## **Future Primitive**

## By John Zerzan

Division of labor, which has had so much to do with bringing us to the present global crisis, works daily to prevent our understanding the origins of this horrendous present. Mary Lecron Foster (1990) surely errs on the side of understatement in allowing that anthropology is today "in danger of serious and damaging fragmentation." Shanks and Tilley (1987b) voice a rare, related challenge: "The point of archaeology is not merely to interpret the past but to change the manner in which the past is interpreted in the service of social reconstruction in the present." Of course, the social sciences themselves work against the breadth and depth of vision necessary to such a reconstruction. In terms of human origins and development, the array of splintered fields and subfields- anthropology, archaeology, paleontology, ethnology, paleobotany, ethnoanthropology, etc., etc. - mirrors the narrowing, crippling effect that civilization has embodied from its very beginning.

Nonetheless, the literature can provide highly useful assistance, if approached with an appropriate method and awareness and the desire to proceed past its limitations. In fact, the weakness of more or less orthodox modes of thinking can and does yield to the demands of an increasingly dissatisfied society. Unhappiness with contemporary life becomes distrust with the official lies that are told to legitimate that life, and a truer picture of human develop- ment emerges. Renunciation and subjugation in modern life have long been explained as necessary concomitants of "human nature." After all, our pre-civilized existence of deprivation, brutality, and ignorance made authority a benevolent gift that rescued us from savagery. "Cave man" and `Neanderthal' are still invoked to remind us where we would be without religion, government, and toil.

This ideological view of our past has been radically overturned in recent decades, through the work of academics like Richard Lee and Marshall Sahlins. A nearly complete reversal in anthropological orthodoxy has come about, with important

implications. Now we can see that life before domestication/agriculture was in fact largely one of leisure, intimacy with nature, sensual wisdom, sexual equality, and health. This was our human nature, for a couple of million years, prior to enslavement by priests, kings, and bosses.

And lately another stunning revelation has appeared, a related one that deepens the first and may be telling us something equally important about who we were and what we might again become. The main line of attack against new descriptions of gatherer-hunter life has been, though often indirect or not explicitly stated, to characterize that life, condescendingly, as the most an evolving species could achieve at an early stage. Thus, the argument allows that there was a long period of apparent grace and pacific existence, but says that humans simply didn't have the mental capacity to leave simple ways behind in favor of complex social and technological achievement.

In another fundamental blow to civilization, we now learn that not only was human life once, and for so long, a state that did not know alienation or domination, but as the investigations since the '80s by archaeologists John Fowlett, Thomas Wynn, and others have shown, those humans possessed an intelligence at least equal to our own. At a stroke, as it were, the `ignorance' thesis is disposed of, and we contemplate where we came from in a new light.

To put the issue of mental capacity in context, it is useful to review the various (and again, ideologically loaded) interpretations of human origins and development. Robert Ardrey (1961, 1976) served up a bloodthirsty, macho version of prehistory, as have to slightly lesser degrees, Desmond Morris and Lionel Tiger. Similarly, Freud and Konrad Lorenz wrote of the innate depravity of the species, thereby providing their contributions to hierarchy and power in the present.

Fortunately, a far more plausible outlook has emerged, one that corresponds to the overall version of Paleolithic life in general. Food sharing has for some time been considered an integral part of earliest human society (e.g. Washburn and DeVore, 1961). Jane Goodall (1971) and Richard Leakey (1978), among others, have con- cluded that it was the key element in establishing our uniquely Homo development at least as early as 2 million years ago. This emphasis, carried forward since the early '70s by Linton, Zihlman, Tanner, and Isaac, has become ascendant. One of the telling arguments in favor of the cooperation thesis, as against that of generalized violence and male domination, involves a diminishing, during early evolution, of the difference in size and strength between males and females. Sexual dimorphism, as it is called, was originally very pronounced, including such features as prominent canines or "fighting teeth" in males and much smaller canines for the female. The disappearance of large male canines strongly suggests that the female of the species exercised a selection for sociable, sharing males. Most apes today have significantly longer and larger canines, male to female, in the absence of this female choice capacity (Zihlman 1981, Tanner 1981).

Division of labor between the sexes is another key area in human beginnings, a condition once simply taken for granted and expressed by the term huntergatherer. Now it is widely accepted that gathering of plant foods, once thought to be the exclusive domain of women and of secondary importance to hunting by males, constituted the main food source (Johansen and Shreeve 1989). Since females were not significantly dependent on males for food (Hamilton 1984), it seems likely that rather than division of labor, flexibility and joint activity would have been central (Bender 1989). As Zihlman (1981) points out, an overall behavioral flexibility may have been the primary ingredient in early human existence. Joan Gero (1991) has demonstrated that stone tools were as likely to have been made by women as by men, and indeed Poirier (1987) reminds us that there is "no archaeological evidence supporting the contention that early humans exhibited a sexual division of labor." It is unlikely that food collecting involved much, if any division of labor (Slocum 1975) and probably that sexual specialization came quite late in human evolution (Zihlman 1981, Crader and Isaac 1981).

So if the adaptation that began our species centered on gathering, when did hunting come in? Binford (1984) has argued that there is no indication of use of animal products (i.e. evidence of butchery practices) until the appearance,

relatively quite recent, of anatomically modern humans. Electron microscope studies of fossil teeth found in East Africa (Walker 1984) suggest a diet composed primarily of fruit, while a similar examination of stone tools from a 1.5 million-year-old site at Koobi Fora in Kenya (Keeley and Toth 1981) shows that they were used on plant materials. The small amount of meat in the early Paleolithic diet was probably scavenged, rather than hunted (Ehrenberg 1989b).

The `natural' condition of the species was evidently a diet made up largely of vegetables rich in fiber, as opposed to the modern high fat and animal protein diet with its attendant chronic disorders (Mendeloff 1977). Though our early forbears employed their "detailed knowledge of the environment and cognitive mapping" (Zihlman 1981) in the service of a plant-gathering subsistence, the archaeological evidence for hunting appears to slowly increase with time (Hodder 1991).

