

precipitates early puberty in girls is not well known. The evolutionary developmental psychologist Bruce J. Ellis⁴⁸ suggests that pheromones (a chemical substance that travels from one individual to another in order for the former to influence the behavior of the latter) emitted by the stepfather and other unrelated men in the household might trigger early puberty in girls. This is one of the remaining mysteries in evolutionary psychology.

Guys Gone Wild

THE EVOLUTIONARY PSYCHOLOGY OF CRIME AND VIOLENCE

While there have not been many evolutionary psychological studies in the area of crime and violence, one of the early classics in the field was on this topic.¹ Martin Daly and Margo Wilson's 1988 book *Homicide* demonstrates that all types of homicide—killing children, killing parents, men killing other men, men killing women, husbands killing wives, and wives killing husbands—can be explained by Darwinian logic.

At first sight, it appears that killing children makes no sense from the evolutionary psychological perspective, which emphasizes reproductive success. Why would parents kill their own children? Daly and Wilson have two answers to this question. The first answer is that they don't. Daly and Wilson discovered that what often passes as parents killing their children in police statistics is actually stepfathers killing their stepchildren, who do not carry their genes. It looks as though biological parents are killing their genetic children in the statistics because the police, uninformed by Darwinian

logic, make no distinction between biological parents and stepparents in their record keeping. Biological parents very seldom kill their genetic children.

Their second answer to the question is that sometimes parents have to make tough choices. All parents, even wealthy ones, have limited resources to invest in their children. Every dollar, every minute, every effort that they invest in one child is another dollar, another minute, another effort that they cannot invest in other children. Their evolved psychological mechanisms therefore compel them to invest most efficiently, which usually means that they invest more in children who have the greatest prospect for reproductive success, at the cost of other children whose reproductive prospect is gloomier.

Another surprising finding in this area is that criminals are not so different from other men. All men (criminal or not) are more or less the same. The ultimate reason why men do what they do—whether they be criminals, musicians, painters, writers, or scientists—is to impress women so that they will sleep with them. Men do everything they do in order to get laid.

Of course, by the same token, all women are more or less the same, but you cannot see that in this chapter on crime and violence, because almost all criminals are men. Let's first find out why that is the case.

Q. Why Are Almost All Violent Criminals Men?

There are many *cultural universals*—features of human society that are shared by all known cultures. Donald E. Brown provided the original list of “human universals” (and wrote a whole book about

them) in 1991,² and Steven Pinker updated the list in 2002.³ There are probably so many cultural universals (contrary to what Franz Boas and cultural determinists think) because human culture is a manifestation of human nature at the level of society, and human nature is universal to all humans.⁴ This is why all human cultures are more or less the same, and there are so many cultural universals. (See “What about Culture? Is Anything Cultural?” in chapter 2.)

Among the many cultural universals is the fact that men in every human society commit an overwhelming majority of all crimes and acts of violence.⁵ Why is this? Why are men so much more criminal and violent than women?

In their comprehensive study of homicide, the leading evolutionary psychologists Martin Daly and Margo Wilson note that humans throughout their evolutionary history were effectively polygynous—many married men had multiple wives.⁶ (See “Why [and How] Are Contemporary Westerners *Polygynous*?” in chapter 4.) In a polygynous society, some males monopolize reproductive access to all females while other males are left out; in such a society, some males do not get to reproduce at all, while almost all females do. (Recall our discussion of sex differences in fitness variance in chapter 2. The distance between the “winners” and the “losers” in the reproductive game is much greater among men than among women.) This inequality of reproductive success between males and females makes males highly competitive in their effort not to be left out of the reproductive game. This competition among men leads to a high level of violence (murder, assault, and battery) among them, and the large number of homicides between men (compared to the number of homicides between women, or between the sexes) is a direct result of this male competition for mates.

Big Violence Starts Small

In particular, Daly and Wilson⁷ note that most homicides between men originate from what is known as "trivial altercations."⁸ A typical homicide in real life is not one depicted in an episode of *Columbo*; premeditated, well planned, and nearly perfectly executed by an intelligent murderer. Instead, it begins as a fight about trivial matters of honor, status, and reputation between men (such as when one man insults another or makes moves on another's girlfriend). Fights escalate because neither is willing to back down, until they become violent and one of the men ends up dead. Because women prefer to mate with men of high status and good reputation,⁹ a man's status and reputation directly correlates with his reproductive success. Men are therefore highly motivated (albeit unconsciously) to protect their honor, and often go to extreme lengths to do so. Daly and Wilson thus explain homicides between men in terms of their (largely unconscious) desire to protect their status and reputation in their attempt to gain reproductive access to women.

Incidentally, this is why many evolutionary psychologists believe that the death penalty does not deter murder. The logic of the death penalty assumes that most murders are premeditated. A potential murderer carefully and rationally weighs the costs and benefits of the act, and decides not to murder if the costs outweigh the benefits. This might describe a fictional murderer on *Columbo*, but not real-life murderers, who do not stop to think before escalating their trivial altercations into fatal fights.

