# Hunter-gatherers and Their Neighbors from Prehistory to the Present\*1

It is widely assumed that modern hunter-gatherer societies lived until very recently in isolation from food-producing societies and states and practiced neither cultivation, pastoralism, nor trade. This paper brings together data suggesting a very different model of middle to late Holocene hunter-gatherer economy. It is argued that such foraging groups were heavily dependent upon both trade with food-producing populations and part-time cultivation or pastoralism. Recent publications on a number of hunter-gather societies establish that the symbiosis and desultory food production observed among them today are neither recent nor anomalous but represent an economy practiced by most hunter-gatherers for many hundreds, if not thousands, of years. Psychological and political reasons for Westerners' attachment to the myth of the "Savage Other" are discussed.

Westerners today commonly think of tribal peoples in general, and hunter-gatherers in particular, as primitive and isolated—incomplete, not yet fully evolved, and outside the mainstream. This view has been supported throughout this century by the writings of explorers, adventurers, missionaries, government agents, journalists, and, until very recently, anthropologists. Tribal peoples, and especially nomadic foragers, are often described as "fossilized" remnants of isolated late Paleolithic hunter-gatherers who have just emerged, through recent contact, into the 20<sup>th</sup> century. "Modern foragers tend still to be viewed in most of the current anthropological literature as sequestered beings whose very existence is due to the fact that they live beyond the reach of the trade routes of foreign powers. They are depicted as quintessential isolates, whose world was merely

<sup>\*</sup> Originally published as: Headland, Thomas N., and Lawrence A. Reid. 1989. Hunter-gatherers and their neighbors from prehistory to the present. *Current Anthropology* 30(1):43-51. See the original, published version of this paper for Comments and Reply, *Cur*rent Anthropology 30(1):51-61.

An earlier version of this paper was read by Headland at the Fifth Annual Visiting Scholars' Conference, Southern Illinois University, April 15–16 1988. We thank the following for written critical comments on earlier drafts: Alan Bernard, Matthias Guenther, Janet Headland, Susan Hochstetler, Karl Hutterer, Richard Lieban, Carol Mikinney, and William Scott. We feel a special debt of gratitude to Bion Griffin and Agnes Estioko-Griffin for their substantial input over many years and to Leslie Sponsel for detailed comments on several earlier versions. Richard Crawford, Ronald Edgerton, Pedro Gil Munoz, Rudolf Rahmann, and John Slonaker assisted us in our archival research. We had help in translating certain documents from Hella Goschnick, Marianne Finkbeiner, and Hartmut Wiens (from German) and Charles Peck, William Scott, and Martha Shirai (from Spanish).

glimpsed in passing by explorers, and who remained remote until anthropologists penetrated their lives" (Schrire 1984:2).

The literature is full of recent "discoveries" of "isolated" tribal groups. Stereotyped descriptions of such peoples are found in popular writings such as Burrough's Land That Time Forgot (1963 [1918]) and Gibbons's The People That Time Forgot (1981) and in anthropological works such as Primitive Worlds: People Lost in Time (Breeden 1973). Redfield's 1947 classic "The Folk Society," which idealizes tribal systems as "isolated," helps through its reprintings (most recently in Bodley 1988) to keep the myth alive in anthropology classrooms. Other anthropological examples are Huxley and Capa's (1964) Farewell to Eden, describing their visit to some Indians in the Amazon as "a trip that was to take us back thirty-five hundred years in time" (p. 13), and the 1984 educational film on the Mbuti pygmies titled Children of the Forest (see review by Morelli, Winn, and Tronick 1986). Schebesta's 1947 work on the Philippine Negritos is called *Men*schen ohne Geschichte (People without History), and the author of a 1981 book on the "Auca" of the Ecuadorian rain forest calls them an "isolated" people whose "way of life has changed little since their ancestors migrated from Asia across the Bering Strait" (Broenniman 1981:17).

Perhaps the best-known case, made famous by some 20 ethnographic films produced in the 1970s by Napoleon Chagnon and Timothy Asch, is that of the Yanomamo, a horticultural people of the Amazon. In the third edition of what is probably the most widely read anthropology book in the United States today, Chagnon (1983:1) continues to portray these "fierce people" as living in pristine isolation from Western influence at the time of his initial visit to them in 1964—and this despite the fact that American missionaries have been working with the Yanomamo in his area since 1950 (pp. 3, 9). He even calls them "our contemporary ancestors" in the final sentence of his book (p. 214). (For a contrastive view of Yanomamo prehistory, see Colchester 1984; see also Ramos 1987.)

These works and many others perpetuate a view of tribal peoples as having lived until relatively recent times in isolation from their neighbors. There is, however, conclusive evidence that this "isolate model" is incorrect—that most, if not all, tribal peoples have typically been in more or less continuous interaction

with neighboring groups, often including state societies, for thousands of years. We will call this view the "interdependent model" and support it with recent ethnographic descriptions of several hunter-gatherer societies traditionally considered "isolated" and "primitive".

We are not the first to question the myth of the primitive isolate. Spielmann (1986:305), for example, criticizes anthropologists for their "unrealistic and misleading" tendency to analyze egalitarian societies as closed systems, and Wolf (1982:18) points to anthropology's "mythology of the pristine primitive." It is part of what Strathern (1987) refers to as the "persuasive fictions of anthropology." Our argument here is in fact influenced by recent writings of several anthropologists who began to challenge it at about the same time as we did (e.g., chapters in the volumes edited by Leacock and Lee 1982, Francis, Kense, and Duke 1981, and especially Schrire 1984). More generally, our model was inspired by the writings of Roger Keesing, Frederick Dunn, and Karl Hutterer, who describe the prehistoric world as one in which tribal peoples have been in intense interaction with one another for a long time. Keesing calls the isolate model "the mosaic stereotype" and critiques it in detail (1981:111–22). He proposes instead a "systematic view" of the prehistoric tribal world in which simple tribal societies, complex societies, and even states coexisted and evolved together. He believes that most prehistoric foraging groups were parts of complex regional systems tied together by trade, exchange, and politics—that "for several thousand years the 'environments' of most hunters and gatherers have included surrounding agriculturalists, pastoralists and in many cases kingdoms and empires" (p. 122). What we are calling the isolate model is a view of "a world that never existed" (p. 114). It continues, however, to be taught to anthropology students and to the public.

#### 1. Case Studies

## 1.1. The Philippine Negritos

The Philippine Negritos, some 25 ethnolinguistically different groups numbering in total about 15,000 are hunter-gatherers in various stages of culture change. Most practice minor desultory cultivation and intense trade of forest

products with non-Negrito agricultural populations. Two models of their prehistory may be proposed. The older and more generally accepted "isolationist stance" (to borrow a term from Gordon 1984:220) is that the first human inhabitants of the Philippines were some type of Pleistocene *Homo sapiens* that evolved some 20,000 years ago into the Negrito found in the archipelago today (Solheim 1981:25; Rambo 1984:240-41; Omoto 1985:129-30; Bellwood 1985: 74,113); that their original languages were not Austronesian; that were "pure" hunter-gatherers; and that they had at most only infrequent contact with the Austronesian-speakers who began migrating into the Philippines around 3000 B.C.<sup>2</sup>

This isolate model is reflected, for example, in the report of a psychological anthropologist who studied the Ayta in western Luzon in the late 1930s that these Negritos, living "an isolated life in the equatorial rain forests, where millennia slip away with so little change . . . are probably living the way our own ancestors did some hundred thousand years ago" (Stewart 1954:23) and that "nowhere were the Negritos known to have agriculture" (p. 24). The anthropologist Eder (1978) describes the recent past of the Batak Negritos of Palawan Island in a similar framework, assuming without evidence that they "once lived in self-contained isolation" (p. 55), that "in the closing decades of the nineteenth century" they were still "isolated . . . from all but sporadic contact" with outsiders (1978:ix; see also 12), that they "began cultivating rice only during the latter part of the 19<sup>th</sup> century" (1978:58), and that trade of commercial forest products "to obtain desired consumer goods . . . may also have begun at this time" (p. 58). Warren (1984:3) also assumes that the swidden cultivation he observed among the Batak in 1950 was "obviously newly acquired from their neighbors." Fox (1953:175) noted that the Ayta Negritos "are today all shifting cultivators" but believed that they "were once able to live without recourse to cultivation" (p. 245), judging that their "association . . . with cultivated plants must be reckoned

2

The latest archaeological and linguistic evidence favors the hypothesis that the original homeland of Proto-Austronesian was Formosa and that a group speaking a daughter language of Proto-Austronesian arrived in the northern Philippines from Formosa around 3000 B.C. (Pawley and Green 1973:52–54; Blust 1978:220; Harvey 1981; Scott 1984:38–39, 52; Bellwood 1985:107–21, 130, 232). For recent opposing views on the location of the homeland, see Solheim (1984–85) and Meacham (1984–85).

in a few hundred years—excepting perhaps the taro and yams" (p. 27, emphasis added). And Reynolds (1983:166) has recently stated, "For thousand of years, the Negritos in the tropical forests of Southeast Asia had managed to maintain a traditional life by withdrawing from prolonged contact with non-Negritos." Rai's (1982) ethnography presents Agta Negritos in northeastern Luzon as "relatively isolated" in pre-Hispanic and early Spanish times, with only "marginal" and "peripheral" trade with outsiders until the last two or three centuries (pp. 139–40, 145–46, 152, 154) and formal trade "at most only as old as the beginning of this century" (p. 156). He surmises that "the Agta may have been practicing some degree of horticulture for the past two centuries" (p. 166).

