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## It Does Take a Village

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Melvin Konner

*Mothers and Others: The Evolutionary Origins of Mutual Understanding*

by Sarah Blaffer Hrdy

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Anthony Bannister/Gallo Images/Corbis

*A !Kung grandmother and grandchild, Namibia*

Sarah Blaffer Hrdy is one of the most original and influential minds in evolutionary anthropology. She first became known for her field study of Hanuman langurs, the sacred monkeys that range widely in the Indian peninsula. They are large and sometimes dangerous, and Hrdy was among that second generation of bold primatologists, just behind Jane Goodall and Diane Fossey, who did original work with primates.

Hrdy discovered, among other things, that dominant males in a group are challenged from time to time by roving adventurers who can mate only by defeating them. If defeated, the former leaders slink away, often wounded, while their successors attack and kill all infants under six months old. This brings their mothers back into heat, and the

slain infants are supplanted by the new males' offspring. Females resist this bravely, but to little avail.

If such behavior had been limited to langurs, it might have been an anomaly. But thanks in no small part to Hrdy's leadership, it was also documented in chimpanzees, patas monkeys, lions, and many other species. Competitive infanticide was seen as a dark side of Darwinism, and a confirmation that no part of nature is free from the amoral logic of natural selection.

Hrdy went on to write a well-received book on the evolution of females, *The Woman That Never Evolved*.<sup>1</sup> The mythic figure of that title was the soft, generous, seductive, maternal idol of the prehistoric world that served in the minds of many as a foil to their own muscular ancestors; these heroes needed something to fight for, fight over, and defend, and ideally she should be the defenseless, feminine figure of their dreams. In fact, this idol was not what she seemed, and by carefully demonstrating the power and aggressiveness of primate females both human and prehuman, Hrdy discredited this founding figure.

Many years later, Hrdy took on another heroine of anthropology and psychology, the good mother. This persona, a natural extension of the woman that never evolved, was the mother that never evolved—the one who renounced every other earthly ambition or delight, gave birth to new life in a spasm of ecstatic pain, and took her infant into her arms, prepared to sacrifice her own life for the welfare of her young.

But this goddess too was a mere apparition. As Hrdy suggested in *Mother Nature*,<sup>2</sup> the primate mother who evolved into the human species was calculating the odds of her infant's survival when weighed against her own, because if she neglected the latter, she would lose not only this infant but all future ones.

As for the descendants of those primates, we know that a human mother can calculate not just with regard to another's offspring, but also her own. On this view, neglect and abuse of children and even infanticide are not mere misfirings of the adaptive machinery, but can be strategies of maximizing fertility. The real flesh-and-blood *Homo sapiens* loved her children to be sure, but had needs and priorities of her own.

It is possible to see Hrdy's most recent book, *Mothers and Others*, as the third in a trilogy that began with *The Woman That Never Evolved*. It may be the most important. As she demolished, in the first, the idol of an evolved passive femininity, and in the second, the serene, always giving maternal goddess, in her third synthetic work she takes on another cultural and biological ideal: the mother who goes it alone. In our once male-

dominated vision of evolution, we had the lone brave man, the hunter with his spear, and the lone enduring woman nurturing her young beneath the African sun; they made a deal, the first social contract, exchanging the services each was suited to by genetic destiny.

Hrdy has not been alone in challenging this myth. A conference and book edited by Richard Lee and Irven DeVore, although it was called *Man the Hunter*, showed that women brought in half or more of the food of hunter-gatherers by collecting vegetables, fruit, and nuts.<sup>3</sup> This meant that, given the unpredictability of hunting success and the human need for plant foods, the primordial deal between the sexes was rather more complex than we thought. It also suggested that women had power in these societies; that men listened to them and decisions were made by consensus, not by male fiat as in more complex, hierarchical societies.

It also suggested that the working mother was nothing new. In *Woman the Gatherer*, Adrienne Zihlman, Frances Dahlberg, and others filled in some of the gaps in our model of human evolution by emphasizing facts about women and their ancestors that had somehow been missed by male anthropologists.<sup>4</sup> Since women were providing half or more of the food (in some cases even hunting) and 80 or 90 percent of the child care, the overwhelming importance of males in evolution was in question. True, the stone tools, mainly weapons, that survive along with fossils throughout the human and proto-human record were probably made by men. But growing knowledge of hunter-gatherer life strongly suggested that digging sticks and carrying devices, for plant foods and infants, were among the first and most important tools; we don't see them because they didn't become fossils, but these were almost certainly made by women.