Much evidence, however, has overturned assumptions as to widespread prehistoric hunting. Collections of bones seen earlier as evidence of large kills of mammals, for example, have turned out to be, upon closer examination, the results of movement by flowing water or caches by animals. Lewis Binford's "Were There Elephant Hunters at Tooralba?" (1989) is a good instance of such a closer look, in which he doubts there was significant hunting until 200,000 years ago or sooner. Adrienne Zihlman (1981) has concluded that "hunting arose relatively late in evolution," and "may not extend beyond the last one hundred thousand years." And there are many (e.g. Straus 1986, Trinkhaus 1986) who do not see evidence for serious hunting of large mammals until even later, viz. the later Upper Paleolithic, just before the emergence of agriculture.

The oldest known surviving artifacts are stone tools from Hadar in eastern Africa. With more refined dating methods, they may prove to be 3.1 million years old (Klein 1989). Perhaps the main reason these may be classified as representing human effort is that they involve the crafting of one tool by using another, a uniquely human attribute so far as we know. Homo habilis, or "handy man," designates what has been thought of as the first known human species, its name reflecting association with the earliest stone tools (Coppens 1989). Basic wooden and bone implements, though more perishable and thus scantily represented in the

archaeological record, were also used by Homo habilis as part of a "remarkably simple and effective" adaptation in Africa and Asia (Fagan 1990). Our ancestors at this stage had smaller brains and bodies than we do, but Poirier (1987) notes that "their postcranial anatomy was rather like modern humans," and Holloway (1972, 1974) allows that his studies of cranial endocasts from this period indicate a bascally modern brain organization. Similarly, tools older than 2 mil- lion years have been found to exhibit a consistent right-handed orientation in the ways stone has been flaked off in their formation. Right-handedness as a tendency is correlated in moderns with such distinctly human features as pronounced lateralization of the brain and marked functional separation of the cerebral hemispheres (Holloway 1981a). Klein (1989) concludes that "basic human cognitive and communicational abilities are almost certainly implied."

Homo erectus is the other main predecessor to Homo sapiens, according to longstanding usage, appearing about 1.75 million years ago as humans moved out of forests into drier, more open African grasslands. Although brain size alone does not necessarily correlate with mental capacity, the cranial capacity of Homo erectus overlaps with that of moderns such that this species "must have been capable of many of the same behaviors" (Ciochon, Olsen and Tames 1990). As Johanson and Edey (1981) put it, "If the largest-brained erectus were to be rated against the smallest-brained sapiens - all their other characteristics ignored - their species names would have to be reversed." Homo Neanderthalus, which immediately preceded us, possessed brains somewhat larger than our own (Delson 1985, Holloway 1985, Donald 1991). Though of course the muchmaligned Neanderthal has been pictured as a primitive, brutish creature - in keeping with the prevailing Hobbesian ideology - despite manifest intelligence as well as enormous physical strength (Shreeve 1991).

Recently, however, the whole species framework has become a doubtful proposition (Day 1987, Rightmire 1990). Attention has been drawn to the fact that fossil specimens from various Homo species "all show intermediate morphological traits," leading to suspicion of an arbitrary division of humanity into separate taxa (Gingerich 1979, Tobias 1982). Fagan (1989), for example, tells us that "it is very hard to draw a clear taxonomic boundary between Homo

erectus and archaic Homo sapiens on the one hand, and between archaic and anatomically modern Homo sapiens on the other." Likewise, Foley (1989): "the anatomical distinctions between Homo erectus and Homo sapiens are not great." Jelinek (1978) flatly declares that "there is no good reason, anatomical or cultural" for separating erectus and sapiens into two species, and has concluded (1980a) that people from at least the Middle Paleolithic onward "may be viewed as Homo sapiens" (as does Hublin 1986). The tremendous upward revision of early intelligence, discussed below, must be seen as connected to the present confusion over species, as the once-prevailing overall evolutionary model gives way.

But the controversy over species categorization is only interesting in the context of how our earliest forbears lived. Despite the minimal nature of what could be expected to survive so many millennia, we can glimpse some of the texture of that life, with its often elegant, pre-division of labor approaches. The "tool kit" from the Olduvai Gorge area made famous by the Leakeys contains "at least six clearly recognizable tool types" dating from about 1.7 million years ago (M. Leakey, 1978). There soon appeared the Acheulian handaxe, with its symmetrical beauty, in use for about a million years. Teardrop-shaped, and possessed of a remarkable balance, it exudes grace and utility from an era much prior to symbolization. Isaac (1986) noted that "the basic needs for sharp edges that humans have can be met from the varied range of forms generated from 'Oldowan' patterns of stone flaking," wondering how it came to be thought that "more complex equals better adapted." In this distant early time, according to cut-marks found on surviving bones, humans were using scavenged animal sinews and skins for such things as cord, bags, and rugs (Gowlett 1984). Further evidence suggests furs for cave wall coverings and seats, and seaweed beds for sleeping (Butzer 1970).

The use of fire goes back almost 2 million years (Kempe 1988) and might have appeared even earlier but for the tropical conditions of humanity's original African homeland, as Poirier (1987) implies. Perfected fire-making included the firing of caves to eliminate insects and heated pebble floors (Perles 1975, Lumley 1976), amenities that show up very early in the Paleolithic.

As John Gowlett (1986) notes, there are still some archaeologists who consider anything earlier than Homo sapiens, a mere 30,000 years ago, as greatly more primitive than we "fully human" types. But along with the documentation, referred to above, of fundamentally `modern' brain anatomy even in early humans, this minority must now contend with recent work depicting complete human intelligence as present virtually with the birth of the Homo species. Thomas Wynn (1985) judged manufacture of the Acheulian handaxe to have required "a stage of intelligence that is typical of fully modern adults." Gowlett, like Wynn, examines the required "operational thinking" involved in the right hammer, the right force and the right striking angle, in an ordered sequence and with flexibility needed for modifying the procedure. He contends that manipulation, concentration, visualization of form in three dimensions, and planning were needed, and that these requirements "were the common property of early human beings as much as two million years ago, and this," he adds, "is hard knowledge, not speculation."

