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# Play as a Foundation for Hunter-Gatherer Social Existence



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The author offers the thesis that hunter-gatherers promoted, through cultural means, the playful side of their human nature and this made possible their egalitarian, nonautocratic, intensely cooperative ways of living. Hunter-gatherer bands, with their fluid membership, are likened to social-play groups, which people could freely join or leave. Freedom to leave the band sets the stage for the individual autonomy, sharing, and consensual decision making within the band. Hunter-gatherers used humor, deliberately, to maintain equality and stop quarrels. Their means of sharing had gamelike qualities. Their religious beliefs and ceremonies were playful, founded on assumptions of equality, humor, and capriciousness among the deities. They maintained playful attitudes in their hunting, gathering, and other sustenance activities, partly by allowing each person to choose when, how, and how much they would engage in such activities. Children were free to play and explore, and through these activities, they acquired the skills, knowledge, and values of their culture. Play, in other mammals as well as in humans, counteracts tendencies toward dominance, and hunter-gatherers appear to have promoted play quite deliberately for that purpose.

**I** AM A DEVELOPMENTAL/EVOLUTIONARY psychologist with a special interest in play. Some time ago, I began reading the anthropological literature on hunter-gatherer societies in order to understand how children's play might contribute to children's education in those societies. As I read, I became increasingly fascinated with hunter-gatherer social life *per se*. The descriptions I read, by many different researchers who had observed many different hunter-gatherer groups, seemed to be replete with examples of humor and playfulness in adults, not just in children, in all realms of hunter-gatherers' social existence. It became increasingly apparent to me that play and humor lay at the core of hunter-gatherer social structures and mores. Play and humor were not just means of adding fun to their lives. They were means of maintaining the band's existence—means of promoting actively the egalitarian attitude, extensive shar-

ing, and relative peacefulness for which hunter-gatherers are justly famous and upon which they depended for survival. In this article, I present evidence from research literature that play provided a foundation for hunter-gatherers' modes of governance, religious beliefs and practices, approaches to productive work, and means of education.

Hunter-gatherers occupy a unique place in anthropologists' and psychologists' attempts to understand human nature and human adaptability. During much of our history as a species, we were all hunter-gatherers. Our uniquely human traits are, presumably, adaptations to that way of life. Agriculture first appeared a mere ten thousand years ago.<sup>1</sup> The question of just how long humans existed before that has no firm answer, because it depends on how we want to define "humans." The line of primates that led to our species split off from that which led to our closest ape relatives, chimpanzees and bonobos, about six million years ago. By four million years ago, our ancestors were walking upright, and, by two to one million years ago, they had much larger brains than other apes, built fires, made tools, lived in social groups, and survived by hunting animals and gathering roots, nuts, seeds, berries, and other plant materials.<sup>2</sup> If we take, arbitrarily, a million years ago as the beginning of human history, then for 99 percent of that history, we were all hunter-gatherers.

The hunter-gatherer way of life is now almost completely extinguished, pushed out by intrusions from agriculture, industry, and modern ways generally. But as recently as the 1960s and the 1970s, and to some extent even later, anthropologists could find and study hunter-gatherers who had been very little affected by modern ways. Anthropologists who have studied such societies have classified them into two general categories. The societies discussed in this article fall into the category that is referred to as *immediate-return* hunter-gatherers, *simple* hunter-gatherers, or *egalitarian* hunter-gatherers. These societies have low population densities; live in small, mobile bands, that move regularly from place to place within large but relatively circumscribed areas; do not condone violence; are egalitarian in social organization; make decisions by consensus; own little property and readily share what they do own; and have little occupational specialization except those based on gender.<sup>3</sup>

The other category of hunter-gatherer societies, which is smaller in number and is typified by the Kwakiutl of the American Northwest Coast and the Ainu of Japan, is referred to as *collector* societies, *delayed-return* hunter-gatherers, *complex* hunter-gatherers, or *non-egalitarian* hunter-gatherers. In a chapter distinguishing the two categories, Robert Kelly characterizes the collector societies

as having “high population densities, sedentism or substantially restricted residential mobility, occupational specialization, perimeter defense and resource ownership, focal exploitation of a particular resource (commonly fish), large residential group size, inherited status, ritual feasting complexes, standardized valuables, prestige goods or currencies, and food storage.” He adds that they “also tend to have high rates of violence and condone violence as legitimate.”<sup>4</sup> Not all hunter-gatherer groups fall clearly into one or the other of these two categories. Some Inuit groups and some groups in New Guinea, for example, seem to fall between the two.<sup>5</sup>

In this article, my focus is on societies that most clearly fit the immediate-return definition. Throughout the article, I use, as do some researchers, the term *hunter-gatherer society*, unmodified, to refer exclusively to those hunter-gatherer societies that fall into the immediate-return category, and I use the term *collector society* to refer to the more complex, delayed-return, hunter-gatherer societies.

Hunter-gatherer societies (of the immediate-return variety) are, of course, not all carbon copies of one another. They have different languages, different ways of hunting and gathering, different ceremonies, and so on. Recently, specialists in hunter-gatherers have focused attention on the differences among them in order to counter the tendency in decades past to overemphasize the similarities. Yet, in basic ways regarding their social structure and social attitudes (to be discussed shortly), they are remarkably similar to one another, whether they exist in Africa, Asia, Australia, or South America.<sup>6</sup> This similarity among groups that are so widely separated geographically and that occupy such diverse habitats (ranging from dry, sparsely vegetated grasslands to rich, humid forests), gives us some confidence that they are also likely to be similar to hunter-gatherer societies that existed in preagricultural times. Archeological evidence also suggests that societies of this type long predated collector societies, which seem to have first appeared in the Upper Paleolithic (about forty thousand years ago).<sup>7</sup>

The hunter-gatherer groups that I refer to by name in this article are the *Ju/'hoansi* (also called the *!Kung*, of Africa's Kalahari Desert), *Hazda* (of Tanzania's rain forest), *Mbuti* (of Congo's Ituri Forest), *Aka* (of rain forests in Central African Republic and Congo), *Efé* (of Congo's Ituri Forest), *Batek* (of Peninsular Malaysia), *Agta* (of Luzon, Philippines), *Nayaka* (of South India), *Aché* (of Eastern Paraguay), *Parakana* (of Brazil's Amazon basin), and *Yiwara* (of Australia's desert). The group that has been studied and written about most

fully, by the largest number of different investigators and with the most vivid detail, are the *Ju/'hoansi*. (The *si* at the end of *Ju/'hoansi* makes the term plural and is used with reference to the people as a whole; the singular noun and adjectival form is *Ju/'hoan*.) Because they have been so richly described, more of my examples come from this group than from any other. However, I also present many examples from other groups and, when possible, refer to reviews of multiple hunter-gatherer groups in order to document general claims.

In describing the practices of hunter-gatherer groups, I use the ethnographic present, that is, the present tense referring to the time when the studies were conducted, not today. Many of the practices described here have since been obliterated, or are well en route to being obliterated, along with the cultures themselves.

Before proceeding further, I feel compelled to insert a caveat—a caveat that should not be necessary but perhaps is. The word *play* has some negative connotations to people in our culture, especially when applied to adults. It suggests something trivial, a diversion from work and responsibility. It suggests childishness. So, in the past, when people referred to the playfulness of the indigenous inhabitants of one place or another, the term was often an insult or, at best, a left-handed compliment. In truth, hunter-gatherer life can be very hard. It is certainly not all fun and games. There are times of drought and famine; early deaths are common; there are predators that must be dealt with. People grieve when their loved ones die. People take losses seriously and take seriously the necessity to plan for emergencies and respond appropriately to them. As you will see, my point is that play is used not to escape from but to confront and cope with the dangers and difficulties of a life that is not always easy.

Perhaps because of the negative connotations, anthropologists don't often use the terms *play* or *playful* in their descriptions of hunter-gatherer activities. They do, however, often use terms like *good-humored* and *cheerful*. My inferences about play and playfulness come primarily from researchers' actual descriptions of hunter-gatherers' activities, not so much from their explicit use of the labels "play" or "playful."

### Definition of Play

Before entering into the contention that play is a foundation for hunter-gatherer social existence, I should state what I mean by play and playful. I am not provid-

ing a new or unique definition; I am relying on definitions presented by many play scholars, both classic and contemporary. Also, throughout this article I use the term *game* in its broad sense, to refer to any form of play, not necessarily competitive play. In fact, most of the play that I discuss in this article is decidedly not competitive.

A first point worth making about play is that, in our species, it is not necessarily all-or-nothing. Pure play is observed more often in children than in adults. In adults, including hunter-gatherer adults, play is commonly blended with other motives that have to do with adult responsibilities. That is why, in everyday conversation, we tend to talk about children “playing” and about adults bringing a “playful spirit” or “playful attitude” to their activities. A second point is that play’s distinguishing characteristics lie not in the overt form of the activity but in the motivation and mental attitude that the person brings to it. Two people might be throwing a ball, or building a house, or doing almost anything, and one may be playing (to a high degree) while the other is not. A third point is that play is defined not in terms of a single identifying characteristic, but in terms of a confluence of characteristics, all having to do with motivation or attitude and all of which can vary in degree.

Classic and modern works on play have employed quite a variety of terms and phrases to describe play’s characteristics, but I think they can be boiled down nicely to the following five: Play is activity that is (1) self-chosen and self-directed; (2) intrinsically motivated; (3) structured by mental rules; (4) imaginative; and (5) produced in an active, alert, but nonstressed frame of mind. No other author that I know of has characterized play with exactly this list of five characteristics, but these five seem to appear most often in learned works about play, and they are most convincing to me.<sup>8</sup> The more fully an activity entails all of these characteristics, the more inclined most people are to refer to that activity as play. Let me elaborate briefly on each of these characteristics, as each is relevant to the discussion that follows.

### *Play Is Self-Chosen and Self-Directed*

Play, first and foremost, is what a person *wants* to do, not what a person feels obliged to do. Players choose not only to play but how to play, and that is the meaning of the statement that play is self-directed. Players are free agents, not pawns in someone else’s game. In social play (play involving more than one player), one person may emerge for a while as the leader but only at the will of all the others. Anyone may propose rules, but the rules must be agreeable

to all. The most basic freedom in play is the freedom to quit. The freedom to quit ensures that all of the players are doing what they want to do. It prevents leaders from enforcing rules that are not agreed upon by all. People who are unhappy will quit, and if too many quit play will end. So, to the degree that players are motivated to keep play going, they are motivated to seek consensus on all decisions that affect play and to keep their playmates happy in other ways as well.

### *Play Is Intrinsically Motivated*

Play is activity that, from the conscious perspective of the player, is done for its own sake more than for some reward that is separate from the activity itself. In other words, it is behavior in which means are more valued than ends. When we are *not* playing, what we value most are the results of our actions. We scratch an itch to get rid of the itch, flee from a tiger to avoid getting eaten, or work at a boring job for money. If there were no itch, tiger, or paycheck, we would not scratch, flee, or work at the boring job. When we are not playing, we typically opt for the least effortful way of achieving our goal. In play, however, all this is reversed. In play, attention is focused on the means more than the ends, and players do not necessarily look for the easiest routes to achieving the ends.

Play often has goals, but the goals are experienced as an intrinsic part of the game, not as the sole reason for engaging in play activities. Goals in play are subordinate to the means for achieving them. For example, constructive play (the playful building of something) is always directed toward the goal of creating the object that the players have in mind; but the primary objective in such play is the *creation* of the object, not the *having* of the object. Children making a sandcastle would not be happy if an adult came along and said, "You can stop all your effort now; I'll make the castle for you." The process, not the product, motivates them. Similarly, children or adults playing a competitive game have the goal of scoring points and winning, but, if they are truly playing, it is the process of scoring and winning that motivates them, not the points themselves or the status of having won. If someone would just as soon win by cheating as by following the rules, or get the trophy and praise through some shortcut that bypasses the game process, then that person is not playing. When adults say that their work is play to them, they are implying that they enjoy their work so much that they would likely continue it even if they no longer needed the paycheck or other extrinsic rewards it produces.

*Play Is Guided by Mental Rules*

Play is freely chosen activity, but it is not free-form activity. Play always has structure, and that structure derives from rules in the players' minds. This point is really an extension of the point just made about the prominence of means in play. The rules of play are the means. The rules are not like rules of physics, nor like biological instincts, which are automatically followed. Rather, they are mental concepts that often require players to make conscious efforts to keep them in mind. The rules of play provide boundaries within which the actions must occur, but they do not precisely dictate each action; they always leave room for creativity. Human activities that are precisely structured by rules, with known ends and known paths to those ends, are properly called rituals, not play.<sup>9</sup> Rituals provide no opportunities for self-direction, and play requires self-direction.