And in a world where nearly half the population is male—the sex with higher levels of testosterone and its potential for causing aggressive behavior—the female majority, by better translating emotions into words, must have mitigated countless dangerous conflicts. We should not underestimate the role that may have been played by this verbally skilled, moderating majority in the evolution of language itself. Of all the calls, hoots, and screeches issued by our chimpanzee relatives, the only ones that sound a little like human speech are the coos exchanged in quiet moods by mothers with their young; the first language may have been “motherese.”<sup>5</sup>

Which returns us to Hrdy's current, most ambitious contribution. In *Mothers and Others*, she situates this pivotal mother-infant pair not in an empty expanse of savanna, waiting for a man to arrive with his killed game, but where it actually belongs, in the dense social setting of a hunter-gatherer or, before that, an ape or monkey group. Hrdy argues

convincingly that social support was crucial to human success, that compared with other primates, humans are uniquely cooperative, and that it was precisely cooperation in child care that gave rise to this general bent.

The first two ideas are clearly linked and important, both in theoretical and practical terms. In the 1960s and 1970s, the English psychoanalyst John Bowlby created the first scientific model of the emotional attachment between humans. In his three-volume *Attachment and Loss*, he not only explored the evolutionary foundation underlying human affections, but used it to challenge the prevailing Freudian model.<sup>6</sup> The first attachment of human life, that of an infant to its primary caregiver, was not the byproduct of oral needs or infant sexuality, but important in itself. The infant's brain was set up to develop the array of impulses and behaviors we call attachment, and to focus them on a person—the one who cuddled it, calmed its fears, responded to its distress.

Bowlby was influenced by the work of the ethologist Konrad Lorenz on imprinting, the remarkable process in which chicks and ducklings become, within a few days of hatching, obsessed with the shape and sound of their mothers, in whose safe shadow they then stay. For our own ancestors, attachment was evolution's answer to a world of hungry predators—hawks above, leopards and snakes below—who could make a living at the expense of monkey infants much more easily if those infants were alone; thus the relentless press of natural selection urging infants and caregivers to be together. The result was a bond whose absence or interruption could cause suffering and psychological damage, especially for the infant.

The study of attachment coincided with second-wave feminism, the large-scale reentry of women into the labor force of industrial countries, and the rise of day care as a practical solution for working women with ambition or with no other choice. Some psychologists in this period vigorously defended not only highly intensive mothering but the traditional nuclear family as well. The predicted dire consequences of our recent departures from those traditions have not so far materialized.

Some things about day care are bad for the young, of course; they get more infectious illnesses, and may, if the day care is not good, suffer from lack of stimulation, neglect, or even abuse. Sufficiently long and large studies of the effects of day care began only at the end of the last century and have found that children in day care are different. Up to the age of twelve, their teachers report that they have more problems with other children —"hits others," "disobedient at school," "argues a lot"—than their home-reared counterparts, but their behavior is squarely within the normal range.<sup>7</sup> Nonetheless, even high-quality day care raises the level of cortisol, a stress hormone, in toddlers over the

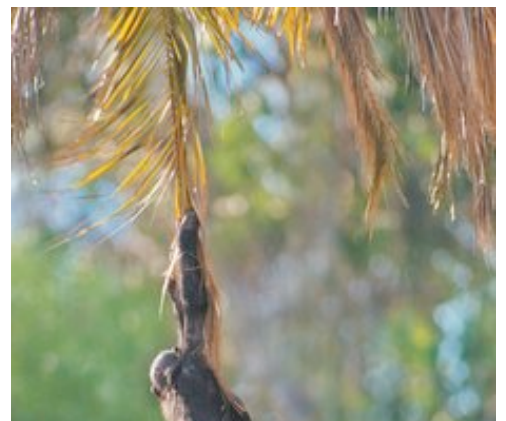
course of the day, while a study of children of the same age, from similar backgrounds, in home environments showed declines during the same period.<sup>8</sup> But what does this mean? If life is full of stress, then it can be argued that day care children are being prepared for it. And we know that the best day care improves their cognitive and social skills.