During the vast time-span of the Paleolithic, there were remarkably few changes in technology (Rolland 1990). Innovation, "over 2 1/2 million years measured in stone tool development was practically nil," according to Gerhard Kraus (1990). Seen in the light of what we now know of prehistoric intelligence, such 'stagnation' is especially vexing to many social scientists. "It is difficult to comprehend such slow development," in the judgment of Wymer (1989). It strikes me as very plausible that intelligence, informed by the success and satisfaction of a gatherer-hunter existence, is the very reason for the pronounced absence of 'progress'. Division of labor, domestication, symbolic culture--these were evidently refused until very recently.

Contemporary thought, in its postmodern incarnation, would like to rule out the reality of a divide between nature and culture; given the abilities present among people before civilization, however, it may be more accurate to say that basically, they long chose nature over culture. It is also popular to see almost every human act or object as symbolic (e.g. Botscharow 1989), a position which is, generally speaking, part of the denial of a nature versus culture distinction. But it is culture

as the manipulation of basic symbolic forms that is involved here. It also seems clear that reified time, language (written, certainly, and probably spoken language for all or most of this period), number, and art had no place, despite an intelligence fully capable of them.

I would like to interject, in passing, my agreement with Goldschmidt (1990) that "the hidden dimension in the construction of the symbolic world is time." And as Norman O. Brown put it, "life not repressed is not in historical time," which I take as a reminder that time as a materiality is not inherent in reality, but a cultural imposition, perhaps the first cultural imposition, on it. As this elemental dimension of symbolic culture progresses, so does, by equal steps, alienation from the natural.

Cohen (1974) has discussed symbols as "essential for the development and maintenance of social order." Which implies--as does, more forcefully, a great deal of positive evidence--that before the emergence of symbols there was no condition of dis-order requiring them. In a similar vein, Levi-Strauss (1953) pointed out that "mythical thought always progresses from the awareness of oppositions toward their resolution." So whence the absence of order, the conflicts or "oppositions?" The literature on the Paleolithic contains almost nothing that deals with this essential question, among thousands of monographs on specific features. A reasonable hypothesis, in my opinion, is that division of labor, unnoticed because of its glacially slow pace, and not sufficiently understood because of its newness, began to cause small fissures in the human community and unhealthy practices vis-a-vis nature. In the later Upper Paleolithic, "15,000 years ago, we begin to observe specialized collection of plants in the Middle East, and special-ized hunting," observed Gowlett (1984). The sudden appearance of symbolic activities (e.g. ritual and art) in the Upper Paleolithic has definitely seemed to archaeologists one of prehistory's "big surprises" (Binford 1972b), given the absence of such behaviors in the Middle Paleolithic (Foster 1990, Kozlowski 1990). But signs of division of labor and specialization were making their presence felt as a breakdown of wholeness and natural order, a lack that needed redressing. What is surprising is that this transition to civilization can still be seen as benign. Foster (1990) seems to

celebrate it by concluding that the "symbolic mode...has proved extraordinarily adaptive, else why has Homo sapiens become material master of the world?" He is certainly correct, as he is to recognize "the manipulation of symbols [to be] the very stuff of culture," but he appears oblivious to the fact that this successful adaptation has brought alienation and destruction of nature along to their present horrifying prominence.

It is reasonable to assume that the symbolic world originated in the formulation of language, which somehow appeared from a "matrix of extensive nonverbal communication" (Tanner and Zihlman 1976) and face-to-face contact. There is no agreement as to when language began, but no evidence exists of speech before the cultural 'explosion' of the later Upper Paleolithic (Dibble 1984, 1989). It seems to have acted as an "inhibiting agent," a way of bringing life under "greater control" (Mumford 1972), stemming the flood of images and sensations to which the premodern individual was open. In this sense it would have likely marked an early turning away from a life of openness and communion with nature, toward one more oriented to the overlordship and domestication that followed symbolic culture's inauguration. It is probably a mistake, by the way, to assume that thought is advanced (if there were such a thing as `neutral' thought, whose advance could be universally appreciat- ed) because we actually think in language; there is no conclusive evidence that we must do so (Allport 1983). There are many cases (Lecours and Joanette 1980, Levine et al. 1982), involving stroke and like impairments, of patients who have lost speech, including the ability to talk silently to themselves, who were fully capable of coherent thought of all kinds. These data strongly suggest that "human intellectual skill is uniquely powerful, even in the absence of language" (Donald 1991).

In terms of symbolization in action, Goldschmidt (1990) seems correct in judging that "the Upper Paleolithic invention of ritual may well have been the keystone in the structure of culture that gave it its great impetus for expansion." Ritual has played a number of pivotal roles in what Hodder (1990) termed "the relentless unfolding of symbolic and social structures" accompanying the arrival of cultural mediation. It was as a means of achieving and consolidating social cohesion that ritual was essential (Johnson 1982, Conkey 1985); totemic rituals, for example,

reinforce clan unity.

The start of an appreciation of domestication, or taming of nature, is seen in a cultural ordering of the wild, through ritual. Evidently, the female as a cultural category, viz. seen as wild or dangerous, dates from this period. The ritual "Venus" figurines appear as of 25,000 years ago, and seem to be an example of earliest symbolic likeness of women for the purpose of representation and control (Hodder 1990). Even more concretely, subjugation of the wild occurs at this time in the first systematic hunting of large mammals; ritual was an integral part of this activity (Hammond 1974, Frison 1986).

Ritual, as shamanic practice, may also be considered as a regression from that state in which all shared a consciousness we would now classify as extrasensory (Leonard 1972). When specialists alone claim access to such perceptual heights as may have once been communal, further backward moves in division of labor are facilitated or enhanced. The way back to bliss through ritual is a virtually universal mythic theme, promising the dissolution of measurable time, among other joys. This theme of ritual points to an absence that it falsely claims to fill, as does symbolic culture in general.