Different types of play have different types of rules. A basic rule of constructive play, for example, is that you must work with the chosen medium in a manner aimed at producing or depicting some specific object or design that you have in mind. In sociodramatic play—the playful acting out of roles or scenes, as when children are playing house or pretending to be superheroes—the fundamental rule is that players must abide by their shared understanding of the roles that they are playing; they must stay in character. Even rough-and-tumble play (playful fighting and chasing), which may look wild from the outside, is constrained by rules. An always-present rule in children's play fighting, for example, is that you mimic some of the actions of serious fighting, but you don't really hurt the other person. You don't hit with all your force (at least not if you are the stronger of the two); you don't kick, bite, or scratch.

In all sorts of social play, the players must have a shared understanding of the rules. In many instances of social play, more time is spent discussing the rules, to arrive at a shared understanding, than is spent actually playing. Again, play requires consensus. One person playing by a different set of rules can ruin the game.

*Play Is Imaginative*

Play involves some sort of mental removal of oneself from the immediately present real world. Imagination, or fantasy, is most obvious in sociodramatic play, where the players create the characters and plot, but it is also present in other forms of human play. In rough-and-tumble play, the fight is a pretend one, not a real one. In constructive play, the players say that they are building

a castle, but they know it is a pretend castle, not a real one. In formal games with explicit rules, the players must accept an already established fictional situation that provides the foundation for the rules. For example, in the real world, bishops can move in any direction they choose, but in the fantasy world of chess they can move only on the diagonals. The fantasy aspect of play is intimately connected to play's rule-based nature. To the degree that play takes place in a fantasy world, it must be governed by rules that are in the minds of the players rather than by laws of nature. Rules of play that are not dictated by real-world conditions or by instincts are products of imagination.

The fantasy element is often not as obvious, or as full blown, in adult play as in the play of children. Yet, imagination figures into much if not most of what adults do and is a major factor in our intuitive sense of the degree to which adult activities are playful. For example, all hypotheses and theories, designed to explain something about the here and now in terms of entities that are not immediately present, require imagination. That is why we intuitively consider theory production in science to be more playful than data collection and compilation. Adults in all walks of life may also embed their daily activities into fantasies about the value of those activities, which may add to their sense of play and hence to their motivation to complete their tasks. I, right now, am super scholar, setting the world straight through the power of ideas.

In social play, all players must buy into a shared fantasy or fiction. The shared fantasy allows the game to cohere; it provides a context for understanding the rules, for keeping them in mind, and for evaluating potential new rules or decisions that may be proposed. I suspect that the editors of the *American Journal of Play* have shared fantasies about the influence their new journal will have, which add to their playful adventure.

#### *Play Involves an Active, Alert, but Nonstressed Frame of Mind*

The final characteristic of play follows naturally from the other four. Because play involves conscious control of one's own behavior, with attention to process and rules, it requires an active, alert mind. Players do not just passively absorb information from the environment, or reflexively respond to stimuli, or behave automatically in accordance with habit. Moreover, because play is not a response to others' demands or to immediate strong biological needs, the person at play is relatively free from the strong drives and emotions that are experienced as pressure or stress. And because the player's attention is focused on process more than outcome, the player's mind is not distracted by fear of



failure. Many forms of play involve some degree of mental tension because players care about performing well. But when such tension becomes excessive and is experienced as distress or as fear of failure, we are inclined to say that the activity is no longer playful.

So, the mind at play is active and alert, but not distressed. Attention is attuned to the activity itself, and there is reduced consciousness of self and time. The mind is wrapped up in the ideas, rules, and actions of the game. This state of mind has been shown in many psychological research studies to be ideal for creativity and the learning of new skills.<sup>10</sup>

### **Social Play as a Mode of Governance in Hunter-Gatherer Bands**

Every instance of prolonged social play is an exercise in governance. The great challenge is to keep all of the players happy without allowing anyone to violate the rules. If players are unhappy they will quit, and if too many quit the game is over. If players consistently violate the rules, that, too, terminates the game. The point I wish to develop in this section is that the means of governance in social play are, in essence, the means of governance in hunter-gatherer societies. I'll start by describing a typical example of a group playing a social game and then show how certain characteristics of such a group also exist in hunter-gatherer bands. The crucial characteristics in both are summarized as voluntary participation, autonomy, equality, sharing, and consensual decision making.

#### *Voluntary Participation, Autonomy, Equality, Sharing, and Consensual Decision Making in a Group at Play*

Picture a typical example of social play, a neighborhood group playing baseball—not a Little-League game run by coaches and umpires, which is not fully play, but a mixed-age pickup game run by the players themselves. The stated goal of each player might be to win, but the real goals are to keep the game going, play well (as defined by each person's own standards), and enjoy a shared activity. The players might keep score, but in the end nobody cares about the number of runs. Even though the game is nominally competitive, it is really a cooperative game in which all of the players, regardless of which team they are on, strive to make the game last and to keep it fun. Players may even move from

one team to another, to keep the teams balanced, as the game progresses. So, it is appropriate to think of all of the players as one play group, not two teams pitted against one another.

A basic characteristic of any social game, if it is really play, is that participation is optional; anyone who wants to leave can leave at any time. As I said earlier, in defining play, the freedom to leave is essential to the spirit of play. Since the game requires a certain number of players, everyone who wants the game to continue is motivated to keep the other players happy so they don't leave. This has a number of implications, which are intuitively understood by most players.

One implication is that players must not dominate or bully other players. People who feel dominated will quit. Another implication is that players must attempt to satisfy the needs and wishes of all the other players, at least sufficiently to keep them from quitting. In this sense, each person, regardless of ability, must be deemed equally worthy. If Marc, Mike, and Mary all want to pitch, the team might let each have a turn at pitching, even though their chance of winning would be better if Henry did all the pitching. Whoever is pitching, that person will almost certainly throw more softly to little Billy, who is a novice, than to big, experienced Jerome. When Jerome is up, the pitcher shows his best stuff, not just because he wants to get Jerome out but also because anything less would be insulting to Jerome. The golden rule of social play is not "Do unto others as you would have them do unto you." Rather, it is "Do unto others as they would have you do unto them." The equality of play is not the equality of sameness but the equality that comes from granting equal validity to the unique needs and wishes of every player.

In any given pickup game, some people will be much better players than others. There will be a tendency for the better players to dominate—to make all the rules, to give orders to others, and so on. However, if they do that, or do it too obviously, the others will quit. So, to the degree that the better players lead, they must learn to do so without dominating, without destroying the other players' sense of choice. The better players must also be careful not to flaunt their superior play. If they flaunt their ability, others may feel belittled and may quit. To keep the game going, players who intuitively understand these rules of play may develop leveling strategies, aimed at preventing anyone from flaunting their ability or behaving in a domineering manner. For example, such displays may be ridiculed or mocked, with the aim of bringing the overly proud person down a peg or two.

Leaders in social play exert leadership not by forcing their own wishes on others nor by evenhandedly treating all players by the same standards, but by being sensitive to each player's wishes and proposing rules and procedures that can accommodate them all. The most respected players are those who are most helpful to others and remain humble about that helpfulness. They lead not by power assertion but by attraction.

Sharing is also crucial to the game. Some people may come with a baseball glove or bat or both, and others may come with nothing. An implicit rule is that all such materials are, for the purpose of the game, common property. The catcher will use whatever catcher's mitt is available, the fielders will use whatever gloves are available—depending in part on the position they are playing—and each batter is free to choose from any of the bats.

As the game progresses, rules may be modified at any time, always with the purpose of making the game more fun and allowing it to continue. If too many people are knocking the ball out of the vacant lot and into the neighboring yard, the players might institute a rule that certain people (the best batters) have to bat one handed, with their nondominant hand. Anyone can propose a new rule, but to become a rule all players must accept it. In other words, decision making in social play is by consensus. Consensus does not mean that everyone has to agree that the new rule is the best possible rule. It only means that everyone *consents* to the rule; they are happy enough with the rule that they aren't going to walk away from the game because of it. Often a great deal of discussion and compromise is required to reach such consensus. A simple majority vote would not suffice, because the minority might feel unhappy and quit; and, again, if too many quit, the game is over.

In sum, the key elements that underlie social relationships and governance in a well-operating social game are voluntary participation, with attendant freedom to quit at any time; allowance for much individual autonomy within the rules of the game; equal treatment of all players, not in the sense of treating them all the same but in the sense of taking their needs equally into account; obligatory sharing of game-related materials; and consensual decision making. Of these characteristics, the first can reasonably be considered to be the most basic. The freedom of each player to quit is what ensures that those who want the game to continue will behave in ways consistent with the remaining four elements. If players were compelled to stay in the game, then the more powerful players could dominate, and the autonomy, equality, sharing, and consensual decision making would be lost.

*Voluntary Participation, Autonomy, Equality, Sharing, and Consensual Decision Making as Characteristics of Hunter-Gatherer Bands*

The five characteristics of a group playing a social game are precisely the elements that anthropologists refer to repeatedly, and often emphatically, in their discussions of social relationships and governance in hunter-gatherer societies. Here is a summary that I have abstracted from those discussions.

Most hunter-gatherers, wherever they have been studied, live in bands of about twenty to fifty people each, counting children as well as adults. Each band moves as needed to follow the available game and edible plants. At each campsite to which they move, each family within the band builds, from natural materials, a small, temporary hut, the construction of which usually takes just a few hours. Because the band moves frequently, material goods beyond what a person can easily carry are a burden, so there is very little accumulation of property. Each band is an independent entity. There is no governmental entity above the level of the band. The people within the band make all of the group's decisions.<sup>11</sup>

Hunter-gatherers are highly mobile, not just in the sense of whole bands moving from place to place but also in the sense of individuals and families moving from band to band. Bands are not permanent structures with fixed memberships. Everyone has friends and relatives in other bands who would welcome them in. Because of this, and because they are not encumbered by property, individuals may move at a moment's notice from one band to another. People move from band to band for marriage, but they also move to get away from conflicts or simply because they are more attracted to the people or the procedures that exist in another band. Disgruntled groups of people within any band may also, at any time, leave the original band and start a new one. Thus, the decision to belong to any given band is always a person's choice.<sup>12</sup> The freedom of band members to leave sets the stage for the other playlike qualities of hunter-gatherer life.

Although hunter-gatherers are free at any time to leave a band, they recognize the value of keeping a band together. The band is the economic and work unit, as well as the social unit, of hunter-gatherer societies. A band with stable membership, in which people know one another well and have a history of cooperating with one another, is more valuable than an unstable band. Moreover, people develop close friendships with others in their band. Therefore, people within a band—like people in a play group—are motivated to behave toward others in ways designed to keep the band together, and this lays the foundation

for hunter-gatherers' autonomy, equality, sharing, and consensual decision making.<sup>13</sup>

Essentially all researchers who write about the social lives of hunter-gatherers emphasize the high value placed on individual autonomy. The descriptions make it clear that hunter-gatherers' sense of autonomy is different from the individualism that characterizes modern, Western, capitalist cultures. Western individualism tends to pit each person against others in competition for resources and rewards. It includes the right to accumulate property and to use disparities in wealth to control the behavior of others. Thus, Western individualism tends, in principal, to set each person apart from each other person. In contrast, as Tim Ingold has most explicitly pointed out, the hunter-gatherers' sense of autonomy is one that connects each person to others, rather than sets them apart but does so in a way that does not create dependencies.<sup>14</sup> Their autonomy does not include the right to accumulate property or to use power or threats to control others' behavior or to make others indebted to them. Their autonomy does, however, allow people to make their own decisions from day-to-day and moment-to-moment about their own activities, as long as they do not violate the implicit and explicit rules of the band, such as rules about sharing. For example, individual hunter-gatherers are free, on any day, to join a hunting or gathering party or to stay at camp and rest, depending purely on their own preference. This is a freedom that goes far beyond the freedom of most workers in Western cultures.