Negritos, then, according to the isolate model, were pure hunter-gatherers with a near–Pleistocene economy throughout most of the Spanish era and perhaps even into the early part of this century.

We propose a more complex *interdependent* model that better represents the history of the Negritos in the late prehistoric period. Symbiotic interaction<sup>3</sup> with outsiders probably began soon after the first Austronesian-speaking people began migrating into Negrito areas—for some populations as early as 3000 B.C. For the proto-Agta groups in northeastern Luzon it may have been somewhat later but was likely well established by 1400 B.C., when humans who were probably not Negritos were cultivating rice in that area (Snow et al. 1986).

The Agta are the least acculturated of all Philippine Negritos (see Griffin and Headland 1985 for bibliography and Headland 1986, Reid 1987, 1988a and b, Headland and Reid n.d.). Called Dumagat by outsiders, the Agta ethnolinguistic groups of eastern Luzon typically reside in small nomadic camps in the rain forests of the Sierra Madre. The most salient activity of Agta men is hunting wild pig, deer, and monkey with bow and arrow. Among the Casiguran Agta, in a typical year about a quarter of the households cultivate tiny swiddens, averaging only one-sixth of a hectare in size. Rice is the main staple, wild starch foods being part of only 2% of meals (Headland 1987). Almost all of this rice is acquired by

-

At least seven types of symbiosis are recognized (see e.g., Sutton and Harmon 1973:184): mutualism, cooperation, commensalism, amensalism, competition, predation, and parasitism.

trading wild meat, minor forest products, or labor with neighboring agriculturalists; less than 5% comes from their own small fields.

Proponents of the isolate model would claim that these Agta bands were until recently almost completely separated from non—Agta farming populations, since even during Spanish times very few non-Negrito people lived in that inhospitable area, with its rugged mountains, stormy weather, and rough seas. They would argue that the Agta's involvement in agriculture, desultory as it is, is a recent "contamination" resulting from contact with farmers and the pressure of shrinking hunting territory. Negritos have been widely described as "people without cultivation" even into this century (e.g., Borrows 1908:45–46). Estioko-Griffin and Griffin (1981:55), for example, present the agricultural practices of the Agta they studied in the 1970s as "new," with the more acculturated Agta only "in their second or third generation as part-time marginal [swidden] farmers." They state that Agta cultivation practices are still little known and that in the traditional Agta system there was a "lack of use of cultigens" (p. 61). The ethnohistorical, archaeological, linguistic, and botanical evidence fails to support these views.

#### 1.1.1. Ethnohistorical evidence

Early reports substantiate beyond question that the Agta were making swiddens and that symbiotic relationships with nearby farming communities were well established throughout the Spanish period. When Dean C. Worcester, U.S. Secretary of the Interior of the Philippines, made a quick steamer trip down the east coast of Luzon in 1909, he depicted the Agta on the remote northeast coast as primitive and untouched: "In this region, and in this region alone, the [Agta] Negrito . . . has had little or no contact with white men or with Christian [i.e., non-Negrito] Filipinos" [Worcester 1912:833]. It is clear, however, that he failed to grasp the significance of the many trade items he found in their abandoned lean-tos: coconut shells, clay pots, metal fishhooks, metal arrowheads, bolos, and commercial cloth (p. 841). Furthermore, one of his photographs "taken [in these Agta camps] on the northeast coast of Luzon" (p. 837) shows a wooden mortar

for pounding corn or rice, a small clay pot, and a tin can.<sup>4</sup> In 1909 the Agta bands in this area were probably the most remote and "primitive" hunter-gatherers in the Philippines, but the trade goods just mentioned show that they were certainly not independent of other Filipinos or of agriculture.

A number of 18th-century reports make clear that the Agta were involved in intense symbiosis, including patron-client relationships, with Christianized farmers and trading forest products for rice, tobacco, metal tools, beads, and pots (AFIO MS 89/60 1745; Santa Rosa 1746, cited in Perez 1928:87, 94, 106 and 1927:294). It is clear from many other records that this system was wide-spread by the 19<sup>th</sup> century (see e.g., Semper 1861:252, 255–56; 1869:51–52, de Medio 1887, quoted in Report 1901:391; Platero n.d., quoted in Report 1901:391; Segovia 1969 [1902]:103; Eighth annual report 1903:334; Garvan, March 12, 1913, in Worcester 1913:105-7; Lukban 1914:2, 4, 6–9; W. Turnbull 1929:177, 237–38; 1930:782, 783; Vanoverbergh 1937–38:149, 922, 928; Lynch 1948; Amazona 1951:24; Tangco 1951:85; and Schebesta 1954:60, 64). Likewise, there is solid evidence that the Agta were making swiddens of their own by the 1740s (AFIO MS 89/60; Santa Rosa 1746, cited in Perez 1928:87, 88, 92–93, 96), in the 19<sup>th</sup> century (Semper 1861:252, 255-56; de Medio 1887 and Platero n.d., cited in Report 1901:390–91), and in the early years of this century (Worcester 1912:841; Lukban 1914:2; Whitney 1914; Turnbull 1930:32, 110, 782, 794; Vanoverbergh 1937–38:922, 927; for English translations see Headland 1986).<sup>5</sup>

# 1.1.2. Archaeological evidence

The archaeological evidence establishes that extensive international trade in forest products has been going on throughout much of insular Southeast Asia for

This photograph, taken on August 30, 1909, is in the Worcester Photographic Archives of the Museum of Anthropology, University of Michigan, File No. 1-Z-I. It shows another trade item, a small clay pot to the right of the mortar, that was cut from the reproduction published by Worcester (1912: 837).

Eder (1987:23, 45-46, 48-49) cites a number of archival references showing that the Batak Negritos also engaged in interethnic trade and some agriculture during Spanish times. Endicott (1983:224–26; 1984:30) cites 19<sup>th</sup>-century references indicating that trade, labor barter, and occasional horticulture "have long been regular features of the economies of the nomadic Semang (Negritos)" in Malaysia (p. 30). Brosius (1983:138; see also 139–40) indicates that the Ayta Negritos had been making swiddens "for a very logn time, almost certainly prior to the arrival of the Spanish."

at least the last thousand years and that nomadic forest peoples, including Negritos, have been the collectors and primary traders (Hall 1985:1–2, 21, 23–24, 226). Dunn (1975) argues that such trade in Malaya, mostly to China, began in the 5<sup>th</sup> century A.D. Rambo (1981:140) agrees, saying that Malaysian Negritos may have evolved into specialist forest collectors for maritime traders as early as 5,000 years ago. Hoffman (1984, 1986) argues that Chinese sailors were trading for forest products in Borneo before the 5<sup>th</sup> century. Their arguments dispel any suggestion that Paleolithic people were living isolated in the jungles of these islands on the eve of the Europeans' arrival.

Hutterer's (1974, 1976, 1977, 1983) description of extensive prehistoric trade in the Philippines supports our interdependent model for these islands. He and others (Fox 1967; Landa Jocano 1975:145-53; Scott 1981; 1983; 1984:63-84) review the evidence for trade between the Philippines and China by at least the time of the Sung dynasty (A.D. 969–1279), with Negritos having intense symbiotic relationships with outsiders at that time (Hutterer 1974:296). Mindoro, in the central Philippines, was part of the international Asian trade routes by A.D. 972 (Scott 1983:1) and "was itself the central port for the exchange of local goods on a Borneo-Fukien route" by A.D. 1270 (p. 15). According to Scott, "the total impression is one of continual movements of rice, camotes, bananas, coconuts, wine, fish, game, salt, and cloth ... to say nothing of iron, gold, jewelry, porcelain, and slaves" (p. 24).

Looking specifically at the Agta areas of northeastern Luzon, archaeological studies indicate that there were non-Negrito populations here long before the Spanish era. Peterson (1974a, b) excavated what was almost surely a non-Negrito habitation site in the center of today's Agta area that he dates at 1200 B.C. or earlier and considers "incipient agricultural." It has yielded pottery, mortars, and evidence of the reaping of grain (1974b:131, 161, 162, 225, 227). Another archaeologist presents evidence that humans were living in another part of this area by the end of the Pleistocene and by 5000 B.C. were using "grass reaping blades" (Thiel 1980). These blades should probably be associated with a Negrito population; the brass needle found at the same site in an archaeological level dated 2000 B.C. and a burial cave dated 1500 B.C. are probably not Negrito.

The evidence is solid that people were cultivating rice in northeastern Luzon by 1400 B.C. (Snow et al. 1986). This site is also on the western edge of today's Agta area and just a few kilometers from Thiel's. It is probable that the ancestors of today's Agta were interacting with these farmers by the middle of the 2d millennium B.C. Finally, recent archaeological research establishes that there were ceramic manufacturing cultures in northeastern Luzon as early as around 3000 B.C. (Snow and Shutler 1985:1). The archaeological record, then, suggests that rice-farming populations and Negrito hunters were living within a day's walk of each other in northeastern Luzon for at least the last 3,000 years.