Ritual as a means of organizing emotions, a method of cultural direction and restraint, introduces art, a facet of ritual expressiveness (Bender 1989). "There can be little doubt," to Gans (1985), "that the various forms of secular art derive originally from ritual." We can detect the beginning of an unease, a feeling that an earlier, direct authenticity is departing. La Barre (1972), I believe, is correct in judging that "art and religion alike arise from unsatisfied desire." At first, more abstractly as language, then more purposively as ritual and art, culture steps in to deal artificially with spiritual and social anxiety.

Ritual and magic must have dominated early (Upper Paleolithic) art and were probably essential, along with an increasing division of labor, for the coordination and direction of community (Wymer 1981). Similarly, Pfeiffer (1982) has depicted the famous Upper Paleolithic European cave paintings as the original form of initiating youth into now complex social systems; as necessary for order

and discipline (see also Gamble 1982, Jochim 1983). And art may have contributed to the control of nature, as part of development of the earliest territorialism, for example (Straus 1990).

The emergence of symbolic culture, with its inherent will to manipulate and control, soon opened the door to domestication of nature. After two million years of human life within the bounds of nature, in balance with other wild species, agriculture changed our lifestyle, our way of adapting, in an unprecedented way. Never before has such a radical change occurred in a species so utterly and so swiftly (Pfeiffer 1977). Self-domestication through language, ritual, and art inspired the taming of plants and animals that followed. Appearing only 10,000 years ago, farming quickly triumphed; for control, by its very nature, invites intensification. Once the will to production broke through, it became more productive the more efficiently it was exercised, and hence more ascendant and adaptive.

Agriculture enables greatly increased division of labor, establishes the material foundations of social hierarchy, and initiates environmental destruction. Priests, kings, drudgery, sexual inequality, warfare are a few of its fairly immediate specific consequences (Ehrenberg 1986b, Wymer 1981, Festinger 1983). Whereas Paleolithic peoples enjoyed a highly varied diet, using several thousand species of plants for food, with farming these sources were vastly reduced (White 1959, Gouldie 1986).

Given the intelligence and the very great practical knowledge of Stone Age humanity, the question has often been asked, "Why didn't agriculture begin, at say, 1,000,000 B.C. rather than about 8,000 B.C.?" I have provided a brief answer in terms of slowly accelerating alienation in the form of division of labor and symbolization, but given how negative the results were, it is still a bewildering phenomenon. Thus, as Binford (1968) put it, "The question to be asked is not why agriculture...was not developed everywhere, but why it was developed at all." The end of gatherer-hunter life brought a decline in size, stature, and skeletal robusticity (Cohen and Armelagos 1981, Harris and Ross 1981), and introduced tooth decay, nutritional deficiencies, and most infectious diseases (Larsen 1982,

Buikstra 1976a, Cohen 1981). "Taken as a whole...an overall decline in the quality--and probably the length--of human life," concluded Cohen and Armelagos (1981).

Another outcome was the invention of number, unnecessary before the ownership of crops, animals, and land that is one of agriculture's hallmarks. The development of number further impelled the urge to treat nature as something to be dominated. Writing was also required by domestication, for the earliest business transactions and political administration (Larsen 1988). Levi-Strauss has argued persuasively that the primary function of written communication was to facilitate exploitation and subjugation (1955); cities and empires, for example, would be impossible without it. Here we see clearly the joining of the logic of symbolization and the growth of capital.

Conformity, repetition, and regularity were the keys to civilization upon its triumph, replacing the spontaneity, enchantment, and discovery of the preagricultural human state that survived so very long. Clark (1979) cites a gatherer-hunter "amplitude of leisure," deciding "it was this and the pleasurable way of life that went with it, rather than penury and a day-long grind, that explains why social life remained so static." One of the most enduring and widespread myths is that there was once a Golden Age, characterized by peace and innocence, and that something happened to destroy this idyll and consign us to misery and suffering. Eden, or whatever name it goes by, was the home of our primeval forager ancestors, and expresses the yearning of disillusioned tillers of the soil for a lost life of freedom and relative ease.

The once rich environs people inhabited prior to domestication and agriculture are now virtually nonexistent. For the few remaining foragers there exist only the most marginal lands, those isolated places as yet unwanted by agriculture. And surviving gatherer-hunters, who have somehow managed to evade civilization's tremendous pressures to turn them into slaves (i.e. farmers, political subjects, wage laborers), have all been influenced by contact with outside peoples (Lee 1976, Mithen 1990).

Duffy (1984) points out that the present day gatherer-hunters he studied, the Mbuti Pygmies of central Africa, have been acculturated by surrounding villager-agriculturalists for hundreds of years, and to some extent, by generations of contact with government authorities and missionaries. And yet it seems that an impulse toward authentic life can survive down through the ages: "Try to imagine," he counsels, "a way of life where land, shelter, and food are free, and where there are no leaders, bosses, politics, organized crime, taxes, or laws. Add to this the benefits of being part of a society where everything is shared, where there are no rich people and no poor people, and where happiness does not mean the accumulation of material possessions." The Mbuti have never domesticated animals or planted crops.

Among the members of non-agriculturalist bands resides a highly sane combination of little work and material abundance. Bodley (1976) discovered that the San (aka Bushmen) of the harsh Kalahari Desert of southern Africa work fewer hours, and fewer of their number work, than do the neighboring cultivators. In times of drought, moreover, it has been the San to whom the farmers have turned for their survival (Lee 1968). They spend "strikingly little time laboring and much time at rest and leisure," according to Tanaka (1980), while others (e.g. Marshall 1976, Guenther 1976) have commented on San vitality and freedom compared with sedentary farmers, their relatively secure and easygoing life.

