

Chapter 41

Our Cheating Hearts

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Devotion and betrayal, marriage and divorce: how evolution shaped human love.

The language of zoology used to be so reassuring. Human beings were called a "pair-bonding" species. Lasting monogamy, it seemed, was natural for us, just as it was for geese, swans, and the other winged creatures that have filled our lexicon with such labels as "love-birds" and "lovey-dovey." Family values, some experts said, were in our genes. In the 1967 best seller *The Naked Ape*, zoologist Desmond Morris wrote with comforting authority that the evolutionary purpose of human sexuality is "to strengthen the pair-bond and maintain the family unit."

This picture has lately acquired some blemishes. To begin with, birds are no longer such uplifting role models. Using DNA fingerprinting, ornithologists can now check to see if a mother bird's mate really is the father of her offspring. It turns out that some female chickadees (as in "my little chickadee") indulge in extramarital trysts with males that outrank their mates in the social hierarchy. For female barn swallows, it's a male with a long tail that makes extracurriculars irresistible. The innocent-looking indigo bunting has a cuckoldry rate of 40 percent. And so on. The idea that most bird species are truly monogamous has gone from conventional wisdom to punctured myth in a few short years. As a result, the fidelity of other pair-bonding species has fallen under suspicion.

Which brings us to the other problem with the idea that humans are by nature enduringly monogamous: humans. Of course, you don't need a Ph.D. to see that till-death-do-we-part fidelity doesn't come as naturally to people as, say, eating. But an emerging field known as evolutionary psychology can now put a finer point on the matter. By studying how the process of natural selection shaped the mind, evolutionary psychologists are painting a new portrait of human nature, with fresh detail about the feelings and thoughts that draw us into marriage--or push us out.

The good news is that human beings are designed to fall in love. The bad news is that they aren't designed to stay there. According to evolutionary psychology, it is "natural" for both men and women--at some times, under some circumstances--to commit adultery or to sour on a mate, to suddenly find a spouse unattractive, irritating, wholly unreasonable. (It may even be natural to *become* irritating and wholly unreasonable, and thus hasten the departure of a mate you've soured on.) It is similarly natural to find some attractive colleague superior on all counts to the sorry wreck of a spouse you're saddled with. When we see a couple celebrate a golden anniversary, one apt reaction is the famous remark about a dog walking on two legs: The point is not that the feat was done well but that it was done at all.

All of this may sound like cause for grim resignation to the further decline of the American family. But what's "natural" isn't necessarily unchangeable. Evolutionary psychology, unlike past

gene-centered views of human nature, illuminates the tremendous flexibility of the human mind and the powerful role of environment in shaping behavior. In particular, evolutionary psychology shows how inhospitable the current social environment is to monogamy. And while the science offers no easy cures, it does suggest avenues for change.

The premise of evolutionary psychology is simple. The human mind, like any other organ, was designed for the purpose of transmitting genes to the next generation; the feelings and thoughts it creates are best understood in these terms. Thus the feeling of hunger, no less than the stomach, is here because it helped keep our ancestors alive long enough to reproduce and rear their young. Feelings of lust, no less than the sex organs, are here because they aided reproduction directly. Any ancestors who lacked stomachs or hunger or sex organs or lust--well, they wouldn't have become ancestors, would they? Their traits would have been discarded by natural selection.

This logic goes beyond such obviously Darwinian feelings as hunger and lust. According to evolutionary psychologists, our everyday, ever-shifting attitudes toward a mate or prospective mate--trust, suspicion, rhapsody, revulsion, warmth, iciness--are the handiwork of natural selection that remain with us today because in the past they led to behaviors that helped spread genes.

