February 8, 2000

SCIENTIST AT WORK / Sarah Blaffer Hrdy

Primate Expert Explores Motherhood’s Brutal Side

Related Links
- Anne Magurran Reviews Sarah Blaffer Hrdy’s ’Mother Nature’ (Jan. 23, 2000)
- First Chapter: Sarah Blaffer Hrdy’s ’Mother Nature’
- The New York Times on the Web: Science

By NATALIE ANGIER

Everybody knows what a good mother is. She is a lot like apple pie: reassuringly firm on the outside, but soft, sweet, warm and bland within.

A good mother gets pleasure from the comfort and pleasure of others. A good mother gets pleasure from being sliced, diced and eaten alive.

Yet while everybody knows what a good mother is, and everybody wants one, nobody seems to know where to find her -- and with reason.

A new book aims ’to raise Darwin’s consciousness.’ That good mother, who gives infinitely and unstintingly, is, in the phrase of the primatologist Sarah Blaffer Hrdy, the woman that never evolved, nor could have.

Dr. Hrdy, of the University of California at Davis, knows a lot about mothers -- real mothers with their feet on the ground, rather
than Earth Mothers with their feet on pedestals. She knows about human mothers across cultures and eras, and she knows about nonhuman mothers across phyla. She knows about the complexity, beauty and ferocity of the bond between a mother and her young. She knows that the bond is not a given, nor is it fixed and clean and sweet, but instead is a barter, a supple, ever-changing push-me pull-you negotiation between two individuals who need each other and are closely related, but who are not clones and so do not always see eye to eye, or breast to mouth for that matter.

Now Dr. Hrdy has gathered her insight and research into a book, "Mother Nature: A History of Mothers, Infants and Natural Selection," published last fall by Pantheon Books.

The book, which took her more than 15 years to complete, is thick, complex, scholarly and personal.

Fastidiously documented and footnoted, yet nonetheless beautifully and accessibly written, it is the product of a woman who, before going into science, had considered becoming a novelist.

It is the story of the mother-infant bond told from a nuanced but distinctly Darwinian perspective, an appraisal of how a welter of selective forces has shaped maternal behaviors, impulses and strategies over tens of thousands of years.

Among its many narrative parries, the book challenges a bedrock assumption of evolutionary biology, the premise that males of most species, including humans, vary far more in reproductive success than do their female counterparts.

Some males manage to mate like Lotharios while others are sexual duds, the theory goes, whereas females are in such demand that they can mate as much as they need to and thus end up with more or less the same number of offspring.
With this model of female monotony in mind, mothers have been viewed as cookie-cutter characters, with scant variation in maternal methods or maternal success from one female to the next.

Calling this bit of theoretical orthodoxy into question, Dr. Hrdy discusses the growing evidence that the variation in female reproductive success -- in the ability of females to rear offspring who themselves reproduce -- is far greater than had been suspected.

Motherhood matters, she says, and maternal styles and decisions matter, and why did it take people so long to see that simple, profound truth?

Dr. Hrdy talks about the extraordinary demands of human mothering. Most primate mothers can rear their infants on their own, but human mothers cannot. They need help, and throughout history and prehistory they have gotten it however and from whomever they can -- from mothers, grandmothers, brothers, aunts, cousins; from one man, or more than one man.

New research, Dr. Hrdy says, has revealed the prevalence of a practice called partible paternity -- the idea that a baby is a patchwork quilt of the various men a woman sleeps with during pregnancy.

Found among the traditional peoples of lowland Amazonia, eastern and southern Africa, New Guinea and elsewhere, partible paternity and customs like it turn out to be of advantage to women and their offspring. If a woman’s primary husband dies or deserts her, the other second-tier mates are expected to help protect and provide for her children.

As one young Zambian woman is quoted as saying: "Why put all your eggs in one basket?"

Dr. Hrdy does not flinch from the brutal side of human motherhood.

As a communal breeder beholden to the assistance of others in rearing her young, a woman must be a true political animal. She must be calculating, sometimes ruthlessly so. Dr. Hrdy delves into the subject of infanticide, revealing the practice to be a sorry staple of humanity’s efforts to plan and manage their families.

If a baby is born feeble, or handicapped, or the wrong sex, or
too soon after the last child, the parents may choose to kill, abandon or neglect it, rather than struggle to rear it against all odds and thus put their other children’s futures at risk.

Sometimes they dropped the child in the river.

At other times, they committed infanticide passively, by depositing the unwanted progeny at a Dickensian-like orphanage, for example, or shipping it off to a distant and overburdened wet nurse.

Many cultures postpone until several days or weeks after an infant’s birth official rituals like baptism, circumcision and naming ceremonies, Dr. Hrdy points out, perhaps in recognition that not every newborn is destined to be reared.

"Even though I consider this material to be part of what I do for a living," said Dr. Lee Cronk, an evolutionary anthropologist at Rutgers, "Sarah presented a huge amount of information on the history of child abandonment practices with which I wasn’t familiar. It’s a terrific book."

