

## **THE DARKER SIDE OF THE “ORIGINAL AFFLUENT SOCIETY”**

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*Hunter-gatherers emerged from the “Man the Hunter” conference in 1966 as the “original affluent society.” The main features of this thesis now seem to be widely accepted by anthropologists, despite the strong reservations expressed by certain specialists in foraging societies concerning the data advanced to support the claim. This essay brings together a portion of the data and argumentation in the literature that raise a number of questions about hunter-gatherer affluence. Three topics are addressed: How “hard” do foragers work? How well-fed are members of foraging societies? And what do we mean by “work,” “leisure,” and “affluence” in the context of foraging societies? Finally, this essay offers some thoughts about why, given the reservations and critical observations expressed by anthropologists who work with foragers, the thesis seems to have been enthusiastically embraced by most anthropologists.*

Hunter-gatherers are the quintessential anthropological topic. They constitute the subject matter that, in the last instance, separates anthropology from its sister social science disciplines: psychology, sociology, economics, and political science. In that central position, hunter-gatherers are the acid test to which any reasonably comprehensive anthropological theory must be applied.

—Robert L. Bettinger, *Hunter-Gatherers: Archeological and Evolutionary Theory* (1991:v)

Rousseau was not the first, nor even, probably, the most naive. But he was the most famous in a long line of credulous people, stretching as far back as thought and as far forward, perhaps, as our precarious species manages to survive, who seem to believe that we have left something behind that is better in every way than what we have now and that the most apt way to solve our problems is to go backward as quickly as possible. Inevitably, what is past is viewed as natural, what is present is unnatural; as if the march of history, with its spreading plague of gadgets, had somehow distanced us from the bodies we inhabit, from the functions we perform every day. This nostalgia is characteristically indiscriminating. The naive romantics of an era often look back just a few decades to find their Eden, little realizing that the romantics of that era also looked back, and so on, and so on.

—Melvin Konner, *The Tangled Wing* (1983:3)

**THE FORAGER'S JOURNEY FROM PENURY TO AFFLUENCE**

IN THIS ESSAY I DISCUSS a chapter in the recent intellectual history of anthropology.<sup>1</sup> The chapter I have in mind concerns certain contemporary interpretations of hunter-gatherers—or, as they are often called, foraging societies—interpretations which have gained a wide currency within as well as outside of anthropology (see, e.g., Gowdy 1994, 1997). Several compelling reasons make an exploration of these issues worthy of our time and attention. For one thing, putting together as accurate a picture of hunter-gatherers as possible can, I believe, tell us something significant about the range of human adaptations, as well as fill in an important piece of the puzzle about the nature and limits of human nature. Moreover, the recent accounts that are the focus of this essay provide an illustration of how ideological yearnings can exert a powerful influence on how we handle ethnographic data. As Ernest Gellner (1988:23) has remarked, referring to our preagrarian ancestors, “Primitive man has lived twice: once in and for himself, and the second time for us, in our reconstruction.”

Throughout much of the history of anthropology, the way of life of hunter-gatherers has been depicted as an unenviable one: toiling from dawn to dusk just to make ends meet; coping with a hostile and unyielding environment; having no leisure time to devote to culture building. M.J. Herskovits (1952:15-16) probably spoke for most anthropologists when he observed: “Thus food, to a South African Bushman or a native of Tierra del Fuego, who lives always in a state of potential hunger, is always of maximum value, since it is essential to the maintenance of life itself. . . . there is little surplus of energy or resources available for other activities than the food quest.” Clearly this was a world well lost, and the transition to farming was seen by most scholars as a progressive step in human history.

All this began to change in the 1960s—the timing here, as we shall see, is significant—when anthropologists showed a renewed interest in hunter-gatherers, an interest rekindled by the changing cultural milieu in which anthropologists worked as well as several quantitatively informed ethnographic studies conducted in such places as Arnhem Land in Australia and among the foragers of the Kalahari Desert in southern Africa. These enquiries culminated in the now well-known “Man the Hunter” conference in 1966 (Lee and DeVore 1968), from which hunter-gatherers emerged as the “original affluent society.”

This was not the first time that hunter-gatherers were characterized as “affluent.” According to the demographers, the Caldwells, the demographer A.M. Carr-Saunders was the father of the concept of “Stone Age affluence.” In 1922, they claim, he “expressed scorn for the belief that primitive people are always miserable and ill-nourished and drew evidence, as his successors were to do, from the condition of the pre-contact Australian Aborigines, calling attention to the description by Spencer and Gillen” (Caldwell, Caldwell, and Caldwell 1987:26). Then again in the 1950s, Elman Service, in courses taught at the University of Michigan and later in various of his writings (Service 1963:9, 1966:12-13), took strong issue with the idea that the life of hunter-gatherers was so dominated by the rigors of sheer survival that they had little leisure time in which to engage in culture

building. Many hunter-gatherers, he went on to point out (Service 1966:13), are "quite literally, among the most leisured peoples in the world." Murphy (1970:153), commenting on Service's argument, recalled that the hunting-horticultural Mundurucú often had to endure periods of torrential rain, making hunting impossible; during these times they had lots of leisure, but it was leisure bought at the expense of gnawing hunger. (Is there an important distinction to be made between "leisure" and "enforced idleness"?) Service's observations made one thing clear: cultural development requires a great deal more than idle hands.

But the idea of "primitive affluence" is most closely identified in the literature with Marshall Sahlins, who came up with the catchy characterization that seems to have stuck in people's minds; and it was he who marshalled the evidence and wove it into a persuasive argument in support of that characterization.<sup>2</sup> The "affluence" thesis first appeared as some abbreviated comments offered by Sahlins during the "Man the Hunter" conference (Sahlins 1968a); it later appeared in the French journal *Les Temps Modernes* in a somewhat longer version (Sahlins 1968b); and finally in a considerably expanded version, it appeared as the opening chapter in the collection, *Stone Age Economics* (Sahlins 1972). This latter rendition, if one judges by the frequency of citations within and outside of anthropology, seems to have carried the day and has come to represent the new enlightened anthropological view of hunting-gathering societies. In this essay Sahlins (1972:1) argued that "by the common understanding an affluent society is one in which all people's wants are easily satisfied." (One would like to ask: By whose common understanding? Are wants the same as needs? Does Sahlins have any direct evidence of what the "wants" are of the people he is writing about?) Unlike our own industrial society where wants expand indefinitely and means are limited, thereby creating a perpetual condition of scarcity, hunting-gathering societies, he argues, are characterized by ends that are limited and means that are modest but adequate. Paradoxically, Sahlins goes on to assert, this Zen strategy enables a people to enjoy "material plenty" with what can objectively be considered a rather low standard of living.

Drawing on data from a variety of foraging societies, but leaning most heavily on quantitative surveys done among the Arnhem Landers of Australia as well as the quantitative materials collected by Richard Lee among the Dobe Bushmen of the Kalahari, Sahlins argued that these people are able to meet their needs by working at subsistence roughly 15-20 hours per week. Moreover, in some ethnographic examples, the average "work week" appears to be even less than that. For example, Sahlins (1972:27) quotes Woodburn on the foraging Hadza of Tanzania: "Over the year as a whole probably an average of less than two hours a day is spent obtaining food." When he put together all the societal variations in work times, Sahlins (1972:34) drew the following conclusion: "Reports on hunters and gatherers of the ethnological present—specifically on those in marginal environments—suggest a mean of three to five hours per adult worker per day in food production." Any calculation of the time spent by hunter-gatherers in gaining a living should also include the relevant observation that these people do not work continuously; quite the contrary, their efforts are "highly intermittent." Whatever the variation in the

number of hours per day or per week that occupy these people in subsistence activities, the fact seems to be, as Sahlins makes clear, it is considerably less than the average workday in industrial societies. Hunters, we are told, keep “bankers’ hours.” What is more, when they do work, the work that they do is not terribly taxing or demanding and “their wanderings, rather than anxious, take on all the qualities of a picnic outing on the Thames” (Sahlins 1972:30).

A short work week taken up with not very taxing tasks means that these people have a great deal of leisure time which they spend lounging about, sleeping, and sometimes visiting kin in other camps. Faced with a choice, these people have opted for leisure and rejected the work ethic. The Hadza, apparently representative of all hunters and gatherers, we learn, “tutored by life and not anthropology, reject the neolithic revolution in order to *keep* their leisure” (Sahlins 1972:27). Hence, Sahlins concludes, contrary to what is usually thought, with cultural development, the amount of work per capita actually increases and the amount of leisure decreases.

