Shipton 2002).

Why Bother with Interdisciplinarity?

It is important to emphasise at this point that anthropologists of food are not obliged to perform in an interdisciplinary manner. There is nothing necessary about the process. A good number of noteworthy studies in the anthropology of food have been carried out within the confines of a single discipline: the food-centred *Mythologiques* of Lévi-Strauss (1964, 1967, 1969) are the best example here. It is just that so many of the questions we pose are best answered by utilising the strengths of different disciplines. This is primarily because, for humans, food can be regarded as both 'nature' and 'culture'. The same cannot be said for any other animal. No other primate knows anything about culinary operations. The one possible exception is the macaque (Macaca fuscata) monkey of Japan which may dip its potatoes into saltwater before consumption. No primates other than humans know how to use fire for gastronomic ends; there are no chefs in nonhuman primate societies. Only we humans have complex ways of preparing foods, which we pass on to our children. Gorillas and chimpanzees have well-developed brains but they do not have recipes. The staff at London Zoo might stage a Chimps' Tea Party but what exactly the chimpanzees think they are doing during this performance is another matter (MacClancy 1993). Samuel Johnson made much the same point, much more pungently, over two hundred years ago:

I had found out a perfect definition of human nature as distinguished from the animal. An ancient philosopher said, Man was 'a two-legged animal without feathers', upon which his rival sage had a cock plucked bare, and set down in the school before all his disciples as a 'Philosophick Man'. Dr (Benjamin) Franklin said, Man was 'a tool-making animal', which is very well; for no animal but man makes a thing. But this applies to very few of the species. My definition of Man is a 'Cooking Animal'. The beasts have memory, judgement, and all the facilities and passions of our mind, in a certain degree; but no beast is a cook (from Boswell 1970: 179, fn.1).

For humans, food bridges many divides: it is both substance and symbol; it is life-sustaining in both biochemical and cognitive modes. Both physically and socially, we consume it and make it part of ourselves, only to expel it in another form. In other words, for all of us, food is both nutrition and a mode of thought. Lévi-Strauss said it better: 'Food is not only good to eat, but also good to think with'. By definition, nothing else in human life fits that double bill.

Within the anthropology of food, interdisciplinarity is neither obligatory nor new. In the 1930s Richards was already working in an interdisciplinary manner, as she had botanists, nutritionists and biochemists help her to identify and assess the nutritional values of foods.

There are almost as many ways of practising interdisciplinarity as there are practitioners of it. The specific mode of interdisciplinarity employed is decided anew with each particular project. Sharp-eyed readers of this book will notice that several contributors have their own particular conceptions of inter-, multi-, pluri- or cross-disciplinarity. The choice of term is somewhat arbitrary, as each contributor has the same ultimate goal: for each project embarked upon, the overall aim, if we are to answer the questions we pose, is to be interdisciplinary in a rigorous fashion, not merely multidisciplinary in an unintegrated manner. When dealing with one particular problem within the anthropology of food, the goal is not just to 'stack' different approaches (e.g. nutritional, ethnobotanical, social anthropological) on top of one another, as though their simple contiguity would lend power to one's argument. For each problem tackled, what researchers have to demonstrate is how different approaches may be linked productively. They may well have to perceive links that no one has shown before. The links made may well be different when dealing with different problems. They cannot usually be prescribed, only teased out as the research progresses. But unless persuasive sets of links are made the result is merely an undisciplined multidisciplinarity, not a rigorous interdisciplinarity.

Exemplars of Multidisciplinary Food Studies

One patent corollary to the above is that what anthropologists of food need is the intellectual boldness to be able to think beyond the conventional boundaries of individual disciplines, and to combine approaches in a creative, constructive manner. We shall give two examples.

The anthropologist, Sidney Mintz, in his magisterial study, *Sweetness and Power*, (1985), analysed the way sugar was converted from being a luxury condiment for the powerful to becoming the first proletarian staple of modern industrialised society. To carry out this work meant researching the evolution of sugar production in the Caribbean, the development of its consumption in Britain and the unfolding interaction between these two poles: an interaction which aided the creation and consolidation of a truly world capitalism. Rather than focus on just one small-scale face-to-face community — the sugar plantation where he had done his original fieldwork in the late 1940s — Mintz took a more global, evolutionary perspective. At the time, it was a pioneering move. Moreover, in the course of this prize-winning analysis, he drew in a consistently imaginative manner from the work of human biologists, nutritionists, social historians and social anthropologists. In doing so, and in doing it so successfully, Mintz helped to prefigure a modern anthropology.