Hunter-gatherers avoid, with passion, any kinds of agreements or practices that make one person dependent upon or beholden to another. They do not engage in contractual exchanges. Gifts are given regularly, but there is never an obligation that a gift be reciprocated. Hunter-gatherers likewise do not tell others what to do or use power-assertive methods to gain compliance. When they do try to influence the behavior of others, they usually do so indirectly, in ways that preserve each person's sense of choice and prevent or minimize any sense of being dominated. A general assumption is that all adults will want to work for the good of the band, but care is taken to ensure that each person's work for the band is voluntary, not coerced. Ingold points out that social relationships among hunter-gatherers are founded on trust—trust that the others will, on their own volition, want to please others in the band and support the band as a whole.<sup>15</sup>

Intimately tied to hunter-gatherers' sense of autonomy is what Richard Lee has called their "fierce egalitarianism."<sup>16</sup> Egalitarianism, among hunter-

gatherers, goes far beyond the Western notion of equal opportunity. It means that no one has more material goods than anyone else, that everyone's needs are equally important, and that no one considers himself or herself to be superior to others. The maintenance of equality in these ways is part and parcel of the maintenance of autonomy, as inequalities could lead to domination of those who have less by those who have more. Hunter-gatherers, of course, recognize that some people are better hunters or gatherers than others, some are wiser than others, and so on, and they value such abilities. However, they react strongly against any flaunting of abilities or overt expressions of pride. Any sense that some people are superior to others would challenge the autonomy of individuals, as a sense of superiority can lead to attempts to dominate.

From an economic point of view, the primary purpose of the band for hunter-gatherers is sharing. The people share their skills and efforts in obtaining food, defending against predators, and caring for children. They also share food and material goods. Such sharing, presumably, is what allowed hunter-gatherers to survive for so long under challenging conditions. The hunter-gatherer concept of sharing is different from our Western concept. For us, sharing is a praiseworthy act of generosity, for which a thank-you is due and some form of repayment may be expected in the future. For hunter-gatherers, sharing is not a generous act, nor an implicit bargain, but a duty. Nobody is thanked or praised for sharing, but they would be ridiculed and scorned if they failed to share. Anthropologists refer to such sharing as "demand sharing." Failing to share, if you have more than someone else, is a violation of a fundamental rule of hunter-gatherer societies.<sup>17</sup>

Hunter-gatherers do not have "big men" or "chiefs," of the sort common in collector and primitive agricultural societies, who tell people what to do. Some hunter-gatherer groups have no regular leader at all. Others, including most Ju/'hoan bands, have a nominal leader who speaks for the band in dealing with other bands, but that person has no more formal decision-making power than anyone else. Decisions that affect the whole band, such as that to move from one camp to another, are made by group discussions, which may go on for hours or even days before action is taken. Women as well as men take part in these discussions, and even children may be heard if they have an opinion. Within any given band, some people are known to have more wisdom or better judgment than others and are therefore more influential than others; but any power that they exert comes from their ability to persuade and to find compromises that take everyone's desires into account.<sup>18</sup>

The goal of such discussion is to reach consensus among all who care about the decision. It usually makes no sense to act until all band members are ready to go along with the action. Those who are not ready to go along may leave, or they may stay as disgruntled members; in either case the band would be weakened. To accept a decision that is strongly rejected by some members is, implicitly, a decision by the band that it would be okay for those members to leave. That sometimes happens. Depending on your perspective, you could say in such cases that the disgruntled persons were driven out by the band's decision, or you could say that the disgruntled persons were simply using their always-present options to leave.

Again, the point I am making is that the elements anthropologists emphasize in describing hunter-gatherer social attitudes and governance are strikingly similar to the elements that characterize well-functioning play groups. The meanings of *autonomy*, *equality*, *sharing*, and *consensus* within a hunter-gatherer band are quite comparable to their meanings in social play. And, in hunter-gatherer bands as well as in play groups, the ultimate source of these characteristics lies in the voluntary nature of group membership. Since people can leave at any time, it is necessary to please members of the band in order to keep the band together. Pleasing them means granting them autonomy, treating them as equals, sharing with them, and making group decisions they are willing to accept. Sometimes anthropologists write about hunter-gatherer social life as if nothing comparable to it exists in Western cultures. I suggest here that something quite comparable does exist—in every well-functioning group of people playing a social game.

#### *Uses of Humor in Hunter-Gatherer Governance*

Anthropologists who have lived in hunter-gatherer bands often write about the good humor of the people—the joking, good-natured teasing, and laughter. Such humor, which is also common among people everywhere in social play, no doubt serves a bonding function. Laughing together helps create a feeling of closeness and shared identity. Good-natured teasing is a way of acknowledging yet accepting one another's flaws.

Some anthropologists have pointed out that hunter-gatherers use humor for another purpose, that of correcting or punishing those who are in some way disrupting the peace or violating a rule. For example, Colin Turnbull wrote, “[The Mbuti] are good-natured people with an irresistible sense of humor; they are always making jokes about one another, even about themselves, but their

humor can be turned into an instrument of punishment when they choose.”<sup>19</sup> Similarly, Elizabeth Marshall Thomas noted that the Ju/'hoansi whom she had lived among would not criticize people directly but would do so through humor. She wrote, “The criticized person was not supposed to take offense at the jokes and would be sure to laugh along with the others. On the very rare occasions when self-control broke down, such as happened when two women could not stop quarreling, other people made a song about them and sang it when the arguments started. Hearing the song, the two women felt shamed and fell silent. Thus the community prevailed without mentioning the problem directly.”<sup>20</sup>

Richard Lee has commented extensively on hunter-gatherers' use of humor as a tool to quell budding expressions of individual superiority and to maintain the egalitarianism that is crucial to the band's well-being. Concerning hunter-gatherers in general, he wrote, “There is a kind of rough good humor, putdowns, teasing, and sexual joking that one encounters throughout the foraging world. . . . People in these societies are fiercely egalitarian. They get outraged if somebody tries to put on the dog or to put on airs; they have evolved—independently, it would seem—very effective means for putting a stop to it. These means anthropologists have called ‘humility-enforcing’ or ‘leveling’ devices: thus the use of a very rough joking to bring people into line.”<sup>21</sup>

In his book about the Ju/'hoansi, Lee tells the story of how the people he was studying turned their leveling humor on him.<sup>22</sup> At one point early in his fieldwork, Lee decided to reward the people he was studying with a feast, for which he purchased the fattest ox he could find in the nearby farming community, “1200 lbs. on the hoof.” He was excited about announcing this gift and expected that the Ju/'hoansi—who loved meat and never got enough of it—would be grateful. When he announced the gift, however, he was surprised and hurt to find that the people responded not with the words of gratitude he had expected but with insults. For example, Bena, a sixty-year-old grandmother, referred to the ox as “a bag of bones” and asked, to everyone's amusement except Lee's, “What do you expect us to eat off it, the horns?” A man who had been one of Lee's closest confidants among the Ju/'hoansi deadpanned: “You have always been square with us. What has happened to change your heart? Or are you too blind to tell the difference between a proper cow and an old wreck?” Such humor, at Lee's expense, continued for days preceding the feast.

Lee was already aware of the Ju/'hoan practice of “insulting the meat” that hunters brought to the band, and at some point he began to suspect that this practice was now being used on him. Nevertheless, his pride in providing such



a wonderful gift was taken away; his masculine ego was hurt. And that was precisely the purpose of the insults. The Ju/'hoansi were treating him in just the same way they treated any of their own hunters who brought home a big kill and failed to show proper modesty about it. As Tomazho, a wise Ju/'hoan healer, subsequently explained to Lee: "When a young man kills much meat, he comes to think of himself as a big man, and he thinks of the rest of us as his inferiors. We can't accept this. We refuse one who boasts, for someday his pride will make him kill somebody. So we always speak of his meat as worthless. In this way we cool his heart and make him gentle."<sup>23</sup>

The effectiveness of humor as a leveler and reducer of aggression, I think, comes from its direct relationship to play. To make fun of something is to say, "This thing that you are so proud of, or this dispute that has you so angry, is not as important as you think it is. This is play, and the important thing in play is to be a good sport." When hunter-gatherers use humor to resolve even the most serious social problems that they face, they seem to bring all of social life into the domain of play.

The relationship between laughter and play lies deep in our biological makeup. Laughter originated, in primate evolution, as a signal to accompany play fighting. To distinguish play fighting from real fighting, so that a playful attack is not answered with a real one, players of any species must use some signal to assure one another that their attacks are playful. In monkeys and apes, the play-fight signal is the relaxed open-mouth display, or play face, characterized by a widely open mouth with lower jaw dropped and relatively little tension in the facial muscles. In chimpanzees, the play face is often accompanied by a vocalized *ahh ahh ahh*, which sounds like a throaty human laugh. Such observations leave little doubt that the play face and sounds accompanying it are evolutionarily related to human laughter.<sup>24</sup> Play fighting and the signals accompanying it constitute the original form of humor. When we humans, of any age and in any culture, use humor to quell a fight or deflate a puffed-up ego, we are calling on a very primitive mammalian mechanism. We are saying, in effect, "This is play, and in play we don't really hurt anyone, and we don't act in a domineering manner." We are saying it in a way that works because it strikes at the gut level of instinct, which we have no means to refute, rather than at the intellectual level of verbal argument, which we are all so good at refuting or ignoring.

And so, by using humor as a means to promote humility and peace, hunter-gatherers capitalize on the human instinct to relate humor to play. Those who

are criticized through humor have three choices: They can join the laughter, thereby acknowledging implicitly the foolishness of what they have done, which puts them immediately back into the social game. They can feel and express shame for acting in a way that led to the ridicule, which brings them back into the good graces of the others and allows them gradually to reenter the game. Or, they can stew in resentment until they either leave the band or decide to change their ways. A great advantage of humor as a means to induce behavioral reform is that it leaves the punished persons free to make their own choices and does not automatically end their senses of autonomy and play, which would happen if the punishment involved incarceration, physical violence, or forced banishment. In my informal observations, such uses of humor are common in social play groups, though rarely are they exhibited in such a high art form and with such a conscious understanding of the purpose, as apparently occurs among the Ju/'hoansi.

#### *Rules for Sharing in the Social Game of Life*

All social play involves shared rules. The rules give structure and predictability to the interactions among the players. The overarching purposes of the rules for any social game, if it is truly play, are to coordinate the activities of all of the participants into a coherent whole and to make the game fun for all. The rules of social play often require that people resist their natural urges or instincts and exert self-discipline. Much of the joy of social play comes from such exertion and from the aesthetics of taking part in a coordinated, rule-restrained social activity. All this, which can be said about the rules of every form of social play, can also be said about the rules within any hunter-gatherer society. Here my focus is on the rules for sharing.

Hunting and gathering people everywhere have rules for distributing foods and sharing the few material goods they own. The goal, always, is material equality, which may be essential for the band's survival. However, the means of achieving that goal are often quite elaborate and playlike. The focus on means turns people's attention away from their immediate hunger and away from concern for rapid achievement of the goal of material equality, and this makes the distribution playlike. Consider, for example, the rules for distributing meat.

When hunters bring a large kill into the camp, it is a time of general rejoicing. The only person who cannot rejoice is the hunter who actually killed the animal; he must behave modestly and act as if the animal is skinny and worth-

less. This rule of extreme modesty about a kill apparently characterizes most, if not all, hunter-gatherer cultures.<sup>25</sup> The meat from the kill is then distributed to families and individuals in the camp in a manner that follows a gamelike set of rules, though the rules differ from society to society. One rule specifies who may carve up the meat and distribute it in the first wave of distribution. In some cultures, that person is the hunter who killed it; more often, however, it is not. Among the Ju/'hoansi, the official, initial owner of the meat, who has the right to distribute it, is not the hunter but the person who owned the arrow that killed the animal. There is much giving and lending of arrows among all members of the band, so anyone might own an arrow and lend it to a successful hunter.<sup>26</sup> A number of other hunter-gatherer societies likewise attribute initial game ownership to the person who owned the implement (such as an arrow, a poisoned dart, or a net) that was used to make the kill or capture.<sup>27</sup> Such rules ensure that even the goodwill generated by the distribution of meat does not go just to successful hunters but is distributed throughout the band. In still other societies, a particular person, often an elderly male who had nothing to do with the hunt, is designated as the official distributor of meat.

In apparently all hunter-gatherer groups, there is no economic advantage in being the distributor of meat. That person is never allowed to take a larger share than anyone else, and often he must take a smaller share. Some societies have explicit rules for the order of distribution. Among the Yiwara, for example, the man who brings home a kill must give the first and best portions to those who are least closely related to him by blood, including his in-laws, and must leave for his immediate family and himself the least desired portion.<sup>28</sup> This custom, I assume, helps to maintain goodwill among those whose relationships are most likely to need such support. Among the Hazda, pregnant women are given first priority.<sup>29</sup> All these rules seem to have practical purposes, but the ceremonial spirit in which they are followed appears to put them at least partly into the realm of play.