These, then, are the main elements of the original affluent society thesis. Bettinger (1991:48), looking back on the warm reception given the idea of hunter-gatherer affluence in anthropology, expresses surprise at how rapidly anthropologists embraced the thesis, since, as he notes, the data supporting it were “not overwhelming” (for a similar observation, see Winterhalder 1993:333). Indeed, this essay has been prompted, in large part, by what can only be construed as a certain level of cognitive dissonance in the literature. On the one hand, one frequently comes across statements claiming that contrary to what was formerly thought, anthropologists have now shown that hunter-gatherers are able to achieve a life of relative abundance and ease with not much effort. At the same time, a number of anthropologists, especially those who are specialists in foraging societies, have expressed rather strong reservations about the sweeping nature of the “hunter-gatherer affluence” claim, as well as criticized major portions of the data used to support it.

What has been the fate of the idea of hunter-gatherer affluence since its early pronouncement some thirty years ago? As noted above, although anthropologists have voiced reservations about the thesis, few seem to have rejected the core claims contained in its formulation. One gets the impression that for many—perhaps most—anthropologists, the vision of hunter-gatherer affluence contains some profound insight into the human condition, and they therefore very much want that vision to be true. Here are some views of specialists in hunter-gatherer societies concerning the staying power of the central features of the hunter-gatherer affluence idea. In an essay on the “affluent society” thesis, Bird-David (1992:27) has written that “Sahlins’s argument, duly updated and reconceptualized, does indeed hold.” In an introductory essay to a collection of papers from a conference on hunter-gatherers, Barnard and Woodburn (1988:11) observe that although the “affluent society” thesis has come in for certain criticisms and although they too have reservations, by and large, the “crux of the theory has, we believe, stood up well to twenty years of additional research.” Finally, Cashdan (1989:22-23), in a review of economic research on hunter-gatherers within the last couple of decades, offers the following appraisal:

Hunter-gatherers, even those living in seemingly harsh environments such as the Kalahari and Australian deserts, are able to live very well indeed by devoting only some 20 or 30 hours per week to the food quest. These findings led one participant to dub hunter-gatherers the "original affluent society," affluent not because they are wealthy in material things, but because they are able to satisfy their needs and wants with comparative ease. Although later research has shown this to be an overstatement, it remains true that among many hunter-gatherers subsistence work is intermittent, leisure time is abundant and nutritional status excellent.

Indeed, it seems then that the former anthropological stereotype of the miserable hunter-gatherer condemned to the most meager existence has been replaced in the literature by the image of the "happy-go-lucky," affluent hunter-gatherer. As one anthropologist (Kelly 1995:346) noted, virtually every introductory textbook written since the late '60s conveys the impression that hunter-gatherers live "near-perfect lives."

In the following discussion I address three issues bearing upon the original affluent society thesis. First, how hard do hunters and gatherers work, or, more accurately, how much time do they spend in making a living? (These are separate questions; they are often conflated in the literature.) Second, how adequate is their effort in meeting their nutritional and health needs? And third, I discuss some issues which have not received the attention they deserve, namely, what do we mean by concepts such as "work," "affluence," and "leisure" in the context of hunter-gathering societies? I suggest that when various ethnographic observations and critical remarks scattered through the literature are brought together into a more comprehensive picture, then both on empirical as well as conceptual grounds, the original affluent society thesis does not fare as well as the previously quoted writers would have us believe. If I am right in this assessment, then how are we to account for the remarkable staying power of the thesis? In this connection, I offer some thoughts about the continuing appeal of the affluent society thesis both within and outside of anthropology.<sup>3</sup>

### **FORAGERS KEEP "BANKERS' HOURS"**

The original formulation of hunter-gatherer affluence leaned heavily for empirical support on two time allocation studies: one conducted by F.D. McCarthy and M. McArthur in 1948 (later published in 1960) among four groups in Arnhem Land, Australia, and a second survey by Richard Lee conducted among the !Kung Bushmen in 1964. As a number of writers have indicated, however, whether these investigations can bear the empirical burden Sahlins and others wish to place upon them is questionable.

The McCarthy-McArthur study recorded hunting and gathering activity among four groups over a two-week period. However, the usefulness of the data collected varied from group to group. For example, the data from the Hemple Bay and Port Bradshaw groups, both found on the eastern Arnhem Land coast, were

collected over a four-day period and were not as informative as data on the Fish Creek group (located in the stony country near Oenpelli), which were collected over an eleven-day period. Several investigators have commented on the “artificial circumstances” under which the data in the entire study were collected, and they have raised certain cautionary flags about drawing any general conclusions from this experiment. McArthur herself noted (1960:1-26) that all the Australian foragers have, in varying degrees, made the foodstuffs available at mission stations (e.g., flour, rice, sugar) a normal part of their diet and thus the participants in the experiment had to be cajoled into avoiding such nontraditional foods. For instance, Bird-David (1992:28) points out that the nine adults who comprised the Fish Creek group were picked up at a mission station and persuaded to participate in the experiment. They became so tired of the “traditional” diet that on the fifth day of the study several of the men threatened to defect and walked into Oenpelli to purchase some flour and rice. Apparently they were talked out of consuming these store-bought foods and agreed to continue in the experiment. The point here is that we are hardly talking about “pristine” hunter-gatherers in this study.

According to the Australian anthropologist J.C. Altman (1984:185; see also Jones 1980:135; Caldwell, Caldwell, and Caldwell 1987:32), this study has additional drawbacks. First, it was conducted over a short period of time making any extrapolation to the full seasonal cycle highly questionable. What is more, the demographic composition of the groups in the study was atypical—e.g., the Fish Creek group consisted only of adults, which means that there was no need to provide for young dependents.

What emerged from this study was the following: at Fish Creek, the men spent 3 hours and 44 minutes per day in subsistence activities and women spent 3 hours and 50 minutes, while at Hemple Bay, the comparable figures were 5 hours and 9 minutes for men and 5 hours and 7 minutes for women (see Altman 1984:185; also Sahlins 1972:14-20). Commenting on these findings, Altman (1984:185) observes that “by accepting these data, Sahlins grossly overestimated the amount of leisure time available to Aborigines in the past and that in Arnhem Land at any rate affluence is more a modern than an original phenomenon.”<sup>4</sup> Elsewhere, Altman and Nieuwenhuysen (1979:88-89) lay out the salient elements of the economic pattern imposed on the wanderings of the Australian Aborigines in times past:

In the traditional setting clans were nomadic and subsistence output was either perishable or immobile. . . . there was a clearly defined ceiling to the demand for output. During “normal” times, it might . . . be possible to expend only a limited labour input and leave other time available for leisure; while during abnormal years . . . when floods or droughts occurred the maximum available labour input would be insufficient to generate the “ceiling” output. On these occasions, there would be a production shortfall below the ceiling which might mean starvation or a need to forage on territories normally associated with other clans.

To return to Altman's assertion that the "affluence" found among the Arnhem Land foragers is attributable to modern conditions, Kohen (1995:119-23) reports that in contemporary Australia, even so-called traditional hunter-gatherers now use motor vehicles, hunt with shotguns, and rely to some degree on store-bought goods such as flour and sugar.

Given the above reservations, what are we to make of the McCarthy-McArthur experiment? At the very least, one ought to be extremely cautious in basing any general conclusions on it. Sahlins, too, has "serious reservations" about drawing general conclusions from the Arnhem Land survey. The artificial conditions under which the survey was done, the brief length of the study, and modern features (e.g., metal tools) which may have influenced the outcome of the survey, he reminds us, should make us wary about relying too heavily or exclusively on the Arnhem Land data. Having advanced these admonitions, Sahlins (1972:17) goes on to say: "The most obvious, immediate conclusion is that the people do not work hard. The average length of time per person per day put into the appropriation and preparation of food was four or five hours. . . . these Australians seem to *underuse* their objective economic possibilities."