Our second exemplar is by an even more inventive synthesiser. Jared Diamond's bestselling Guns, Germs and Steel: a short history of everybody for the last 13,000 years (1997) has made him one of the most well-known scientific popularisers of recent decades. As global in aim as the subtitle suggests, Diamond sets himself the big questions: why has so much of history taken the course it has? Why has it unfolded so differently on different continents? To answer these, he relies on work done by geneticists, molecular biologists, food biogeographers, ethnobiologists, epidemiologists, archaeologists, linguists and social anthropologists, among others. Most historians present history as the consequence of human decisions. What gives Diamond's work its edge is that he portrays history in broad terms, as a consequence of the interaction between humans and the different environments within which they live. Particular environments enable human groups to develop in certain ways: people in certain areas can grow certain kinds and combinations of crops; they can hunt certain animals and may be able to domesticate some of them; interaction with these animals may give them resistance to certain diseases; and all of these factors may have immediate and radical consequences for those peoples and the elaboration of their societies. It is as though his environmentalism gently mocked the pretensions of those historians who present humans as the independent makers of their own destiny.

Pedants might quibble that Diamond is not in fact an anthropologist of food. It is true that his academic position is not in anthropology; he is a professor of physiology at the University of California Medical School. But that fact serves us in making an important point. Because the anthropology of food is an almost open-ended interdisciplinary melange, it may well be the case that academics, from whatever particular university faculty, working within or very near this general area will conduct interdisciplinary investigations which, in terms of methods, overlap greatly with those associated with the anthropology of food. The point remains: we should not be concerned with the pettiness of academic turf wars, but aim to find revealing answers to the important questions we pose. In this context, exactly which disciplinary badge one wears

is almost irrelevant. We have entitled this book *Researching Food Habits: methods and problems* and we flatter ourselves that its lessons may be of value to any student researching the human use of food.

This Book

We wanted to include as broad a range of approaches as possible, in order to give students and new researchers an idea of just how diverse the anthropology of food is and how many different sets of methods anthropologists of food might employ. However, of necessity some perspectives are neglected. Although there is some grouping of the chapters, the editors do not perceive clear enough subdivisions to create named sections.

The first chapter is by one of the most senior and productive of anthropologists of food. For decades de Garine has worked in and led multidisciplinary teams investigating problems in the anthropology of food. He makes the excellent point that for biological scientists and social scientists to work alongside each other can be a very tricky business as they tend to have different expectations, different criteria of validity and significance, and different timetables. These difficulties are not a peculiarly European problem, as American anthropologists have confirmed experiencing similar difficulties, often compounded by the negative stereotypes each group of academics may hold of the others (Kandel *et al.* 1980). Nevertheless, de Garine has successfully led a team which has cooperated for many years, even in the field, across the biological/social science divide.

Szabó's chapter on ethnobotanical methods emphasises the central importance of taking local people seriously, of listening to what they have to say and writing it down on paper. All too often, up until very recently, botanists studying the regional flora of an area have not bothered to ask the locals how they classify and understand the plants in their surroundings. Yet, if the environment within which people live is a historical product of the sustained interaction between plants, animals, humans and their technology, then it is surely incumbent on ecologically oriented researchers to find out how locals perceive the world around them. The categories within which they think help form their thought, their thoughts inform their actions and their actions affect the environment. This chapter provides a practical guide on the collection and preservation of plant material in the field and its analysis in the laboratory, as well as tuition on how to gain as much information as possible from local informants on their naming and use of the plants.

Some of the more quantitatively inclined among social scientists like to criticise social anthropologists for their apparently vague, qualitative approach. Stung by these barbs, some social anthropologists brand their critics as naïve empiricists overkeen on arithmetical results and mathematical models. In this unnecessarily common exchange of verbal abuse, the protagonists lampoon each other as 'number-crunchers' ranked against the 'woolly-headed',

supposedly more interested in impressions than precision. However, in the third chapter, Hubert boldly tries to steer a middle course by suggesting a method whereby the two research styles might be combined and their complementary strengths exploited. This clearly didactic chapter gives explicit advice on each step new researchers should take in carrying out such research. An appendix to the chapter provides a guide to topics that can usefully be raised in interviews about food and drink patterns in a household. Her approach shows the value of visiting households and the rooms where food is prepared and served, in order to observe food producers at their sites of production.

The central feature of any social approach is talk. Researchers and locals talk to one another. In that way researchers learn things that they did not know before, which they write down and can later analyse to produce findings and conclusions. If this approach is to work, there must be some trust, however minimal, between researchers and the people with whom they talk. In fact, social anthropology is the only discipline whose main research method is also its goal: to learn about social relationships ethnographers have first to create social relationships with the people they are studying. Medina's chapter focuses on this interaction between researchers and researched. He teases out part of the nature and some of the consequences of this complex, ever-dynamic form of relationship. The possible pitfalls of this kind of fieldwork may be great, but the rewards, when they are achieved, can be even greater.