How can evolutionary psychologists be so sure? In part, their faith rests on the whole database of evolutionary biology. In all sorts of species, and in organs ranging from brains to bladders, nature's attention to the subtlest aspects of genetic transmission is evident. Consider the crafting of primate testicles--specifically, their custom tailoring to the monogamy, or lack thereof, of females. If you take a series of male apes and weigh their testicles (not recommended, actually), you will find a pattern. Chimpanzees and other species with high "relative testes weight" (testes weight in comparison to body weight) feature quite promiscuous females. Species with low relative testes weight are either fairly monogamous (gibbons, for example) or systematically polygynous (gorillas), with one male monopolizing a harem of females. The explanation is simple. When females breed with many males, male genes can profit by producing lots of semen for their own transportation. Which male succeeds in getting his genes into a given egg may be a question of sheer volume, as competing hordes of sperm do battle.

THE TROUBLE WITH WOMEN

Patterns like these, in addition to showcasing nature's ingenuity, allow a kind of detective work. If testicles evolved to match female behavior, then they are clues to the natural behavior of females. Via men's testicles, we can peer through the mists of prehistory and see how women behaved in the social environment of our evolution, free from the influence of modern culture; we can glimpse part of a pristine female mind.

The relative testes weight of humans falls between that of the chimpanzee and the gorilla. This suggests that women, while not nearly so wild as chimpanzee females (who can be veritable sex machines), are by nature somewhat adventurous. If they were not, why would natural selection divert precious resources to the construction and maintenance of weighty testicles?

There is finer evidence, as well, of natural female infidelity. You might think that the number of sperm cells in a husband's ejaculate would depend only on how long it has been since he last had sex. Wrong. What matters more, according to a recent study, is how long his mate has been out of sight. A man who hasn't had sex for, say, a week will have a higher sperm count if his wife was away on a business trip than if she's been home with the flu. In short, what really counts is whether the woman has had the opportunity to stray. The more chances she has had to collect sperm from other males, the more profusely her mate sends in his own troops. Again: That natural selection designed such an elaborate weapon is evidence of something for the weapon to combat female faithlessness.

So here is problem No. 1 with the pair-bond thesis: Women are not by nature paragons of fidelity. Wander-lust is an innate part of their minds, ready to surface under propitious circumstances. Here's problem No.2: if you think women are bad. You should see men.

THE TROUBLE WITH MEN

With men, too, clues from physiology help uncover the mind. Consider "sexual dimorphism"--the difference between average male and female body size. Extreme sexual dimorphism is typical of a polygynous species, in which one male may impregnate several females, leaving other males without offspring. Since the winning males usually secure their trophies by fighting or intimidating other males, the genes of brawny, aggressive males get passed on while the genes of less formidable males are deposited in the dustbin of history. Thus male gorillas, who get a whole harem full of mates if they win lots of fights and no mates if they win none, are twice as big as females. With humans, males are about 15 percent bigger--sufficient to suggest that male departures from monogamy, like female departures, are not just a recent cultural invention.

Anthropology offers further evidence. Nearly 1000 of the 1154 past or present human societies ever studied--and these include most of the world's "hunter-gatherer" societies--have permitted a man to have more than one wife. These are the closest things we have to living examples of the "ancestral environment"--the social context of human evolution, the setting for which the mind was designed. The presumption is that people reared in such societies--the !Kung San of southern Africa, the Ache of Paraguay, the nineteenth century Eskimo--behave fairly "naturally." More so, at least, than people reared amid influences that weren't part of the ancestral environment: TVs, cars, jail time for bigamy.

There are vanishingly few anthropological examples of systematic female polygamy, or polyandry--women monopolizing sexual access to more than one man at once. So, while both sexes are prone under the right circumstances to infidelity, men seem much more deeply inclined to actually acquire a second or third mate--to keep a harem.

They are also more inclined toward the casual fling. Men are less finicky about sex partners. Prostitution--sex with someone you don't know and don't care to know--is a service sought overwhelmingly by males the world round. And almost all pornography that relies sheerly on visual stimulation--images of anonymous people, spiritless flesh--is consumed by males.