The logic of the death penalty also assumes that execution is the worst fate possible. From the evolutionary psychological perspective, there is something worse than death, which is the total reproductive failure that awaits any man who does not compete for mates in a polygynous society. If they compete and fight with other men,

they *may* die (by being either killed by the other man or executed by the state); if they don't compete, however, they *will definitely* die, reproductively, by leaving no copies of their genes.

Rape may appear to be an exception to this reasoning because, unlike murders and assaults, the victims of rape are usually women, and there is therefore no male competition for status and reputation. However, the same psychological mechanism that compels men to gain reproductive access to women by competing with each other can also motivate men to commit rape. Predatory rapists are overwhelmingly men of lower class and status, who have very dim prospects of gaining legitimate reproductive access to women.¹⁰ While it is not a manifestation of competition and violence, rape may be motivated by men's psychological mechanisms that urge them to gain reproductive access to women when they do not have the legitimate means to do so.

We can also extend the same analysis to property crimes. If women prefer to mate with men with more resources, then men can increase their reproductive prospects by acquiring material resources. Resources in traditional societies, however, tend to be concentrated in the hands of older men; younger men are often excluded from attaining them through legitimate means and must therefore resort to illegitimate means. One method of doing so is to appropriate someone else's resources by stealing them. So the same psychological mechanism that motivates violent crime can also motivate property crimes.

Crimes Evolved Before Norms Against Them

Our suggestion that men steal in order to attract women might at first glance appear strange, since theft and other forms of resource extortion are universally condemned in human societies; in fact,

such condemnation is another cultural universal. It is quite possible, however, that the psychological mechanism that motivates young males to commit violent and property crimes evolved in our ancestors in evolutionary history before the ape-human split (five to eight million years ago), even before the ape-monkey split (fifteen to twenty million years ago). In fact, our reasoning logically requires that the crucial psychological mechanisms emerge *before* the informal norms against violence and theft do; otherwise, violent competition and accumulation of resources through theft would not lead to higher status and reproductive success for males because they would be ostracized for violating the norms. We believe that the norms against violence and theft might have evolved *in reaction to* the psychological mechanisms that compelled young males to engage in violence and theft. The fact that violent and predatory acts that humans would classify as criminal are quite common among nonhuman species that do not have informal norms against such acts increases our confidence in this suggestion.¹¹

These are some of the reasons why men are more violent and criminal. Crime and violence pay in reproductive terms, by allowing men to eliminate or intimidate their rivals and to accumulate resources to attract mates when they lack legitimate means to acquire such resources. But that is just one side of the coin. What about women? Given what we present above, why would *any* woman commit crimes at all?

Staying Alive

The evolutionary psychologist Anne Campbell offers the “staying alive” theory of female criminality, which answers these questions and more.¹² Her theory begins with the fundamental observation that offspring’s survival and thus reproductive success depends

more heavily on maternal than paternal care and investment. It is therefore imperative for mothers rather than fathers to survive long enough to take physical care of their offspring to ensure their survival to sexual maturity. This, Campbell argues, is why females are more risk-averse than males are. The potential benefit of taking risks—by engaging in physical competition for resources and mates, for instance—simply does not justify the potential cost (the very survival of their offspring, which heavily hinges on the mother’s own survival). A woman’s primary goal is therefore to stay alive for the sake of her children.

Campbell goes on to point out, however, that females do occasionally need to compete for resources and mates, especially when these are scarce. This is why women sometimes compete for “a few good men,” and occasionally resort to violence and theft to achieve their goals, even though, consistent with their primary goal to stay alive, their tactics of competition are usually low-risk (larceny rather than robbery) and indirect (spreading negative gossip and rumors about a rival behind her back rather than direct physical confrontation with her).

In her most recent work, Campbell¹³ goes even further toward theoretical integration of male and female criminality. She argues that men and women do not differ in the *benefits* of aggression: high-status men who are winners of male competition may get access to mates and thus more opportunities for sex, but high-status women who are winners of female competition may get priority access to resources and greater protection afforded by high-status males. In other words, Campbell argues, women must compete for high-quality mates just as much as men do. It is therefore only the *costs* of aggression, Campbell argues, that distinguish men and women, and explain the far lower incidence of aggression among women.

Campbell points out that “theft by women is usually tied to economic need and occurs as part of their domestic responsibilities for their children,” whereas “robbery is the quintessential male crime, in which violence is used both to extract resources and to gain status.”¹⁴ Apart from their tendency and inclination to avoid physical risks and danger altogether, this is another reason that women commit fewer crimes than men. Women only steal what they need for them and their children to survive, whereas men steal to show off and gain status as well as resources. In other words, *women steal less than men for exactly the same reason as they earn less than men.*¹⁵ (See “Why Do Men Earn More Money and Attain Higher Status Than Women?” in chapter 7.) Women generally earn less than men do because they tend to make only what they need and usually have better things to do than earn money, whereas men are motivated to earn far more than they need to survive in order to use it to attract women. Similarly, women steal less than men do because they tend to steal what they need to survive and do not use crime for other purposes, like showing off and gaining status.