In much social anthropology today, the topic of 'identity' looms large. What is not always mentioned by those happy to use the concept is that it brings with it a whole train of difficulties. MacClancy, in his contribution, strives to forewarn fledgling researchers of these danger points, and how best to avoid them. He then plots the various avenues that fresh fieldworkers might wish to pursue. He particularly dwells on frequently ignored, but very useful, sources of information, such as newspaper articles, novels and past and current cookbooks. Why such potentially fruitful sources of material have so often been passed over is a puzzle yet to be solved.

A big temptation for teachers of method is to present the course of fieldwork as virtually flawless and relatively untroubled. A prevailing orthodoxy among too many lecturers who teach anthropological research methods is that yes, one may have initial difficulties with the locals, and yes, certain rituals may be hidden from the researcher's view, but if the fieldworker stays long enough most of these difficulties should simply pass away. Teachers of this kind seem keener to sing the praises of fieldwork than to depict its dirty realism: gaps in the data gathered, worries about the status of some of their data, concerns about the questions left unasked and doubts about information partly remembered but not written down at the time, etc. Gerald and Valerie Mars's contribution is so valuable, because this – the dirty realism – is precisely the problem they dwell on. To our knowledge this is the first time the question has been so openly broached for publication. What they show, in two highly appropriate examples, is that we cannot always live up to the standards that

we have been trained to set ourselves. There will always be some occasions when we have to gather what information we can – however impoverished it might appear – because the particular opportunity will not arise again. In these events we must do what we can, given that we can do no more; our results may still be of great value. To put that another way, our work may yet produce interesting and valuable results even though our final statements may not be as securely based as we should wish. This the Mars call 'the good enough principle'.

In the next chapter, Simmen, Pasquet and Hladik show how to assess (1) gustatory perception (taste on the tongue) by determining taste thresholds, and (2) hedonic reactions to tastes by using supra-threshold responses. They outline methods for use in the laboratory and those that can be taken into the field. This might at first seem a sudden switch from the social towards the strictly biological. Not so. As Hladik and Simmen (1996) pointed out with respect to humans and food, even aspects of human life thought to be purely biological cannot be neatly separated from culturally learned responses. They do not limit their instruction on methods to research on humans, but also include an explanation of methods for testing nonhuman primates. They suggest that those who wish to understand the basic qualities of the human tasting phenomenon can gain a useful, evolutionary perspective from the study of the reactions of nonhuman primates. In this chapter, the contributors argue that the taste system is a primary interface between an organism and its alimentary environment, and it is, therefore, an integral part of the physiological background from which feeding behaviour and food habits have developed. Thus, investigating hedonic responses fosters understanding both of the original interface and of the contemporary ways in which cultural conditions interact with human physiology.

Macbeth and Mowatt's chapter follows straight on from this, as they look into the problems which arise when trying to research hedonic responses across different cultures. The topic of preferences that humans express about different food items is much broader than the physiological reactions on tongue and other neurological pathways, because of strong sociocultural influences. As they state, biochemical processes and social experiences are inextricably linked. Furthermore, researchers who want to study food preferences and aversions outside of their own society have to be very sensitive to potential cultural and linguistic differences, and for those, who in one study wish to compare the food preferences of people from different cultures, there is a diversity of complexities, some very subtle. Whereas statistically complex methods for reducing statements about food preferences to quantitative data have been used before, these methods had been designed for research within one society. The problem which Macbeth and Mowatt tackle is how to design a method appropriate for comparing food preferences across five sample populations, each from a different European nation. Although they chose to use questionnaires, these were of a very special format, which owed much to careful prior fieldwork, interviewing and trials in each of the countries. Their

method and their conclusions about that method are given in detail in this chapter, and they warn that not all the complexities are resolved by use of this kind of method; researchers should also spend time with the subjects being studied, discussing with them and observing their attitudes.

Ulijaszek makes a similar set of caveats in the next chapter, where he very skilfully plots the diverse pitfalls in studies of dietary intake. Indeed his depressing but illuminating contribution reads more like a sceptic's essay, or as an extended series of cautionary tales for those with more enthusiasm than patience. Ulijaszek's necessary message appears to be: fledgling researcher be aware!