In relatively large hunter-gatherer bands, the distribution of meat occurs in waves. The first wave involves distribution among a predesignated set of adults, who then distribute those portions among others, who, in turn, distribute the portions they received. The end result is that everyone receives roughly equal portions with some differences depending on perceived need. Kirk Endicott points out that food sharing among the Batek may continue even when everyone has plenty. Families may give portions of food to others who already have adequate portions and may receive from others the same kinds of foods that

they have just given away.<sup>30</sup> Here the implicit rules of sharing clearly go beyond the practical purpose of making sure that everyone gets their fair share of food. The means (sharing) here take precedence over the end (equivalent portions for all), which suggests that the sharing is playlike.

In her review of food sharing within various hunter-gatherer bands, Wiessner concludes that the sharing is not centered on reciprocity.<sup>31</sup> A successful hunter, who has taken no more than anyone else from his own kill, cannot expect that in the future he or his family will receive a larger than average portion of someone else's kill. Nurit Bird-David contrasts such nonreciprocal sharing of game among the Nayaka hunter-gatherers, whom she studied, with the sharing of game by their sedentary, cultivator neighbors, the Mulla Kurumba. The latter group has ceremonies for sharing large game, but in the ceremonies, unlike the Nayaka's, the emphasis is on reciprocity and the exact repayment of debts.<sup>32</sup>

So crucial are the rules of food sharing to hunter-gatherer bands that anyone who fails to share is, in essence, opting out of the game, declaring that he or she is no longer a member of the band. Kim Hill, concerning the Aché, wrote, "It is my impression that those who refuse to share game would probably be expelled from the band."<sup>33</sup> I suppose the analogue to this, in a pickup game of baseball, would be the kid who, when he gets the ball, just holds on to it and refuses to throw it to anyone else.

Even more playlike is the sharing of materials other than food. Hunter-gatherers own very little, and the objects they do own, such as beaded decorations and tools, have limited value because they are made from readily available materials and can be replaced without great trouble by band members who are highly skilled at making them. Yet, the people cherish such objects, not as treasures to hoard but as potential gifts to others. Such objects are circulated in continuous rounds of gift giving, which promote friendships. People in collector and agricultural societies also often have gift-giving traditions, but in those societies the giving may take on competitive, power-assertive, and dependence-producing functions.<sup>34</sup> In contrast, hunter-gatherers take pains to keep their gift giving modest, friendly, noncompetitive, and in these senses playlike.

The Ju/'hoansi, for example, have a formal gift-giving system, referred to as *hxaro*, which occupies a considerable portion of their time and has the qualities of a sacred game. Each Ju/'hoan adult has roughly ten to twenty regular *hxaro* partners, most of whom live in other bands, sometimes more than one hundred miles away. Each person travels regularly by foot to visit his or her *hxaro* partners and present them with gifts. Giving between any pair of partners always goes in

both directions, but care is taken to prevent the giving from looking like trade. Gifts are never reciprocated immediately, and there is no requirement that the gifts balance out to be equal in value. Each gift is given and received as a reflection of friendship, not as something that is owed to the other. Hxaro partners are said by the Ju/'hoansi to "hold each other in their hearts."<sup>35</sup>

Ju/'hoan children are introduced to hxaro by their grandmothers, when they are still toddlers, through games of give and take.<sup>36</sup> By having hxaro partners in many different bands spread out over large areas, the Ju/'hoansi protect themselves from complete dependence on their own band and location. They are welcomed, for as long as they wish to stay, wherever they have such a partner. So, what at first glance seems to be wasted effort—walking hundreds of miles a year to deliver gifts that have little material value—is actually a socially valuable game. It helps maintain peace between bands, and it frees people from the confinement and possibility of exploitation that would result if they could not move freely from one band to another. It also facilitates marriages between people of different bands, which is essential among all hunter-gatherers to prevent inbreeding. But these social gains, which may be the ultimate purposes of hxaro, are not the immediate, conscious motives for most of the visits. The conscious motives are to experience the joys that come from visiting old friends, presenting them with gifts, and following the rules of a lifelong game.

### A Playful Approach to Religion

A case can be made that religious faith, everywhere, taps into the human capacity for play. Faith is belief that does not require empirical evidence. To believe without evidence is to make-believe. In any social game, the players accept, for the purpose of the game, the fictional premises that provide the game's context. Jill *is* the princess, Johnny *is* the fierce dragon, and the couch *is* a bridge with a troll living under it. Only during time out can Jill and the others say that they were merely pretending. It can be argued that religion, for the devout, is play for which there is no time out.<sup>37</sup>

If we think of social life as a grand human game, then the religious beliefs of a society provide a context for understanding the goals and rules of the game and for making decisions. The religious beliefs both reflect and help to support the society's socioeconomic structure. From this point of view, it is no

surprise that monotheistic religions that blossomed in feudal times portray a hierarchical view of the cosmos with an all powerful God, a “king of kings,” at the top and a storyline focused on the requirements of obedience and service to lords and masters. It is also no surprise that hunter-gatherer religions reflect an egalitarian view of the spirit world, populated by a multitude of deities, none of whom have authority over the others or over human beings.

Because of their egalitarian foundation, hunter-gatherer religions are playful in ways that go well beyond the general fashion in which all religions can be thought of as play. For devout Jews, Christians, and Muslims, the cosmos is imbued with serious moral purpose to which humans must bend in ways that run counter to the spirit of play. For hunter-gatherers, in contrast, the cosmos is capricious. The hunter-gatherer deities themselves are playful and even comical beings, not stern judges. They are not all-powerful, all-wise, all-good, or all-bad. Like people, they are sometimes good, sometimes bad, occasionally wise, often foolish, and generally unpredictable. They are not particularly concerned with human morality. Their interactions with people can most often be described as whimsical. A deity may hurt or help a person just because he or she feels like it, not because the person deserves it, and in that sense, at least, the deities are personifications of the natural phenomena, such as the weather, on which the people depend and with which they must contend. A common character in the hunter-gatherer spirit world is what mythologists call the “trickster.”<sup>38</sup> The trickster is typically a partly clever, partly bumbling, morally ambivalent being who manages to interfere with the best-laid plans of the other deities and humans. The trickster character is not necessarily represented in just one deity; it may be an aspect of personality that runs through most or all of them.

One of the Ju/'hoan deities has characteristics that might, at first, lead us to view him as equivalent to the single god of modern monotheistic religions. This deity, called Gao Na, is the creator of the universe. First he created himself and the other deities; then the earth, water holes in the earth, and water to fill the holes; then the sky, sun, moon, stars, rain, wind, lightning, plants, animals, and human beings. Yet, despite such power of creation, Gao Na is seen as not particularly powerful in other respects and certainly not as wise. In fact, consistent with their general practice of leveling those who might think too highly of themselves, the Ju/'hoansi delight in portraying Gao Na as a fool.<sup>39</sup>

In Ju/'hoan religious stories, Gao Na, the creator of everything, is unable to control the beings he created and is continuously being outwitted by them. For example, his wives trick him again and again into jumping into a pit full

of feces. They tell him that there is a fat eland—a species of African antelope—under a pile of branches, and he leaps happily into the pile to get it, only to fall into the pit. Later the wives tell him another story about some other prize under the branches, and he jumps in again.<sup>40</sup> He never learns. He is like Charlie Brown who keeps thinking that this time Lucy will not pull the football away when he tries to kick it. Even the creator of everything—maybe especially the creator of everything—has no business feeling proud. He doesn't need worship; he needs, instead, to be put in his place as no better than anyone else.

Similar stories, apparently aimed at leveling the deities, can be found in other hunter-gatherer religions. Among the Batek, for example, perhaps the most powerful deity is Gobar, the thunder god. Gobar is an exception to the generality that hunter-gatherer gods don't punish; he brings thunderstorms when Batek persons violate sacred rules, such as engaging in incest or striking a child or mocking certain animals that Gobar protects. Yet the Batek do not revere or fear Gobar; they are more likely to make fun of him. In one often-repeated humorous story, Gobar is “burned by bees” and, as a result, is covered with ugly bumps. The Batek also believe that Gobar makes mistakes, such as by bringing storms when no rules were broken, and they have no hesitation about criticizing him for those mistakes.<sup>41</sup>

The religious practices of most hunter-gatherers include shamanic ceremonies. The primary serious purpose of such ceremonies is healing, but the ceremonies also provide an opportunity for band members to interact in all sorts of ways with members of the spirit world. Individuals who have the power to do so (the shamans) enter into trance states in which they take on the properties of and/or communicate with specific deities. Mathias Guenther notes that this altered state of consciousness is generally reached “without hallucinogenic substances, but through a combination of drumming, singing, and dancing, coupled with physical exhaustion.” He writes further: “Often the shaman is a showman who employs rich poetic imagery and histrionics. He may sing and dance, trembling and shrieking, and speak in strange languages. He may also employ prestidigitation and ventriloquism. . . . Shamanic séances are very much performance events, not infrequently with audience feedback. They involve the shaman in role playing, engaging in dialogue with various spirits, each of whose counter-roles he plays himself.”<sup>42</sup>

Among some hunter-gatherer groups, the whole band joins in the dancing, singing, and drumming; all of them, effectively, are shamans or at least contributors to the shamanic experience. Among the Ju/'hoansi, roughly half of the

men and a third of the women are able to enter into shamanic trances.<sup>43</sup> When spirits are called forth in such exercises, in apparently any hunter-gatherer group, they are not treated reverently; they are treated much as the people treat each other. The communication may involve mutual joking, teasing, laughing, singing, and dancing, as well as requests for healing.

Anthropologists refer to the shamanic and other religious ceremonies as “rituals,” probably because the term has come to be used for any religious ceremony with some sort of regular structure. But the ceremonies are clearly not rituals in the sense of strict, uncreative adherence to a prescribed form. In fact, some hunter-gatherer researchers have claimed that the rituals they observed in the groups they studied were indistinguishable from play.<sup>44</sup> The ceremonies typically involve a great deal of the kind of self-determined, imaginative, yet rule-guided action that fits the definition of play.

A number of researchers have commented that hunter-gatherers, in general, are highly practical people, not much given to magic or superstition.<sup>45</sup> Shamanic healing is an exception, but such healing may actually work to the degree that diseases have psychological components. In general, hunter-gatherer religious ceremonies have more to do with embracing reality than with attempting to alter it, which may help explain why they are creative rather than formulaic. As an example, Thomas describes how the G/wi people (hunting and gathering neighbors to the Ju/'hoansi) use their sacred rain dance not to bring on rain but to welcome it and partake in its power when they see it coming.<sup>46</sup> Living in the desert, they might well dance to bring on rain if they thought it would work, but they do not believe they have such power. They can, however, rejoice in the rain and use its coming to raise their own spirits and prepare themselves for the bounty to follow. Gould, writing of the Yiwara, makes the same point in stating that these people “do not seek to control the environment in either their daily or their sacred lives. Rituals of the sacred life may be seen as the efforts of man to combine with his environment, to become ‘at one’ with it.”<sup>47</sup> From my perspective, such ceremonies are a form of play in which aspects of the natural world, personified in the deities, become playmates.

On the dimensions that commonly distinguish religious liberals from religious fundamentalists in Western culture, hunter-gatherers appear everywhere to be at the liberal end. Although hunter-gatherers find meaning in their stories about the spirit world, they do not treat the stories as dogma. Neighboring bands may tell similar stories in different ways, or may tell different stories



that contradict one another, but nobody takes offense. The sacred ceremonies of one band may be different from those of another or may vary considerably over time. Hunter-gatherer parents do not become upset when their children marry into another group and adopt religious beliefs and practices that differ from those they grew up with.<sup>48</sup> To leave one band and join another with different religious practices is in this sense like leaving a group playing one game and joining another playing a different game. There seems to be an implicit acknowledgment among these people that religious stories, while in some ways special and even sacred, are in the end just stories.