Many studies confirm the more discriminating nature of women. One evolutionary psychologist surveyed men and women about the minimal level of intelligence they would accept in a person they were "dating." The average response for both male and female: average intelligence. And how smart would the potential date have to be before they would consent to sex? Said the women: Oh, in that case, markedly above average. Said the men: Oh, in that case, markedly below average.

There is no dispute among evolutionary psychologists over the basic source of this male open-mindedness. A woman, regardless of how many sex partners she has, can generally have only one offspring a year. For a man, each new mate offers a real chance for pumping genes into the future. According to the *Guinness Book of Records*, the most prolific human parent in world history was Moulay ("The Bloodthirsty") Ismail, the last Sharifian Emperor of Morocco, who died in 1727. He fathered more than 1000 children.

This logic behind undiscerning male lust seems obvious now, but it wasn't always. Darwin had noted that in species after species the female is "less eager than the male," but he never figured out why. Only in the late 1960s and early 1970s did biologists George Williams and Robert Trivers attribute the raging libido of males to their nearly infinite potential rate of reproduction.

WHY DO WOMEN CHEAT?

Even then the female capacity for promiscuity remained puzzling. For women, more sex doesn't mean more off-spring. Shouldn't they focus on quality rather than quantity--look for a robust, clever mate whose genes may bode well for the offspring's robustness and cleverness? There's ample evidence that women are drawn to such traits but in our species genes are not all a male has to offer. Unlike our nearest ape relatives, we are a species of "high male-parental investment." In every known hunter-gatherer culture, marriage is the norm--not necessarily monogamous marriage, and not always lasting marriage, but marriage of some sort; and via this institution, fathers help provide for their children.

In our species, then, a female's genetic legacy is best amplified by a mate with two things: good genes and much to invest. But what if she can't find one man who has both? One solution would be to trick a devoted, generous, and perhaps wealthy but not especially brawny or brainy mate into raising the offspring of another male. The woman need not be aware of this strategy, but at some level, conscious or unconscious, deft timing is in order. One study found that women who cheat on mates tend to do so around ovulation, when they are most likely to get pregnant.

For that matter, cheating during the infertile part of the monthly cycle might have its own logic, as a way (unconsciously) to turn the paramour into a dupe; the woman extracts goods or services from him in exchange for his fruitless conquest. Of course, the flowers he buys may not help her genes, but in the ancestral environment, less frivolous gifts--notably food--would have. Nisa, a woman in a !Kung San hunter-gatherer village, told an anthropologist that "when you have lovers, one brings you something and another brings you something else. One comes at night with meat, another with money, another with beads. Your husband also does things and gives them to you."

Multiple lovers have other uses, too. The anthropologist Sarah Blaffer Hrdy has theorized that women copulate with more than one man to leave several men under the impression that they might be the father of particular offspring. Then, presumably, they will treat the offspring kindly. Her theory was inspired by langur monkeys. Male langurs sometimes kill infants sired by others as a kind of sexual icebreaker, a prelude to pairing up with the (former) mother. What better way to return her to ovulation--by putting an emphatic end to her breast-feeding--and to focus her energies on the offspring to come?

Anyone tempted to launch into a sweeping indictment of langur morality should first note that infanticide on grounds of infidelity has been acceptable in a number of human societies. Among the Yanomamo of South America and the Tikopia of the Solomon Islands, men have been known to demand, upon marrying women with a past, that their babies will be killed. And Ache men sometimes collectively decide to kill a newly fatherless child. For a woman in the ancestral environment, then, the benefits of multiple sex partners could have ranged from their sparing her child's life to their defending or otherwise investing in her youngster.

Again, this logic does not depend on a conscious understanding of it. Male langurs presumably do not grasp the concept of paternity. Still, genes that make males sensitive to cues that certain infants may or may not carry their genes have survived. A gene that says, "Be nice to children if you've had lots of sex with their mothers," will prosper over the long haul.