Among contemporary hunter-gatherers, no group has been more investigated and more written about than the various Bushmen groups that live in the Kalahari Desert of southern Africa. One anthropologist (Cashdan 1989:23) referred to the !Kung Bushmen as "the most compelling example of a leisured band society." Not surprisingly, therefore, the literature on the Bushmen has figured prominently in all discussions of hunter-gatherer affluence, and one of the centerpieces of that literature is the time allocation study by Richard Lee of the work patterns in an encampment of Dobe Bushmen over a four-week period in 1964 (see Lee 1968, 1969, 1979:254-65, 1984). Although carried out under less contrived conditions than the McCarthy-McArthur survey in Australia, Lee's investigation suffers from some of the same shortcomings: for example, to buttress his argument concerning Bushmen well-being, Lee would like to extrapolate his findings from one portion of the seasonal cycle to the entire cycle, even though he is aware of the significant difference between the dry season and the wet season (Lee 1979:254). Between August and October, water is limited and food scarce (Lee's survey was done from July 6 to August 1). In his doctoral dissertation completed in 1965, Lee (quoted by Truswell and Hansen 1976:190) wrote that during this dry season, "the San must resort to increasingly arduous tactics in order to maintain a good diet, or, alternatively they must content themselves with foods of less desirability in terms of abundance, ease of collecting, or nutritive value. It is during the three lean months of the year that the San life approaches the precarious conditions that have come to be associated with the hunting and gathering way of life." As the medical researchers from which the above quote is taken add (Truswell and Hansen 1976:190), during the lean months referred to above, people are forced to eat mostly roots and bulbs which have a high water content but a low caloric value.

During a four-week period in the winter of 1964 (July to August), Lee kept a record of the time spent in subsistence activity by each person in a camp of Dobe Bushmen (the encampment during the four weeks varied from twenty-three to forty

people) as well as a record of the weight of all meat and vegetables brought back into camp. To make the !Kung subsistence efforts comparable to those of persons in industrial societies, Lee recorded the times that each person left and returned to the camp—sort of comparable to leaving for the office or shop in the morning and returning later in the day. His purpose was to discover how hard people were working by getting a broad picture of the ratio of subsistence work days to days not spent in subsistence (Lee 1979:255).<sup>5</sup> (In later publications, as we shall see, Lee enlarged his subsistence category by adding other life-sustaining activities to subsistence.) Lee's investigation revealed that what he defined as subsistence activities occupied adult !Kung for about 2.4 days per week on the average, or for about 20 hours. This rather leisurely work schedule, it is claimed, managed to yield an abundant and nutritionally well-balanced diet.

These findings were somewhat puzzling to some anthropologists who have conducted similar investigations in similar societies. Hawkes and O'Connell (1981) observed that the Bushmen figures were one-half to one-fifth of the time required by the Alyawarra, a central Australian foraging group. They expressed some surprise because the !Kung and Alyawarra are very similar in habitat as well as technology. The difference, it turned out, was explainable by Hawkes and O'Connell's definition of work: in their calculations of work, they included time spent in processing food as well as hunting and gathering it.

In his 1984 survey of life among the Dobe !Kung, Lee himself took notice of this difference. He first notes that "the abundance and variety of plant food makes it possible for the !Kung to feed themselves by an average of about 20 hours of subsistence work per adult per week, a far lower figure than the 40-hour work week we have come to accept in the industrialized countries. In this chapter we explore how this 'affluent' way of life is achieved by the !Kung in their harsh, semiarid desert environment" (Lee 1984:37). But then he reminds us that it would be misleading to leave the impression that subsistence exhausts the kind of work the !Kung do: "In addition there are the important tasks of manufacturing and maintaining their tool kit and, of course, housework—for the !Kung this involves food preparation, butchery, drawing water and gathering firewood, washing utensils, and cleaning the living space. These tasks take many hours a week" (Lee 1984:51-52).<sup>6</sup> When these tasks are added to "subsistence work," the estimate per week is 44.5 hours for men and 40.1 hours for women. Lee is quick to add that these figures are well below the 40 or so hours per week that people in our own society spend above their wage-paid job doing housework, shopping, and other household chores. What seems to be at issue here is what we mean by terms such as "work" and "leisure" in the context of hunting-gathering societies—or, indeed, in the context of any society. But more about this shortly.

One final observation concerning how "work" is handled in the anthropological literature: statements about the effort put out by foragers will invariably emphasize the "time" spent at this or that activity, usually hunting and gathering. But people in nonmarket societies tend to be more task oriented than time oriented (see Applebaum 1984:16-20); nor does the time spent foraging tell us very much about the danger, difficulty, or health hazards involved in subsistence

activities—all of which one supposes would have a marked influence on the undertaking of this or that task (Hawkes [1993] has argued that Hadza, !Kung, and Ache hunters will actively engage in risky endeavors as a means of gaining recognition and status; see Silberbauer [1981:274-77] and note 5 in this essay for the health hazards that can accompany subsistence activities).

### THE WELL-FED FORAGER

Not only do the members of the "original affluent society" work at a short leisurely schedule, not only is their work when they do work not especially taxing, but with this minimal effort they are able to achieve an abundant and well-balanced diet. This somewhat rosy picture, however, has been questioned by a host of investigators, both anthropologists and medical researchers. The issue here has to do with the quantity, quality, and predictability of the food resources hunter-gatherers rely upon. Again we focus on the Bushmen data because the literature is extensive.

Truswell and Hansen (1976:189-90) cite a string of biomedical researchers who have raised doubts about the nutritional adequacy of the !Kung diet, one going so far as to characterize one Bushmen group as being a "clear case of semi-starvation." Truswell and Hansen (1976:190-91) themselves have concluded that the data suggest "chronic or seasonal calorie insufficiency may be a major reason why San do not reach the same adult stature as most other people."

Lee has always disagreed with these findings, although he softened his opposition somewhat by conceding that the smallness of the !Kung might have something to do with undernutrition during childhood and adolescence, and he went on to note that !Kung raised on cattle posts on a Bantu diet of milk and grain grow significantly taller (Lee 1979:291). But at the same time, Lee (1979:289) reasserts the adequacy of the !Kung diet and claims questions about their height, weight, and fatness stem from inappropriate Western standards. On the nutritional status of the Bushmen diet, Lee is contradicted by many of his anthropological colleagues who have also done field research among the peoples of the Kalahari. For example, during the "Man the Hunter" conference Lorna Marshall (1968:94) commented: "It has been suggested that because they [the !Kung] do not have to work everyday they can be said to have an 'affluent society.' This is a *bon mot* but does not add to the understanding of the reasons. . . . The !Kung we worked with are very thin and . . . constantly expressed concern and anxiety about food." Harpending and Wandsnider (quoted by Wilmsen 1989:305) assert that "Lee's studies of the !Kung [Zhu] diet and caloric intake have generated a misleading belief among anthropologists and others that !Kung are well fed and under little or no nutritional stress." Konner and Shostak (quoted by Wilmsen 1989:305) are quite emphatic that nutritional stress and its health consequences among the !Kung are hardly in the eye of the beholder:

Deprivation of material things, including food, was a general recollection [of Zhu adults] and the typical emotional tone in relation to it was one of

frustration and anger. . . . Data on !Kung fertility in relation to body fat, on seasonal weight loss in some bands, and on the slowing of infant growth after the first six months of life all suggested that the previously described abundance had definite limits. Data on morbidity and mortality, though not necessarily relevant to abundance, certainly made use of the term “affluent” seem inappropriate.

But perhaps the most critical and telling remarks concerning the well-fed !Kung come from the demographer Nancy Howell (1986:171-72), who spent two years with them:

While the !Kung way of life is far from one of uniform drudgery—there is a great deal of leisure in the !Kung camp, even in the worst time of the year—it is also true that the !Kung are very thin and complain often of hunger, at all times of the year. It is likely that hunger is a contributing cause to many deaths which are immediately caused by infectious and parasitic diseases, even though it is rare for anyone simply to starve to death.