Flood (1983) noted that to Australian aborigines "the labour involved in tilling and planting outweighed the possible advantages." Speaking more generally, Tanaka (1976) has pointed to the abundant and stable plant foods in the society of early humanity, just as "they exist in every modern gatherer society." Likewise, Festinger (1983) referred to Paleolithic access to "considerable food without a great deal of effort," adding that "contemporary groups that still live on hunting and gathering do very well, even though they have been pushed into very marginal habitats."

As Hole and Flannery (1963) summarized: "No group on earth has more leisure time than hunters and gatherers, who spend it primarily on games, conversation

and relaxing." They have much more free time, adds Binford (1968), "than do modernindustrial or farm workers, or even professors of archaeology."

The non-domesticated know that, as Vaneigem (1975) put it, only the present can be total. This by itself means that they live life with incomparably greater immediacy, density and passion than we do. It has been said that some revolutionary days are worth centuries; until then "We look before and after," as Shelley wrote, "And sigh for what is not...."

The Mbuti believe (Turnbull 1976) that "by a correct fulfillment of the present, the past and the future will take care of themselves." Primitive peoples do not live through memories, and generally have no interest in birthdays or measuring their ages (Cipriani 1966). As for the future, they have little desire to control what does not yet exist, just as they have little desire to control nature. Their moment-by-moment joining with the flux and flow of the natural world does not preclude an awareness of the seasons, but this does not constitute an alienated time consciousness that robs them of the present.

Though contemporary gatherer-hunters eat more meat than their pre-historic forbears, vegetable foods still constitute the mainstay of their diet in tropical and subtropical regions (Lee 1968a, Yellen and Lee 1976). Both the Kalahari San and the Hazda of East Africa, where game is more abundant than in the Kalahari, rely on gathering for 80 percent of their sustenance (Tanaka 1980). The !Kung branch of the San search for more than a hundred different kinds of plants (Thomas 1968) and exhibit no nutritional deficiency (Truswell and Hansen 1976). This is similar to the healthful, varied diet of Australian foragers (Fisher 1982, Flood 1983). The overall diet of gatherers is better than that of cultivators, starvation is very rare, and their health status generally superior, with much less chronic disease (Lee and Devore 1968a, Ackerman 1990).

Lauren van der Post (1958) expressed wonder at the exuberant San laugh, which rises "sheer from the stomach, a laugh you never hear among civilized people." He found this emblematic of a great vigor and clarity of senses that yet manages to withstand and elude the onslaught of civilization. Truswell and Hansen (1976)

may have encountered it in the person of a San who had survived an unarmed fight with a leopard; although injured, he had killed the animal with his bare hands.

The Andaman Islanders, west of Thailand, have no leaders, no idea of symbolic representation, and no domesticated animals. There is also an absence of aggression, violence, and disease; wounds heal surprisingly quickly, and their sight and hearing are particularly acute. They are said to have declined since European intrusion in the mid-19th century, but exhibit other such remarkable physical traits as a natural immunity to malaria, skin with sufficient elasticity to rule out post-childbirth stretch marks and the wrinkling we associate with ageing, and an `unbelievable' strength of teeth: Cipriani (1966) reported seeing children of 10 to 15 years crush nails with them. He also testified to the Andamese practice of collecting honey with no protective clothing at all; "yet they are never stung, and watching them one felt in the presence of some age-old mystery, lost by the civilized world."

DeVries (1952) has cited a wide range of contrasts by which the superior health of gatherer-hunters can be established, including an absence of degenerative diseases and mental disabilities, and childbirth without difficulty or pain. He also points out that this begins to erode from the moment of contact with civilization.

Relatedly, there is a great deal of evidence not only for physical and emotional vigor among primitives but also concerning their heightened sensory abilities. Darwin described people at the southernmost tip of South America who went about almost naked in frigid conditions, while Peasley (1983) observed Aborigines who were renowned for their ability to live through bitterly cold desert nights "without any form of clothing." Levi-Strauss (1979) was astounded to learn of a particular [South American] tribe which was able to "see the planet Venus in full daylight," a feat comparable to that of the North African Dogon who consider Sirius B the most important star; somehow aware, without instruments, of a star that can only be found with the most powerful of telescopes (Temple 1976). In this vein, Boyden (1970) recounted the Bushman ability to see four of the moons of Jupiter with the naked eye.

In The Harmless People (1959), Marshall told how one Bushman walked unerringly to a spot in a vast plain, "with no bush or tree to mark place," and pointed out a blade of grass with an almost invisible filament of vine around it. He had encountered it months before in the rainy season when it was green. Now, in parched weather, he dug there to expose a succulent root and quenched his thirst. Also in the Kalahari Desert, van der Post (1958) meditated upon San/Bushman communion with nature, a level of experience that "could almost be called mystical. For instance, they seemed to know what it actually felt like to be an elephant, a lion, an antelope, a steenbuck, a lizard, a striped mouse, mantis, baobab tree, yellow-crested cobra or starry-eyed amaryllis, to mention only a few of the brilliant multitudes through which they moved." It seems almost pedestrian to add that gatherer-hunters have often been remarked to possess tracking skills that virtually defy rational explanation (e.g. Lee 1979).

Rohrlich-Leavitt (1976) noted, "The data show that gatherer-hunters are generally nonterritorial and bilocal; reject group aggression and competition; share their resources freely; value egalitarianism and personal autonomy in the context of group cooperation; and are indulgent and loving with children." Dozens of studies stress communal sharing and egalitarianism as perhaps the defining traits of such groups (e.g. Marshall 1961 and 1976, Sahlins 1968, Pilbeam 1972, Damas 1972, Diamond 1974, Lafitau 1974, Tanaka 1976 and 1980, Wiessner 1977, Morris 1982, Riches 1982, Smith 1988, Mithen 1990). Lee (1982) referred to the "universality among foragers" of sharing, while Marshall's classic 1961 work spoke of the "ethic of generosity and humility" informing a "strongly egalitarian" gatherer-hunter orientation. Tanaka provides a typical example: "The most admired character trait is generosity, and the most despised and disliked are stinginess and selfishness."