## 1.1.3. Linguistic evidence

Our interdependent model proposes that these Agta hunters carried on intense interethnic relationships with Austronesian-speaking farmers at the earliest period. The linguistic support for this view has been outlined elsewhere (Headland 1986:17–19, 174–78; Reid 1987, 1988*a*, *b*; Headland and Reid n.d.) and will be only briefly reviewed here.

All Philippine Negrito groups speak languages that, like those of their non-Negrito neighbors, belong to the Austronesian language family. These Negrito languages are, for the most part, unintelligible to their agricultural neighbors; they are not simply dialects of those neighbors' languages as has frequently been suggested. They are neither aberrant nor distinctive as a group among Philippine languages. Now, since Austronesian-speaking people did not begin migrating into the Philippines until around 3000 B.C., and since the ancestors of today's Negritos had lived in those islands for thousands of years before that time and therefore presumably spoke languages that were not Austronesian, the question is when and under what circumstances they gave up their original languages and began speaking Austronesian ones.

At some time in the prehistoric past, the ancestors of today's Negritos must have established some type of contact with the Austronesian-speaking immigrants in the course of which they lost their own languages and adopted those of the newcomers. In order for a language switch of this magnitude to have occurred, more was probably involved than trade. There must have been periods of intimate interaction long enough for bilingualism to develop and then for the

original Negrito languages to be replaced. The linguistic data suggest that all this happened a very long time ago. While it is theoretically possible for early Negritos to have abandoned their original languages in the space of three or four generations, the degree of language differentiation that has subsequently taken place could not have occurred in such a short period of time. This divergence implies a period of independent development of well over a thousand years in the case of the Negrito languages that are today most similar to their non-Negrito sister languages and of many thousands of years in the case of those that are least similar.

Our hypothesis, then, is that well over 1,000 years ago, and quite possibly 3,000 years ago, the ancestors of today's Negritos were interacting with non-Negrito speakers of an Austronesian language. This interaction was so intense that the Negritos adopted the language as their own. Later these ancient Negritos separated themselves from their non-Negrito neighbors but retained the language they had borrowed from them. Over time, through the normal processes of language change, separate dialects and finally separate daughter languages developed. There is no other plausible explanation for the linguistic facts. For example, some Negrito languages have retained archaic features, such as case-marking particles and verbal affixes, that are not found today in most other Philippine languages but existed in some early daughter languages of Proto-Austronesian. These archaic forms indicate that these Negrito languages were first learned when such forms were still present in the protolanguage spoken by the non-Negrito people with whom they were then in contact. (For details see Reid 1987, Headland and Reid n.d.)

# 1.1.4. Botanical evidence

The reason that prehistoric Negritos attached themselves so readily to non-Negrito farming populations was, we suggest, a critical nutritional need. As one of us has argued elsewhere (Headland 1987), tropical rain forests are not the food-rich biomes they are sometimes assumed to be. While faunal resources are usually sufficient there, these may not provide sufficient lipids to supply the nutritional needs of humans in the absence of wild plant starches. The late Pleistocene human populations of the Philippines seem to have been living in

areas that were then wooded savannas, not rain forest (Thiel 1980; see Scott 1984:14, 142 for a review of the evidence). The prehistoric Agta probably did not move into the rain forest before they had at least seasonal access to cultivated starch foods.

We propose, then, that the symbiotic relationship we find today between tropical forest hunter-gatherers and farmers evolved long ago as an adaptive strategy for exploiting the tropical forest. This aspect of our model accords well with Rambo's (1988) "adaptive radiation model" for the ethnogenesis of Southeast Asian Negrito culture: that Negritos evolved culturally into what they are today as they moved into the forest to collect wild products to trade with agriculturalists and overseas traders for tools and starch food.

The accumulation of evidence, then, leads us to favor the interdependent model for the history of the Philippine Negritos. Some bands possibly did live seasonally far from and independent of non-Negrito farming populations, but even these groups moved at times to locations in which they could trade with farmers. Most Negritos, however, interacted intensely with their Austronesian-speaking neighbors to the extent that they not only learned the languages of those neighbors but actually adopted them as their own. The interdependence of Negritos and farming populations observable today has existed much longer than most scholars have thought. There is no question that the ancestors of the present-day Agta were at one time Paleolithic hunter-gatherers. What we are arguing is that this Stone Age life-style ended long ago, probably by the middle Holocene, and that prehistoric Negritos probably moved into the Neolithic at more or less the same time as their neighbors

To advocate the isolate model would require hypothesizing either that the Negritos were not the original inhabitants of the Philippines but rather immigrated there concurrently with the various groups of Austronesian immigrants some 5,000 years ago or that the homeland of Proto-Austronesian was the Philippines. The latter hypothesis would imply that there had always been both Negrito and non-Negrito peoples in the islands, both groups having evolved biologically from some earlier type of *H. sapiens* or perhaps even *H. erectus*, and that their earliest language was Proto-Austronesian. To our knowledge, no one has seriously proposed either of these hypotheses.

#### 1.2. The San

Since the appearance of the 1980 film The Gods Must Be Crazy, millions of moviegoers have been convinced that the San Bushmen are the sweetest, most innocent, and most contented people on earth—still lacking, in this age of airplanes and Coke bottles, any knowledge of property, money, or the outside world. Other powerful media continue to perpetuate this myth. A 1985 article in Newsweek (January 28, p. 66) depicts the San as untouched until, "early in this century, they encountered Civilization." In a recent human ecology text (Campbell 1983) this view is reinforced: "San lifestyle probably changed little over the course of hundreds of thousands of years" (p. 124). In accord with this is another, more recent Newsweek article reviewing the latest scientific theory on modern man's common ancestor, a woman they are calling Eve who lived about 200,000 years ago and "probably [lived] much like today's Bushmen in southern Africa" (January 11, 1988, p. 51). Johnson and Earle (1987:38-54) make no mention of the !Kung San's involvement with outsiders or with food production, describing them as pure foragers and asserting that "until the mid-1960's, the San were relatively isolated from the outside" (p. 38). Konner and Shostak (1987:11) extend this date another decade, saying that "the !Kung San... were subsisting primarily by traditional methods of hunting and gathering into the 1970s," and suggests that their life-style may be "relevant to the interpretation of some aspects of human adaptation during the paleolithic period of human evolution." (For a review of many other references describing the San in isolationist terms, see Hitchcock 1987.)

When Richard Lee first described the !Kung San in the 1960s, he too presented them in terms of the isolate model. The !Kung were in fact popularized through Lee's writings and the Marshalls' (e.g., Thomas 1959) as the classic example of "real" hunter-gatherers because of their apparent isolation and independence of food production. But it was Lee himself who later discovered that "the !Kung were no strangers to agriculture and pastoralism" (Lee 1979:409; see also Lee 1984:135). He found that the !Kung had been doing no planting at the time of his first visit (1963–64) simply because of a drought; on his return (1967–69) he found that 51% of the men planted fields (p. 409; see also 1976:18;

1981:16).<sup>7</sup> Wiessner describes, too, the way some extremely acculturated !Kung groups may return to what appears to the outsider to be a completely unacculturated state—a "common occurrence" among them (1977:xx). This observation is supported by Guenther (1986). According to Wiessner "it was impossible… to infer anything about degree of acculturation of a family from current lifestyle." Gordon (1984:219) states the problem clearly: "It is not that Lee is wrong in his representation of reality. Indeed he has shown himself to be quite flexible on the issue of contact and interaction… the problem lies in how others interpret Lee's statements."

In fact, Lee's 1984 book on the !Kung shows how closely tied the Dobe !Kung were to food producers when he first encountered them in 1963. The 466 Dobe !Kung were then living in nine camps, eight of which were within a 20-km radius. What students often fail to note is that there were then living within that same area 340 blacks and thousands of livestock. In eight of the nine camps, the !Kung were living with black herders, for whom they worked part-time as herders. Only at one camp, Dobe, were !Kung living with no non-!Kung or livestock, and even these "frequently visited" the blacks at Mahopa, only 10 km away, "to ask for some milk" (pp. 16–17, 123). In 1963 trucks were passing through the Dobe area—"about one truck every six weeks" (p. 18)—and a minority of Dobe !Kung men had worked in the mines at Johannesburg (p. 138). In spite of this, Lee sometimes overemphasizes the "relative isolation" of the !Kung (pp. vi, 129) It seems an overstatement for him to claim that the Dobe !Kung were living "almost entirely by hunting and gathering" (p. vi) when he found them or that "by 1960 the !Kung still remained hunter-gatherers without herds or fields" (p. 119, but see p. 135, where he acknowledges that most !Kung had practiced both herding and agriculture in the past). And he continues to reject the thesis of Schrire (1980) and Wilmsen (1983) that !Kung society had been fundamentally altered by interaction with herders many hundreds of years ago (p. 130).

From Silberbauer's (1981) description of the neighboring G/wi San, they seem as close to the archetype of the "isolated" hunter-gatherer society as one could hope to come. Brooks (1982), however, casts doubt on this characterization.