Concepts of the spirit world are valuable to hunter-gatherers, but they apparently don't let those concepts interfere with their empirical understanding of the world around them. Here is an example provided by Thomas. When Toma, a wise Ju/'hoan, was asked matter-of-factly what happens to stars during the daytime, he responded, matter-of-factly: "They stay where they are. We just can't see them because the sun is too bright." But another time, in a religious frame, Toma answered the same question with a Ju/'hoan legend, in which the stars are antlions (desert insects) that crawl up into the sky at night and return to their sandy pits at dawn. He was apparently not the least bit upset by the contradiction between these two explanations.<sup>49</sup>

In his classic book about the Mbuti, Colin Turnbull contrasts the lightheartedness of Mbuti religious beliefs and practices with the fearful superstitions of the nearby agricultural people.<sup>50</sup> The agriculturalists truly fear the forest spirits, so much so that they rarely venture into the forest, even in broad daylight. In contrast, while the Mbuti claim to believe in the same spirits and to interact with them in their religious ceremonies, they do not, in their everyday lives, manifest any fear of the spirits. One of their ceremonies involves the playing of the molimo—an enormously long trumpet, traditionally made by hollowing out a log from a molimo tree. The men of a band are keepers of the molimo, and on special occasions they bring it out at night. The sound of the molimo is deemed sacred, and women are supposed to be frightened of it and to believe that it comes from a terrible animal spirit. According to Turnbull, when he observed the ceremony, the women played their parts well, staying in their huts and acting frightened. But they were not really frightened; they seemed to know perfectly well that this was all a grand game instigated by the men. Other anthropologists have likewise contrasted the playful attitudes of hunter-gatherers toward their deities with the fearful attitudes of neighboring sedentary people.<sup>51</sup>

## A Playful Approach to Productive Work

Our word “work” has two different meanings. It can mean toil, which is unpleasant activity; or it can mean any activity that accomplishes something useful, whether or not the activity is pleasant. We use the same word for both of these meanings, because from our cultural perspective the two meanings often overlap. To a considerable degree, we view life as a process of doing unpleasant work in order to achieve necessary or desired ends. We toil at school to get an education (or a diploma); toil at a job to get money; and may even toil at a gym (work out) to produce better muscle tone. Sometimes we enjoy our work at school, our workplace, or the gym—and we deem ourselves lucky when we do—but our dominant mental set is that work is toil, which we do only because we have to or because it brings desired ends. Work in this sense is the opposite of play.

By all accounts, hunter-gatherers do not have this concept of work as toil.<sup>52</sup> They do not confound productiveness with unpleasantness. They do, of course, engage in many productive activities, which are necessary to sustain their lives. They hunt, gather, build and mend huts, build and mend tools, cook, share information, and so on. But they do not regard any of these as burdensome. They do these things because they want to. Work for them is play.

How do they manage this? What is it about hunter-gatherer work that makes it enjoyable rather than burdensome? On the basis of anthropologists’ descriptions, I would suggest that at least four factors contribute to hunter-gatherers’ maintaining a playful attitude toward even those activities they must engage in to survive.

### *The Workload Is Moderate*

One contributing factor to the playlike quality of hunter-gatherer work is that the work is not excessive. According to several quantitative studies, hunter-gatherers typically devote about twenty hours per week to hunting or food gathering and another ten to twenty hours to chores at the campsite, such as food processing and making or mending tools.<sup>53</sup> All in all, the research suggests, hunter-gatherer adults spend an average of thirty to forty hours per week on all subsistence-related activities combined, which is considerably less than the workweek of the typical modern American, if the American’s forty or more hours of out-of-home work is added to the many hours spent on domestic chores.

The short workweek becomes less surprising when we think about how hunter-gatherers make their living. Hunter-gatherers, by definition, do not plant or cultivate; they just harvest. They do not control the rate of production of food, only the rate of collecting it. With this way of life, long hours of work would be counterproductive. Harvesting wild animals and plants faster than their regeneration rate would deplete nature's food supply and eventuate in either mass starvation or a need to move ever farther, into new, unknown, possibly dangerous territory. Moreover, without means for long-term food storage, there is no value in harvesting more than can be consumed within a short period after its harvest. There is also no value in spending lots of time producing material goods. Possessions beyond what a person can easily carry on long treks from one campsite to another are burdens, not luxuries.

One anthropologist, Marshall Sahlins, has famously characterized hunter-gatherer societies collectively as "the original affluent society."<sup>54</sup> An affluent society, by Sahlins's definition, is one in which "people's material wants are easily satisfied." Hunter-gatherers are affluent not because they have so much, but because they want so little. They can provide for those wants with relatively little work, and, as a result, they have lots of free time, which they spend, according to one observer of the Ju/'hoansi, at such activities as "singing and composing songs, playing musical instruments, sewing intricate bead designs, telling stories, playing games, visiting, or just lying around and resting."<sup>55</sup> These are just the kinds of activities that we would expect of happy, relaxed people anywhere.

### *The Work Is Varied and Challenging*

Play requires mental challenge and an alert, active mind engaged in meeting the challenge. The least playlike work is mind-numbingly repetitive and dull. Hunter-gatherer work is almost always challenging, almost never dull.

Hunting, as it is done by hunter-gatherers, requires intelligence, knowledge, and physical skill. Unlike such carnivorous animals as lions, tigers, and wolves, humans cannot capture game by sheer speed and force but instead must use wit and craft. Hunter-gatherer men have a vast knowledge of the habits of the two to three hundred different mammals and birds they hunt. They can identify each animal by its sounds and tracks as well as by the sight of it. Louis Liebenberg claims that the tracking of game by hunters marked the origin of scientific reasoning.<sup>56</sup> Hunters use the marks they see in the sand, mud, or foliage as clues, which they combine with their accumulated knowledge from past experience,

to develop and test hypotheses about the size, sex, physical condition, speed of movement, and time of passage of the animal they are tracking. In describing the tracking abilities of the Ju/'hoansi, Alf Wannenburg wrote: "Everything is noticed, considered, and discussed. The kink in a trodden grass blade, the direction of the pull that broke a twig from a bush, the depth, size, shape, and disposition of the tracks themselves, all reveal information about the condition of the animal, the direction it is moving in, the rate of travel, and what its future movements are likely to be."<sup>57</sup>

The tools of hunting—which, depending on the culture, might be bows and arrows, blow pipes and poisoned darts, spears and spear throwers, snares, or nets—must be crafted to perfection. And great skill is needed, too, in the use of the tools. No anthropologist has reported an ability—using the same tools—to hunt with anything close to the effectiveness of the hunter-gatherers he or she has studied.<sup>58</sup> Most speak with awe of the abilities they observe.

The gathering of vegetable foodstuffs, which is done mostly by women, likewise requires knowledge and skill. Our species is not adapted to graze on large amounts of readily available foliage, as our ape relatives are. Rather, we depend on nutrient-rich plant matter that must be sought out, extracted, and processed. Hunter-gatherer women must know which of the countless varieties of roots, tubers, nuts, seeds, fruits, and greens in their area are edible and nutritious, when and where to find them, how to dig them (in the case of roots and tubers), how to extract the edible portions efficiently (in the case of grains, nuts, and certain plant fibers), and, in some cases, how to process them to make them edible or more nutritious than they otherwise would be. These abilities include physical skills, honed by years of practice, as well as the capacity to remember, use, add to, and modify an enormous store of culturally shared verbal knowledge.<sup>59</sup>

### *Most Work Is Done in a Social Context*

We are social beings. We like to be with others of our kind, especially with those we know well, and we like to do what our friends and colleagues do. Hunter-gatherers live very social lives. Nearly all of their activity is public. Most of their work is done cooperatively, and even that which is done individually is done in social settings with others around.

Men usually hunt in ways that involve teamwork; women usually forage in groups. Concerning the latter, Wannenburg wrote of the Ju/'hoansi bands he studied: "In our experience all of the gathering expeditions were jolly events.

With the [Ju/'hoansi's] gift of converting chores into social occasions, they often had something of the atmosphere of a picnic outing with children."<sup>60</sup> A social setting—with cooperative efforts, mutual encouragement, and joking and laughter—always helps promote a playful attitude toward work. In a description of the means by which Batek people choose tasks and form work groups each day, Endicott wrote: "They may be entirely different groups from those of the previous day, for the Batek like variety both in their work and their companions."<sup>61</sup>

### **Each Person Chooses When, How, and Whether to Work**

A crucial ingredient of play is the sense of free choice. Players must feel free to play or not play and must invent or freely accept the rules. Workers who must follow blindly, step-by-step, the directions of a micromanaging boss are the least likely to consider their work is playful. Hunter-gatherers have developed, to what our culture might consider a radical extreme, an ethic of personal autonomy. They deliberately avoid telling each other how to behave, in work as in any other context.<sup>62</sup> Each person is his or her own boss.

On any given day at a hunter-gatherer camp, a hunting or gathering party may form. The party is made up only of those who want to hunt or gather that day. The group decides collectively where it will go and how it will approach the task. Anyone made unhappy by the decisions is free to form another party, or to hunt or gather alone, or to stay at camp all day, or to do anything at all that is not disruptive to others. There is no retribution for backing out. A person who does not hunt or gather will still receive a share of the bounty. By adopting this strategy, hunter-gatherers avoid being held back in their foraging by someone who is there only begrudgingly and has a bad attitude about it. And because they adopt this strategy, all members of the band can experience their hunting and gathering as play.

Ultimately, of course, hunting and gathering are crucial for everyone's survival, but on any given day, for any given person, these activities are optional. On any given day, a band member may join a foraging group, visit friends in another camp, or just stay in camp and relax, depending on what he or she feels like doing. Such freedom does open up the possibility of free riding by individuals who choose not to hunt or gather over an extended period of time,

but, such long-term shirking apparently happens rarely.<sup>63</sup> It is exciting to go out hunting or gathering with the others, and it would be boring to stay in camp day after day.

The fact that on any given day the work is optional and self-directed keeps it in the realm of play. I'm sure that the perceived necessity to obtain food and accomplish other essential tasks influences people's decisions about what to do, but the sense of necessity does not dominate on a day-to-day basis, and therefore it does not destroy the sense of play. The genius of hunter-gatherer society, from my perspective, lies in its ability to accomplish the tasks that must be accomplished while maximizing each person's experience of free choice, which is essential to the spirit of play.

### Play as the Route to Education

Education is essential to the human condition. People everywhere depend for their survival on skills, knowledge, and ideas passed from generation to generation; and such passing along is, by definition, education. Because we are educated, we do not have to reinvent the wheel—or the bow and arrow, or how to make fire, or the rules for getting along with one another—in every generation. Because of education, we are the benefactors (and the victims) of the inventions and ideas of our ancestors. This is true of hunter-gatherer cultures too. Hunter-gatherer adults, however, do not concern themselves much with their children's education. They assume that children will learn what they need to know through their own, self-directed exploration and play. In play, hunter-gatherer children, on their own initiatives, practice the skills they will need for survival as adults. In their play, they also rehearse and build upon the knowledge, experience, and values that are central to their culture.

In our culture, when we think of education we think primarily of schooling, not of play. We think of education as the responsibility of the older generation, as something that the older generation does for the younger generation. The verbs *educate*, *teach*, and *train* are all active for the teacher and passive for the student. Such language reflects reality in our schools: the teacher educates (or teaches or trains), and the student is educated (or taught or trained). Schools, even more than most adult workplaces, operate through hierarchy and exercise of power, which is the opposite of play. In the classroom, the teacher is boss, and students must do as they are told. In the school, the principal is boss, and

teachers must do as they are told. In the school district, the superintendent is boss. Students are at the bottom of the power structure and are subject to rules, regulations, and curricula created not by themselves or even by their teachers, but by people who never met them. Students are required by law to attend school, which deprives them of the power to quit. Students do not choose what to learn or how to learn or when to learn. Little wonder children find it almost impossible to bring their playful instincts to this kind of education. In contrast, among hunter-gatherers, play is the foundation for education.

Our own cultural notions of education, and of child care in general, are founded on agricultural metaphors. We speak of “raising” children, just as we speak of raising chickens or tomatoes. We speak of “training” children, just as we speak of training horses. Our manner of talking and thinking about parenting suggests that we own our children, much as we own our domesticated plants and livestock, and that we control how they grow and behave. Just as we train horses to do the tasks we want them to do, we train children to do the tasks we think will be necessary for their future success. We do this whether or not the horse or child wants such training. Training requires suppression of the trainee’s will and hence suppression of play.

Hunter-gatherers, of course, do not have agriculture, and so they do not have agricultural metaphors. In their world, all the plants and animals are wild and free. Young plants and animals grow on their own, guided by internal forces, making their own decisions. Each young organism depends, of course, on its environment, but its way of using that environment comes from within itself. The young tree needs and uses the soil, but the soil does not tell the seedling how to use it or strive to guide or control that use. The young fox’s environment includes its two parents, who provide milk, meat, comfort, and continual examples of fox behavior. It is the kit, not the parents, who determines when and how it will take the milk, meat, comfort, and examples. The parents to the kit, like the soil to the seedling, provide part of the substrate that the youngster uses in its own way for its own purposes. And that is the general approach that hunter-gatherers take toward child care and education. One of the means by which children use the cultural substrate to promote their own development is play.