THE INVENTION AND CORRUPTION OF LOVE

Genes don't talk, of course. They affect behavior by creating feelings and thoughts--by building and maintaining the brain. Whenever evolutionary psychologists talk about some evolved behavioral tendency--a polygamous or monogamous bent, say, or male parental investment--they are also talking about an underlying mental infrastructure.

The advent of male parental investment, for example, required the invention of a compelling emotion: paternal love. At some point in our past, genes that inclined a man to love his offspring began to flourish at the expense of genes that promoted remoteness. The reason, presumably, is that changes in circumstances--an up-surge in predators, say--made it more likely that the offspring of undevoted, unprotective fathers would perish.

Crossing this threshold meant love not only for the child; the first step toward becoming devoted parents consists of the man and woman developing a mutual attraction. The genetic payoff of having two parents committed to a child's welfare seems to be the central reason men and women can fall into swoons over one another.

Until recently, this claim was heresy. "Romantic love" was thought to be the unnatural invention of Western culture. The Manguaians of Polynesia, for instance, were said to be "puzzled" by references to marital affection. But lately anthropologists have taken a second look at purportedly loveless cultures, including the Manguaians, and have discovered what nonanthropologists already knew: Love between man and woman is a human universal.

In this sense the pair-bonding label is apt. Still, that term--and for that matter the term love--conveys a sense of permanence and symmetry that is wildly misleading. Evolution not only invented romantic love but from the beginning also corrupted it. The corruption lies in conflicts of interest inherent in male parental investment. It is the goal of maximizing male investment, remember, that sometimes leads a woman to infidelity. Yet it is the preciousness of this investment that makes her infidelity lethal to her mate's interests. Not long for this world are the genes of a man who showers time and energy on children who are not his.

Meanwhile, male parental investment also makes the man's naturally polygynous bent inimical to his wife's reproductive interests. His quest for a new wife could lead him to withdraw, or at least dilute, investment in his first wife's children. This reallocation of resources may on balance help his genes but certainly not hers.

The living legacy of these long-running genetic conflicts is human jealousy--or, rather, human jealousies. In theory, there should be two kinds of jealousy--one male and one female. A man's jealousy should focus on sexual infidelity, since cuckoldry is the greatest genetic threat he faces. A woman, though she'll hardly applaud a partner's strictly sexual infidelity (it does consume time and divert some resources), should be more concerned with emotional infidelity--the sort of magnetic commitment to another woman that could lead to a much larger shift in resources.

David Buss, an evolutionary psychologist at the University of Michigan, has confirmed this prediction vividly. He placed electrodes on men and women and had them envision their mates doing various disturbing things. When men imagined sexual infidelity, their heart rates took leaps of a magnitude typically induced by three cups of coffee. They sweated. Their brows wrinkled. When they imagined a budding emotional attachment, they calmed down, though not quite to their normal level. For women, things were reversed: envisioning emotional infidelity--redirected love, not supplementary sex--brought the deeper distress.

That jealousy is so finely tuned to these forms of treachery is yet more evidence that they have a long evolutionary history. Still, the modern environment has carried them to new heights, making marriage dicier than ever. Men and women have always, in a sense, been designed to make each other miserable, but these days they are especially good at it.

MODERN OBSTACLES TO MONOGAMY

To begin with, infidelity is easier in an anonymous city than in a small hunter-gatherer village. Whereas paternity studies show that 2 percent of the children in a !Kung San village result from cuckoldry, the rate runs higher than 20 percent in some modern neighborhoods.

Contraceptive technology may also complicate marriage. During human evolution, there were no condoms or birth-control pills. If an adult couple slept together for a year or two and produced no baby, the chances were good that one of them was not fertile. No way of telling which one, but from their genes' point of view, there was little to lose and much to gain by ending the partnership and finding a new mate. Perhaps, some have speculated, natural selection favored genes inclining men and women to sour on a mate after long periods of sex without issue. And it is true that barren marriages are especially likely to break up.