This is a figure much higher than for Casiguran Agta men, of whom 24% did some minor cultivation for themselves in 1983, an average year (Headland 1986:483).

She points (personal communication, 1986) to a statement by Tanaka (1976:100) that the same G/wi, whom Tanaka studied only a year after the period represented by Silberbauer's study, "do keep herds of goats and donkeys." According to Wilmsen (1983:17), "Accumulating evidence overwhelmingly renders obsolete any thought of San isolation even before European colonial intrusions into their native arenas. Early Iron Age agropastoralist economies were active in all parts of the Kalahari and its surroundings at least for the past millennium.... To ignore this is illusion."

Schrire (1980), who believes that the San have been practicing sporadic pastoralism for hundreds of years, reviews a good deal of evidence that contradicts any theories about the existence of pure hunter-gatherers anywhere in southern Africa. Denbow (1984:178) shows that "foragers and food producers have been enmeshed in networks of interaction and exchange for 1,000 years longer than was previously suspected. Over 1,200 years ago these networks reached into the heart of the Dobe !Kung area" (see also Denbow 1986, Denbow and Campbell 1986, Denbow and Wilmsen 1986.) Volkman (1986) presents the San as having long practiced a mixed economy that included crop planting and animal husbandry as well as hunting and gathering. Finally, after reading Gordon's (1984) startling descriptions of the intense interaction between African herders and Kalahari San in the last hundred years, it is hard to believe that the groups described by Silberbauer and Tanaka were as isolated and "untouched" as they seem to have thought.

These groups are indeed "hunter-gatherers," but in the sense of Leacock and Lee (1982a:4, 7–9)—not because they are isolated primitives who eat only wild foods and not because of their mode of *subsistence* (i.e., hunting fishing, gathering) but because of their unique foraging mode of *production*, characterized by sharing, communal ownership of land and resources, and egalitarian political relations (Lee 1981). Today's hunter-gatherers engage in minor food production and eat traded starch foods, "but their relationship to their environment continues to be predatory and opportunistic" (Keesing 1981:512). Above all, as Guenther (1986) points out, they manifest flexibility and adaptability, as the same bands may move sequentially over a generation or two from serfdom to food production to

mining to pure foraging to employment as mercenaries as they adjust to ecological and political changes in their environments.

As Parkington (1984:172) says, "We know now... that all hunter-gatherers in southern Africa have shared the landscape for at least 1,500 years with pastoralists or agriculturalists." Wilmsen (1983:16) cites a wealth of data to support this view for the Kalahari and says that "in the nineteenth century, the !Kung homeland was already laced by a network of trade routes supplying local products to the European market." Denbow (1984:188) points out that, though anthropologists like Lee, Silberbauer, and Tanaka have tried to find independent foraging groups to study in the Kalahari, "in fact there has probably been no such thing here, in an historical or processual sense, for almost 1500 years." The recent reviews by Hitchcock (1987) and Denbow and Wilmsen (1986) on the issue support the idea of hundreds of years of San interethnic symbiosis. We may accept Vierich's (1982:213) proposition that "if the hunting and gathering way of life has survived in the Kalahari, it is not because of isolation."

# 1.3. The Central African pygmies

Moving north to central Africa, we find Campbell (1983:32-33) describing the Mbuti pygmies as until recently "independent forest groups." For him, "there is no doubt of [the] ability [of the Mbuti] to survive without [trade]." Turnbull, of course, argued a quarter of a century ago that the Mbuti were not economically dependent upon farmers because they could and sometimes did live independently on wild foods (1963:35; 1965:34; but see Vansina 1986:436). Indeed, he maintains this position today (1983, 1986), despite the failure of anthropologists to find a single case—either ethnographic or in the archaeological record—of a pygmy group living independently of village farmers anywhere in Africa and the evidence that the African rain forests would not provide sufficient wild foods to sustain human foragers for long periods (Hart and Hart 1986, Headland 1987, Bailey and Peacock n.d.).

Cavalli-Sforza (1986) paints a somewhat less isolationist picture of pygmy life. While he suggests that pygmies (albeit imperfectly) represent Upper Paleolithic living conditions (p. xxii; see also pp. 378, 422, 424, 425), he does acknowledge that "there probably are no Pygmies living in complete isolation" (p. 369) and

"seem to be no Pygmies who have truly zero contact with African farmers" (p. 422; see also p. 362). He argues, however, that they "continue living in an economic system presumably similar to that of our earlier ancestors" (p. xxii), "have not, or only very recently, adopted farming as a major source of food" (p. 18), "live, or presumably lived until a short while ago, exclusively as hunter-gatherers" (p. 20), and "live still basically unaffected by contact with the modern world" (p. 422). Although he points out that Bantu farmers "probably made early contacts with Pygmies... 2,000 years ago or earlier" (p. 362), he minimizes the effect of those contacts on pygmy culture and feels that pygmies "retain substantial independence" even today (p. 362).

In contrast, Bahuchet and Guillaume (1982) argue for a long history of interethnic trade between the African pygmies and their agricultural neighbors. Concerning the Aka, they call into question "the widespread image of pygmies living confined and isolated in their forest cocoon," saying that "the linguistic affiliations of Aka, and the long process of differentiation, imply the existence of ancient contacts which must have been more extensive than mere occasional exchanges of material goods" (p. 191; see also Bahuchet and Thomas 1986, Bahuchet 1987)8 Morelli, Winn, and Tronick (1986:744) go a step farther to propose that "forest living for the Mbuti may be a relatively recent phenomenon" (after they were forced into the forest by warring tribes).

# 1.4. Other hunter-gatherer groups

Recent evidence suggests that—with the possible exception of the arctic and subarctic peoples—most late Holocene hunter-gatherer societies were not isolated at all but engaged to some degree in interethnic trade with neighboring societies and, in many cases, part-time food production. There is some evidence of intense trade, at least in Europe, during the late Pleistocene. The archaeologist Olga Soffer, referring to Cro-Magnon peoples, has recently been quoted as saying, "You have something like a prehistoric Hudson Bay Co.," with elaborate networks of exchange between clans (*Newsweek*, November 10, 1986, p. 71). Soffer

.

Berry et al. (1986:26) make the same argument for the Biaka pygmies. A brief review of other such linguistic references may be found in Cavalli-Sforza (1986:367–69). In this light, Turnbull's (1983:21) argument that the Mbuti recently "lost their own language and adopted those of the immigrant peoples" is unacceptable.

(1985) argues for much more complexity in social organization among Upper Pleistocene hunter-gatherers than has heretofore been recognized. For the Holocene, Wobst (1978) cites several references to widespread interregional trade among "late paleolithic hunter-gatherers" on several continents. McKinley (n.d.) has a book in press to be titled Stone Age World Systems, and Gregg (n.d.) is editing a collection of papers on interaction in small-scale societies. Both volumes will emphasize the worldwide extent of the interaction model we propose here. Several papers in a volume edited by Francis, Kense, and Duke (1981) show the complexity of long-range trade networks in Amazonia in prehistoric times. The papers collected by Mathien and McGuire (1986) describe prehistoric networks linking Mesoamerica and the Southwest. Schrire (1984:14-17) and Speth and Spielmann (1983:20) review the writings of others on the idea of more general interethnic trade in North America long before the arrival of Europeans, including Eskimo interchanges across the Bering Strait. For insular Southeast Asia in particular, Dunn (1975:120–37) reviews evidence suggesting that inland-coastal trade was established on the Malay Peninsula by 8,000 B.C. and that by 2,000 B.C. Malayan forest peoples living far inland may have been tied into overseas trade networks. And Hoffman (1984, 1986) dispels any idea that the hunter-gatherers in the interior of Borneo were independent "wild people of the woods," arguing that these "Punun groups ... arose initially from the demand for various jungle products desired by Chinese" more than 1,000 years ago (1986:102). According to Hoffman, "it is time for anthropologists to stop thinking of Borneo as though it were another New Guinea" (p.103).

We should not, then, continue to consider the "hunter-gatherers" of the last 2,000 years or so as isolated or as people who eat no domestic foods (Coon 1971:xvii), practice strict "Pleistocene economies—no metal, firearms, dogs, or contact with non-hunting cultures" (Lee and DeVore 1968:4), living in patrilocal bands (Service 1971), or have no agriculture of any kind (Murdock 1968:15). As Lee and DeVore have stressed, such definitions would effectively eliminate most, if not all, of the foraging peoples described over the last century as "hunter-gatherers". Even prehistoric Australian Aborigines evidently practiced various types of simple plant cultivation, including burning, seed planting, replanting of wild yam tops, fertilization, and irrigation (Campbell 1965).