And later she adds the following observation (Howell 1986:176): “Despite more than twenty five years of ethnographic observation of the !Kung, I believe that their attitude toward food has not yet been thoroughly understood by any of the anthropologists. . . . What we observers have trouble understanding is what chronic hunger feels like, and how human appetite responds to the availability of a kilo or so of rather tart berries or somewhat fibrous roots.”<sup>7</sup>

All calories, as we know, are not of equal nutritional value. According to Howell (1986:167), the !Kung may not be malnourished, but they are chronically undernourished. Howell (1986:167) and Lee (1984:54) both suggest that what is lacking in the !Kung diet is a readily available source of carbohydrates—the rice, wheat, pasta, or sugar-rich foodstuffs that have become such a common part of the Western diet. Isaac (1990:328) and Reader (1998:124-25), however, have a somewhat different view on the deficiencies in the !Kung diet. What is missing from their diet, they argue, is not only carbohydrates simple or refined, but more importantly an “appetizing, compact, high-energy” foodstuff such as animal fat in reliable quantities (for the relative importance of carbohydrates and fat in the diet of foragers, see Speth and Spielmann 1983; also Hayden 1981:394-98). We hear so much these days about the overconsumption of fat in the modern industrial diet that we sometimes forget how important some level of fat consumption is to normal human growth and the maintenance of healthy bodily functions. Animal fat, says Reader (1998:124) is “the proper measure of affluence.” Not only is it an important source of vitamins and fatty acids so crucial to good health, but it is also a compact source of energy; indeed, at 9 kilocalories per gram, fat will provide double the energy of either protein or carbohydrates, each of which has about 4 kilocalories per gram (see Eaton, Shostak, and Konner 1988:104). Thus it is much more efficient for the body to store energy as fat. As Reader points out (1998:125), the deserts and

savannas of Africa do not offer a rich supply of fat, either for the animals who live there or the people who hunt them.<sup>8</sup>

One of the perennial problems confronted by virtually all hunter-gatherers is not only the seasonal variation in resources, but more significantly the periodic failure of all major resources. This seems to have been a problem not only for "simple" societies located in marginal environments but also for more "complex" foraging societies located in more generous environments (see Yesner 1994; also Shnirelman 1994). Unlike agriculturalists, foragers appear to be unable or unwilling to store resources in the good times to tide them over the bad times. Take, for example, one of the mainstays of the !Kung diet, the oft-cited mongongo nut, said by Lee (1984:41) to be "superabundant, found near all waterholes, and available in all months of the year; it is easy to collect, tasty and highly nutritious." Eating 200 mongongo nuts a day provides the consumer, we are informed, with 2,500 calories and 77 grams of protein. The mongongo "compares favorably with the world's most nutritious foods, cultivated or otherwise," both in terms of energy value and other essential nutrients (Lee 1979:188).

Yet a number of investigators have noted that periodically the mongongo nut trees fail (e.g., Speth 1990:165). One such failure reported by Wilmsen (1982:108) occurred in 1979; by September of that year, drought conditions had become so serious that the government had to step in with food relief programs. In 1980 the nut crop was a good one, but Wilmsen indicates that it was barely touched because most people preferred maize meal. Hitchcock and Ebert (1984:331) report that droughts are common in the Kalahari; they also note (Hitchcock and Ebert 1984:333) that there are foragers in the Nata region of the Kalahari who have access to mongongos but choose not to exploit them in any quantity, presumably because they "do not taste good."

Wiessner (1982:77; see also her remarks on droughts and seasonal and yearly fluctuations of resources 1982:64) informs us that in 1974, high winds destroyed most of the mongongo nut crop in the Xai/Xai area where she did field research. Because of the heavy rains, the game scattered, and gathering and snaring became difficult. Insects and cattle disease made domestic foods scarce. By August, she says, work effort came to a standstill as the !Kung said there was nothing worth hunting or gathering. People spent their "leisure" time lounging, chatting, and repairing or adding to their tool assemblage.

It is interesting to note that in a later essay in *Stone Age Economics*—entitled "On The Sociology of Primitive Exchange"—Sahlins (1972:212) quotes a paragraph from Elizabeth Marshall Thomas's *The Harmless People* (1959): "Their culture insists that they share with each other, and it has never happened that a Bushman failed to share objects, food, or water with other members of his band, for without very rigid cooperation Bushmen could not survive the famines and droughts that the Kalahari offers them." But one searches in vain in the Original Affluent Society essay for any mention of famines and droughts as posing recurrent difficulties in the lives of foragers.<sup>9</sup>

**WORK, LEISURE, AFFLUENCE, AND CULTURE  
BUILDING AMONG FORAGERS**

As the previous paragraphs have suggested, an issue that has contributed to the contentiousness that has swirled about the hunter-gatherer affluent society thesis is the conceptual one: What do we mean by “work,” by “leisure”? What is the relationship between leisure and culture building? What is a useful way of thinking about “affluence”?

We begin with the concept of work. To a physicist, work involves more than the expenditure of energy: work occurs when a force succeeds in moving the object it acts upon. Hence, if I try to move a boulder and fail to do so, I have expended a lot of energy, but from a physicist’s point of view, I have performed no work.

For the purposes of this discussion, however, let us define work in general terms as the expenditure of energy or effort directed toward the achievement of some goal, whether or not that goal is realized. Hence, if a Bushman spends all day hunting and comes back empty-handed, by our definition he has engaged in work. What is readily apparent about this definition is that it fails to distinguish clearly between activities that we think of as work and activities that we think of as leisure—leisure, after all, can also involve the expenditure of energy toward the achievement of a particular goal. It would seem that what we choose to call work as distinguished from leisure depends upon the context in which the activity takes place, and where these contexts overlap or are difficult to distinguish from one another, as is the case in foraging societies, then the conceptual line between work and leisure becomes fuzzy. In our own society, when we use the term “work,” we usually mean some activity for which we are remunerated, usually monetarily—that is, work refers to employment or what one does on the “job.” Leisure, on the other hand, is what we do when we are not “working.”

Note that leisure activities often require a greater expenditure of energy than the activities we engage in when we are working. Having lunch with a client is work; mowing the lawn, tending the garden, skiing, playing tennis or golf, and even, for some, painting the house are leisure. In addition to context, there may also be an evaluative, subjective element in what we deem to be leisure: to some, gardening is pleasurable; to others, it is work. If I read an anthropology text, that is work; if I read a novel, that is leisure.

The point of all this is, as social investigators who have concerned themselves with such definitional matters have learned (e.g., Parker 1971:18-32; Wallman 1979; Wadel 1979; Applebaum 1992:ix-xiii, 554-59), there is no sharp line between work and leisure. Work, one such investigator concludes, “is an ambiguous concept” (Wadel 1979:365). Leisure often involves more work than does “work.” A common way of trying to distinguish between the two is to say that leisure refers to voluntary activity, or “free time,” no matter what one does with it—“free” in the sense that it is not devoted to subsistence or maintenance. Work, on the other hand, refers to obligatory activity, or “sold” time (Parker 1971:21; Wadel 1979:370).

But, of course, hunter-gatherers do not have “jobs” or “occupations”: hence

the conceptual distinction between work and leisure in these societies becomes even more blurred. Because they want to make work in hunter-gathering societies correspond as closely as possible to work in industrial societies, Sahlins and Lee (and others who have addressed these matters) tend to emphasize subsistence activities; that is, they tend to define work as mainly the time spent in hunting and gathering. If we were to define work in our own society as subsistence activity, most members of our society, it could be argued, do no work at all, since most people are not engaged in subsistence activity—at least not in the sense in which that term is used in foraging societies. If, however, we were to define work not only as subsistence activities but more generally as all life-sustaining activities—not only hunting and gathering but also the making and repairing of tools, housekeeping, curing of skins, child care, the migration from one site or waterhole to another, and so on—then the number of hours hunter-gatherers can be said to work each week would increase dramatically. After all, if having lunch with a client or prospective colleague is work, then why isn't trudging to a neighboring camp to reaffirm a relationship with a relative also work?

There is no question but that our lives are filled with more "busyness" than those of the members of hunting-gathering societies. The reasons for this are fairly obvious; we live in a complex society—complex technologically and complex socially. Being a consumer in such a society *is* work (see Linder 1970). Whether our existence is deemed to be somehow "richer" or preferable to that in hunting-gathering societies will depend, to some degree, upon one's values and ideological leaning. But if we are going to use "Paleolithic man" to pass judgment on modern industrial life, at the very least we ought to strive for an accurate picture of existence in "Paleolithic" societies and resist the temptation to "romanticize" that existence.

Leisure, it is said, is a prerequisite for cultural development. It is this widely accepted postulate that Sahlins wishes to raise some doubts about. Here are societies, he tells us, with lots of leisure but virtually no cultural development. Remember the Hadza, who cling steadfastly to their leisure and who have rejected the very idea of culture building. Of course, it all depends upon what one means by leisure. It can be argued that people in all societies have considerable amounts of discretionary, or free, time. The key issue, however, is whether the social-political system gives incentives to individuals to direct this discretionary time into "innovative" paths, that is, toward greater specialization and division of labor (a point Sahlins makes forcefully in the "domestic mode of production" chapters in the same volume in which the "original affluent society" essay appears; see especially 1972:130-48). Most significant in this regard is whether a substantial portion of the adult population can be released from the imperative of engaging in "subsistence" work so that they can devote their time and effort to developing such innovative pathways. The society, in short, has to invest some portion of its resources, human and material, in culture building and elaboration.