Baer (1986) listed "egalitarianism, democracy, personalism, individuation, nurturance" as key virtues of the non-civilized, and Lee (1988) cited "an absolute aversion to rank distinctions" among "simple foraging peoples around the world." Leacock and Lee (1982) specified that "any assumption of authority" within the group "leads to ridicule or anger among the !Kung, as has been recorded for the

Mbuti (Turnbull 1962), the Hazda (Woodburn 1980) and the Montagnais-Naskapi (Thwaites 1906), among others."

"Not even the father of an extended family can tell his sons and daughters what to do. Most people appear to operate on their own internal schedules," reported Lee (1972) of the !Kung of Botswana. Ingold (1987) judged that "in most hunting and gathering societies, a supreme value is placed upon the principle of individual autono- my," similar to Wilson's finding (1988) of "an ethic of independence" that is "common to the focused open societies." The esteemed field anthropologist Radin (1953) went so far as to say: "Free scope is allowed for every conceivable kind of personality outlet or expression in primitive society. No moral judgment is passed on any aspect of human personality as such."

Turnbull (1976) looked on the structure of Mbuti social life as "an apparent vacuum, a lack of internal system that is almost anarchical." According to Duffy (1984), "the Mbuti are naturally acephalous - they do not have leaders or rulers, and decisions concerning the band are made by consensus." There is an enormous qualitative difference between foragers and farmers in this regard, as in so many others. For instance, agricultural Bantu tribes (e.g. the Saga) surround the San, and are organized by kingship, hierarchy and work; the San exhibit egalitarianism, autonomy, and sharing. Domestication is the principle which accounts for this drastic distinction.

Domination within a society is not unrelated to domination of nature. In gatherer-hunter societies, on the other hand, no strict hierarchy exists between the human and the non-human species (Noske 1989), and relations among foragers are likewise non-hierarchical. The non-domesticated typically view the animals they hunt as equals; this essentially egalitarian relationship is ended by the advent of domestication.

When progressive estrangement from nature became outright social control (agriculture), more than just social attitudes changed. Descriptions by sailors and explorers who arrived in "newly discovered" regions tell how wild mammals and birds originally showed no fear at all of the human invaders (Brock 1981). A few

contemporary gatherers practiced no hunting before outside contact, but while the majority certainly do hunt, "it is not normally an aggressive act" (Rohrlich-Leavitt 1976). Turnbull (1965) observed Mbuti hunting as quite without any aggressive spirit, even carried out with a sort of regret. Hewitt (1986) reported a sympathy bond between hunter and hunted among the Xan Bushmen he encountered in the 19th century.

As regards violence among gatherer-hunters, Lee (1988) found that "the !Kung hate fighting, and think anybody who fought would be stupid." The Mbuti, by Duffy's account (1984), "look on any form of violence between one person and another with great abhorrence and distaste, and never represent it in their dancing or playacting." Homicide and suicide, concluded Bodley (1976), are both "decidedly uncommon" among undisturbed gatherer-hunters. The `warlike' nature of Native American peoples was often fabricated to add legitimacy to European aims of conquest (Kroeber 1961); the foraging Comanche maintained their non-violent ways for centuries before the European invasion, becoming violent only upon contact with marauding civilization (Fried 1973).

The development of symbolic culture, which rapidly led to agriculture, is linked through ritual to alienated social life among extant foraging groups. Bloch (1977) found a correlation between levels of ritual and hierarchy. Put negatively, Woodburn (1968) could see the connection between an absence of ritual and the absence of specialized roles and hierarchy among the Hazda of Tanzania. Turner's study of the west African Ndembu (1957) revealed a profusion of ritual structures and ceremonies intended to redress the conflicts arising from the breakdown of an earlier, more seamless society. These ceremonies and structures function in a politically integrative way. Ritual is a repetitive activity for which outcomes and responses are essentially assured by social contract; it conveys the message that symbolic practice, via group membership and social rules, provides control (Cohen 1985). Ritual fosters the concept of control or domination, and has been seen to tend toward leadership roles (Hitchcock 1982) and centralized political structures (Lourandos 1985). A monopoly of ceremonial institutions clearly extends the concept of authority (Bender 1978), and may itself be the original formal authority.

Among agricultural tribes of New Guinea, leadership and the inequality it implies are based upon participation in hierarchies of ritual initiation or upon shamanistic spirit-mediumship (Kelly 1977, Modjeska 1982). In the role of shamans we see a concrete practice of ritual as it contributes to domination in human society.

Radin (1937) discussed "the same marked tendency" among Asian and North American tribal peoples for shamans or medicine men "to organize and develop the theory that they alone are in communication with the supernatural." This exclusive access seems to empower them at the expense of the rest; Lommel (1967) saw "an increase in the shaman's psychic potency...counterbalanced by a weakening of potency in other members of the group." This practice has fairly obvious implications for power relationships in other areas of life, and contrasts with earlier periods devoid of religious lead- ership.

The Batuque of Brazil are host to shamans who each claim control over certain spirits and attempt to sell supernatural services to clients, rather like priests of competing sects (S. Leacock 1988). Specialists of this type in "magically controlling nature...would naturally come to control men, too," in the opinion of Muller (1961). In fact, the shaman is often the most powerful individual in preagricultural societies (e.g. Sheehan 1985); he is in a position to institute change. Johannessen (1987) offers the thesis that resistance to the innovation of planting was overcome by the influence of shamans, among the Indians of the American Southwest, for instance. Similarly, Marquardt (1985) has suggested that ritual authority structures have played an important role in the initiation and organization of production in North America. Another student of American groups (Ingold 1987) saw an important connection between shamans' role in mastering wildness in nature and an emerging subordination of women.

Berndt (1974a) has discussed the importance among Aborigines of ritual sexual division of labor in the development of negative sex roles, while Randolph (1988) comes straight to the point: "Ritual activity is needed to create `proper' men and women." There is "no reason in nature" for gender divisions, argues Bender (1989). "They have to be created by proscription and taboo, they have to be

`naturalized' through ideology and ritual."