### *Indulgence of Children’s Wishes*

The word most commonly used by anthropologists to describe hunter-gatherers’ style of child care is “indulgence.” The adults trust and therefore indulge children’s instincts, including their instincts to play. They believe children know best what they need and when they need it, so there are few battles of will between adults

and children.<sup>64</sup> The best way to present the flavor of hunter-gatherer child care is with a sample of quotations from researchers who have lived in various hunter-gatherer cultures.

Aborigine children [of Australia] are indulged to an extreme degree, and sometimes continue to suckle until they are four or five years old. Physical punishment for a child is almost unheard of.<sup>65</sup>

\* \* \*

Hunter-gatherers do not give orders to their children; for example, no adult announces bedtime. At night, children remain around adults until they feel tired and fall asleep. . . . Parakana adults do not interfere with their children's lives. They never beat, scold, or behave aggressively with them, physically or verbally, nor do they offer praise or keep track of their development.<sup>66</sup>

\* \* \*

The idea that this is "my child" or "your child" does not exist [among the Yequana]. Deciding what another person should do, no matter what his age, is outside the Yequana vocabulary of behaviors. There is great interest in what everyone does, but no impulse to influence—let alone coerce—anyone. The child's will is his motive force.<sup>67</sup>

\* \* \*

Infants and young children [among Inuit hunter-gatherers of the Hudson Bay area] are allowed to explore their environments to the limits of their physical capabilities and with minimal interference from adults. Thus if a child picks up a hazardous object, parents generally leave it to explore the dangers on its own. The child is presumed to know what it is doing.<sup>68</sup>

\* \* \*

Ju/'hoansi children very rarely cried, probably because they had little to cry about. No child was ever yelled at or slapped or physically punished, and few were even scolded. Most never heard a discouraging word until they were approaching adolescence, and even then the reprimand, if it really was a reprimand, was delivered in a soft voice.<sup>69</sup>

In our culture, many people would consider such indulgence to be a recipe for disaster, a recipe for producing spoiled, demanding children who would grow up to be spoiled, demanding adults. But, according to the researchers who have lived among hunter-gatherers, nothing could be further from the truth. Here, for example, is what Thomas has to say about the issue as it applies to



the Ju/'hoansi: "We are sometimes told that children who are treated so kindly become spoiled, but this is because those who hold that opinion have no idea how successful such measures can be. Free from frustration or anxiety, sunny and cooperative, and usually without close siblings as competitors, the Ju/'hoan children were every parent's dream. No culture can ever have raised better, more intelligent, more likable, more confident children."<sup>70</sup>

To clarify Thomas's statement about the lack of close siblings as competitors, I should note that births, for any given hunter-gatherer woman, are usually spaced at least four years apart. The continuous, on-demand nursing of children until they are three- or four-years-old, which occurs in most hunter-gatherer cultures, apparently produces a hormonal effect that delays ovulation in women who are lean, as hunter-gatherer women are, and serves as a natural means of birth control.<sup>71</sup> The relative infrequency of births contributes, no doubt, to the high value that the band places on each child and to the indulgent treatment.

Hunter-gatherers' treatment of children is very much in line with their treatment of adults. They do not use power-assertive methods to control behavior; they believe that each person's needs are equally important; and they believe that each person, regardless of age, knows best what his or her own needs are. Moreover, just as is the case with adults, children are not dependent on any specific other individuals, but upon the band as a whole, and this greatly reduces the opportunity for any specific individuals, including their parents, to dominate them. Any adult in the band, and even in neighboring bands, would provide food and other care to any child in need; and children are free to move into other huts—most commonly the huts of their grandparents or uncles and aunts—if they feel put upon by their own parents.<sup>72</sup> In Western cultures, parents often complain about grandparents and other kin who undermine parental discipline and spoil the child. Among hunter-gatherers, such parental discipline is apparently not possible, even if it were desired, because other adults in the band would always undermine it. The result of such practices is that hunter-gatherer children are self-assertive and self-controlled but not spoiled, at least not spoiled from the perspective of hunter-gatherer values.

### *Lots of Time to Play*

Given the indulgence that hunter-gatherer adults exhibit toward children, it is no surprise that the children spend most of their time playing. Play, almost by definition, is what children want to do. The adults have no qualms about this, because they believe that it is through play that children learn what they

must to become effective adults, and this belief is reinforced by millennia of cultural experience.

Several years ago, to supplement the relatively sparse published literature on the lives of hunter-gatherer children, Jonathan Ogas and I contacted a number of anthropologists who had at one time or another lived among and studied hunter-gatherers. We asked them to fill out a questionnaire concerning childhood and play in the groups they had studied. Even though some of these researchers had not specifically studied children or play, we assumed that they would have interesting things to say about these topics simply from having lived among them. Ten different hunter-gatherer researchers responded to our questionnaire representing seven different hunter-gatherer cultures.<sup>73</sup>

The survey responses, together with the previously published work, told a remarkably consistent story. Children in these cultures are free to play on their own, essentially all day long, every day. Adults do not provide formal instruction to children and rarely intervene in children's activities. Adults do not expect children to do much productive work. Their assumption, validated by experience, is that young people will, of their own accord, begin contributing to the economy of the band when they are developmentally ready to do so.

Here are some typical responses to our survey question about how much time children had to play: "Both girls and boys had almost all day every day free to play," (Alan Brainard, concerning the Nharo of southern Africa). "Children were free to play nearly all the time; no one expected children to do serious work until they were in their late teens," (Karen Endicott, concerning the Batek). "Boys were free to play nearly all the time until age 15–17; for girls most of the day, in between a few errands and some babysitting, was spent in play," (Robert Bailey, concerning the Efé). These observations fit well with the claims in published articles. For example, in a report on how Ju/'hoan children spent their time, Patricia Draper concluded: "[Ju/'hoan] children are late in being held responsible for subsistence tasks. Girls are around 14 years old before they begin regular food gathering and water- and wood-collecting. This is in spite of the fact that they may be married before this age. Boys are 16 years old or over before they begin serious hunting. . . . Children do amazingly little work."<sup>74</sup> In a study of peoples with mixed hunter-gatherer and agricultural subsistence in Botswana, John Bock and Sarah Johnson found that the more a family was involved in hunting and gathering and the less they were involved in agriculture, the more time children had to play.<sup>75</sup>

Hunter-gatherer cultures do vary in the degree to which children contribute to their own subsistence. The Ju/'hoansi seem to lie at the extreme of almost

no contribution by children, and the Hazda seem to lie at the other extreme. Nicholas Blurton Jones and his colleagues found that Hazda children forage for roughly half of the calories that they consume each day and often do other chores as well, such as gathering water and firewood or caring for younger children.<sup>76</sup> These researchers noted, however, that the Hazda child's life is far from one of dreary toil. They found that children aged five to fifteen spent on average only about two hours per day foraging and that even while foraging they continued to play, an observation that is consistent with the playful nature of hunter-gatherer work in general. A typical comment about children's foraging, in other hunter-gatherer groups, is that it may produce food, but it is motivated by enjoyment, not by the need to get something edible.<sup>77</sup>

#### *Incorporation of Adult Activities into Play*

Hunter-gatherer children are never isolated from adult activities. They observe directly all that occurs in camp—the preparations to move; the building of huts; the making and mending of tools and other artifacts; the food preparation and cooking; the nursing and care of infants; the precautions taken against predators and diseases; the gossip, discussions, arguments, and politics; the songs, dances, festivities, and stories. They sometimes accompany adults on food-gathering trips, and by age ten or so, boys sometimes accompany men on hunting trips. They pay attention to the adult activities around them. In the course of their daily lives, they see and hear everything that is relevant to becoming a successful adult in their culture, and they have the opportunity to explore all of this and incorporate it into their play. They play at the activities they observe in the adults around them, and they become good at those activities. As they grow older, their play turns gradually into the real thing. There is no sharp division between playful participation and real participation in the valued activities of the group.

Our survey question about the forms of hunter-gatherer children's play elicited many examples of valued adult activities that were mimicked regularly by children in play. Digging up tubers, fishing, smoking porcupines out of holes, cooking, caring for infants, climbing trees, building vine ladders, building huts, using knives and other tools, making tools, carrying heavy loads, building rafts, making fires, defending against attacks from predators, imitating animals (a means of identifying animals and learning their habits), making music, dancing, storytelling, and arguing were all mentioned by one or more respondents. The specific lists varied from culture to culture in accordance with differences in the skills that were exemplified by adults in each culture. All of the respon-

dents said that boys in the culture they studied engaged in a great deal of playful hunting. The two respondents who studied the Agta—a culture in which women as well as men regularly hunt—noted that girls as well as boys in this culture engaged in playful hunting. In their study of peoples involved in both agriculture and foraging, Bock and Johnson found that the proportion of boys' playtime devoted to a game of aimed stick-throwing, which seemed to enhance hunting skill, correlated positively with the degree to which their households gained subsistence through hunting.<sup>78</sup>

Apparently, when children are free to do what they want, they spend much of their time playing at the very activities that they see from direct experience are most crucial for success in their culture.<sup>79</sup> Their conscious motive is fun, not education. It is exciting for children, everywhere, to pretend that they are powerful, competent adults, doing beautifully and skillfully what they see the adults around them doing. From an evolutionary perspective, it is no coincidence that children function in such a way.

Equally important to their learning how to hunt and gather, hunter-gatherer children learn how to interact with others assertively yet peacefully. In their play, children practice arguing. Turnbull has described how older Mbuti children (age nine and up) playfully rehash and try to improve upon the arguments that they have heard among adults. Here is how Turnbull describes it:

It may start through imitation of a real dispute the children witnessed in the main camp, perhaps the night before. They all take roles and imitate the adults. It is almost a form of judgment for if the adults talked their way out of the dispute the childrens, having performed their imitation once, are likely to drop it. If the children detect any room for improvement, however, they will explore that, and if the adult argument was inept and everyone went to sleep that night in a bad temper, then the children try and show that they can do better, and if they cannot, then they revert to ridicule which they play out until they are all rolling on the ground in near hysterics. That happens to be the way many of the most potentially violent and dangerous disputes are settled in adult life.<sup>80</sup>

Turnbull goes on to describe how Mbuti youth, aged about ten through seventeen, judge and correct their elders' behavior. If the camp has been seriously disrupted by adults' dissention for a period of time, the youth, on their

own initiative, may enact a ceremony, called the *molimo madé*, in which they present themselves in unison as an angry elephant, stomping through camp and disrupting it. This enactment is well understood by everyone to be a sign that the young people are tired of the dissent among the adults and are asking them to make peace. And so, it is not just the case that children learn by observing their elders; the elders also learn from the children. The ceremony itself is, like other hunter-gatherer ceremonies, a mix of play, religion, and practical politics. It is a playful means by which the young people, without blaming any individual adult, can influence the adults' behavior.

### *The Age-Mixed, Noncompetitive Nature of Children's Play*

Because they are free to mingle with people of all ages, hunter-gatherer children learn from those of all ages. From the oldest people, they hear stories about the past. From returned hunting and gathering parties of adults, they hear accounts of the day's adventures. From older children, they gain examples of skilled play toward which to strive. From younger children and infants, they gain playful practice in child care and nurturing. All this contributes to their growing fund of knowledge and to the games they play among themselves. The stories and examples draw and fascinate children because they are real aspects of the culture in which they are growing, not something designed artificially for their supposed benefit.

The play of hunter-gatherer children is not only informed by what they have learned from others of various ages, but it occurs almost always in age-mixed groups. Because hunter-gatherer bands are small and births are widely spaced, the number of potential playmates for any given child is limited. Even if hunter-gatherer children wanted to segregate by age, they would rarely find more than one or two playmates within a year or two of their own age and often none. A typical play group might consist of half a dozen children ranging in ages from four to eleven or from nine to fifteen. As Patricia Draper put it in her response to our survey: "Any [Ju/'hoan] child with enough motor and cognitive maturity could enter into any game. Older teenagers and adults could and did play as well, though not for as long or with the same enthusiasm as the children."

Research on age-mixed play in our culture suggests that such play differs qualitatively from same-age play.<sup>81</sup> It is less competitive and more nurturing. In age-mixed play, each child tries to do his or her best but has little or no concern for beating others. When playmates differ greatly in age, size, and strength, there

is little point in trying to prove oneself better than another. In such play, older children typically help younger children along, which allows the younger ones to play in more sophisticated ways than they would alone and gives the older ones valuable experience in helping and nurturing.