## 2. Explaining the Persistence of the Isolate Model

A French journalist who visited an Agta Negrito band in the northern Philippines for a week in 1979 reported that there was "no evidence that the tribe practiced any kind of agriculture" (Evrard 1979:38) and described their fear of his mirror, tape recorder, and camera, "obviously the first they had ever seen"—considering himself "the first white man to intrude upon them" (p.39). A 1981 report on these same Agta by the Commissioner to the Non-Christian Tribes for Cagayan Province (appointed by the governor and given that title in the late '70s) describes them as a "Newly Found Tribe" of "cannibal(s) in the upper Sierra Madre" and even quotes one Agta as saying that "the most delicious meat is the liver of human beings" (Cortez n.d.). He describes them as "the most primitive, wild, fierce, and dangerous group ... a generation from the Stone Age" and speaks of their having no clothes, being fond of eating raw meat, and being ignorant of days, weeks, months, and years; their children, he says, are "unwanted and unloved," and "idolatry and adultery are supreme." These are the same Agta among whom one of us had been living since 1962. They have, of course, long been quite used to white people, cameras, and mirrors, they love and care for their children, and they have interacted with outsiders for many hundreds of years.

Ethnocentric and racist statements such as these still appear in print, and the prejudice they reflect continues to be widely held (for summary compilations of examples, see Headland 1986:445; Headland and Reid n.d.; Hoffman 1986:2–4, 8, 46, 57, 95–96; Rosaldo 1982; Guenther 1980). While few if any anthropologists today would accept any part of the 19<sup>th</sup>-century evolutionary theories of Tylor and Morgan or of Frazer's creation of "an atmosphere of romantic savagery" (Strathern 1987:256), many lay people continue to believe in the anthropological fiction that Tylor and Morgan codified—that human peoples evolve culturally from savagery to barbarism to civilized status. Implausible as this viewpoint is in the light of new archaeological, linguistic, archival, and ethnographic data, it continues to overshadow recent scientifically sound analyses based on these data.

Some anthropologists have recently attempted to explain why this myth of the "Savage Other" persists. Pandian (1985:63), who reviews anthropology from the perspective of the history of Western thought, concludes that "the psychological

needs of people are met by the symbol of the wild man." Fabian (1983:164) takes a more political position, showing that anthropology tends to view contemporary tribal cultures as if they were separate from us in time and place. He sees this as a political use of anthropology that maintains and reinforces a relationship between dominant and dominated societies. He views what we call the isolate model as an ideological tool for exploitation and oppression—for "intellectual imperialism." Dove (1983:85) discusses the persistence of the belief that swidden cultivation is primitive and wasteful and that swiddeners (no less than hunter-gatherers) live in isolation, "completely cut off from the rest of the world," and, with Fabian, sees the reason as political: "These myths ... have been used since colonial times to justify the exploitation of a ... vulnerable peasantry by ... [a] a more powerful urban and governing elite" (p.96).

Behar (1987) shows how the Spanish colonizers of northern Mexico emphasized the savagery of local hunter-gatherers as a justification for driving them off desired lands or enslaving them. Many Spanish settlers, in their petitions to authorities in Mexico City and Spain, described the wildness and brutal nature of the Amerindians and proposed genocide as a solution. Rosaldo (1978:242) notes the same situation in the Philippines and sees "the dominant motive ... (as) control"; colonizers view indigenous lifeways as dangerous to the goals of "civilization" in that they threaten the establishment of roads and towns in frontier areas. Guenther (1980:135) reviews the 18th- and 19th-century pejorative attitudes and destructive actions of European colonists against the San in southern Africa and accounts for the persistence of negative stereotypes as an "ideological mechanism...[that] justified the denial of land, freedom, and life to the Bushman." Volkman (1986) reports that the Namibian government continues to treat the San in the same way, making political decisions for them based on their "primitiveness". Finally, Taussig (1987) shows how the colonial representation of the Colombian Indian as Wild Man led to the torture and killing of Indians by colonists in the early years of this century.

Sponsel (1985:96-97) suggests that anthropologists in particular perpetuate the isolate model because of the high value they place on the "primitiveness of the culture studied," "the traditional in 'primitive' culture," "cultural purity," and the depiction of the people as "our contemporary ancestors." On the same theme,

Martin (1986:420) says that the folklorization of ethnographic inaccuracies is the result of "exoticism" in anthropology. Ramos (1987) believes that this is why the Yanomamo are so famous today, at the same time espousing Fabian's political explanation (pp.298, 299). Rosaldo (1982), focusing on the Philippine Negritos, suggests that they are mythologized as "utter savages" to make them more fascinating "objects of scientific value." He is probably right in saying, "Had Negritos not existed perhaps they would have been invented" (p.321).

Wobst (1978:304) argues that anthropologists "reinforce the overwhelming ethnographic stereotype that hunter-gatherers articulate exclusively with local variability, and that regional and interregional process among hunter-gatherers is a symptom of degeneration and culture contact." It is his view that "all hunter-gatherers in the ethnographic era were intimately tied into continent-wide cultural matrices" (p.303) but that "the literature is remarkably silent" (p.304) on this because anthropologists have done a kind of "salvage ethnography" on them, trying to reconstruct the "ethnographic present—the imaginary point in time when the studied populations were less affected by culture contact." In short, Wobst says, anthropologists have filtered out behaviors involving interaction between hunters and their surrounding nation-states, and therefore "the ethnographic literature perpetuates a worm's-eye view of [hunter-gatherer] reality." Cowlishaw (1987) shows for Australian Aborigines that anthropologists have denied their history and authenticity by focusing on the "traditional" in their cultures.

Wolf (1982:14) blames functionalist anthropology, with its static view of cultures, for misleading anthropologists into treating tribal cultures as "hypothetical isolates." We suggest that the more ecologically oriented neofunctionalists of the 1970s have made the same mistake. As Mintz (1985:xxvi–xxvii) explains,

Cultural or social anthropology has built its reputation as a discipline upon the study of ... what are labeled "primitive" societies ... [This] has unfortunately led anthropologists, ... occasionally, to ignore information that made it clear that the society being studied was not quite so primitive [or isolated] as the anthropologist would like ... [thus giving the impression] of an allegedly pristine primitivity, coolly observed by the anthropologist-as-hero ... One anthropological monograph

after another whisks out of view any signs of the present and how it came to be.

#### 3. Conclusion

The historical and philosophical reasons for Western civilization's fascination with savagery may be more complex than all of these suggestions combined. As we learn from Stocking (1987), this Western world view of the Savage Other probably evolved from an 18<sup>th</sup>-century Victorian anthropology, and aspects of this view continue to be fed by both anthropological writings and popular works today.<sup>9</sup>

We have argued that small indigenous societies are as fully modern as any 20th-century human group, that many hunter-gatherer groups have been involved in minor food production for thousands of years, and that many of these latter were also participating in interethnic and possibly international trade long before the 16th-century European expansion. The foraging societies we know today remain in their "primitive" state not because they are "backward" but because they are kept there by their more powerful neighbors and because it is economically their most viable option in their very restricted circumstances. Westerners have chronically failed to understand such societies because they continue to see them as fossilized isolated hunters rather than as "commercial foragers" carrying on a life-style not in spite of but because of their particular economic role in the global world in which they live. Until this anthropological bias is corrected, our image of hunter-gatherer culture and ecology will remain incomplete and distorted.

An example of this was the worldwide excitement created in 1971 when a group of scientists claimed to have found a lost Stone Age tribe of Tasaday cavemen in a dense rain forest in the southern Philippines—a story that, according to several 1986 reports, may have been a hoax (see e.g., *Newsweek*, April 28, 1986, p.51; *Asiaweek*, August 31, 1986, pp. 60-61; *Anthropology Today* 2[6]:23–24; see also the official position of the University of the Philippines Department of Anthropology [University of the Philippines 1988]).

### References

- AFIO Ms 89/60. 1975. Certificación de Fr. Bernardo de Santa Rosa de administración de sacramentos, 10 Marzo 1745. Unpublished letter, Archivo Franciscano Ibero-Oriental, Madrid, No. 89/60.
- Amazona, Damian. 1951. Some customs of the Aetas of the Baler area, Philippines. *Primitive Man* 24(2):21–34.
- Bahuchet, Serge. 1987. Historical perspectives on the Aka and Baka pygmies of the western Congo Basin. Paper read at the 86<sup>th</sup> annual meeting of the American Anthropological Association, Chicago, Ill., November.
- Bahuchet, Serge, and Henri Guillaume. 1982. Aka-farmer relations in the north-east Congo basin. *Politics and history in band societies*, ed. by Eleanor Leacock and Richard Lee, 189–211. Cambridge: Cambridge University Press.
- Bahuchet, Serge, and Jacqueline M. Thomas. 1986. Lingüstique et histoire des pygmées de l'ouest du Bassin Congolais. *Sprache und Geschichte in Afrika* 7:73–103.
- Bailey, J. 1863. An account of the wild tribes of the Veddahs of Ceylon: Their habits, customs, and superstitions. *Transactions of the Ethnological Society of London* 2:278–320.
- Bailey, Robert, and N. Peacock. [1988] Efe pygmies of northeast Zaire: Subsistence strategies in the Ituri Forest. *Coping with uncertainty in food supply*, ed. by I. De Garine and G. Harrison. Oxford: Oxford University Press. Barnard, Alan. 1983. Contemporary hunter-gatherers: Current theoretical issues in ecology and social organization. *Annual Review of Anthropology* 12:193–214.
- Behar, Ruth. 1987. The visions of a Guachichil witch in 1599: A window on the subjugation of Mexico's hunter-gatherers. *Ethnohistory* 34:115–38.
- Bellwood, Peter. 1985. *Prehistory of the Indo-Malaysian archipelago*. New York: Academic Press.
- Bendor, Barabara, and Brian Morris. 1988. Twenty years of history, evolution, and social change in gatherer-hunter societies. *Hunters and gatherers*, vol. 1: *History, evolution, and social change*, ed. by T. Ingold, D. Riches, and J. Woodburn, 4–14. Oxford: Berg.