The work of evolutionary psychologists Martin Daly, Margo Wilson, and Anne Campbell thus explains why men are so much more violent and criminal than women are, and why this sex difference is culturally universal. We should point out, however, that according to the Interpol data, there is one exception to this rule in the world. A significant minority or even majority of offenders of *all* serious felonies in Syria *year after year* are women. We are frankly baffled by these statistics; however, it is very difficult for us (or any evolutionary psychologist) to believe that Syrian women, alone in the whole world, are genuinely more criminal than women elsewhere. We strongly suspect that either these statistics reflect some clerical error (for example, “male” and “female” were wrongly labeled when the Interpol form was first translated into Arabic many years ago, and the same

mislabeled forms are photocopied and used every year) or there are some cultural or institutional reasons (for example, women may routinely take the fall for crimes committed by their husbands, brothers, or fathers). We have asked several Syrian experts for a possible explanation since we first noticed this statistical anomaly nearly a decade ago. We have not found one; however, we suspect that Syrian women do *not* commit the majority of serious crimes in their country.

Q. What Do Bill Gates and Paul McCartney Have in Common with Criminals?

For nearly a quarter of a century, criminologists have known about a persistent empirical phenomenon called the “age-crime curve.” In their highly influential 1983 article “Age and Explanation of Crime,” two leading criminologists, Travis Hirschi and Michael R. Gottfredson, claim that the relationship between age and crime is the same across all social and cultural conditions at all times. In every society, for all social groups, for all races and both sexes, at all historical times, the tendency to commit crime and other analogous, risk-taking behavior rapidly increases in early adolescence, peaks in late adolescence and early adulthood, rapidly decreases throughout the 20s and 30s, and levels off during middle age. Although there have been minor variations observed around the “invariant” age-crime curve,¹⁶ the essential shape of the curve for serious interpersonal crimes is widely accepted by criminologists.¹⁷

Everyone Wants a Piece of the Action

One of the striking features of the age-crime curve is that it is not limited to crime. The same age profile characterizes “every *quantifiable*

human behavior that is *public* (i.e., perceived by many potential mates) and *costly* (i.e., not affordable by all sexual competitors).¹⁸ The relationship between age and productivity among *male* jazz musicians, *male* painters, *male* writers, and *male* scientists, which might be called the "age-genius curve,"¹⁹ is essentially the same as the age-crime curve.²⁰ Their productivity—the expressions of their genius—quickly peaks in early adulthood, and then just as quickly declines throughout adulthood. The age-genius curve among their female counterparts is much less pronounced and flatter; it does not peak or vary as much as a function of age.

It is not difficult to find personifications of the age-genius curve. Paul McCartney has not written a hit song in years, and now spends much of his time painting. Bill Gates is now a respectable businessman and philanthropist, and is no longer the computer whiz kid of his earlier years. J. D. Salinger now lives as a total recluse and has not published anything in more than three decades. Orson Welles was mere 26 when he wrote, produced, directed, and starred in *Citizen Kane*, which many consider to be the greatest movie ever made. There are some exceptions. Many artists, writers, and scientists remain productive into their middle and old ages, just like there are a few career criminals who commit crimes all their lives. But, in general, the pattern of youthful productivity holds for most.

What is the reason behind all this? Why do criminals usually desist from committing crimes as they age? Why does the productivity of creative geniuses also often fade with age? A single evolutionary psychological theory can explain the productivity of both creative geniuses and criminals over the life course.²¹ According to this theory, *both crime and genius are expressions of young men's competitive desires, whose ultimate function in the ancestral environment would have been to increase reproductive success.*

What Explains the Crime and Genius Curves?

As we've discussed, there are reproductive benefits of intense competitiveness to men. In the physical competition for mates, those who are competitive may act violently toward their male rivals. Their violence serves the dual function of protecting their status and honor, and discouraging or altogether eliminating their rivals from future competition for mates. Their competitiveness also inclines them to accumulate resources to attract mates by stealing from others, and the same psychological mechanism can probably induce men who cannot gain legitimate access to women to do so illegitimately through forcible rape. Men who are less inclined toward crime and violence may express their competitiveness through their creative activities in order to attract mates.²²

There are no reproductive benefits from competition before puberty because prepubescent males are not able to translate their competitive edge into reproductive success. With puberty, however, the benefits of competition rapidly increase. Once the men are reproductively capable, every act of competition (be it through violence, theft, or creative genius) can potentially augment their reproductive success. The benefits of competition stay high after puberty for the remainder of their lives because human males are reproductively capable for most of their adult lives.

The Downside of the Curve

This is not the whole story, however. There are also costs associated with competition. Acts of violence can easily result in the man's own death or injury, and acts of resource appropriation can trigger retaliation from the rightful owners of the resources. A man's reproductive

success is obviously compromised if the competitive acts result in his death or even injury. Before men start reproducing (before their first child), there are few costs of competition. True, being competitive might result in their death or injury, and they might therefore lose in the reproductive game if they are too competitive. However, they also lose by *not* competing. If they do not compete for mates in a polygynous society, which all human societies are (see "Why [and How] Are Contemporary Westerners Polygynous?" in chapter 4), they will be left out of the game and end up losing as a result. In other words, young men *might* lose if they are competitive, but given polygyny, they will *definitely* lose if they are not. So there is little cost to being competitive, even at the risk of death and injury; the alternative is worse in reproductive terms, which once again is the reason the death penalty cannot deter young men.