In the 1950s and 1960s, using data from the Human Relations Area Files, John Roberts and his colleagues compared the types of competitive games commonly played in different types of cultures. They concluded that the only cultures that seemed to have no competitive games of any kind were hunter-gatherer cultures.<sup>82</sup> In response to a question about competitive play in our survey, only two of the ten respondents said that they had seen any competitive play in the cultures they had studied, and both of them said that they had seldom seen it. Several of the respondents noted that play among hunter-gatherer children is noncompetitive not just because it is age mixed, but also because competition runs counter to the spirit of cooperation that pervades hunter-gatherer bands. For instance, regarding Agta children's play, P. Bion Griffin commented that the only consistent rule of the play he observed was that "no one should win and beat another in a visible fashion."

In the most extensive descriptive account of the play and games of any hunter-gatherer group, Lorna Marshall pointed out that most Ju/'hoan play is informal and noncompetitive and that even the group's more formal games, which have explicit rules and could be played competitively, are played non-competitively.<sup>83</sup> For instance, Ju/'hoan children of ages five to fifteen, of both sexes, often play a game of throwing the "zeni." The zeni consists of a leather thong, about seven-inches long, with a small weight fastened at one end and a feather at the other. The player hurls it into the air as high as possible with a stick, then tries to catch it with the stick when it comes fluttering down, and from that position hurls it again. Many of the children play the game with much skill, and it could be played competitively—for instance, by seeing who can hurl the zeni the highest or catch it the most times in succession—but, according to Marshall, the young Ju/'hoansi do not play it that way. Players try to do their best, but their performances are not compared to the performances of others.

Another Ju/'hoan game with rules is the melon game, played by women and girls. This game involves singing, dancing, and clapping, all according to specific rules, while simultaneously keeping a small melon moving from one dancer to another by tossing it backward, over one's head, to the next person in line. The purpose of the game is to keep everyone in harmony and to keep

the melon moving without dropping it. The Ju/'hoansi could play the game in a competitive way by saying that anyone who drops the melon is out of the game, but they do not. The goal always is cooperation, not competition.

Turnbull described tug-of-war games played in a ceremonial manner by the Mbuti during the honey season. Men and boys take one side of the vine rope, women and girls take the other, and they sing in antiphony as they pull. When the men and boys start to win, "one of them will abandon his side and join the women, pulling up his bark-cloth and adjusting it in the fashion of women, shouting encouragement to them in a falsetto, ridiculing womanhood by the very exaggeration of his mime." Then, when the women and girls start to win, "one of them adjusts her bark clothing, letting it down, and strides over to the men's side and joins their shouting in a deep bass voice, similarly gently mocking manhood." Turnbull continues:

Each person crossing over tries to outdo the ridicule of the last, causing more and more laughter, until when the contestants are laughing so hard they cannot sing or pull any more, they let go of the vine rope and fall to the ground in near hysteria. Although both youth and adults cross sides, it is primarily the youth who really enact the ridicule. . . . The ridicule is performed without hostility, rather with a sense of at least partial identification and empathy. It is in this way that the violence and aggressivity of either sex "winning" is avoided, and the stupidity of competitiveness is demonstrated.<sup>84</sup>

The point of hunter-gatherer play is not to establish winners and losers but to have fun. In the process of having fun, the players develop skills requiring strength, coordination, endurance, cooperation, and wit, and they solidify their bonds of friendship. If the focus were on competition, the pressure to win could reduce the playfulness and fun of the activity. Instead of cementing friendships, competitive games could produce arrogance in winners and envy or anger in losers, which would weaken rather than strengthen the community.

### **Concluding Thoughts**

The research literature on hunter-gatherers makes it clear that their egalitarian, nonautocratic, highly cooperative way of living did not occur just naturally.

It cannot be attributed simply to a benign human nature, corrupted in us by modern social institutions. Nor did it occur as a passive result of a combination of human nature and the environmental conditions in which hunter-gatherers survived. That combination may have necessitated, and enabled, the hunter-gatherers' approach to social life, but it did not automatically produce that approach. Hunter-gatherers everywhere seem to have been acutely sensitive to the possibility that, at any time, hierarchical, dependent, dominance relationships could arise within their society and destroy the equality and unselfish sharing upon which their survival depended. To prevent that from happening, they developed cultural practices aimed at reinforcing their egalitarianism and nipping in the bud any tendencies toward hierarchy and domination. To me, the striking, unifying aspect of the practices they developed lies in the degree to which they involved play or playfulness.

In this article I have presented examples from the research literature on hunter-gatherers to show (1) how the fluid structure and consensual decision-making processes of hunter-gatherer bands resemble those of social-play groups, which people are free to join or leave at a moment's notice; (2) how humor and laughter are used as leveling and peace-keeping devices; (3) how the rules of hunter-gatherer societies, particularly the rules for sharing, are like the rules of social play; (4) how hunter-gatherer religious stories and ceremonies emphasize the playful, comic nature of the deities and reinforce the notion of equality within the cosmos; (5) how hunter-gatherers arrange their subsistence-essential work in a manner that retains the spirit of play; and (6) how hunter-gatherer child care and educational practices are structured to maximize children's opportunities for play and to minimize any sense of their being dominated by adults.

One way to think about hunter-gatherers' uses of play is to suppose that our species, by nature, has two fundamentally opposing ways of structuring social interactions, which we inherited from our mammalian ancestors. One way of structuring them is the *method of dominance*. The literature on mammalian social behavior, particularly on primate social behavior, is replete with discussions of dominance hierarchies and struggles for status. Dominance hierarchies give structure to the social interactions within animal colonies and prevent the chaos that would occur if each new opportunity for food, or for mating, resulted in a renewed struggle.

The other way of structuring social interactions is what I will call the *method of social play*. Play in the animal world always involves the temporary renunciation of dominance. Social play remains play only so long as both (or all) of the



players participate willingly, so play is destroyed by dominance and coercion. Most mammalian social play takes the form of playful fighting and chasing. Such actions can remain playful only so long as nobody is hurt and the needs of all participants are met. When two young monkeys or chimpanzees engage in a play fight, the stronger one deliberately self-handicaps, and the “fight” is not a fight in the sense of establishing a winner or loser. The playful “combatants” alternate in taking defensive and offensive positions, and they refrain from using their teeth or other weapons in a manner that could hurt the other. In playful chases, the two take turns in chasing and being chased, like children playing tag. In play, each animal must continuously behave in such a way as to meet the needs of the other while still satisfying its own needs. Failure to do this would terminate the game. So, during play, a new sort of relationship emerges between individuals, one that is based not on power assertion but on power restraint and sensitivity to the needs of the other player.<sup>85</sup>

My primary argument in this article is that hunter-gatherers everywhere developed cultural practices that combated the human tendency toward dominance by maximizing the human tendency to play. Hunter-gatherers’ existence apparently required an intense kind of long-term sharing, which was not based just on blood relationships or direct reciprocity. Such sharing would be destroyed by dominance. Dominance induces fear and anger, while play induces unity and friendship. The kind of sharing upon which hunter-gatherers depended apparently required the feelings of unity and friendship that play can produce. Therefore, to survive, hunter-gatherers everywhere developed cultural practices designed to maximize their playful tendencies and minimize their dominance tendencies.

In addition to the cultural adaptations, it is quite possible that further biological adaptations enabled hunter-gatherers to develop, over time, ever more playful approaches to social life. If we assume that the needs for intense sharing were present for hundreds of thousands of years in our human and human-like ancestors, then natural selection could well have expanded and elaborated upon the play instincts inherited from our earlier primate ancestors. In most mammals, including most primates, play occurs mostly among the young and apparently serves primarily the function of education. Young mammals practice, in play, the skills they must develop for survival into and through adulthood. In some primates, play may also serve a bonding function, helping to counteract the fear induced by dominance systems and thereby helping to promote cooperation. This may help explain why, in some primates, social play is observed

to some degree among adults as well as among juveniles.<sup>86</sup> A great increase in the need for cooperation and sharing based on friendships could have led to further expansion of the human play drive into adulthood and to an increased flexibility of that drive, allowing it to be applied in a wider variety of contexts and be manifested in an essentially infinite variety of activities.

## NOTES

1. Concerning agriculture's origins, see Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies* (1997), 93–103.

2. For dating of the human ancestral split from other apes, see Michael C. Corballis, "Phylogeny from Apes to Humans," in *The Descent of Mind: Psychological Perspectives on Hominid Evolution*, ed. Michael C. Corballis and Stephen E. G. Lea (1999), 40–70. For discussion of human origins, see Melvin Konner, *The Tangled Wing: Biological Constraints on the Human Spirit*, 2nd ed. (2002), 29–53.

3. Robert L. Kelly, *The Foraging Spectrum: Diversity in Hunter-Gatherer Lifeways* (1995), 302–3.

4. Ibid.

5. Ibid.

6. For reviews of similarities and differences among immediate-return hunter-gatherer societies, see Kelly, *The Foraging Spectrum*; Susan Kent, "Cultural Diversity among African Foragers: Causes and Implications," in *Cultural Diversity among Twentieth-Century Foragers*, ed. Susan Kent (1996), 1–18; Richard B. Lee, "Reflections on Primitive Communism," in *Hunters and Gatherers, Volume 1: History, Evolution, and Social Change*, ed. Tim Ingold, David Riches, and James Woodburn (1988), 252–68; Richard B. Lee and Richard Daly, ed. *The Cambridge Encyclopedia of Hunters and Gatherers* (1999); Peter Rowley-Conwy, "Time, Change, and the Archaeology of Hunter-Gatherers: How Original Is the 'Original Affluent Society'?", in *Hunter-Gatherers: An Interdisciplinary Perspective*, ed. Catherine Panter-Brick, Robert H. Layton, and Peter Rowley-Conwy (2001), 39–72; and James Woodburn, "Egalitarian Societies," *Man* 17 (1982): 431–51.

7. Kelly, *Foraging Spectrum*, 304. See also Marian Vanhaeren and Francesco d'Errico, "Grave Goods from the Saint-Germain-la-Rivière Burial: Evidence for Social Inequality in the Upper Paleolithic," *Journal of Anthropological Archaeology* 24 (2005): 117–34.

8. Particularly useful sources in generating the list were: Johan Huizinga, *Homo Ludens: A Study of the Play Element in Culture* (1955, first published 1938); Kenneth H. Rubin, Greta G. Fein, and Brian Vandenberg, "Play," in *Handbook of Child Psychology, Volume 4: Socialization, Personality, and Social Development*, ed. Paul H. Mussen, Eileen M. Hetherington, and William Damon (1983), 693–774; Peter K. Smith, "Play: Types and Functions in Human Development," in *Origins of the Social Mind*, ed.

Bruce J. Ellis and David F. Bjorklund (2005), 271–91; and Lev S. Vygotsky, “The Role of Play in Development,” in *Mind in Society: The Development of Higher Psychological Processes*, ed. Michael Cole et al. (1978), 92–104.

9. This distinction between play and ritual is nicely made by Thomas Henricks, “The Nature of Play: An Overview,” *American Journal of Play* 1 (2008): 157–80.

10. I’m alluding here to research such as that of Teresa Amabile on artistic creativity, Alice Isen on creative problem solving, and Mihalyi Csikszentmihalyi on “flow.”

11. General references for points made here and the next two paragraphs are the same as those listed in note 6.

12. Tim Ingold, “On the Social Relations of the Hunter-Gatherer Band,” in *The Cambridge Encyclopedia of Hunters and Gatherers*, ed. Richard B. Lee and Richard H. Daly (1999), 399–410; Woodburn, “Egalitarian Societies,” 431–51.

13. For a discussion of how the freedom to move serves as a leveling device in hunter-gatherer bands, see Woodburn, “Egalitarian Societies,” 435–36.

14. Ingold, “On the Social Relations of the Hunter-Gatherer Band,” 399–410.

15. *Ibid.*, 406.

16. Lee, “Reflections on Primitive Communism,” 264.

17. Ingold, “On the Social Relations of the Hunter-Gatherer Band,” 408; Polly Wiessner, “Leveling the Hunter: Constraints on the Status Quest in Foraging Societies,” in *Food and the Status Quest: An Interdisciplinary Perspective*, ed. Polly Wiessner and Wulf Schiefelhövel (1996), 171–92.