Another possible challenge to monogamy in the modern world lies in movies, billboards, and magazines. There was no photography in the long-ago world that shaped the human male mind. So at some deep level, that mind may respond to glossy images of pin-ups and fashion models as if they were viable mates--alluring alternatives to dull, monogamous devotion. Evolutionary psychologist Douglas Kenrick has suggested as much. According to his research, men who are shown pictures of *Playboy* models later describe themselves as less in love with their wives than do men shown other images. Women shown pictures from *Playgirl* felt no such attitude adjustment toward spouses.

Perhaps the largest modern obstacle to lasting monogamy is economic inequity. To see why, it helps to grasp a subtle point made by Donald Symons, author of the 1979 classic *The Evolution of Human Sexuality*. Though men who leave their wives may be driven by "natural" impulses, that does not mean men have a natural impulse designed expressly to make them leave their wives. After all, in the ancestral environment, gaining a second wife didn't mean leaving the first. So why leave her? Why not stay near existing offspring and keep giving some support? Symons believes men are designed less for opportune desertion than for opportune polygyny. It's just that when polygyny is illegal, a polygynous impulse will find other outlets, such as divorce.

If Symons is right, the question of what makes a man feel the restlessness that leads to divorce can be rephrased: What circumstances, in the ancestral environment, would have permitted the acquisition of a second wife? Answer: possessing markedly more resources, power, or social status than the average Joe.

Even in some "egalitarian" hunter-gatherer societies, men with slightly more status or power than average are slightly more likely to have multiple wives. In less egalitarian preindustrial societies, the anthropologist Laura Betzig has shown, the pattern is dramatic. In Incan society, the four political offices from petty chief to chief were allotted ceilings of seven, eight, fifteen and thirty women. Polygyny reaches its zenith under the most despotic regimes. Among the Zulu, where coughing or sneezing at the king's dinner table was punishable by death, his highness might monopolize more than 100 women.

To an evolutionary psychologist, such numbers are just extreme examples of a simple fact: The ultimate purpose of the wealth and power that men seek so ardently is genetic proliferation. It is only natural that the exquisitely flexible human mind should be designed to capitalize on this power once it is obtained.

Thus it is natural that a rising corporate star, upon getting a big promotion, should feel a strong attraction to women other than his wife. Testosterone--which expands a male's sexual appetite--has been shown to rise in nonhuman primates following social triumphs, and there are hints that it does so in human males, too. Certainly the world is full of triumphant men--Johnny Carson, Donald Trump--who trade in aging wives for younger, more fertile models. (The multi-wived J. Paul Getty said, "A lasting relationship with a woman is only possible if you are a business failure.")

A man's exalted social status can give his offspring a leg up in life, so it's natural that women should lust after the high-status men who lust after them. Among the Ache, the best hunters also have more extramarital affairs and more illegitimate children than lesser hunters. In modern societies, contraception keeps much of this sex appeal from translating into offspring. But last year a study by Canadian anthropologist Daniel Perusse found that single men of high socioeconomic status have sex with more partners than lower-status men.

One might think that the appeal of rich or powerful men is losing its strength. After all, as more women enter the work force, they can better afford to premise their marital decisions on something other than a man's income. But we're dealing here with deep romantic attractions, not just conscious calculation, and these feelings were forged in a different environment. Evolutionary psychologists have shown that the tendency of women to place greater emphasis than men on a mate's financial prospects remains strong regardless of the income or expected income of the women in question.

The upshot of all this is that economic inequality is monogamy's worst enemy. Affluent men are inclined to leave their aging wives, and young women--including some wives of less affluent men--are inclined to offer themselves as replacements.

Objections to this sort of analysis are predictable: "But people leave marriages for emotional reasons. They don't add up their offspring and pullout their calculators." True. But emotions are just evolution's executioners. Beneath the thoughts and feelings and temperamental differences marriage counselors spend their time sensitively assessing are the stratagems of the genes--cold, hard equations composed of simple variables: social status, age of spouse, number of children, their ages, outside romantic opportunities, and so on. Is the wife really duller and more nagging than she was twenty years ago? Maybe, but maybe the husband's tolerance for nagging has dropped now that she is 45 and has no reproductive future. And the promotion he just got, which has already drawn some admiring glances from a young woman at work, has not helped.