The cost of competition, however, rises dramatically with the birth of the first child and subsequent children. True, men still benefit from competition because such acts of competition might attract additional mates even after their initial reproduction. However, a man's energies and resources are put to better use by protecting and investing in his existing children. In other words, with the birth of children, men should shift their reproductive effort away from mating and toward parenting. If the men die or get injured in their acts of competition, their existing children will suffer; they might starve without their father's parental investment or fall victim to predation by others without their father's protection. The costs of competition therefore rapidly increase after the birth of the first child, which usually happens several years after puberty because men need some time to accumulate enough resources and attain sufficient status to attract their first mate. Nevertheless, in the absence of artificial contraception, reproduction probably began at a much earlier age in the ancestral environ-

ment than it does today. There is therefore a gap of several years between the rapid rise in the benefits of competition and the similarly rapid rise in its costs.

Both the age-crime curve and the age-genius curve can be explained as the mathematical difference between the benefits and costs of competition. Young men rapidly become more violent, more criminal, and creatively more expressive in late adolescence and early adulthood as the benefits of competition rise, but then their productivity just as rapidly declines in late adulthood as the costs of competition rise and cancel its benefits. Criminality, genius, and productivity in virtually everything else men do vary as they do over the life course because they represent the difference between the benefits and costs of competition.

These calculations have been performed by natural and sexual selection, so to speak, which then equips male brains with a psychological mechanism to incline them to be increasingly competitive immediately after puberty and to make them less competitive right after the birth of the first child. Men simply do not *feel like* acting violently, stealing, or conducting additional scientific experiments, or they just *want to* settle down after the birth of the child, but they do not exactly know why. The intriguing suggestion here is that a single psychological mechanism may be responsible for much of what men do, whether they are criminals or scientists.²³

We All Have the Winners' Genes

Now, given that human society has always been mildly polygynous, there were many men who did not succeed at securing mates and reproducing. These men had everything to gain and nothing to lose by remaining competitive and violent for their entire lives. However, *we are not descended from these men*. By definition, we are all

exclusively descended from men (and women) who attained some reproductive success—none of us are descended from total reproductive losers who left no offspring—and we are *disproportionately* descended from those who attained great reproductive success. (Twelve children carry the genes of a man who had twelve children, but only one child carries the genes of a man who had only one child. And, of course, no children carry the genes of a man who had no children. Yes, childlessness is perfectly heritable!) Contemporary men, therefore, did not inherit from reproductive losers psychological mechanisms that force them to stay competitive and keep trying to secure mates for their entire lives.

Female Choice

The similarity between Bill Gates, Paul McCartney, and the criminals (in fact, *all* men) in evolutionary history points to a very important concept in evolutionary biology: female choice. In all species in which the female makes greater parental investment than the male (such as humans and all other mammals), mating is a female choice; it happens when the female wants it to happen, and with whom she wants it to happen, not when the male wants it to happen.²⁴

The power of female choice becomes quite apparent in a simple thought experiment. Imagine for a moment a society where sex and mating were entirely a male choice; individuals have sex whenever and with whomever men want, not whenever and with whomever women want. What would happen in such a society? *Absolutely nothing*, because people would never stop having sex! There would be no civilization in such a society, because people would not do anything besides have sex. This, incidentally, is the evolutionary explanation for why gay men tend to have significantly more sex partners and have sex significantly more frequently than straight men do: be-

cause there are no women in their relationship to say no.²⁵ Sexually active straight men on average have had 16.5 sex partners since age 18; gay men have had 42.8.

In reality, however, women do often say no to men. This is why men throughout history have had to conquer foreign lands, win battles and wars, compose symphonies, author books, write sonnets, paint portraits and cathedral ceilings, make scientific discoveries, play in rock bands, and write new computer software in order to impress women so that they will agree to have sex with them.²⁶ There would be no civilizations, no art, no literature, no music, no Beatles, no Microsoft, if sex and mating were a male choice. Men have built (and destroyed) civilizations in order to impress women so that they might say yes. Women are the reason men do everything.

The comedian Bill Maher captures the essence of female choice perfectly, when he quips: "For a man to walk into a bar and have his choice of any woman he wants, he would have to be the ruler of the world. For a woman to have the same power over men, she'd have to do her hair." In other words, any reasonably attractive young woman exercises as much power as does the (male) ruler of the world.

Q. Why Does Marriage "Settle" Men Down?

There is something else that crime and genius have in common. (See "What Do Bill Gates and Paul McCartney Have in Common with Criminals?" above.) Just as age does, *marriage depresses both tendencies*.