Still, life is long, and there remain reasons for concern about this vast social experiment. Some psychologists continue to raise questions about its ultimate effects, and both the research and the debate will likely last a long time. Meanwhile, some of those women with the means to care for their children will continue to look askance at those who delegate such care, and their disdain will no doubt be reciprocated.

Hrdy's book cannot resolve questions concerning the mental health of children not cared for by their mothers, but it provides a relevant cross-cultural and evolutionary perspective on such care. First, the ethnological record shows that the nuclear family, although not rare, has not been common either, and it has always occurred within a broader social setting. Polygynous families (with two or more wives), polyandrous families (with two or more husbands), extended families under a single roof, mother-child households in a compound comprising several wives of a powerful man, and other arrangements have long shown that isolated nuclear households—mom, dad, kids—are not necessarily the human norm.

Likewise, the working mother has always been a central part of the human scene, and the classic stay-at-home mom of 1950s television may have been limited to Western cultures in that era. Women gathered, gardened, farmed, fished, built huts, made clothing and other necessities, even hunted in some cultures, in addition to caring for children and performing other domestic duties. Mothers often could not discharge these duties without help. Our species is not unique in caring for offspring cooperatively, but our great ape cousins don't do it, and we take it to extraordinary levels.

Among naturalists, the terms “cooperative breeding,” “alloparenting,” and “helpers at the nest” describe this kind of behavior, and the evolutionary success of some species depended on it, but it emerged only gradually as a possible explanation for the triumphs of our own. The roots of this idea can be found in Jane Lancaster's observation that only humans provide for their young after weaning, and that this must have helped make earlier weaning possible.<sup>9</sup> Our ape cousins breast-feed until age



four or five and then forage on their own; human hunter-gatherers breast-feed for two-and-a-half to three years, with weaning foods replacing milk. It's difficult to overstate the importance of shortened nursing; it leads to shortened spacing between births, which leads to more rapid population growth—a possible explanation for how we edged out the other primates.



Frans Lanting/National Geographic Stock  
*A female bonobo playing with an infant,  
Democratic Republic of the Congo, 1990*

But mothers could not have done this alone. Lancaster and other anthropologists believed it was the male members of the species—seduced, cajoled, and bargained into fatherhood—who supplied the high-protein, high-energy animal flesh that helped sustain the weanling. Kristen Hawkes, studying Hadza hunter-gatherers in Tanzania, thought the solution to the mother's dilemma was the nonreproducing grandmother, who in the course of evolution had extended her lifespan long beyond her fertility so as, Hawkes hypothesized, to help her daughters rear their young.<sup>10</sup> And Beatrice Whiting, one of the first cultural anthropologists to do systematic cross-cultural studies of childhood, believed it was the child nurse, usually an older sister but often a cousin or young aunt and sometimes even a brother, who helped bear the burdens of child care for mothers, making life, work, and further reproduction possible.<sup>11</sup>

Yet even the closest mother-infant relationships are embedded in a dense social environment, as in this description of !Kung hunter-gatherer infants in Botswana, which Hrdy quotes:

From their position on the mother's hip they have available to them her entire social world.... When the mother is standing, the infant's face is just at the eye-level of desperately maternal 10- to 12-year-old girls who frequently approach and initiate brief, intense, face-to-face interactions, including mutual smiling and vocalization. When not in the sling they are passed from hand to hand around a fire for similar interactions with one adult or child after another. They are kissed on their faces, bellies, genitals, sung to, bounced, entertained, encouraged, even addressed at length in conversational tones long before they can understand words.<sup>12</sup>

The mother does not have to assign the care of the baby to an older child, nor does the grandmother have to take over for there to be enough support to make life easier and more pleasant for the mother. The fact of a mother at home alone with an infant or a toddler is a new one in human experience, and it may not be “natural” for either.

This becomes clearer with careful measurement. Ann Cale Kruger, a developmental



psychologist who analyzed !Kung responses to crying, found that in timed, coded behavioral observations someone other than the mother helped respond to a baby's cry in most cases.<sup>13</sup> Even the longest crying bouts, those over thirty seconds (!Kung infants aren't left to cry very long), evoked a nonmaternal effort half the time. However, she also found that the number of longer bouts of crying in which the mother was *not* involved was zero. These findings confirmed that although mothers are not alone in meeting the challenges of baby care, they can have a uniquely important role.