Similarly, we might ask the young, childless wife who finds her husband intolerably insensitive why the insensitivity wasn't so oppressive a year ago, before he lost his job and she met the kindly, affluent bachelor who seems to be flirting with her. Of course, maybe her husband's abuses are quite real, in which case they signal his disaffection and perhaps his impending departure--and merit just the sort of preemptive strike the wife is now mustering.

THE FALLOUT FROM MONOGAMY'S DEMISE

Not only does male social inequality favor divorce. Divorce can also reinforce male social inequality; it is a tool of class exploitation. Consider Johnny Carson. Like many wealthy, high-status males, he spent his career dominating the reproductive years of a series of women. Somewhere out there is a man who wanted a family and a pretty wife and, if it hadn't been for Johnny Carson, would have married one of these women. And if this man has managed to find another woman, she was similarly snatched from the clutches of some other man. And so on--a domino effect: A scarcity of fertile females trickles down the social scale.

As theoretical as this sounds, it cannot help happening. There are only about 25 years of fertility per woman. When some men dominate more than 25 years' worth, some man somewhere must do with less. And when, in addition to all the serial husbands, you count men who live with a woman for five years before deciding not to marry her, and then do it again (perhaps finally at 35 marrying a 28-year-old, the net effect is not trivial. As some Darwinians have put it, serial monogamy tantamount to polygyny. Like polygyny, it lets powerful men grab extra sexual resources (a.k.a. women), leaving less fortunate men without mates--or at least with- mates young enough to bear children. Thus rampant divorce not only ends the marriages of some men but prevents the marriage of others. In 1960, when the divorce rate was around 25 percent, the portion of the never married population age 40 or older was about the same for men and women. By 1990, with the divorce rate running at 50 percent, the portion for men was larger by 20 percent than for women.

Viewing serial monogamy as polygyny by another name throws a kink into the family-values debate. So far, conservatives have got the most political mileage out of decrying divorce. Yet lifelong monogamy--one woman man for rich and poor alike--would seem to be a natural rallying cry for liberals.

One other kind of fallout from serial monogamy comes plainly into focus through the lens of evolutionary psychology: the toll taken on children. Martin Daly and Margo Wilson of McMaster University in Ontario, two of the field's seminal thinkers, have written that one of "most obvious" Darwinian predictions is that step-parents will "tend to care less profoundly for children than natural parents." After all, parental investment is a precious resource. So natural selection should "favor those parental psyches that do not squander it on non-relatives"-who after all do not carry the parent's genes.

Indeed, in combing through 1976 crime data, Daly and Wilson found that an American child living with one more substitute parents was about 100 times as likely to be fatally abused as a child living with biological parents. In a Canadian city in the 1980s, a child age two or younger was 70 times as likely to be killed by a parent if living with a stepparent and a natural parent than if living with two natural parents.

Of course, murdered children are a tiny fraction of children living with stepparents; divorce and remarriage hardly amount to a child's death warrant. But consider the more common problem of nonfatal abuse. Children under 10 were, depending on their age and the study in question, three to forty times as likely to suffer parental abuse if living with a stepparent and a biological parent instead of two biological parents.

There are ways to fool Mother Nature, to induce parents to love children who are not theirs. (Hence cuckoldry.) After all, people cannot telepathically sense that a child is carrying their genes. Instead they rely on cues that in the ancestral environment would have signaled as much. If a woman feeds and cuddles an infant day after day, she may grow to love the child, and so may the woman's mate. This sort of bonding is what makes adopted children lovable (and is one reason relationships between stepparent and child are often harmonious). But the older a child is when first seen, the less profound the attachment will probably be. Most children who acquire stepfathers are past infancy. Polygynous cultures, such as the nineteenth century Mormons, are routinely dismissed as cruelly sexist. But they do have at least one virtue: They do not submit children to the indifference or hostility of a surrogate father. What we have now-serial monogamy, quasi-polygyny- is in this sense worse than true polygyny. It massively wastes the most precious evolutionary resource: love.