But gatherer-hunter societies, by their very nature, deny ritual its potential to domesticate women. The structure (non-structure?) of egalitarian bands, even those most oriented toward hunting, includes a guarantee of autonomy to both sexes. This guarantee is the fact that the materials of subsistence are equally available to women and men and that, further, the success of the band is dependent on cooperation based on that autonomy (Leacock 1978, Friedl 1975). The spheres of the sexes are often somewhat separate, but inasmuch as the contribution of women is generally at least equal to that of men, social equality of the sexes is "a key feature of forager societies" (Ehrenberg 1989b). Many anthropologists, in fact, have found the status of women in forager groups to be higher than in any other type of society (e.g. Fluer- Lobban 1979, Rohrlich-Leavitt, Sykes and Weatherford 1975, Leacock 1978).

In all major decisions, observed Turnbull (1970) of the Mbuti, "men and women have equal say, hunting and gathering being equally important." He made it clear (1981) that there is sexual differentiation - probably a good deal more than was the case with their distant forbears - "but without any sense of superordination or subordination." Men actually work more hours than women among the !Kung, according to Post and Taylor (1984).

It should be added, in terms of the division of labor common among contemporary gatherer-hunters, that this differentiation of roles is by no means universal. Nor was it when the Roman historian Tacitus wrote, of the Fenni of the Baltic region, that "the women support themselves by hunting, exactly like the men...and count their lot happier than that of others who groan over field labor." Or when Procopius found, in the 6th century A.D., that the Serithifinni of what is now Finland "neither till the land themselves, nor do their women work it for them, but the women regularly join the men in hunting."

The Tiwi women of Melville Island regularly hunt (Martin and Voorhies 1975) as do the Agta women in the Philippines (Estioko-- Griffen and Griffen 1981). In Mbuti society, "there is little specialization according to sex. Even the hunt is a

joint effort," reports Turnbull (1962), and Cotlow (1971) testifies that "among the traditional Eskimos it is (or was) a cooperative enterprise for the whole family group."

Darwin (1871) found another aspect of sexual equality: "...in utterly barbarous tribes the women have more power in choosing, rejecting, and tempting their lovers, or of afterwards changing their husbands, than might have been expected." The !Kung Bushmen and Mbuti exemplify this female autonomy, as reported by Marshall (1959) and Thomas (1965); "Women apparently leave a man whenever they are unhappy with their marriage," concluded Begler (1978). Marshall (1970) also found that rape was extremely rare or absent among the !Kung.

An intriguing phenomenon concerning gatherer-hunter women is their ability to prevent pregnancy in the absence of any contraception (Silberbauer 1981). Many hypotheses have been put forth and debunked, e.g. conception somehow related to levels of body fat (Frisch 1974, Leibowitz 1986). What seems a very plausible explanation is based on the fact that undomesticated people are very much more in tune with their physical selves. Foraging women's senses and processes are not alienated from themselves or dulled; control over childbearing is probably less than mysterious to those whose bodies are not foreign objects to be acted upon.

The Pygmies of Zaire celebrate the first menstrual period of every girl with a great festival of gratitude and rejoicing (Turnbull 1962). The young woman feels pride and pleasure, and the entire band expresses its happiness. Among agricultural villagers, however, a menstruating woman is regarded as unclean and dangerous, to be quarantined by taboo (Duffy 1984). The relaxed, egalitarian relationship between San men and women, with its flexibility of roles and mutual respect impressed Draper (1971, 1972, 1975); a relationship, she made clear, that endures as long as they remain gatherer-hunters and no longer.

Duffy (1984) found that each child in an Mbuti camp calls every man father and every woman mother. Forager children receive far more care, time, and attention than do those in civilization's isolated nuclear families. Post and Taylor (1984) described the "almost permanent contact" with their mothers and other adults that

Bushman children enjoy. !Kung infants studied by Ainsworth (1967) showed marked precocity of early cognitive and motor skills development. This was attributed both to the exercise and stimulation produced by unrestricted freedom of movement, and to the high degree of physical warmth and closeness between !Kung parents and children (see also Konner 1976).

Draper (1976) could see that "competitiveness in games is almost entirely lacking among the !Kung," as Shostack (1976) observed "!Kung boys and girls playing together and sharing most games." She also found that children are not prevented from experimental sex play, consonant with the freedom of older Mbuti youth to "indulge in premarital sex with enthusiasm and delight" (Turnbull 1981). The Zuni "have no sense of sin," Ruth Benedict (1946) wrote in a related vein. "Chastity as a way of life is regarded with great disfavor...Pleasant relations between the sexes are merely one aspect of pleasant relations with human beings...Sex is an incident in a happy life."

Coontz and Henderson (1986) point to a growing body of evidence in support of the proposition that relations between the sexes are most egalitarian in the simplest foraging societies. Women play an essential role in traditional agriculture, but receive no corresponding status for their contribution, unlike the case of gatherer-hunter society (Chevillard and Leconte 1986, Whyte 1978). As with plants and animals, so are women subject to domestication with the coming of agriculture. Culture, securing its foundations with the new order, requires the firm subjugation of instinct, freedom, and sexuality. All disorder must be banished, the elemen- tal and spontaneous taken firmly in hand. Women's creativity and their very being as sexual persons are pressured to give way to the role, expressed in all peasant religions, of Great Mother, that is, fecund breeder of men and food.

The men of the South American Munduruc, a farming tribe, refer to plants and sex in the same phrase about subduing women: "We tame them with the banana" (Murphy and Murphy 1985). Simone de Beauvoir (1949) recognized in the equation of the plow and the phallus a symbol of male authority over women. Among the Amazonian Jivaro, another agricultural group, women are beasts of

burden and the personal property of men (Harner 1972); the "abduction of adult women is a prominent part of much warfare" by these lowland South American tribes (Ferguson 1988). Brutalization and isolation of women seem to be functions of agricultural societies (Gregor 1988), and the female continues to perform most or even all of the work in such groups (Morgan 1985).