- Berry, J. W., et al. 1986. On the edge of the forest: Cultural adaptation and cognitive development in Central Africa. Berwyn, Ill.: Swets North America.
- Bird-David, Nurit H. 1988. Hunter-gatherers and other people: A re-examination. *Hunters and gatherers*, vol. 1: *History, evolution, and social change*, ed. by T. Ingold, D. Riches, and J. Woodburn, 17–30. Oxford: Berg.
- Blust, Robert. 1978. Eastern Malayo-Polynesian: A subgrouping argument. *Second International Conference on Austronesian Linguistics: Proceedings*, fasc. I, ed. by S.A. Wurm and Lois Carrington, 181–234. Pacific Linguistics C–61.
- Blust, Robert. 1984–85. The Austronesian homeland: A linguistic perspective. *Asian Perspectives* 26:45–67.
- Bodley, John H., ed. 1988. Tribal peoples and development issues. Mountain View, Calif.: Mayfield.
- Borrows, D. P. 1908. *Eighth annual report of the Director of Education*. Manila: Bureau of Printing.
- Breeden, Robert L., ed. 1973. *Primitive worlds: People lost in time*. Washington, D.C.: National Geographic Society.
- Broennimann, Peter. 1981. *Auca on the Cononaco: Indians of the Ecuadorian rain forest.* Basel: Birkhauser Boston.
- Brooks, Alison S. 1982. Review of "*Hunter and habitat in the central Kalahari Desert*, by George B. Silberbauer [Cambridge: Cambridge University Press, 1981]. *Human Ecology* 10:425–29.
- Brosius, J. Peter. 1983. The Zambales Negritos: Swidden agriculture and environmental change. *Philippine Quarterly of Culture and Society* 11:123–48.
- Burroughs, Edgar Rice. 1963 [1918]. *Land that time forgot*. New York: Nelson and Doubleday.
- Campbell, Alastair H. 1965. Elementary food production by the Australian Aborigines. *Mankind* 6:206–11.
- Campbell, Bernard. 1983. *Human ecology: The story of our place in nature from prehistory to the present.* New York: Aldine.
- Cavalli-Sforza, Luigi, ed. 1986. African pygmies. Orlando: Academic Press.
- Chagnon, Napoleon A. 1983. *Yanomamo: The fierce people* (3<sup>rd</sup> edition). New York: Holt, Rinehart and Winston.

- Colchester, Marcus. 1984. Rethinking Stone Age economics: Some speculations concerning the pre-Columbian Yanomama economy. *Human Ecology* 12:291–94.
- Coon, Carleton S. 1971. The hunting peoples. Boston: Little, Brown.
- Cortez, C. R. n.d. (1981). The newly found tribe. Philippine Native Crusade, Bradenton, Fla. Ms.
- Cowlishaw, Gillian. 1987. Color, culture, and the aboriginalists. Man 22:221–37.
- Denbow, James R. 1984. Prehistoric herders and foragers of the Kalahari: The evidence for 1500 years of interaction. *Past and present in hunter-gatherer stu-dies*, ed. by Carmel Schrire, 175–93. Orlando: Academic Press.
- Denbow, James R. 1986. A new look at the later prehistory of the Kalahari. *Journal of African History* 27:3–28.
- Denbow, James R., and Alec Campbell. 1986. The early stages of food production in southern Africa and some potential linguistic correlations. *Sprache und Geschichte in Afrika* 7:83–103.
- Denbow, James R., and Edwin N. Wilmsen. 1986. Advent and course of pastoralism in the Kalahari. *Science* 234:1509–15.
- Dove, Michael R. 1983. Theories of swidden agriculture and the political economy of ignorance. *Agroforesty Systems* 1:85–99.
- Dunn, Frederick L. 1975. *Rain-forest collectors and traders: A study of resource utilization in modern and ancient Malaya*. Malaysian Branch, Monograph 5. Royal Asiatic Society: Kuala Lumpur.
- Eder, James F. 1978. The caloric returns to food collecting: Disruption and change among the Batak of the Philippine tropical forest. *Human Ecology* 6:55–69.
- Eder, James F. 1987. *On the road to tribal extinction*. Berkeley: University of California Press.
- Eighth annual report of the Philippine Commission to the Secretary of War, 1907, Part I. 1908. Washington, D.C.: Government Printing Office.
- Endicott, Kirk. 1983. The effects of slave raiding on the aborigines of the Malay Peninsula. Slavery, bondage, and dependency in Southeast Asia, 216–45. St. Lucia: University of Queensland Press.

- Endicott, Kirk. 1984. The economy of the Batek of Malaysia: Annual and historical perspectives. *Research in Economic Anthropology* 6:29–52.
- Estioko-Griffin, Agnes A., and P. Bion Griffin. 1981. The beginning of cultivation among Agta hunter-gatherers in northeast Luzon. *Adaptive strategies and change in Philippine swidden-based societies*, ed. by Harold Olofson, 55–72. Laguna, Philippines: Forest Research Institute.
- Evrard, Alain. 1979. Encounter with a vanishing forest people: The Pugot [Agta] of Isabela. *Orientations* 10(11):34–39.
- Fabian, Johannes. 1983. *Time and the other: How anthropology makes its object.* New York: Columbia University Press.
- Foley, Robert. 1988. Hominids, humans, and hunter-gatherers: An evolutionary perspective. *Hunters and gatherers*, vol. 1: *History, evolution, and social change*, ed. by T. Ingold, D. Riches, and J. Woodburn, 207–20. Oxford: Berg.
- Fox, Robert B. 1953. *The Pinatubo Negritos: Their useful plants and material culture.*Manila: Bureau of Printing.
- Fox, Robert B. 1967. The archaeological record of Chinese influence in the Philippines. *Philippine Studies* 15:41–62.
- Francis, Peter D., F. J. Kense, and P. G. Duke, eds. 1981. *Networks of the past: Regional interaction in archaeology (Proceedings of the Twelfth Annual Conference of the Archaeological Association of the University of Calgary)*. Calgary: University of Calgary.
- Gardner, P. M. 1983. Cyclical adaptations on variable cultural frontiers. *Nomadic Peoples* 12:14–19.
- Gibbons, Alice. 1981. The people time forgot. Chicago: Moody Press.
- Gordon, Robert J. 1984. The !Kung in the Kalahari exchange: An ethnohistorical perspective. *Past and present in hunter-gatherer studies*, ed. by Carmel Schrire, 195–222. Orlando: Academic Press.
- Gregg, Susan, ed. [1991] *Between bands and states: Interaction in small-scale societies*. Center for Archaeological Investigations, Occasional Paper No. 9. DeKalb: Southern Illinois University Press.
- Griffin, P. Bion, and Thomas N. Headland. 1985. A selected bibliography of the Agta Negritos of eastern Luzon, Philippines. *The Agta of northeastern Luzon:*

- *Recent studies*, ed. by P. Bion Griffin and Agnes Estioko-Griffin, 166–75. Cebu City: San Carlos Publications.
- Guenther, Mathias G. 1980. From "brutal savages" to "harmless people": Notes on the changing Western image of the Bushmen. *Paideuma* 26:123–40.
- Guenther, Mathias G. 1986. From foragers to miners and bands to bandits: On the flexibility and adaptability of Bushman band societies. *Sprache und Geschichte in Afrika* 7:133–59.
- Hall, Kenneth R. 1985. Maritime trade and state development in early Southeast Asia. Honolulu: University of Hawai'i Press.
- Hart, Terese B., and John A. Hart. 1986. The ecological basis of hunter-gatherer subsistence in African rain forests: The Mbuti of eastern Zaire. *Human Ecology* 14:29–55.
- Harvey, Mark. 1982. Subgroups in Austronesian. *Papers from the Third International Conference on Austronesian Linguistics 2, Tracking the travellers*, ed. by Amran Halim, Lois Carrington, and Stephen Wurm, 47-99. Pacific Linguistics C-75. Canberra: Australian National University.
- Headland, Thomas N. 1978. Cultural ecology, ethnicity, and the Negritos of northeastern Luzon: A review article. *Asian Perspectives* 21:128–39.
- Headland, Thomas N. 1986. Why foragers do not become farmers: A historical study of a changing ecosystem and its effect on a Negrito hunter-gatherer society in the *Philippines*. Ann Arbor: University Microfilms International.
- Headland, Thomas N. 1987. The wild yam question: How well could independent hunter-gatherers live in a tropical rainforest ecosystem? *Human Ecology* 15:465–93.
- Headland, Thomas N. 1988a. The competitive exclusion principle and the persistence of the professional primitive. Paper read at the 12<sup>th</sup> International Congress of Anthropological and Ethnological Sciences, Zagreb, Yugoslavia, July 24–31.
- Headland, Thomas N. 1988b. Ecosystemic change in a Philippine tropical rainforest and its effect on a Negrito foraging society. *Tropical Ecology* 29(2):121–35.
- Headland, Thomas N, and Lawrence A. Reid. 1989 [1991]. Holocene foragers and interethnic trade: A critique of the myth of isolated independent hunt-