IS THERE HOPE?

Given the toll of divorce-on children, on low-income men, and for that matter on mothers and fathers-it would be nice to come up with a magic monogamy-restoration plan. Alas, the importance of this task seems rivaled only by its difficulty. Lifelong monogamous devotion just isn't natural, and the modern environment makes it harder than ever. What to do?

As Laura Betzig has noted, some income redistribution might help. One standard conservative argument against antipoverty policies is their cost: Taxes burden the affluent and thus, by lowering work incentive, reduce economic output. But if one goal of the policy is to bolster monogamy, then making the affluent less so would help. Monogamy is threatened not just by poverty in an absolute sense but also by the relative wealth of the rich. This is what lures a young woman to a wealthy married or formerly married man. It is also what makes the man who attracts her feel too good for just one wife.

As for the economic consequences, the costs of soaking the rich might well be outweighed by the benefits, financial and otherwise, of more stable marriages, fewer divorces, fewer abused children, and less loneliness and depression.

There are other levers for bolstering monogamy, such as divorce law. In the short run, divorce brings the average man a marked rise in standard of living, while his wife, along with her children, suffers the opposite. Maybe we should not lock people into unhappy marriages with financial disincentives to divorce, but surely we should not reward men for leaving their wives, either.

A MORAL ANIMAL

The problem of divorce is by no means one of public policy alone. Progress will also depend on people using the explosive insight of evolutionary psychology in a morally responsible way. Ideally, this insight would lead people to subject their own feelings to more acute scrutiny. Maybe for starters, men and women will realize that their constantly fluctuating perceptions of a mate are essentially illusions, created for the (rather absurd, really) purpose of genetic proliferation, and that these illusions can do harm. Thus men might beware the restlessness designed by natural selection to encourage polygyny. Now that it brings divorce, it can inflict great emotional and even physical damage on their children.

And men and women alike might bear in mind that impulses of wanderlust, or marital discontent, are not always a sign that you married the "wrong person." They may just signify that you are a member of our species who married another member of our species. Nor, as evolutionary psychiatrist Randolph L. Nesse has noted, should we believe such impulses are a sign of psychopathology. Rather, he writes, they are "expected impulses that must, for the most part, be inhibited for the sake of marriage."

The danger is that people will take the opposite tack: react to the new knowledge by surrendering to "natural" impulses, as if what's "in our genes" were beyond reach of self-control. They may even conveniently assume that what is "natural" is good.

This notion was common earlier in this century. Natural selection was thought of almost as a benign deity, constantly "improving" our species for the greater good. But evolutionary psychology rests on a quite different world view: recognition that natural selection does not work toward overall social welfare, that much of human nature boils down to ruthless genetic self-interest, that people are naturally oblivious to their ruthlessness.

George Williams, whose 1966 book *Adaptation and Natural Selection* helped dispel the once popular idea that evolution often works for "the good of the group," has even taken to calling natural selection "evil" and "the enemy." The moral life, in his view, consists largely of battling human nature.

Darwin himself believed the human species to be a moral one--in fact, the only moral animal species. "A moral being is one who is capable of comparing his past and future actions or motives, and of approving or disapproving of them," he wrote.

In a sense, yes, we are moral. We have at least the technical capacity to lead an examined life: self-awareness, memory, foresight, and judgment. Still, chronically subjecting ourselves to moral scrutiny and adjusting our behavior accordingly is hardly a reflex. We are potentially moral animals--which is more than any other animal can say--but we are not naturally moral animals. The first step to being moral is to realize how thoroughly we aren't.