18. For a good discussion of consensual decision making in one hunter-gatherer society, see George Silberbauer, “Political Process in G/wi Bands,” in *Politics and History in Band Societies*, ed. Eleanor B. Leacock and Richard B. Lee (1982), 23–35. Other, more general references on hunter-gatherers’ egalitarian decision making are the same as those in note 6. See especially the reference to Kent (1996).

19. Colin M. Turnbull, *The Forest People* (1968, first published 1961), 114.

20. Elizabeth Marshall Thomas, *The Old Way: A Story of the First People* (2006), 218.

21. Lee, “Reflections on Primitive Communism,” 264.

22. Richard B. Lee, *The Dobe Ju’hoansi*, 3rd ed. (2003).

23. *Ibid.*, 52.

24. Jan A. R. A. M. van Hooff, “A Comparative Approach to the Phylogeny of Laughter and Smiling,” in *Nonverbal Communication*, ed. Robert A. Hinde (1972), 209–41.

25. Wiessner, “Leveling the Hunter,” 171–92.

26. Thomas, *Old Way*, 101.

27. For this and general discussion of hunter-gatherer rules for distributing meat, see Wiessner, “Leveling the Hunter,” 171–92.

28. Richard A. Gould, *Yiwara: Foragers of the Australian Desert* (1969).

29. Wiessner, “Leveling the Hunter,” 182.

30. Kirk Endicott, “Property, Power, and Conflict among the Batek of Malaysia,” in *Hunters and Gatherers, Volume 2: Property, Power, and Ideology*, ed. Tim Ingold, David Riches, and James Woodburn (1988), 110–27.

31. Wiessner, "Leveling the Hunter," 171–92.
32. Nurit Bird-David, "The Giving Environment: Another Perspective on the Economic System of Gatherer-Hunters," *Current Anthropology* 31 (1990): 189–96.
33. Kim Hill, "Altruistic Cooperation during Foraging by the Aché, and the Evolved Human Predisposition to Cooperate," *Human Nature* 13 (2002): 105–28.
34. Brian Hayden, "Feasting in Prehistoric and Traditional Societies," in *Food and the Status Quest: An Interdisciplinary Perspective*, ed. Polly Wiessner and Wulf Schiefelhövel (1996), 127–47.
35. Polly Wiessner, "Hunting, Healing, and Hxaro Exchange: A Long-Term Perspective on !Kung (Ju/'hoansi) Large-Game Hunting," *Evolution and Human Behavior* 23 (2002): 407–36.
36. Polly Wiessner, "Risk, Reciprocity, and Social Influences on !Kung San Economics," in *Politics and History in Band Societies*, ed. Eleanor B. Leacock and Richard B. Lee (1982), 61–84.
37. A similar point was made by Huizinga, *Homo Ludens*, 25.
38. Mathias Guenther, "From Totemism to Shamanism: Hunter-Gatherer Contributions to World Mythology and Spirituality," in *The Cambridge Encyclopedia of Hunters and Gatherers*, ed. Richard B. Lee and Richard H. Daly (1999), 426–33.
39. Thomas, *Old Way*, 253–73.
40. Ibid.
41. Kirk Endicott, *Batek Negrito Religion: The World-View and Rituals of a Hunting and Gathering People of Peninsular Malaysia* (1979), 163–64.
42. Guenther, "From Totemism to Shamanism," 427–28.
43. Matt J. Rossano, "The Religious Mind and the Evolution of Religion," *Review of General Psychology* 10 (2006): 346–64.
44. For references see Daisaku Tsuru, "Diversity of Ritual Spirit Performances among the Baka Pygmies in Southeastern Cameroon," *African Study Monographs Suppl.* 25 (1998): 47–84.
45. For examples see: Nurit Bird-David, "Beyond 'The Original Affluent Society': A Culturalist Reformulation," *Current Anthropology* 33 (1992): 25–47; and Thomas, *Old Way*, 246–48.
46. Elizabeth Marshall Thomas, *The Harmless People* (1959), 152.
47. Gould, *Yiwara*, 128.
48. Discussions of such religious flexibility and tolerance among hunter-gatherers are found in Endicott, *Batek Negrito Religion*; Gould, *Yiwara*; and Guenther, "From Totemism to Shamanism."
49. Thomas, *Harmless People*, 245.
50. Turnbull, *Forest People*.
51. Examples are found in Endicott, *Batek Negrito Religion*, and in Tsuru, "Diversity of Ritual Spirit Performances."
52. John Gowdy, "Hunter-Gatherers and the Mythology of the Market," in *The Cambridge Encyclopedia of Hunters and Gatherers*, ed. Richard B. Lee and Richard H. Daly (1999), 391–98.

53. These estimates come from quantitative studies conducted among the Ju/'hoansi and among various Australian Aborigines, referred to respectively by Lee, *Dobe Ju/'hoansi*, and Marshall Sahlins, *Stone Age Economics* (1972). Less formal observations, among other hunter-gatherer groups, consistent with these estimates are found in: P. Bion Griffin and Marcus B. Griffin, "Fathers and Childcare among the Cagayan Agta," in *Father-Child Relations: Cultural and Biosocial Contexts*, ed. Barry S. Hewlett (1992), 297–320; Rowley-Conwy, *Hunter-Gatherers*, 39–72; and Turnbull, *Forest People*. However, a higher estimate—of about five to six hours of work per day—has been reported by Hill regarding the Aché, "Altruistic Cooperation during Foraging by the Aché," 114.

54. Sahlins, *Stone Age Economics*.

55. Marjorie Shostak, *Nisa: The Life and Words of a !Kung Woman* (1981), 10.

56. Louis Liebenberg, *The Art of Tracking: The Origin of Science* (1990).

57. Alf Wannenburgh, *The Bushmen* (1979), 41.

58. Hillard Kaplan, Kim Hill, Jane Lancaster, and A. Magdalena Hurado, "A Theory of Human Life History Evolution: Diet, Intelligence, and Longevity," *Evolutionary Anthropology* 9 (2000): 156–85.

59. *Ibid.* See also John Bock, "What Makes a Competent Adult Forager?" in *Hunter-Gatherer Childhoods: Evolutionary, Developmental, and Cultural Perspectives*, ed. Barry S. Hewlett and Michael E. Lamb (2005), 109–28.

60. Wannenburgh, *Bushmen*, 30.

61. Endicott, *Batek Negrito Religion*, 16.

62. This point is made most explicitly, for the Ju/'hoansi, by Thomas, *Old Way*.

63. For comments on the rarity of the long-term shirking of work and the apparent lack of sanctions for it, see: Endicott, "Property, Power, and Conflict among the Batek," 118; and Kristen Hawkes, "Why Hunter-Gatherers Work: An Ancient Version of the Problem of Public Goods," *Current Anthropology* 34 (1993): 341–61.

64. For a general review of hunter-gatherer child-care practices, see Melvin Konner, "Hunter-Gatherer Infancy and Childhood: The !Kung and Others," in *Hunter-Gatherer Childhoods: Evolutionary, Developmental, and Cultural Perspectives*, ed. Barry S. Hewlett and Michael E. Lamb (2005), 19–64. Also relevant here is a statistical study showing a strong correlation between the degree to which a culture's subsistence depended on immediate-return hunting and gathering and the degree to which its child-care practices were directed toward self-assertion rather than obedience: Herbert Barry, Irvin L. Child, and Margaret K. Bacon, "Relation of Child Training to Subsistence Economy," *American Anthropologist* 61 (1959): 51–63.

65. Gould, *Yiwara*, 90. It should be noted, however, that physical punishment has been observed, though rarely, in some hunter-gatherer societies, including the Hazda and the Mbuti, as documented respectively by Nicholas Blurton Jones, "The Lives of Hunter-Gatherer Children: Effects of Parental Behavior and Parental Reproductive Strategy," in *Juvenile Primates: Life History, Development, and Behavior*, ed. Michael E. Pereira and Lynn A. Fairbanks (1993), 308–26; and by Turnbull, *Forest People*.

66. Yumi Gosso, Emma Otta, Maria de Lima, Salum Morais, Fernando Ribeiro, and Vera Bussab, "Play in Hunter-Gatherer Society," in *The Nature of Play: Great Apes and Humans*, ed. Anthony D. Pellegrini and Peter K. Smith (2005), 218.

67. Jean Liedloff, *The Continuum Concept*, rev. ed. (1977), 90.

68. Lee Guemple, "Teaching Social Relations to Inuit Children," in *Hunters and Gatherers, Volume 2: Property, Power, and Ideology*, ed. Tim Ingold, David Riches, and James Woodburn (1988), 137.

69. Thomas, *Old Way*, 198.

70. *Ibid.*, 198–99.

71. Shostak, *Nisa*.

72. *Ibid.* Also: Endicott, "Property, Power, and Conflict among the Batek," 122; and Gilda Morelli, personal communications with the author regarding the Efé, 2008.

73. The ten researchers who responded to our survey (to whom I am immensely grateful) and the cultural groups they studied are: Bruce Knauff, who studied the Gabusi of Papua, New Guinea; P. Bion Griffin and Agnes Estioko-Griffin, who studied the Apta; Karen Endicott, who studied the Batek; Paula Ivey and Robert Bailey, who studied the Efé; Alan Bernard, who studied the Nharo of southern Africa; Nancy Howell and Patricia Draper, who studied the Ju/'hoansi; and John Bock, who studied the Okavango Delta Peoples of Botswana.

74. Patricia Draper, "Social and Economic Constraints on Child Life among the !Kung," in *Kalahari Hunter-Gatherers*, ed. Richard B. Lee and Irven DeVore (1976), 210, 213. Other support for the general conclusion that hunter-gatherer children are free to play nearly all of their waking time includes Gosso et al., "Play in Hunter-Gatherer Society," 213–53; Lorna Marshall, *The !Kung of Nyae Nyae* (1976); Shostak, *Nisa*; and Turnbull, *Forest People*.

75. John Bock and Sara E. Johnson, "Subsistence Ecology and Play among the Okavango Delta Peoples of Botswana," *Human Nature* 15 (2004): 63–81.

76. Blurton Jones, "The Lives of Hunter-Gatherer Children." See also Nicholas Blurton Jones, Kristen Hawkes, and Patricia Draper, "Differences between Hazda and !Kung Children's Work: Affluence or Practical Reason?" in *Key Issues in Hunter-Gatherer Research*, eds. Ernest S. Burch, Jr. and Linda J. Ellanna (1994), 189–215.

77. See, for example, Nobutaka Kamei, "Play among Baka Children in Cameroon," in *Hunter-Gatherer Childhoods: Evolutionary, Developmental, and Cultural Perspectives*, ed. Barry S. Hewlett and Michael E. Lamb (2005), 343–59.

78. Bock and Johnson, "Subsistence Ecology and Play among the Okavango Delta Peoples of Botswana."

79. For discussion of the relationship of children's play to adult activities in a specific hunter-gatherer culture, see Kamei, "Play among Baka Children in Cameroon," 343–59.

80. Colin M. Turnbull, "The Ritualization of Potential Conflict between the Sexes among the Mbuti," in *Politics and History in Band Societies*, ed. Eleanor B. Leacock and Richard B. Lee (1982), 133–55.

81. Peter Gray and Jay Feldman, "Playing in the Zone of Proximal Development: Qualities of Self-Directed Age Mixing between Adolescents and Young Children at a Democratic School," *American Journal of Education* 110 (2004): 108–46.

82. Brian Sutton-Smith and John M. Roberts, "The Cross-Cultural and Psychological Study of Games," in *The Cross-Cultural Analysis of Sport and Games*, ed. Günther Lüschen (1970), 100–108.

83. Marshall, *!Kung of Nyae Nyae*, 313–62.

84. Turnbull, "Ritualization of Potential Conflict between the Sexes among the Mbuti," 142–43.

85. For discussions of self-handicapping and avoidance of dominance in primate play fighting, see: Donald Symons, *Play and Aggression: A Study of Rhesus Monkeys* (1978); and Maxeen Biben, "Squirrel Monkey Play Fighting: Making the Case for a Cognitive Training Function for Play," in *Animal Play: Evolutionary, Comparative, and Ecological Perspectives*, ed. Marc Bekoff and John A. Byers (1998), 161–81.

86. The idea that juvenile play among animals promotes practice of survival skills was first developed fully by Karl Groos, *The Play of Animals* (1898). It has been supported by much research since. For a review of evidence that adult-adult play among primates may serve social bonding functions, see Sergio M. Pellis and Andrew N. Iwaniuk, "Adult-Adult Play in Primates: Comparative Analyses of Its Origin, Distribution, and Evolution," *Ethology* 106 (2000): 1083–1104.