When anthropologists and others have said that leisure is a precondition for culture building, it is this latter construal of leisure that they have had in mind—or that they should have had in mind. The leisure that figures in discussions of culture building is not simply enforced idleness. Sahlins's discussion is somewhat

ambiguous on this issue. On the one hand, the abundant leisure of hunter-gatherers is seen as a mark of their "affluent" existence. At the same time, we are told that the "failure of Arnhem Landers to 'build culture' is not strictly from want of time. It is from idle hands" (Sahlins 1972:20). It would seem that the social and political organization of hunter-gatherers has led to an ethos of "anti-development." Whether one thinks this is a good or bad thing will depend upon how one views the concomitants of social and economic development. Sahlins (1972:39) seems to cast his vote for the organization and ethos of hunter-gatherers: "The 'economic problem' is easily solvable by paleolithic techniques. But then, it was not until culture neared the height of its material achievements that it erected a shrine to the Unattainable: *Infinite Needs*."

Finally, we come to the concept of affluence. While the ingredients that go to make up affluence may vary from investigator to investigator, I suspect many would find it strange, as Konner (1983:371) observes with respect to the !Kung San, to refer to a society with a 50 percent childhood mortality rate and a life expectancy at birth of about thirty years as an "affluent" society (see also Howell 1979:116; few G/wi Bushmen, according to Silberbauer [1981:288], make it much beyond forty-five years). Sahlins (1972:1), it will be recalled, says an affluent society is one which "by the common understanding . . . all the people's material wants are easily satisfied." He goes on to argue that the reason their wants are easily satisfied is because their wants are limited. "It is not that hunters and gatherers have curbed their materialistic 'impulses'; they simply never made an institution of them" (Sahlins 1972:13-14). Yet this claim would seem to fly in the face of other empirical claims. As Altman (1992:36) has retorted, "What needs explanation is why in contemporary contexts hunter-gatherers often demonstrate unlimited rather than limited, material wants. Why is it that at Momega [Australia] and, according to the literature, elsewhere modern hunter-gatherers have apparently insatiable demands for shotguns, rifles, motor vehicles, cassette recorders, CD players, televisions, and VCRs?"

The fact of the matter is that Sahlins has little direct knowledge or evidence of the "wants" of hunter-gatherers. His claim that their wants are limited is largely an inference from the fact that they seem to work fewer hours than they could; that is, they seem "to *underuse* their objective economic possibilities" (Sahlins 1972:17). But what appears to be an underuse of economic possibilities may be explainable by factors other than "limited wants." For instance, it may be that spending more time hunting and gathering leads to diminishing returns or at times no returns at all (recall Wiessner's 1982:77 observations on the reaction of the !Kung to the failure of their resources), and therefore their decision to limit their effort is a perfectly "rational" one. Winterhalder (1993) also argues that foragers' decisions to limit their work effort is an economically rational one. To increase their efforts, he suggests, could lead to an overexploitation of their resources, population fluctuations, and eventual economic disaster. And then there are the G/wi Bushmen, who reside in the central Kalahari. According to Silberbauer (1981:274-78), they spend a good part of the day (from about 10 A.M. to about 4 P.M.) resting in the shade, not because they have "chosen" leisure over work or have limited

wants, but because to venture out in the blistering sun for any time would expose them to dehydration and heatstroke. Throughout much of the year, there is little cloud cover to provide some relief from the withering heat; unshaded temperatures can reach 60°C (140°F), and sand temperatures as high as 72°C (161°F) have been recorded. During the early summer months, all the *G/wi* lose weight and complain of persistent hunger and thirst (Silberbauer 1981:274). Hardly a "picnic outing on the Thames."

Or, the pervasive occurrence of "demand-sharing" (see Peterson 1993) may act as a disincentive to increased effort. Everyone who has worked among the Bushmen has commented upon the continual dunning and constant pressures to share that go on. Here is Patricia Draper (1978:45):

The give and take of tangibles and intangibles goes on in the midst of a high level of bickering. Until one learns the cultural meaning of this continual verbal assault, the outsider wonders how the !Kung can stand to live with each other. . . . People continually dun the Europeans and especially the European anthropologists since unlike most Europeans, the anthropologists speak !Kung. In the early months of my own field work I despaired of ever getting away from continual harassment. As my knowledge of !Kung increased, I learned that the !Kung are equally merciless in dunning each other.

Both Wiessner (1982:79) and Marshall (1968:94) have commented on the fact that the persistent pressures to share have led the !Kung to limit their work effort, since in working harder they would likely expose themselves to demands to share the fruits of their additional labors. To refuse to share opens oneself to accusations of stinginess or worse. Here are Wiessner's (1982:79) observations:

In reciprocal relations, one means that a person uses to prevent being exploited in a relationship . . . is to prevent him or herself from becoming a "have". . . . As mentioned earlier, men who have killed a number of larger animals sit back for a pause to enjoy reciprocation. Women gather enough for their families for a few days, but rarely more. . . . And so, in deciding whether or not to work on a certain day, a !Kung may assess debts and debtors, decide how much wild food harvest will go to family, close relatives and others to whom he or she really wants to reciprocate, versus how much will be claimed by freeloaders.

The !Kung, we are told, spend a great deal of time talking about who has what and who gave what to whom or failed to give it to whom (Wiessner 1982:68). A lot of the exchange and sharing that goes on seems to be as much motivated by jealousy and envy as it is by any value of generosity or a "liberal custom of sharing." In his survey of foraging societies, Kelly (1995:164-65) notes that "Sharing . . . strains relations between people. Consequently, many foragers try to find ways to avoid its demands. . . . Students new to anthropology . . . are often

disappointed to learn that these acts of sharing come no more naturally to hunter-gatherers than to members of industrial societies.”

An important ingredient of the “limited wants” which undergird the “original affluent society” is the very modest number of material possessions held by the members of these societies. In part, the mobile life of hunter-gatherers discourages the accumulation of material possessions, since excess baggage becomes a hindrance rather than an asset. But there is more to it than that. “A more interesting question is why they are content with so few possessions” (Sahlins 1972:11). And we come back to their limited wants. For example, the Bushmen, we are told, “had no sense of possession” (Sahlins 1972:12), while the Yahgan were “completely indifferent to any material possessions” (Sahlins 1972:13). Hence, the hunter is “comparatively free of material pressures” and exhibits “an undeveloped sense of property,” and is totally uninterested in improving his technological tool kit (Sahlins 1972:13). But then, what are we to make of Wiessner’s (1982:82) report: “It cannot be argued today for /Xai/Xai residents that ‘wealth is a burden’ nor can it be argued that !Kung have little interest in material possessions. Most possessions, from traditional ostrich eggshell beads, to shoes, to watches, are highly desired.” In her Lewis Henry Morgan lectures, Elizabeth Colson (1974:44), an astute and perceptive ethnographer, makes the following general observations:

It is almost certainly false to assume, as Lewis Henry Morgan appeared to do and as Fried apparently does, that people who have few possessions are inclined to place little value on what they have or that they give willingly simply because they give graciously. My own reading of ethnography, and my own experience in a number of American Indian and African societies whose members would be regarded as having had little in the way of material wealth suggests rather that property is valued, that people are very much aware that possessions give rise to envy and that they are fearful of the consequences of envy.

So much then for “limited wants” as the underpinning of affluence.

### **THE SEARCH FOR THE “AUTHENTIC” SOCIETY**

In the previous paragraphs and pages, I attempted to bring together what I would guess is only a portion of the data and argumentation that at the very least casts some doubt on the notion of hunter-gatherer affluence. None of the material cited here, I should emphasize, appeared in obscure places, and I suspect much of it is well known to anthropologists, especially to those anthropologists who are specialists in the study of foraging societies. If that is so, one may ask why has the “original affluent society” thesis fallen on such receptive ears and been embraced by anthropologists and others as the new received wisdom? Remember that although the thesis has been previously adumbrated from time to time, its major formulation and intellectual dissemination in academic circles was set in motion in the mid-sixties with the “Man the Hunter” conference. As a number of

investigators have pointed out (e.g., Bender and Morris 1988:4-6; Wilmsen 1989:37; Kelly 1995:15), the "affluent society" thesis fitted nicely into the prevailing zeitgeist in anthropology during the sixties and the decades following. These were times, it will be recalled, during which Western industrial societies were the targets of a critical assault from a variety of academic quarters, and anthropologists were among the most vociferous assailants. Here, we were told, in the more marginal areas of the world were societies that were depicted as just the opposite of the industrial West, societies characterized by egalitarianism, widespread sharing of resources, an indifference to material possessions, societies whose members seemed to live in harmony with nature and one another and whose wants were modest and easily satisfied.