Criminologists have long known that criminals tend to "settle down" and desist (stop committing crime) once they get married, while unmarried criminals continue their criminal careers. But

criminologists tend to explain this phenomenon from the social control perspective²⁷ pioneered by the criminologist Travis Hirschi²⁸ (the same Hirschi of the team who first discovered the age-crime curve). Social control theorists argue that marriage creates a bond to the conventional society, and investment in this bond, in the form of a strong marriage, makes it less likely that the criminal would want to remain in the criminal career, which is incompatible with the conventional life. Men must therefore desist from crime when they get married in order to protect their investment in conventional life; in Hirschi's language, married men develop a "stake in conformity."²⁹ Marriage also increases the scope and efficiency of social control on the criminal. Now there is someone living in the same house and monitoring the criminal's behavior at all times. It would be more difficult for the criminal to escape the wife's watchful eye and engage in illicit activities.

The social control explanation for the effect of marriage on desistance from crime makes perfect sense, *until* one realizes that marriage has the same desistance effect on perfectly legal, conventional activities, such as science. A comparison of the "age-genius curve" among scientists who were married at some point in their lives with the same curve among those who never married shows the strong desistance effect of marriage on scientific productivity. Half as many (50.0 percent) unmarried scientists make their greatest contributions in their late 50s as they do in their late 20s. The corresponding percentage among the married scientists is 4.2 percent. The mean age of peak productivity among the unmarried scientists (39.9) is significantly later than the mean peak age among married scientists (33.9).³⁰

Given that the Nobel Prize for scientific achievement didn't exist in the ancestral environment, the evolved psychological mechanisms of men appear to be rather precisely tuned to marriage as a cue to

desistance. Nearly a quarter (23.4 percent) of all married scientists make their greatest scientific contribution in their career and then desist within five years after their marriage. The mean *delay* (the difference between their marriage and their peak productivity) is a mere 2.6 years; the median is 3.0 years. It therefore appears that scientists rather quickly desist after marriage, while unmarried scientists continue to do important scientific work. When you remember that great scientific discoveries usually require many years of cumulative and continued research, the near coincidence of the male scientists' marriages and their desistance (after which they cease to make any greater scientific discoveries) is remarkable. A study by the sociologists Lowell L. Hargens, James C. McCann, and Barbara F. Reskin also demonstrates that childless research chemists are more productive than those with children.³¹

You may think that unmarried scientists continue to make scientific contributions much later in their lives because they have more time to devote to their careers. Unmarried and therefore childless scientists do not have to spend time taking care of their children, driving them back and forth between soccer practices and ballet lessons, or doing half the household chores, and that is why unmarried scientists can continue making great contributions to science while married scientists must desist to devote their time to their families. This is precisely Hargens et al.'s interpretation of the negative correlation between parenthood and productivity among research chemists.

But we would point out that almost all the scientists in the main data on scientific biographies we rely on above lived in the eighteenth and nineteenth centuries, when married men made very little contribution in the domestic sphere and their wives did not have their own careers. Hargens et al.'s data come from 1969-70, when this was probably still true to a large extent. We would therefore

suggest that, if anything, married scientists probably had *more* (rather than less) time to devote to science, because they had someone to take care of their domestic needs at all times.

Why, then, does marriage depress the productivity of all men, criminals, and scientists alike? What underlies the desistance effect of marriage?

Enjoying the Fruits of Their Labor

The social control perspective on the desistance effect of marriage is at best incomplete if marriage has the same desistance effect on scientists. Unlike criminal behavior, scientific activities are completely within conventional society and are thus not at all incompatible with marriage and other strong bonds to conventional society. Unlike criminals, scientists are not subject to social control (by their wives or others), since scientific activities are not illegal or deviant in any way.

We believe an evolutionary psychological theory provides a much simpler explanation for the desistance effect of marriage for both crime and science, in the form of a single psychological mechanism that predisposes young men to compete and excel early in their adulthood but subsequently turns off after the birth of their children (which quickly followed pair-bonding and regular sex in the absence of reliable means of birth control in the ancestral environment). After their marriage and children, male scientists do not *feel like* spending hours and hours in their labs, just like married criminals do not *feel like* taking great risks and committing crimes. But neither scientists nor criminals know why.

From the evolutionary psychological perspective, reproductive success is the end, and everything men do (be it crime or scientific

research) is but a means to this ultimate end. From this perspective, the question of why marriage depresses crime and scientific productivity misses the whole point. Does it make sense for men to continue employing the means even after they have achieved the ends they were trying to attain with the means? This is why married men are less likely to engage in a whole range of risk-taking behaviors, like driving fast, which are designed indirectly and unconsciously to attract women. Indeed, automobile insurance statistics clearly show that married men have fewer car accidents.

Q. Why Do Some Men Beat Up Their Wives and Girlfriends?

Critics of evolutionary psychology often claim that evolutionary psychological explanations are "untestable" and "unfalsifiable."³² As but one perfect example of eminent testability and falsifiability of evolutionary psychological explanations³³ we offer two competing explanations of domestic violence, formulated by the two deans of modern evolutionary psychology (who happen to be married to each other, no less).