Could Hrdy's cooperative breeding model be compatible with Bowlby's original notion of the centrality of a single caregiver? Studies of infancy in other hunter-gatherers strongly suggest that it is.<sup>14</sup> Research on Efe hunter-gatherers in the African rainforest found that infants are given extensive nonmaternal care, even to the point of being breast-fed at times by women other than the mother; yet mothers clearly predominate, especially at the age when attachments are forming. The same is true of the Aka, hunter-gatherers of Cameroon; they have the most involved fathers of any culture, but mothers still predominate. Grandmothers also matter in all such foraging groups, but not, on average, nearly as much as mothers.

Does this mean that only mothers can care for infants? Certainly not. Even Bowlby said "mother or primary caregiver." His own denial of the importance of breast-feeding in forming and sustaining attachment clearly suggested that any caring person could do the job. But he believed that one person must be more important than others in order for attachment to take a normal course. This claim, as yet, has not been proved, but nothing in Hrdy's wide-ranging account disproves it either. So it is possible to accept her claim that something like cooperative breeding or helpers at the nest was a key factor in human evolution without rejecting the idea of a primary caregiver.

What about Hrdy's other pair of claims—that humans are uniquely cooperative among primates and that this is due to the vital evolutionary role of cooperative breeding? There is no known way to evaluate the second claim, except to say that it is reasonable. If the Darwinian imperative is successful reproduction, then an adaptive advantage as powerful as helpers at the nest could easily have been the first step toward further exceptional cooperation, and human cooperation is impressive. Chimpanzees in experiments show much less of it than we do.

But just what that cooperation means remains the subject of lively debate. Humans do more things together on a far greater scale than any species of ape or monkey. But is this owing to greater cooperative inclination or greater cognitive, communicative, and organizing ability? We read one another's beliefs and intentions much better than any

other primate does, but does this make us more cooperative or only more skilled at subterfuge and deception? Our cooperation seemingly knows no bounds, but it is at its best within one group arrayed, for defensive or destructive purposes, against another.

In her attempt to emphasize the cooperative dimension of human life—which, to be fair, she considers fragile—Hrdy tends to slight her own earlier work on such behavior as competitive infanticide and “aunting to death”—the process by which an infant is adopted by an adult, who then neglects the infant until it dies. She cites Barbara Smuts’s work on friendship in baboons, but not her meticulous and unsettling survey of male violence against females in the natural and human world. And while Hrdy refers appropriately to cooperation among the reputedly fierce Yanomamo tribe of Venezuela, we need to remember that, as the anthropologist Napoleon Chagnon documented, Yanomamo men who have killed others have more descendants than those who have not.

Indeed, rapid evolution of humans may not mainly have increased cooperation, as Hrdy concludes; 12 percent of men in Central Asia today have Y chromosomes traceable to a man who lived around the time of Genghis Khan, and more than two million men in Ireland can trace their genes to a single medieval warrior-king. These facts can be squared with an evolved tendency to cooperate, but to what degree did such cooperation take place in a surrounding environment of competition and aggression?

Charles Darwin’s own sex did not prevent him from giving females a very prominent, even governing role, in evolution. *On The Origin of Species* suggests that the peacock’s tail and other apparently maladaptive traits were the effects of female choice, an explanation elevated in his later *The Descent of Man and Selection According to Sex* to a major principle. Females can be viewed as conducting a vast breeding experiment in which males were the animals bred, and this accords females extraordinary power. But that power led to a world in which males are often pitted against one another, competing for the chance to reproduce. Of course, females also compete for mating opportunities, and they raise their sons and daughters to do the same. Perhaps experience with caregiving and the ensuing ability to discern others’ intentions makes them better at this effort, but it does not necessarily make them cooperate.

Hrdy’s gracefully written, expert account of human behavior focuses on the positive, and its most important contribution is to give cooperation its rightful place in child care. Through a lifetime of pathbreaking work, she has repeatedly undermined our complacent, solipsistic, masculine notions of what women were meant “by nature” to be. Here as elsewhere she urges caution and compassion toward women whose maternal role must be constantly rethought and readjusted to meet the demands of a changing world.



Women have done this successfully for millions of years, and their success will not stop now. But neither Hrdy nor I nor anyone else can know whether the strong human tendency to help mothers care for children can produce the species-wide level of cooperation that we now need to survive.

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