More information on food intake studies follows in the chapter by Henry and Macbeth. After an overview of nutritionists' methods for studying food intake, they focus on the gathering of food intake frequency data. They then introduce in detail one low-budget, macrosurvey method for studying 7-day food intake frequency. As they point out, their inexpensive method does not aim to provide nutritional precision but an initial quantitative overview of foods eaten in the course of one week. They suggest that this sort of quick survey can be a very useful supplement to ethnographic work. For, as they bluntly state, 'the researcher cannot be in every kitchen and dining room of a study population all the time'. The method is useful when precision about nutrients, weights and quantities is less important than an overall, quantified description of food intake either in a larger population sample or for the comparison of more than one population.

One significant aspect of human nutritional status is energy balance. This is the difference between energy intake and energy expenditure. Since Henry and Macbeth's chapter included mention of energy intake, calculated from food intake, Pasquet's chapter is the perfect complement, because he discusses methods for measuring energy expenditure. Pasquet provides detailed information on the measuring of energy expenditure, a methodology which has developed greatly within biological anthropology. The idea of energy balance within a whole community has also been used by human ecologists, when they study the patterns of energy intake and expenditure involved in that population's consumption of food and methods of production and distribution, in their particular environment.

The contributions in the next two chapters take on a more historical twist. Their authors emphasise the need for diverse research methods and cooperation between specialists from different disciplines. González, a social anthropologist, and Mataix, a nutritionist, describe their very sensitive and imaginative way of obtaining quantitative data about a particular local diet in the first half of the twentieth century. They approach the question from three different angles, linking oral interview data from elderly women with information from equally elderly trades people, who were at the time concerned with purveying the basic foodstuffs, and finally converting these data, measured in spoonfuls, cupfuls, handfuls, etc., to modern measurements for comparison with nutrient tables. They detail, with exemplary utility, the

indispensable safeguards to be taken when interviewing aged people about circumstances in their youth or even in their adolescence. The next contributor, Pollock, tackles a related set of problems in reconstructing a local diet by exploiting every source possible: written accounts of the society's past, plant and food inventories, historical settings, earlier ethnography, personal knowledge of community members and suggestive cross-cultural comparisons. Exemplifying the interdisciplinary aim of this book, she shows how her work on one particular project dovetailed with that of the health physicists involved, so that together they produced a broader understanding than either specialism alone could have provided.

This volume ends, appropriately, by ceding the final chapter to a distinguished North American colleague, Ellen Messer, whose research and writings on the anthropology of food have been a beacon to us all. She opens her contribution with a brief but magisterial critique of certain ethnographic styles in contemporary studies of the anthropology of food. Then her main example, from fieldwork in Mexico, demonstrates 'ways to collect dietary information so that it can provide both cultural and biological insights, even without additional anthropometrical or laboratory studies'. Her constructively critical discussion shows the sorts of information and analysis needed for this kind of work.

A Time for Conclusion?

It was Messer (1984) who, in a major review, observed that collaborative efforts between anthropologists, psychologists and biologists seemed to be increasing. She went on to call for more interdisciplinary work within the general field of the anthropology of food. Late in the next decade Pottier noted that anthropological 'interest in food, agriculture, food security and health is peaking'. He hoped anthropology would become 'fit to provide guidance in a fast-changing world' (Pottier 1999: 9). What they, among many others, wished to see was more work done in the area and for more of this work to be policy-relevant.

We agree. That is why we edited this book, which we see as a chest of intellectual tools for would-be researchers to pick up and use and develop. Interest in the topic continues to rise. The challenge is there; the time is now. This is no place for a conclusion.

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References

Ahmed, A.S. and Shore, C.N. (1995) Is Anthropology Relevant to the Contemporary World? In Ahmed, A. and Shore, C. (eds) *The Future of Anthropology: Its Relevance to the Contemporary World*, Athlone, London, 12–45.