When Martin Daly and Margo Wilson began studying domestic violence and uxoricide (the killing of one's wife) in the early 1980s, they had competing explanations.³⁴ Daly hypothesized that domestic violence and uxoricide resulted when the husband did not value his wife sufficiently and mistreated her as a result. Since a wife's fertility and reproductive value decline with age, Daly predicted that older wives were at a greater risk of spousal abuse and homicide than younger wives. Wilson, in contrast, hypothesized that domestic violence and uxoricide were a maladaptive byproduct of the

husband's inclination and tendency to guard his wife to make sure that she did not have sexual contact with other men. Because men should be more motivated to guard younger, more valuable wives, Wilson predicted that younger wives were at a greater risk of spousal abuse and homicide than older wives.

Both explanations use impeccable evolutionary psychological logic and derive from known facts, but both predictions could not be true simultaneously. So Daly and Wilson got to work as the good scientists that they are, collecting data on domestic violence and uxoricide in Canada and the United States, and putting the two competing predictions to the empirical test. Their data showed that younger wives were at a much greater risk of violence and murder than older wives. In the end, Wilson's prediction turns out to be true, and Daly's false.³⁵ Is evolutionary psychology untestable and unfalsifiable?

Astute readers may be thinking right now, "But younger women are usually married to younger men. And younger men are more violent than older men, as you point out in your discussion of the age-crime curve (see "What Do Bill Gates and Paul McCartney Have in Common with Criminals?" above). So younger women are at a greater risk of spousal abuse and murder, not because they are young but because their husbands are young and therefore more violent."

Close, but no cigar. While it is difficult to separate the effects of the husband's age and the wife's age, careful statistical analyses show that the wife's age almost entirely determines the likelihood of being a victim of spousal abuse and homicide. Middle-aged husbands (ages 45–54) legally married in Canada to much younger wives (ages 15–24) are *more than six times* as likely to kill their wives than young husbands (ages 15–24) married to women of similar age.³⁶ Among common-law marriages, middle-aged husbands mar-

ried to much younger wives are *more than 45 times* as likely to kill their wives as young husbands.³⁷ *The effect of the wife's age is so powerful that it overrides and even reverses a man's tendency to become less violent with age.* Thus, while it is true that younger men in general are much more violent and commit more murders than older men, young and old men kill different types of people. Young men kill other men (their male sexual rivals); older men kill their wives. As a result, the proportion of men among murder victims declines as the murderer's age increases. For murderers aged 15–19, 86.3 percent of the victims are males; for murderers aged 65–69, only 51.4 percent of them are males.³⁸

An Adaptation Gone Awry

From the evolutionary psychological perspective, spousal abuse is an extreme, maladaptive, and largely unintended consequence of a man's desire for mate-guarding. Because of the possibility of cuckoldry (unwittingly investing in someone else's genetic offspring), men are strongly motivated to guard their mates to make sure that they do not have sexual access to other men. And they use any means, including intimidation and violence, to achieve this goal.³⁹ Unfortunately, sometimes their adaptive strategy of mate-guarding goes too far and results in a maladaptive outcome of spousal abuse and even murder. Because young women are reproductively more valuable than older women, men are more motivated to protect and guard their younger wives than their older wives, with the unfortunate consequence that younger wives are at a greater risk of spousal abuse than older wives. This is why it is the wife's age, not the husband's, that predicts the likelihood of spousal abuse and murder. Even though a 50-year-old man is typically much less violent and criminal than a 25-year-old man, a 50-year-old man married to a

25-year-old woman is much more likely to abuse and murder his wife than a 25-year-old man married to a 50-year-old woman (although there are very few such couples) or even a 25-year-old man married to a 25-year-old woman.⁴⁰

The Myth of the Midlife Crisis

This is an excellent opportunity for us to shed evolutionary psychological light on a common misunderstanding, since it allows us to shift our attention from a dark topic like domestic violence and apply the same logic to a much lighter topic: the midlife crisis. Many believe that men go through a midlife crisis when they are in midlife (in middle age). Not quite. Many middle-aged men *do* go through midlife crisis, but it's not because *they* are middle-aged but because their wives are. Just as it is the wife's age, not the husband's, that determines the risk of spousal abuse and murder, it is the wife's age, not the husband's, that prompts the constellation of behavior commonly known as a "midlife crisis." From the evolutionary psychological perspective, a man's midlife crisis is precipitated by his wife's imminent menopause and the end of her reproductive career, and thus his renewed need to attract younger, reproductive women. Accordingly, a 50-year-old man married to a 25-year-old woman would not go through a midlife crisis, while a 25-year-old man married to a 50-year-old woman would, just like a more typical 50-year-old man married to a 50-year-old woman would. It is not his midlife that matters; it is hers. So when he buys a shiny red sports car, he's not trying to regain his youth; he's trying to attract young women to replace his menopausal wife by trumpeting his flash and cash.

Life's Not Fair, or Politically Correct

THE EVOLUTIONARY PSYCHOLOGY OF POLITICAL
AND ECONOMIC INEQUALITIES

The topics covered in the final two chapters of this book (chapters 7 and 8) are the least explored areas of application for evolutionary psychology. Because of its origin in the field of psychology and its emphasis on sex and mating, most of the scientific progress and discoveries in evolutionary psychology have been on individual behavior and cognitions—how men and women behave differently, how the human brain perceives the world, the biases and tendencies in our thinking, and so on. Most of the applications of evolutionary psychology in the social sciences have therefore been "micro"—on the small scale of individuals.