- er-gatherers. *Between bands and states: Interaction in small-scale societies*, ed. by Susan Gregg, 333–40. Center for Archaeological Investigations, Occasional Paper No. 9. DeKalb: Southern Illinois University Press.
- Headland, Thomas N, and Lawrence A. Reid. n.d. Prehistoric Philippine Negritos: Were they Pleistocene hunters or commercial traders? Ms.
- Hitchcock, Robert K. 1987. Socioeconomic change among the Basarwa in Botswana: An ethnohistorical analysis. *Ethnohistory* 34:219–55.
- Hoffman, Carl L. 1984. Punan foragers in the trading networks of Southeast Asia. *Past and present in hunter-gatherer studies*, ed. by Carmel Schrire, 123–49. Orlando: Academic Press.
- Hoffman, Carl L. 1986. *The Punan: Hunters and gatherers of Borneo*. Ann Arbor: UMI Research Press.
- Howell, Nancy. 1979. Demography of the Dobe !Kung. New York: Academic Press.
- Howell, Nancy. 1988. The Tasaday and the !Kung: Reassessing isolated hunter-gathers. Paper read at the 53<sup>th</sup> annual meeting of the Society of American Archaeology, Phoenix, April 27–May 1.
- Hutterer, Karl L. 1974. The evolution of Philippine lowland societies. *Mankind* 9:287–99.
- Hutterer, Karl L. 1976. An evolutionary approach to the Southeast Asian cultural sequence. *Current Anthropology* 17:221–42.
- Hutterer, Karl L. 1977. Prehistoric trade and the evolution of Philippine societies: A reconsideration. *Economic exchange and the social interaction in Southeast Asia: Perspectives from prehistory, history, and ethnography*, ed. by Karl L. Hutterer, 177–96. Michigan Papers on South and Southeast Asia 13. Ann Arbor: University of Michigan.
- Hutterer, Karl L. 1983. The national and cultural history of Southeast Asian agriculture: Ecological and evolutionary considerations. *Anthropos* 78:169–21.
- Huxley, Matthew, and Cornell Capa. 1964. *Farewell to Eden*. New York: Harper and Row.
- Ingold, Tim, David Riches, and James Woodburn. 1988. *Hunters and gatherers*. 2 vols. Oxford: Berg.

- Johnson, Allen W., and Timothy Earle. 1987. *The evolution of human societies*. Stanford: Stanford University Press.
- Keesing, Roger M. 1981. *Cultural anthropology: A contemporary perspective* (2<sup>nd</sup> edition). New York: Holt, Rinehart, and Winston.
- Konner, Melvin, and Marjorie Shostak. 1987. Timing and management of birth among the !Kung: Biocultural interaction in reproductive adaptation. *Cultural Anthropology* 2:11–28.
- Krishna Iyer, L. A., and N. Kunjan Pillai. 1935. The primitive tribes of Travancore. *Census of India*, 1939, vol. 1, pt. 3, ed. by J. H. Hutton, 217–40. Simla: Government of India Press.
- Landa Jocano, F. 1975. *Philippine prehistory: An anthropological overview of the beginnings of Filipino society and culture*. Diliman: Philippine Center for Advanced Studies.
- Leacock, Eleanor, and Richard Lee, eds. 1982a. *Politics and history in band societies*. Cambridge: Cambridge University Press.
- Lee, Richard B. 1976. Introduction. *Kalahari hunter-gatherers*, ed. by Richard B. Lee and Irven Devore, 1–24. Cambridge: Harvard University Press.
- Lee, Richard B. 1979. The !Kung San: Men, women, and work in a foraging society. Cambridge: Cambridge University Press.
- Lee, Richard B. 1981. Is there a foraging mode of production? *Canadian Journal of Anthropology* 2:13–19.
- Lee, Richard B. 1984. The Dobe !Kung. New York: Holt, Rinehart and Winston.
- Lee, Richard B., and Irven DeVore. 1968. Problems in the study of hunters and gatherers. *Man the hunter*, ed. by Richard B. Lee and Irven Devore, 3–12. Chicago: Aldine.
- Lewin, Roger. 1988. New view emerge on hunters and gatherers. *Science* 240:1146–48.
- Lukban, Vicente. 1918 [1914]. Report del Gobernador de Tayabas Hon. Vicente Luckban [sic] al Secretario del Interior Hon. Winfred T. Denison sobre la cuestión de los tribus infieles en dicha provincia. Ethnography of the Negrito-Aeta people, vol. 2, Paper No. 50, compiled by H. Otley Beyer, Manila. Typescript, 13 pages. Harvard University Microfilm Dept. Harvard Order No. 65-60-38.

- Lukesch, Anton. 1976. *Bearded Indians of the tropical world*. Graz: Akademische Druck.
- Lynch, Frank. 1948. Some notes on a brief field survey of the hill people of Mt. Iriga, Camarines Sur, Philippines. *Primitive Man* 21:65–73.
- McKinley, Robert. n.d. Stone Age world systems: A new perspective on tribal cultures. Ms.
- Martin, Laura. 1986. Eskimo words for snow. American Anthropologist 88:418–23.
- Mathien, Frances J., and Randall H. McGurie, eds. 1986. *Ripples in the Chichimec sea: New considerations of Southwestern-Mesoamerican interactions*. Carbondale: Southern Illinois University Press.
- Meacham, William. 1984–85. On the improbability of Austronesian origins in South China. *Asian Perspectives* 26:89–106.
- Mintz, Sidney W. 1985. Sweetness and power. New York: Viking Books.
- Morelli, Gilda, Steve Winn, and Edward Z. Tronick. 1986. Review of "Children of the forest (film by Kevin Duffy)". American Anthropologist 88:773–74.
- Morris, B. 1977. Tappers, trappers, and the Hill Pandaram (South India). *Anthrops* 72:225–41.
- Murdock, George Peter. 1968. The current status of the world's hunting and gathering peoples. *Man the hunter*, ed. by Richard B. Lee and Irven DeVore, 13–20. Chicago: Aldine.
- Omoto, Keiichi. 1985. The Negritos: Genetic origins and microevolution. *Out of Asia: Peopling the Americans and the Pacific*, ed. by Robert Kirk and Emöke Szathmary, 123–31. Canberra: Journal of Pacific History.
- Pandian, Jacob. 1985. Anthropology and the Western tradition: Toward an authentic anthropology. Prospect Heights, Ill.: Waveland.
- Parkington, John E. 1984. Soaqua and Bushmen: Hunters and robbers. *Past and present in hunter-gatherer studies*, ed. by Carmel Schrire, 151–74. Orlando: Academic Press.
- Pawley, Andrew, and Roger Green. 1973. Dating the dispersal of the Oceanic languages. *Oceanic Linguistics* 12(1–2):1–67.
- Pérez, P. Lorenzo. 1927. Los Aetas y Ilongotes de Filipinas. *Archivo Ibero Americano* 14:289–346.

- Pérez, P. Lorenzo. 1928. Los Aetas y Ilongotes de Filipinas. *Archivo Ibero Americano* 15:71–106.
- Peterson, Warren E. 1974a. Summary report of two archaeological sites from north-eastern Luzon. *Archaeology and Physical Anthropology in Oceania* 9:26–35.
- Peterson, Warren E. 1974b. Anomalous archaeology sites of northern Luzon and models of Southeast Asian prehistory. Ph.D. dissertation, University of Hawai'i.
- Rai, Navin K. 1982. From forest to field: A study of Philippine Negrito foragers in transition. Ph.D. dissertation, University of Hawai'i.
- Rambo, A. Terry. 1981. Review of "Rain-forest collectors and traders, by Frederick L. Dunn (Malaysian Branch, Royal Asiatic Society, Monograph 5)". Asian Perspectives 24:139–40.
- Rambo, A. Terry. 1984. Orang Asli interactions with the Malaysian tropical rain forest ecosystem. *An introduction to human ecology research on agricultural systems in Southeast Asia*, ed. by A. Terry Rambo and Percy E. Sajise, 237–53. Los Banos: University of the Philippines.
- Rambo, A. Terry. 1988. Why are the Semang? Ecology and ethnogenesis of aboriginal groups in Peninsular Malaysia. *Ethnic diversity and the control of natural resources in Southeast Asia*, ed. by A. T. Rambo, K. Gillogly, and K. Hutterer, 19–35. Ann Arbor: University of Michigan Press.
- Ramos, Alcida R. 1987. Reflecting on the Yanomami: Ethnographic images and the pursuit of the exotic. *Cultural Anthropology* 2:284–304.
- Redfield, Robert. 1947. The folk society. Journal of Sociology 52:295-98.
- Reid, Lawrence A. 1987. The early switch hypothesis: Linguistic evidence for contact between Negritos and Austronesians. *Man and Culture in Oceania* 3:41–59.
- Reid, Lawrence A. 1988a. The Alta languages of the Philippines. Published in 1991, In VICAL 2, Western Austronesian and contact languages: Papers from the Fifth International Conference on Austronesian Linguistics, ed. by Ray Harlow, 265-297. Te Reo Special Publication. Auckland: Linguistic Society of New Zealand.
- Reid, Lawrence A. 1988b. Arta, another Philippine Negrito language. Paper read at the 12<sup>th</sup> International Congress of Anthropological and Ethnological