- Boswell, J. (1970) *Journal of a Tour to the Hebrides with Samuel Johnson, L.L.D.*, (edition edited by R.W.Chapman), Oxford University Press, Oxford.
- Diamond, J. (1997) *Guns, Germs and Steel: A short history of everybody for the last 13,000 years*, Chatto and Windus, London.
- Douglas, M. (1966) Purity and Danger, Routledge and Kegan Paul, London.
- Firth, R. (1934) The sociological study of native diet, *Africa*, 7(4): 74–78.
- Fortes, M. and Fortes, S.L. (1936) Food in the domestic economy of the Tallensi, *Africa*, 9: 237–76.
- Freedman, R. L. (1977) Nutritional Anthropology: An Overview. In Fitzgerald, T.K. (ed.) *Nutrition and Anthropology in Action*, van Gorcum, Assen/Amsterdam, 1–23.
- Guthe, C. E. and Mead, M. (1945) Manual for the Study of Food Habits, *Bulletin of the National Research Council*, National Academy of Sciences, Washington, D.C. No. 111.
- Harris, M. (1966) The Cultural Ecology of India's Sacred Cattle, Current Anthropology, 7: 51–66.
- Harris, M. (1979) Cultural Materialism: The Struggle for a Science of Culture, Random House, New York.
- Harris, M. (1987) *The Sacred Cow and the Abominable Pig: Riddles of food and culture*, Simon Schuster, New York. [Originally published in 1985 as *Good to Eat*].
- Harris, M. and Ross, E.B. (eds) (1987) Food and Evolution: Toward a theory of human food habits, Temple University Press, Philadelphia.
- Hladik, C.M. and Simmen, B. (1996) Taste perception and feeding behavior in nonhuman primates and human populations, *Evolutionary Anthropology*, 5: 58–71.
- Kandel, R., Jerome, N., and Pelto, G. (1980) Introduction. In Jerome, N., Kandel, R. and Pelto, G. (eds) *Nutritional Anthropology: Contemporary approaches to diet and culture*, Redgrave, New York, 1–11.
- Lévi-Strauss, C. (1964) Mythologiques, volume 1, Le cru et el cuit, Plon, Paris.
- Lévi-Strauss, C. (1967) Mythologiques, volume 2, Du miel aux cendres, Plon, Paris.
- Lévi-Strauss, C. (1969) Mythologiques, volume 3, L'origine des manières de table, Plon, Paris.
- MacClancy, J. (1986) Unconventional character and disciplinary convention: John Layard, Jungian and Anthropologist. In Stocking, G. (ed.) *Malinowski, Rivers, Benedict and Others: Essays on culture and personality, History of Anthropology*, volume 4, University of Wisconsin Press, Madison, 50–71.
- MacClancy, J. (1993) Consuming Culture, Henry Holt, New York.
- MacClancy, J. (1995) Brief Encounter: the meeting, in Mass-Observation, of British surrealism and popular anthropology, *Journal of the Royal Anthropological Institute* (n.s.), 1(3): 495–512.
- MacClancy, J. (1996) Popularizing Anthropology. In MacClancy, J. and McDonaugh, C. (eds) *Popularizing Anthropology*, Routledge, London, 1–57.
- Mead, M. (1943a) Dietary patterns and food habits, *Journal of the American Dietetic Association*, 19: 1–5.
- Mead, M. (1943b) The factor of food habits, *Annals of the American Academy of Political Science*, 225: 136–141.

- Messer, E. (1984) Anthropological Perspectives on Diet, Annual Review of Anthropology, 13: 205–49.
- Messer, E. and Shipton, P. (2002) Hunger in Africa: Untangling its Human Roots. In MacClancy, J.V. (ed.) *Exotic No More: Anthropology on the front lines*, University of Chicago Press, Chicago, 227–250.
- Mintz, S. (1985) Sweetness and Power, Viking Penguin, New York.
- Pelto, G.H., Pelto, P.J. and Messer, E. (eds) (1989) *Research methods in nutritional anthropology*, United Nations University Publications, Tokyo (Also available in e-version at http://www.unu.edu/unupress/unupbooks/80632e/80632E00.htm).
- Pottier, J. (1999) *Anthropology of Food: The social dynamics of food security*, Polity, Cambridge.
- Richards, A. (1932) Hunger and Work in a Savage Tribe: A functional study of nutrition among the southern Bantu, Routledge, London.
- Richards, A. (1939) Land, Labour and Diet in Northern Rhodesia: An economic study of the Bemba tribe, Oxford University Press, Oxford.
- Service, E. (1962) Primitive Social Organization, Random House, New York.
- Steward, J. (1955), Theory of Culture Change, University of Illinois Press, Urbana.
- Stocking, G.W., Jr. (1988) Bones, Bodies, and Behaviour. In Stocking, G.W., Jr (ed.) *Bones, Bodies, and Behaviour: Essays in biological anthropology, History of Anthropology,* volume 4, University of Wisconsin Press, Madison, 3–17.
- Stocking, G.W., Jr. (2001) *Delimiting Anthropology: Occasional essays and reflections*, University of Wisconsin Press, Madison.
- Ulijaszek, S. and Strickland, S. (1993) *Nutritional Anthropology: Prospects and perspectives*, Smith-Gordon, Nishimura.
- Watson, J. (ed.) (1997) Golden Arches East: McDonalds in East Asia, Stanford University Press, Palo Alto.
- Weismantel, M. (1988) Food, Gender and Poverty in the Ecuadorian Andes, University of Pennsylvania Press, Philadelphia.