There have not been many "macro" applications of evolutionary psychology—to the issues of economy, politics, and society at large. However, there have been some very intriguing studies in this area as well. Because both of us were originally sociologists, concerned more with macro issues than micro issues, this is where

our training in sociology meets our current interest in evolutionary psychology.

One fascinating discovery from the application of evolutionary psychology to macro issues is that what we often regard as “beyond” individuals—because they are so much bigger than them—such as issues related to social institutions, economic and political inequalities, social problems, wars, religion, and even culture itself, have the same origins as individual behavior and cognitions. They all stem from our evolved psychological mechanisms in our brains. They are all macro manifestations of our human nature and biology.

Q. Why Do Politicians Risk Everything by Having an Affair (but Only If They Are Male)?

On the morning of Wednesday, January 21, 1998, Americans woke up to breaking news. The *Washington Post*, one of the nation’s leading newspapers, reported the allegation that President Bill Clinton had an affair with a 24-year-old White House intern. On that January morning, as the story unfolded in front of the stunned nation, America and the rest of the world had not yet had an inkling of what was in store: a yearlong political scandal that consumed the nation (and the world) and culminated on December 19, with Clinton being impeached by the House of Representatives—the first elected President ever to be impeached in American history.^[1]

While the whole nation was in shock, one woman in Michigan woke up to the news on the morning of January 21, 1998, sipped her coffee while watching the events unfold on TV, smiled to herself, and said, “I told you so.” She is the Darwinian historian Laura L. Betzig. For more than twenty years, Betzig has written on the mating behavior and reproductive success of politicians and other political

leaders in history.² She points out that while powerful men throughout Western history have *married* monogamously (they had only one legal wife at a time), they have always *mated* polygynously (they had lovers, concubines, and female slaves).³ Many had harems, consisting of hundreds and even thousands of virgins. With their wives they produced legitimate heirs; with the others they produced bastards (Betzig’s term). Genes and inclusive fitness make no distinction between the two categories of children. While the legitimate heirs, unlike the bastards, inherited their fathers’ power and status and often went on to have their own harems, powerful men sometimes invested in their bastards as well.

As a result, powerful men of high status throughout human history attained very high reproductive success, leaving a large number of offspring (legitimate or otherwise), while countless poor men in the countryside died mateless and childless. Moulay Ismail the Bloodthirsty, whom we encountered in chapter 2, stands out *quantitatively*, having left more offspring than anyone else on record, but he was by no means *qualitatively* different from other powerful men, like Bill Clinton.

Why Not?

From Betzig’s Darwinian historical perspective, the question that many Americans and others throughout the world asked in 1998, “Why on earth would the most powerful man in the world jeopardize his job for an affair with a young woman?” is a silly question. Betzig’s answer would be: Why not?

Recall from chapter 1 (“What Is Evolutionary Psychology?”) that the underlying motive of all human behavior is reproductive; reproductive success is the purpose of all biological existence, including humans.⁴ Humans do much of what they do, directly or indirectly, knowingly or (usually) unknowingly, to achieve reproductive success.

Attaining political office is no exception. From this perspective, men strive to attain political power (as Bill Clinton did all his life, since his fateful encounter with John F. Kennedy at the White House in 1963), consciously or unconsciously, in order to have reproductive access to a larger number of women. In other words, reproductive access to women is the *goal*, political office is but one *means*. To ask why the President of the United States would have a sexual encounter with a young woman is like asking why someone who worked very hard to earn a large sum of money would then spend it. The purpose of earning money is to spend it. The purpose of becoming the President (or anything else men do) is to have a larger number of women with whom to mate.

What distinguishes Bill Clinton is not that he had extramarital affairs while in office; others have, and more will in the future. It would be a Darwinian puzzle if they did not. What distinguishes Clinton instead is that he got caught and that his affair became a spectacular political scandal. What Clinton's genes did not know is that he was not permitted by others to have sex with a large number of women and that he could not get away with it when most of his predecessors have, like all the kings, emperors, sultans, and democratically elected presidents whose reproductive lives Betzig's work describes in great detail. Clinton's genes didn't know about the DNA fingerprinting technology that ultimately exposed the affair and forced him to admit it publicly, because no such thing existed in the ancestral environment.

Q. Why Do Men So Often Earn More Money and Attain Higher Status Than Women?

In all industrialized nations, women earn less money and attain lower occupational status than men do.⁵ This is true across the

board, among blue-collar and white-collar workers and professionals, and in capitalist, socialist, and communist economies. Why?

The Traditional Social Science View

The sex difference in earnings is one of the central concerns of economics⁶ and sociology.⁷ Economists and sociologists identify three different parts to the total difference in earnings between men and women. First, there is the difference in what they call "human capital"—education, job skills, training, and other individual traits that affect productivity and job performance. Second, sex difference in earnings can be due to occupational segregation by sex—the fact that men and women tend to occupy different jobs. Men tend to occupy "blue-collar" jobs (manufacturing, construction, truck driving), while women tend to occupy "pink-collar" jobs (secretarial, nursing, teaching). Third, the sex difference in earnings can be due to sex discrimination; where employers pay equally qualified men and women doing the same job differently.