The affluence thesis, let me suggest, might be construed as a modern version of the degeneration theory. Degeneration, it may be recalled, was a widely held view in the eighteenth and nineteenth centuries, especially among certain theologians and intellectuals, which saw small-scale non-Western societies as the end points of a process of decline from some former higher state. The march of human history, it was claimed, showed as much decline as it did progress—maybe more. The modern version of this thesis turns the doctrine on its head: it is "primitive" society, and the simpler and more "primitive" the better, that represents the apogee of human existence. Things have been going downhill ever since, reaching their nadir, it would seem, in modern industrial societies.

Lest one think these are the musings of a fanciful imagination, I would point out that when scholars as diverse in their approaches to the human condition as Richard Lee, Irven DeVore, Marshall Sahlins, Marvin Harris, Robin Fox, and Jared Diamond all indicate that something precious was lost when we abandoned the hunting-gathering way of life, then I think it fair to say we are in the presence of a seductive and powerful ideology, whatever the selectively advanced data might be that seem to support this world view.<sup>10</sup>

In an essay published in the *American Anthropologist* in the early '90s, Lee (1992) reflects upon the preface he and DeVore wrote for the volume that came out of the "Man the Hunter" conference. They believed at the time, he says, that most of the participants in the conference who chose to do fieldwork among hunter-gatherers did so because of a "feeling that the human condition was likely to be more clearly drawn here than in other societies" (Lee 1992:43). He then goes on to say that he now believes they were wrong—that the human condition is about "poverty, injustice, exploitation, war and suffering." He concludes his reflections with these words:

When anthropologists look at hunter-gatherers they are seeking something else: a vision of human life and human possibilities without the pomp and glory, but also without the misery and inequity of state and class society. . . . I am convinced that hunter-gatherer studies, far from being the fantasy of uncritical romantics, have a role to play . . . as part of a larger movement to recapture wholeness from an increasingly fragmented and alienating modernity. (Lee 1992:43)

Although recent researches have gone some way toward correcting the rather grim picture of the wretched hunter-gatherer, let us not at the same time forget that hunting-gathering societies have their own kinds of miseries and their own forms of tyranny: the miseries that accompany nagging hunger and periodic severe shortages; the miseries that stem from susceptibilities to a host of infectious diseases as well as the high rates of infant mortality; the tyrannies of constant harassment and covert threats to force sharing and the pervasive envies and jealousies directed toward those who get out of line and fail to conform. Lee (1982:55) recounts the incident of an elder Bushman who asked him for a blanket. When Lee responded that he would just give it away, the elderly Bushman replied, "All my life I've been giving, giving; today I am old and want something for myself." Lee adds that the sentiments expressed by this elder were not unique. Perhaps "human nature" is not as different from society to society as we have been led to believe.

So we come back to Gellner's remark that primitive man has had two lives: one for himself and one for us from which to draw certain moral lessons. Here are people in small-scale societies who have not learned as yet to be motivated by greed, who have yet to be corrupted by personal ambition and the work ethic. This is the way we once were seems to be the lesson we are to take away (e.g., see Lee 1979:432-61), and this is the way we could again become. Marxists, when they project what the future "communist" society might look like, often take the "conviviality" and "morality" of these small-scale societies as their model—but with all the amenities of industrial life added: sort of the social fabric of Bushmen society but with computers. Marx himself, in a famous passage in *The German Ideology* (1966[1845-1846]:47), pictured the future communist society as one of such abundance that the division of labor, or indeed *all* economic and political institutional constraints, could be dispensed with (for a recent discussion of "primitive communism," see Lee 1988). The original affluent society thesis then may be as much a commentary on our own society as it is a depiction of the life of hunter-gatherers. And that may be its powerful draw and lasting appeal.

## NOTES

1. This essay began as a lecture delivered in one of Professor Robert Hunt's classes on economic anthropology at Brandeis University. From there it has evolved to its present form. Along the way Professor Hunt offered words of encouragement as well as helpful critical comments. I am grateful for both. The responsibility for the contents is entirely mine.

2. Sahlins, by the way, acknowledges his inspirational debt to Service (Sahlins 1972:5n).

3. Two critiques of the affluent society thesis in the literature address issues different from those dealt with in this essay. One argues that any generalized model of foragers does violence to the great diversity found among hunter-gathering societies (see Kelly 1995:1-37; Kent 1996). The other critique emphasizes the historical encapsulation of foragers in larger social and political systems. Hence contemporary foragers, it is claimed, represent adaptations to marginality, and to characterize them as either "original" or "affluent" is

highly misleading (see Wilmsen and Denbow 1990; Solway and Lee 1990; Kelly 1995:24-28).

4. Sahlins complements contemporary ethnographic materials from Australia with certain historic accounts, notably the nineteenth-century observations of Sir George Grey, who during 1837-1839 made expeditions in northwestern and western Australia. Grey reported that the Aborigines had no trouble gaining an abundance of food working only two or three hours a day and that they were able to attain this with a minimum of effort. But the Caldwells (1987:31-32) point out that Grey's writings are sometimes used in selective fashion:

It is rarely observed that Grey was often quite emotional in his defense of undisturbed peoples because of his abhorrence of the slave trade and that two pages after his description of abundant food he identifies two annual periods of hunger quite in accordance with theories of links between mortality and periodic want. Grey is also cited as arguing that the Aborigines were not short-lived and frequently attained the age of 70 years, but it is not so frequently noted that within a page or two he was excluding the great number of deaths which take place during the period of infancy. As Grey probably included young children with his infants and is unlikely to have been able to distinguish those over 60 years of age from those beyond 70, it is relevant that model life tables demonstrate that even with an expectation of life at birth of 20 years, one third of persons attaining 25 years of age will reach 60.

5. The emphasis by Lee, Sahlins, and others is on the time spent at various tasks. Although the claim is made that the tasks are not especially arduous, there is very little evidence concerning the difficulty of the tasks, one way or the other, or any evidence about "how hard people were working." In this regard, an observation by Konner (1983:373), who also did field research among the !Kung, is relevant: "If a !Kung woman who has eaten little else for a week straight declines an opportunity to take yet another ten-mile trek to the farther mongongo groves in the heat, carrying a child, and even chooses to go hungry that day instead, I for one would not be inclined to accept that as evidence that she is affluent; she has merely made a cost-benefit analysis that allows the nuts to lie and rot on the ground." The primatologist Robin Dunbar (1996:180) also reminds us that hunting large game can be a formidable and risky business. Not only does one expose oneself to attacks by all manner of predators, but there is also the danger of running into snakes, elephants, and the like. He notes that before snowmobiles made hunting in the dead of winter less precarious, the mortality rate among Eskimo males in certain populations was unusually high—in some harsh environments, the life expectancy of males might be less than half that of females.

6. If we add in the hours spent keeping one's social relationships in good working order, both within the camp and between camps, then the number of hours at "work" increases even further. As Wiessner (1982:78-79) comments, "Thus, studies measuring how much time is spent in the food quest yield a short week, but if the hours spent in the business of social relations are added to these, a 14-hour work week can quickly become a 40-hour one."

7. Speaking of tart berries and fibrous roots, Woodburn (1968:52), writing about the culinary predilections of the Hadza, a group of hunter-gatherers found on the margins of the Rift Valley in Tanzania, observes: "The low opinion which the Hadza have of vegetable food which makes up the bulk of their diet is not surprising when its unpalatability is taken into account. Roots are, in general tough, fibrous, and have little taste, many of the berries are hard and dry and contain large stones which are swallowed whole; *undushi* berries leave

a dry, sticky residuum in the mouth; *k'aha hai* berries split the lips and tongue if eaten in quantity." The Hadza are no fools. As Woodburn (1968:54) points out, they much prefer maize and millet meal porridge to their own unappetizing roots and berries. These are the same Hadza that Sahlin (1972:27) describes as living in an area of "exceptional abundance" of both animals and regular supplies of vegetables.

8. Elsewhere, Reader (1988:147) expands on the importance of fat in the human diet, especially among growing children:

Fat is another good reason for going hunting, and although the fads of western culture seem determined to eliminate it from the diet, fat does perform several important nutritional functions. Fat is essential for the absorption, transport and storage of vitamins A, D, E, and K, which respectively enhance vision, bone strength, fertility and blood coagulation, for instance. Children need two particular kinds of fat for their growth processes. Fat also aids the regulation of oxygen absorption; it accumulates in the body to provide a source of energy for times when sugars and starch are unavailable and moreover fat helps the body to metabolize lean meat.