A fifth-generation Texan who retains a trace of twang, Dr. Hrdy (pronounced HUR-dee) is 53, almost six feet tall and strappingly handsome, yet with limbs and neck just elongated enough to give her an almost balletic air.

She is the daughter of considerable wealth and prominence -- Dallas banking on the maternal side, Texaco oil on the patriline -- but she fled from her background as quickly as possible.

"I wanted out of there," she said.

"When I went off to college at 16, it was wonderful."

Married to Daniel Hrdy, a infectious disease doctor and farmer (to whom she dedicates her latest book as "the wisest choice this female ever made"), she has three children: Katrinka, a varsity rower who graduates from Harvard in the spring; another daughter, Sasha, who will enter Harvard in the fall; and a 13-year-old son, Niko, named after the great naturalist Niko Tinbergen and the only one, Dr. Hrdy said, "who shows signs of becoming a naturalist."

Dr. Hrdy first gained recognition as a graduate student at Harvard in the 1970’s for her studies of langur monkeys in Abu, India, in particular infanticide by males. She described how, when a new male langur entered a troop, one of his first
actions would be to slaughter the infants of the males he deposed, the sooner to put the females into estrus and thus to give himself a shot at mating.

She also told of how females would try to protect their young by quickly and repeatedly mating with the invading male, apparently in hopes that he would be confused enough to view the existing infants as his own.

Dr. Hrdy’s reports of calculated infanticide and counter-infanticide were greeted with skepticism, or dismissed as the pathological responses of monkeys to the press of human populations around them.

But since then male infanticide has been observed in many species, and its importance in shaping male and female behavior alike has been widely accepted.

"Her work on infanticide was revolutionary," said Dr. Meredith Small, a primatologist at Cornell. "Now, we’ve had 30 years of hypothesis-testing, and she’s right. There aren’t many people who can propose a paradigm shift in their lifetime and watch it unfold."

Dr. Hrdy also has gained fame for questioning the idea that males are naturally ardent and females naturally coy, and she has worked mightily to present the female animal as an active player rather than a passive one in evolution, an effort delineated in her landmark 1981 book, "The Woman That Never Evolved," which brought her popular as well as professional fame.

"Mother Nature" continues the effort, as she puts it, to "raise Darwin’s consciousness." She upends stereotypes about maternal instinct and what women "really" want. For example, as Dr. Hrdy sees it, a woman’s career ambition is not a thing.
apart from her nurturing, maternal feelings, or an expression of vestigial "masculinity," or the delusional products of contemporary feminism, as some have suggested.

Instead, ambitiousness can be a reflection of the fact that, among many species, the more powerful and politically dominant the individual, the greater is her or his reproductive success.

Dr. Hrdy cites the example of Flo, the famous Gombe chimpanzee studied by Dr. Jane Goodall.

Flo’s high social rank not only allowed her to appropriate enough resources to raise many offspring to adulthood, but also to found a fief, in which her daughters remained in their birthplace and inherited their mother’s alpha status, rather than being forced to disperse at puberty, as female chimpanzees usually are.

"Mother chimps like Flo were not simply doting nurturers but entrepeneurial dynasts as well," Dr. Hrdy writes.

"A female’s quest for status -- her ambition, if you will -- has become inseparable from her ability to keep her offspring and grand-offspring alive."

"These data strongly suggest," she adds, "that generalized striving for local clout was genetically programmed into the primate female’s psyche during a distant past when status and motherhood were totally convergent." Today, she says, many women don’t know what to do with their zeal to succeed. On the one hand, they no longer need men to support them, nor will they necessarily manage to achieve high status and its trappings on their partner’s salary alone.

Moreover, many women have noticed that a reliance on male income in a world of no-fault divorce can leave them and their children impoverished.

And so, in the tradition of Flo, human mothers today may wish for standing, accomplishment and clout of their own, which is easier fantasized than realized.

The circumstances of modern life put women in a bind, Dr. Hrdy argues, "because jobs, status and resource defense occur in separate domains from child-rearing." Flo could strive for high rank while keeping her infant by her side; a modern mother cannot.
The conflict is not between maternal feelings and ambitiousness, Dr. Hrdy says, but between the needs of a human infant for constant, attentive, extended care; and the fact that a woman’s ambitions must be played out in workplaces with no tolerance for children.

An infant’s needs can be met in day care, Dr. Hrdy emphasizes.

But that surrogate care must be far better than what we have managed, on average, to offer.

What we need in our day care centers are well-paid and highly respected "allomothers," she said, a cadre of "as-if" mothers, who can be either male or female, so long as they are stable, conscientious and treat the children like their closest kin.

"We’re worrying about global warming, the destruction of the rain forest, the ozone layer," she said.

"Nobody is worrying about the future of Homo sapiens in terms of day care issues. And I’m saying we really should. If we care about the future of the human race, and the future of the planet, this is the place to start."

As always, Mother knows best.