Head-hunting is practiced by the above-mentioned groups, as part of endemic warfare over coveted agricultural land (Lathrap 1970); head-hunting and near-constant warring is also witnessed among the farming tribes of Highlands New Guinea (Watson 1970). Lenski and Lenski's 1974 researches concluded that warfare is rare among foragers but becomes extremely common with agrarian societies. As Wilson (1988) put it succinctly, "Revenge, feuds, rioting, warfare and battle seem to emerge among, and to be typical of, domesticated peoples."

Tribal conflicts, Godelier (1977) argues, are "explainable primarily by reference to colonial domination" and should not be seen as having an origin "in the functioning of pre-colonial structures." Certainly contact with civilization can have an unsettling, degenerative effect, but Godelier's marxism (viz. unwillingness to question domestication/production), is, one suspects, relevant to such a judgment. Thus it could be said that the Copper Eskimos, who have a significant incidence of homicide within their group (Damas 1972), owe this violence to the impact of outside influences, but their reliance on domesticated dogs should also be noted.

Arens (1979) has asserted, paralleling Godelier to some extent, that cannibalism as a cultural phenomenon is a fiction, invented and promoted by agencies of outside conquest. But there is documentation of this practice (e.g. Poole 1983, Tuzin 1976) among, once again, peoples involved in domestication. The studies by Hogg (1966), for example, reveal its presence among certain African tribes, steeped in ritual and grounded in agriculture. Cannibalism is generally a form of cultural control of chaos, in which the victim represents animality, or all that should be tamed (Sanday 1986). Significantly, one of the important myths of Fiji Islanders, "How the Fijians first became cannibals," is literally a tale of planting (Sahlins 1983). Similarly, the highly domesticated and time-conscious Aztecs

practiced human sacrifice as a gesture to tame unruly forces and uphold the social equilibrium of a very alienated society. As Norbeck (1961) pointed out, non-domesticated, "culturally impoverished" societies are devoid of cannibalism and human sacrifice.

As for one of the basic underpinnings of violence in more complex societies, Barnes (1970) found that "reports in the ethnographic literature of territorial struggles" between gatherer-hunters are "extremely rare." !Kung boundaries are vague and undefended (Lee 1979); Pandaram territories overlap, and individuals go where they please (Morris 1982); Hazda move freely from region to region (Woodburn 1968); boundaries and trespass have little or no meaning to the Mbuti (Turnbull 1966); and Australian Aborigines reject territorial or social demarcations (Gumpert 1981, Hamilton 1982). An ethic of generosity and hospitality takes the place of exclusivity (Steward 1968, Hiatt 1968).

Gatherer-hunter peoples have developed "no conception of private property," in the estimation of Kitwood (1984). As noted above in reference to sharing, and with Sansom's (1980) characterization of Aborigines as "people without property," foragers do not share civilization's obsession with externals.

"Mine and thine, the seeds of all mischief, have no place with them," wrote Pietro (1511) of the native North Americans encountered on the second voyage of Columbus. The Bushmen have "no sense of possession," according to Post (1958), and Lee (1972) saw them making "no sharp dichotomy between the resources of the natural environment and the social wealth." There is a line between nature and culture, again, and the non-civilized choose the former.

There are many gatherer-hunters who could carry all that they make use of in one hand, who die with pretty much what they had as they came into the world. Once humans shared everything; with agriculture, ownership becomes paramount and a species presumes to own the world. A deformation the imagination could scarcely equal.

Sahlins (1972) spoke of this eloquently: "The world's most primitive people have

few possessions, but they are not poor. Poverty is not a certain small amount of goods, nor is it just a relation between means and ends; above all, it is a relation between people. Poverty is a social status. As such it is the invention of civilization."

The "common tendency" of gatherer-hunters "to reject farming until it was absolutely thrust upon them" (Bodley 1976) bespeaks a nature/culture divide also present in the Mbuti recognition that if one of them becomes a villager he is no longer an Mbuti (Turnbull 1976). They know that forager band and agriculturalist village are opposed societies with opposed values.

At times, however, the crucial factor of domestication can be lost sight of. "The historic foraging populations of the Western Coast of North America have long been considered anomalous among foragers," declared Cohen (1981); as Kelly (1991) also put it, "tribes of the Northwest Coast break all the stereotypes of hunter- gatherers." These foragers, whose main sustenance is fishing, have exhibited such alienated features as chiefs, hierarchy, warfare and slavery. But almost always overlooked are their domesticated tobacco and domesticated dogs. Even this celebrated `anomaly' contains features of domestication. Its practice, from ritual to production, with various accompanying forms of domination, seems to anchor and promote the facets of decline from an earlier state of grace.

Thomas (1981) provides another North American example, that of the Great Basin Shoshones and three of their component societies, the Kawich Mountain Shoshones, Reese River Shoshones, and Owens Valley Paiutes. The three groups showed distinctly different levels of agriculture, with increasing territoriality or ownership and hierarchy closely corresponding to higher degrees of domestication.

To `define' a disalienated world would be impossible and even undesirable, but I think we can and should try to reveal the unworld of today and how it got this way. We have taken a monstrously wrong turn with symbolic culture and division of labor, from a place of enchantment, understanding and wholeness to the absence we find at the heart of the doctrine of progress. Empty and emptying, the

logic of domestication with its demand to control everything now shows us the ruin of the civilization that ruins the rest. Assuming the inferiority of nature enables the domination of cultural systems that soon will make the very earth uninhabitable.

Postmodernism says to us that a society without power relations can only be an abstraction (Foucault, 1982). This is a lie unless we accept the death of nature and renounce what once was and what we can find again. Turnbull spoke of the intimacy between Mbuti people and the forest, dancing almost as if making love to the forest. In the bosom of a life of equals that is no abstraction, that struggles to endure, they were "dancing with the forest, dancing with the moon."