Reader goes on to point out, citing the observations of Vilhjalmur Stefansson who for many years lived with the Eskimos, that if one relies almost exclusively on lean meat, that is, a diet with a minimum amount of fat (e.g., rabbits), the result is likely to be sickness and eventually starvation.

Eaton, Shostak, and Konner (1988:104) have also taken note of the importance of fat to normal human functioning: "Like cholesterol fats are essential to the normal functioning of the human body. Polyunsaturated fatty acids, for example, are the building blocks of prostaglandins—hormones that regulate a wide variety of body functions. Also, they are essential structural components of nearly all the membranes of the cell, both internal and external. And of course fats also provide and store energy." They also point out that aside from such foods as avocados and olives, fruits and vegetables provide us with only a small amount of fat. One has to consume a great deal of fruits and vegetables just to equal the fat in a few mouthfuls of high-grade beef (Eaton, Shostak, and Konner 1988:109-10).

Hayden's (1981:421) observation is especially relevant here: "I was astounded the first time I saw Western Desert Aborigines . . . kill a kangaroo, examine the intestines for fat, and abandon the carcass where it lay because it was too lean. Upon making a kill, Aborigine hunters always open the intestinal cavity and check the fat content. Virtually every ethnographer with whom I have discussed this observation confirms it, yet such details are seldom reported in the literature."

Finally, an informative general discussion of the importance of animal products in the human diet can be found in Chapter 2 ("Meat Hunger") of Marvin Harris's *Good to Eat* (1985:19-46).

9. In his thorough and informative survey *Health and the Rise of Civilization* (1989), Mark Cohen makes several observations concerning the health and well-being of hunters and gatherers. Although he paints a fairly positive picture of the well-being of hunter-gatherers, especially compared to the agricultural communities that followed (twentieth-century industrial societies are, however, another matter), he has some strong reservations about hunter-gatherer affluence (Cohen 1989:130):

The smallest human societies that we can identify, either among living groups or among populations of prehistory, do not appear to live up to more romantic images

we sometimes paint of them in popular literature. Nor do they live up to the image of primitive "affluence" that has become popular among anthropologists in the last twenty years. Hunger has clearly been at least a seasonal problem for many historic and contemporary groups and starvation is not unknown. Contemporary hunter-gatherers appear to be chronically lean as well as at least occasionally hungry. Their low caloric intake results in part from the sparse distribution of most wild foods, both plant and animal, and in part from the low caloric content of their foods in proportion to bulk compared to more extensively processed domestic foods.

On the matter of Paleolithic affluence, Eaton, Shostak, and Konner (1988:158) offer the following observation:

In many respects Late Paleolithic life was an extremely advantageous adaptation; it was in this context that human-kind flourished ultimately populating the globe. As an economic base it has seemed secure enough so that some have described this life-style as "the original affluent society." Although this captures a degree of truth as far as social and economic equality goes, it falls short in describing what it is like to be completely dependent on the vagaries of the natural world. Periodic food shortages, for example, have been observed among all recent hunters and gatherers. Depending on local geographic and ecological conditions, these may occur every ten to fifteen years or more frequently, as often as several times a year.

10. Diamond (1992), for example, a biologist by trade, has written an essay entitled "The Worst Mistake in the History of the Human Race" referring to the fact that humans gave up a hunting-gathering way of life, which he calls the most successful and longest style in human history. Lee and DeVore (1968:3) in their introduction to the *Man the Hunter* volume say essentially the same thing. For Harris's view, see 1977:x; and for Fox's view, see 1989.

### REFERENCES CITED

- Altman, J.C., 1984, Hunter-Gatherer Subsistence Production in Arnhem Land: The Original Affluence Hypothesis Re-Examined. *Mankind* 14:179-90.
- Altman, J.C., 1992, Comments on Nurit Bird-David's "Beyond 'The Original Affluent Society.'" *Current Anthropology* 33:35-36.
- Altman, J.C., and J. Nieuwenhuysen, 1979, *The Economic Status of Australian Aborigines*. Cambridge, Eng.: Cambridge University Press.
- Applebaum, H., 1984, Theoretical Introduction. Pp. 1-38 in *Work in Non-Market and Transitional Societies* (ed. by H. Applebaum). Albany: State University of New York Press.
- Applebaum, H., 1992, *The Concept of Work: Ancient, Medieval and Modern*. Albany: State University of New York Press.
- Barnard, A., and J. Woodburn, 1988, Property, Power and Ideology in Hunter-Gathering Societies: An Introduction. Pp. 4-31 in *Hunters and Gatherers, vol. 2: Property, Power and Ideology* (ed. by T. Ingold, D. Riches, and J. Woodburn). Oxford: Berg Publishers.
- Bender, B., and B. Morris, 1988, Twenty Years of History, Evolution and Social Change in Gatherer-Hunter Studies. Pp. 4-14 in *Hunters and Gatherers, vol. 1: History, Evolution and Social Change* (ed. by T. Ingold, D. Riches, and J. Woodburn). Oxford: Berg Publishers.

Bettinger, R.L., 1991, *Hunter-Gatherers: Archeological and Evolutionary Theory*. New York: Plenum Press.

Bird-David, N., 1992, Beyond "The Original Affluent Society." *Current Anthropology* 33:25-47.

Caldwell, J., P. Caldwell, and B. Caldwell, 1987, *Anthropology and Demography*. *Current Anthropology* 28:25-43.

Cashdan, E., 1989, *Hunters and Gatherers: Economic Behavior in Bands*. Pp. 21-48 in *Economic Anthropology* (ed. by S. Plattner). Palo Alto, Calif.: Stanford University Press.

Cohen, M.N., 1989, *Health and the Rise of Civilization*. New Haven, Conn.: Yale University Press.

Colson, E., 1974, *Tradition and Contract*. Chicago: Aldine Publishing.

Diamond, J., 1992, *The Worst Mistake in the History of the Human Race*. Pp. 95-98 in *Applying Anthropology: An Introductory Reader*, 2nd ed. (ed. by A. Podolefsky and P.J. Brown). Mountain View, Calif.: Mayfield Publishing.

Draper, P., 1978, *The Learning Environment for Aggression and Anti-Social Behavior among the !Kung*. Pp. 31-53 in *Learning Non-Aggression* (ed. by A. Montagu). New York: Oxford University Press.

Dunbar, R., 1996, *Grooming, Gossip, and the Evolution of Language*. Cambridge, Mass.: Harvard University Press.

Eaton, S.B., M. Shostak, and M. Konner, 1988, *The Paleolithic Prescription*. New York: Harper and Row.

Fox, R., 1989, *Consciousness Out of Context: Evolution, History, Progress and the Post-Post-Industrial Society*. Pp. 203-41 in *The Search for Society: Quest for a Biosocial Science and Morality* (by R. Fox). New Brunswick, N.J.: Rutgers University Press.

Gellner, E., 1988, *Plough, Sword and Book: The Structure of Human History*. Chicago: University of Chicago Press.

Gowdy, J.M., 1994, *Co-Evolutionary Economics: The Economy, Society and the Environment*. Boston: Kluwer Academic Publishers.

Gowdy, J.M., ed., 1997, *Limited Wants, Unlimited Means: A Reader on Hunter-Gatherer Economics and the Environment*. Corvelo, Calif.: Island Press.

Harris, M., 1977, *Cannibals and Kings: The Origins of Cultures*. New York: Random House.

Harris, M., 1985, *Good to Eat: Riddles of Food and Culture*. New York: Simon and Schuster.

Hawkes, K., 1993, *Why Hunter-Gatherers Work: An Ancient Version of the Problem of Public Goods*. *Current Anthropology* 34:341-62.

Hawkes, K., and J. O'Connell, 1981, *Affluent Hunters? Some Comments in the Light of the Alyawarra Case*. *American Anthropologist* 83:622-26.

Hayden, B., 1981, *Subsistence and Ecological Adaptations of Modern Hunter/Gatherers*. Pp.344-421 in *Omnivorous Primates: Gathering and Hunting in Human Evolution* (ed. by R.S.O. Harding and G. Teleki). New York: Columbia University Press.

Herskovits, M.J., 1952, *Economic Anthropology: A Study in Comparative Economics*. New York: Alfred A. Knopf.

Hitchcock, R.J., and J.I. Ebert, 1984, *Production among Kalahari Hunter-Gatherers*. Pp. 328-48 in *From Hunters to Farmers: The Causes and Consequences of Food Production in Africa* (ed. by D. Clark and S. A. Brandt). Berkeley: University of California Press.