- Sciences, Zagreb, Yugoslavia, July 24–31. Published in 1991, *Oceanic Linguistics* 28(1):47-74
- Report of the Philippine Commission of the President. Vol. 3. 1901. Washington, D.C.: Government Printing Office.
- Reynolds, Hubert. 1983. Research and participant intervention in the Mountain Negrito development project of northern Negrito. *Silliman Journal* 30:163–75.
- Rosaldo, Renato. 1978. The rhetoric of control: Ilongots viewed as natural bandits and wild Indians. *The reversible world: Symbolic inversion in art and society*, ed. by Barbara Babcock, 240–57. Ithaca: Cornell University Press.
- Rosaldo, Renato. 1982. Utter savages of scientific value. *Politics and history in band societies*, ed. by Eleanor Leacock and Richard Lee, 309–25. Cambridge: Cambridge University Press.
- Schebesta, Paul. 1947. Menschen ohne Geschichte. Mödling (Wien): St Gabriel.
- Schebesta, Paul. 1954. Die Negrito Asiens, vol. 2. Studia Instituti Anthropos 12.
- Schrire, Carmel. 1980. An inquiry into the evolutionary status and apparent identity of San hunter-gatherers. *Human Ecology* 8:9–32.
- Schrire, Carmel. 1984. Wild surmises on savage thoughts. *Past and present in hunter-gather studies*, ed. by Carmel Schrire, 1–25. Orlando: Academic Press.
- Scott, William H. 1981. *Boat building and seamanship in classic Philippine society*. Anthropological Papers 9. Manila: National Museum.
- Scott, William H. 1983. Filipinos in China before 1500. Asian Studies 21:1–19.
- Scott, William H. 1984. *Prehispanic source materials for the study of Philippine history* (revised edition). Quezon City: New Day Publishers.
- Segovia, L. 1969 [1902]. *The full story of Aguinaldo's capture*, translated by Frank de Thoma. Manila: MCS Enterprises.
- Seitz, S. 1984. Von der wildbeuterischen zur agrarischen Lebensweise: Die Negrito im Western von Luzon. *Paideuma* 30:257–74.
- Semper, Carl. 1961. Reise durch die nordöstlichen Provinzen der Insel Luzon. Zeitschrift für Allgemeine Erdkunde 10:249–66.
- Semper, Carl. 1869. *Die Philippinen und ihre Bewohner: Sechs Skizzen*. Wurzburg: A. Stuber's Buchhandlung.
- Service, E. R. 1971. *Primitive social organization: An evolutionary perspective* (2<sup>nd</sup> edition). New York: Random House.

- Silberbauer, George B. 1981. Hunter and habitat in the central Kalahari Desert. Cambridge: Cambridge University Press.
- Snow, Bryan E., and Richard Shutler. 1985. *The archaeology of Fuga Moro Island:*New approaches for the isolation and explanation of diagnostic ceramic assemblages in northern Luzon, Philippines. Cebu City: San Carlos Publications.
- Snow, Bryan E., R. Shutler, D. E. Nelson, J. S. Vogel, and J. R. Southon. 1986. Evidence of early rice cultivation in the Philippines. *Philippine Quarterly of Culture and Society* 14:3–11.
- Soffer, Olga. 1985. *The Upper Paleolithic of the central Russian plain*. Orlando: Academic Press.
- Solheim, Wilhelm G. 1981. Philippine prehistory. *The people and art of the Philippines*, ed. by Gabriel Casal et al., 17–83. Los Angeles: Museum of Cultural History, University of California.
- Solheim, Wilhelm G. 1984–85. The Nusantao hypothesis: The origin and spread of Austronesian speakers. *Asian Perspectives* 26:77–88.
- Speth, John D., and Katherine A. Spielmann. 1983. Energy source, protein metabolism, and hunter-gatherer subsistence strategies. *Journal of Anthropological Archaeology* 2:1–31.
- Spielmann, Katherine A. 1986. Interdependence among egalitarian societies. *Journal of Anthropological Archaeology* 5:279–312.
- Spielmann, Katherine A., ed. n.d. Farmers, hunters, and colonists: Interaction between the Southwest and the Plains. Ms.
- Sponsel, Leslie E. 1985. Ecology, anthropology, and values in Amazonia. *Cultural values and human ecology in Southeast Asia*, ed. by Karl L. Hutterer, A. Terry Rambo, and George Lovelace, 77–121. Michigan Papers on South and Southeast Asia 27.
- Stewart, Kilton. 1954. Pygmies and dream giants. New York: Harper and Row.
- Stocking, George W. 1987. Victorian anthropology. New York: Free Press.
- Strathern, Marilyn. 1987. Out of context: The persuasive fictions of anthropology. *Current Anthropology* 28:251–81.
- Sutton, David B., and N. Paul Harmon. 1973. *Ecology: Selected concepts*. New York: Wiley.

- Tanaka, Jiro. 1976. Subsistence ecology of central Kalahari San. *Kalahari hunt-er-gatherers: Studies of the !Kung San and their neighbors*, ed. by Richard B. Lee and Irven DeVore, 98–119. Cambridge: Harvard University Press.
- Tangco, Marcelo. 1951. *The Christian peoples of the Philippines*. Natural and Applied Science Bulletin 11(1).
- Taussig, Michael. 1987. Shamanism, colonialism, and the Wild Man: A study in terror and healing. Chicago: University of Chicago Press.
- Thiel, Barbara. 1980. Excavations in the Pinacanauan Valley, northern Luzon. *Bulletin of the Indo-Pacific Prehistory Association* 2: 40–48.
- Thomas, Elizabeth Marshall. 1959. *The harmless people*. New York: Random House.
- Turnbull, Colin M. 1963. The lesson of the pygmies. *Scientific American* 208(1):28–37.
- Turnbull, Colin M. 1965. *Wayward servants: The two worlds of the African pygmies*. Garden City: Natural History Press.
- Turnbull, Colin M. 1983. *The Mbuti pygmies: Change and adaptation*. New York: Holt, Rinehart and Winston.
- Turnbull, Colin M. 1986. Survival factors among Mbuti and other hunters of the equatorial African rain forest. *African pygmies*, ed. by Luigi Cavalli-Sforza, 103–23. Orlando: Academic Press.
- Turnbull, Major Wilfrid. 1929. The "Dumagats" of northeast Luzon. *Philippine Magazine* 26:131–33, 175–78, 208–29, 237–40.
- Turnbull, Major Wilfrid. 1930. Bringing a wild tribe under government control. *Philippine Magazine* 26:782–83, 794, 796, 798; 27:31–32, 36, 38, 40, 42, 990–91, 110, 112, 114, 116–18, 120.
- University of the Philippines. 1988. Statement on the Tasaday controversy. *Anthropology Newsletter* 29(2):4.
- Vanoverbergh, Morice. 1937–38. Negritos of eastern Luzon. *Anthropos* 32:905–28; 33:119–64.
- Vansina, Jan. 1986. Do pygmies have a history? *Sprache und Geschichte in Afrika* 7:431–45.

- Vierich, Helga I. 1982. Adaptive flexibility in a multiethnic setting: The Basarwa of the southern Kalahari. Politics and history in band societies, ed. by Eleanor Leacock and Richard Lee, 213–22. Cambridge: Cambridge University Press.
- Volkman, Toby A. 1986. The hunter-gather myth in southern Africa. *Cultural Survival Quarterly* 10(2):25–32.
- Warren, Charles P. 1984. Agricultural development of the Batak of Palawan, Philippines. *Crossroads* 2:1–11.
- Whitney, Capt. F. A. Letter to the Provincial Governor of Nueva Vizcaya, dated March 15, 1914, Dean C. Worcester Papers (Box 1, folder labeled "Correspondence, July–Sept 1914"), Michigan Historical Collections, University of Michigan, Bentley Historical Library, Ann Arbor, Michigan.
- Wiessner, Pauline W. 1977. Hxaro: A regional system of reciprocity for reducing risk among the !Kung San. Ph.D. dissertation, University of Michigan, Ann Arbor.
- Wilmsen, Edwin N. 1983. The ecology of illusion: Anthropological foraging in the Kalahari. *Reviews in Anthropology* 10(1):9–20.
- Wobst, H. Martin. 1978. The archaeo-ethnology of hunter-gatherers, or the tyranny of the ethnographic record in archaeology. *American Antiquity* 43:303–9.
- Wolf, Eric R. 1982. *Europe and the people without history*. Berkeley; University of California Press.
- Worcester, Dean C. 1912. Head-hunters of northern Luzon. *National Geographic* 23:833–48.
- Worcester, Dean C. 1913. *Slavery and peonage in the Philippines*. Manila: Bureau of Printing.