Howell, N., 1979, *Demography of the Dobe !Kung*. New York: Academic Press.

Howell, N., 1986, *Feedback and Buffers in Relation to Scarcity and Abundance: Studies of Hunter-Gatherer Populations*. Pp. 156-87 in *The State of Population Theory* (ed.

by D. Coleman and R. Schofield). New York: Basil Blackwell.

Isaac, B.L., 1990, Economy, Ecology and Analogy: The !Kung San and the Generalized Foraging Model. *Research in Economic Anthropology, Supplement 5*:323-35. Greenwich, Conn.: JAI Press.

Jones, R., 1980, Hunters in the Australian Coastal Savanna. Pp. 107-45 in *Human Ecology in Savanna Environments* (ed. by D.R. Harris). New York: Academic Press.

Kelly, R.L., 1995, *The Foraging Spectrum*. Washington, D.C.: Smithsonian Institution Press.

Kent, S., 1996, Cultural Diversity among African Foragers: Causes and Implications. Pp. 1-18 in *Cultural Diversity among Twentieth Century Foragers: An African Perspective* (ed. by S. Kent). Cambridge, Eng.: Cambridge University Press.

Kohen, J.L., 1995, *Aboriginal Environmental Impacts*. Sydney, Australia: University of South Wales Press.

Konner, M., 1983, *The Tangled Wing: Biological Constraints on the Human Spirit*. New York: Harper Colophon Edition.

Lee, R., 1968, What Hunters Do for a Living, or, How to Make Out on Scarce Resources. Pp. 30-48 in *Man the Hunter* (ed. by R. Lee and I. DeVore). Chicago: Aldine Publishing.

Lee, R., 1969, !Kung Bushmen Subsistence: An Input-Output Analysis. Pp. 47-79 in *Environment and Cultural Behavior* (ed. by A.P. Vayda). Garden City, N.Y.: Natural History Press.

Lee, R., 1979, *The !Kung San: Men, Women, and Work in a Foraging Society*. New York: Cambridge University Press.

Lee, R., 1982, Politics, Sexual and Non-Sexual, in Egalitarian Society. Pp. 37-59 in *Politics and History in Band Society* (ed. by E. Leacock and R. Lee). Cambridge, Eng.: Cambridge University Press.

Lee, R., 1984, *The Dobe !Kung*. New York: Holt, Rinehart and Winston.

Lee, R., 1988, Reflections on Primitive Communism. Pp. 252-68 in *Hunters and Gatherers, vol. 1: History, Evolution and Social Change* (ed. by T. Ingold, D. Riches, and J. Woodburn). Oxford: Berg Publishers.

Lee, R., 1992, Art, Science, or Politics? The Crisis in Hunter-Gatherer Studies. *American Anthropologist* 94:31-54.

Lee, R., and I. DeVore, eds., 1968, *Man the Hunter*. Chicago: Aldine Publishing.

Linder, S.B., 1970, *The Harried Leisure Class*. New York: Columbia University Press.

Marshall, L., 1968, Comment. P. 94 in *Man the Hunter* (ed. by R. Lee and I. DeVore). Chicago: Aldine Publishing.

Marx, K., and F. Engels, 1966 [1845-1846], *The German Ideology*. Pp. 19-539 in *Marx and Engels, Collected Works, vol. 5*. London: Lawrence and Wishart.

McArthur, M., 1960, Food Consumption and Dietary Levels of Groups of Aborigines Living on Naturally Occurring Foods. Pp. 1-143 in *Records of the American-Australian Scientific Expedition to Arnhem Land, vol. 2: Anthropology and Nutrition* (ed. by C.P. Mountford). Melbourne, Australia: Melbourne University Press.

McCarthy, F., and M. McArthur, 1960, The Food Quest and the Time Factor in Aboriginal Economic Life. Pp. 145-94 in *Records of the American-Australian Scientific Expedition in Arnhem Land, vol. 2: Anthropology and Nutrition* (ed. by C.P. Mountford). Melbourne, Australia: Melbourne University Press.

Murphy, R., 1970, Basin Ethnography and Ecological Theory. Pp. 152-71 in *Languages and Cultures of Western North America: Essays in Honor of Sven Liljebled* (ed. by E.H. Swanson, Jr.). Pocatello: Idaho State University Press.

- Parker, S., 1971, *The Future of Work and Leisure*. London: MacGibbon and Kee.
- Peterson, N., 1993, Demand Sharing: Reciprocity and the Pressure for Generosity among Foragers. *American Anthropologist* 95:860-74.
- Reader, J., 1988, *Man on Earth*. Austin: University of Texas Press.
- Reader, J., 1998, *Africa: A Biography of the Continent*. New York: Alfred A. Knopf.
- Sahlins, M., 1968a, Notes on the Original Affluent Society. Pp. 85-89 in *Man the Hunter* (ed. by R. Lee and I. DeVore). Chicago: Aldine Publishing.
- Sahlins, M., 1968b, La Première Société d'Abondance. *Les Temps Modernes* 268:641-80.
- Sahlins, M., 1972, *Stone Age Economics*. Chicago: Aldine Publishing.
- Service, E.R., 1963, *Profiles in Ethnology*. New York: Harper and Row.
- Service, E.R., 1966, *The Hunters*. Englewood Cliffs, N.J.: Prentice Hall.
- Shnirelman, V.A., 1994, *Cerchez le Chien: Perspectives on the Economy of the Traditional Fishing Oriented People of Kamchatka*. Pp. 168-88 in *Key Issues in Hunter-Gatherer Research* (ed. by E.S. Burch, Jr., and L.J. Ellanna). Oxford: Berg Publishers.
- Silberbauer, G.B., 1981, *Hunter and Habitat in the Central Kalahari Desert*. New York: Cambridge University Press.
- Solway, J., and R. Lee, 1990, Foragers, Genuine or Spurious: Situating the Kalahari San in History. *Current Anthropology* 31:109-46.
- Speth, J.D., 1990, Seasonality, Resource Stress, and Food Sharing in So-Called "Egalitarian" Foraging Societies. *Journal of Anthropological Archaeology* 9:148-88.
- Speth, J., and K. Spielmann, 1983, Energy Source, Protein Metabolism, and Hunter-Gatherer Subsistence Strategies. *Journal of Anthropological Archaeology* 2:1-31.
- Thomas, E.M., 1959, *The Harmless People*. New York: Knopf.
- Truswell, A.S., and J.D.L. Hansen, 1976, Medical Research among the !Kung. Pp. 166-94 in *Kalahari Hunters and Gatherers* (ed. by R. Lee and I. DeVore). Cambridge, Mass.: Harvard University Press.
- Wadel, C., 1979, The Hidden Work of Everyday Life. Pp. 365-84 in *Social Anthropology of Work* (ed. by S. Wallman). A.S.A. Monograph 19. New York: Academic Press.
- Wallman, S., 1979, Introduction. Pp. 1-24 in *Social Anthropology of Work* (ed. by S. Wallman). A.S.A. Monograph 19. New York: Academic Press.
- Wiessner, P., 1982, Risk, Reciprocity and Social Influences on !Kung San Economics. Pp. 61-84 in *Politics and History in Band Societies* (ed. by E. Leacock and R. Lee). Cambridge, Eng.: Cambridge University Press.
- Wilmsen, E.N., 1982, Studies in Diet, Nutrition and Fertility among a Group of Kalahari Bushmen in Botswana. *Social Science Information* 21:95-125.
- Wilmsen, E.N., 1989, *Land Filled with Flies: A Political Economy of the Kalahari*. Chicago: University of Chicago Press.
- Wilmsen, E.N., and J. Denbow, 1990, Paradigmatic History of San-Speaking Peoples and Current Attempts at Revision. *Current Anthropology* 31:489-524.
- Winterhalder, B., 1993, Work, Resources, and Population in Foraging Societies. *Man* 28:321-40.
- Woodburn, J., 1968, An Introduction to Hadza Ecology. Pp. 49-55 in *Man the Hunter* (ed. by R. Lee and I. DeVore). Chicago: Aldine Publishing.
- Yesner, D.R., 1994, Seasonality and Resource "Stress" among Hunter-Gatherers: Archaeological Signatures. Pp. 151-67 in *Key Issues in Hunter-Gatherer Research* (ed. by E.S. Burch, Jr., and L.J. Ellanna). Oxford: Berg Publishers.