To the extent that the sex gap in pay is due to differences in human capital and productivity, it is considered to be fair by most social scientists. To the extent that the sex gap in pay results from the existence of blue- and pink-collar jobs, then paying all workers in a given occupation equally will not close the total sex difference in earnings. Paying the same wages to male and female truck drivers and to male and female secretaries will not close the sex gap in pay if truck drivers make more than secretaries and most truck drivers are male and most secretaries are female. The existence of occupational sex segregation thus requires consideration of "comparable worth."⁸

Because they are deeply wedded to the Standard Social Science Model, most economists and sociologists assume that men and

women are on the whole identical in their preferences, values, and desires. They therefore assume that any remaining sex difference in earnings that is not due to sex differences in human capital or sex segregation on the job must be due to employer discrimination. The existence of discrimination, however, must always be inferred from statistical evidence and cannot be observed directly. Social scientists are not likely to witness an employer telling the employees, "I'm paying you more because you are a man, and I'm paying you less because you are a woman." Nor are employers likely to admit to such a practice if they indeed engaged in it.

But Men and Women Are Different

The conclusion that there is sex discrimination by employers crucially depends on the assumption that men and women are on average identical, except in their amount of human capital (education, job experience, skills) and the jobs they hold. If, on the other hand, men and women with the same amount of human capital and in the same jobs are nonetheless *inherently* and *fundamentally* different in ways that affect their earnings, for instance in their preference and desire for earning money, then discrimination becomes unnecessary to explain the sex gaps in pay. If men and women are different in *internal* preferences and dispositions, such as their desire and drive to earn money, then no *external* factors, such as employer discrimination or a "glass ceiling," becomes necessary to explain the sex difference in earnings.

The legal scholar Kingsley R. Browne has pioneered evolutionary psychological work on the sex differences in the workplace, such as earnings and occupational sex segregation.⁹ (We encounter his work on sexual harassment later in this chapter, "Why Is Sexual Harassment So Persistent?") Browne points out that because of

differential selective pressures that men and women faced throughout evolutionary history, men and women have evolved to possess different temperaments. Throughout evolutionary history, material resources and higher status were a man's essential means to reproductive success, because women preferred to mate with resourceful men of high status who could protect and invest heavily in their children. In contrast, physically taking care of children was a woman's means. As a result, women today, who inherited their psychological mechanisms from their female ancestors, are far less risk-taking (because if their ancestors engaged in risky behavior and got injured or killed as a result, their children most likely died),¹⁰ less status-seeking (because status did not enhance women's reproductive success), and less aggressive and competitive (because throughout evolutionary history, men competed to gain access to women, not the other way around).

Browne suggests that men are much more single-mindedly devoted to earning money and achieving higher status than women are. In a study of an American sample, men are significantly more likely to rank income as an important criterion for selecting a job than women are. The absolute sex difference is greater among teenagers than among older workers, so it is not a realistic response to a lifetime's experience of earning less than men, as feminists and other conventional social scientists might contend.¹¹ In contrast, women place significantly greater emphasis on the criterion "the work is important and gives me a feeling of accomplishment" for selecting a job.¹² As Anne Moir and David Jessel, authors of *Brain Sex: The Real Difference Between Men and Women*, state: "In the end, the secret of male achievement in the world of work probably lies in the relative male insensitivity to the world of everything—and everybody—else."¹³

Browne reminds us that many jobs that pay higher wages require

their occupants to work longer hours, relocate to new cities without regard to consequences for family and children (for white-collar or professional jobs), or work in dangerous and unpleasant conditions (for blue-collar workers). It is not that women do not want money or prefer less money to more; nobody in their right mind does. It is instead that women are unwilling to pay the price and make the necessary sacrifices (often in the welfare and well-being of their children) in order to advance in the corporate hierarchy and earn more money. Once again, Moir and Jessel put it best: "Men who fail will often offer the excuse that 'Success isn't worth the effort.' To the female mind, this is not so much an excuse as a self-evident truth."¹⁴ In other words, men make more money because they want to; women make less money because they have better things to do than make money.¹⁵

The sex gap in earnings and the so-called glass ceiling are caused not by employer discrimination or any other external factors, but by the sex differences in internal preferences, values, desires, dispositions, and temperaments. Just as there are a few exceptional women who are more single-mindedly motivated to earn money and attain higher status than the average man, so too are there a few women who make more money and attain higher status than most men.

From the 1960s through the 1980s, feminists claimed that women earned only 59 cents for every dollar earned by men.¹⁶ The precise figure has since been revised upward to 64 cents in 1986,¹⁷ 70 cents in 1987,¹⁸ and, according to President Clinton (if he counts as a feminist), 75 cents in 1999,¹⁹ but their claim is that women still earn substantially less than men do. However, all of these comparisons ignore the inherent sex differences in dispositions and temperaments. More careful statistical comparisons of men and women who are equally motivated to earn money show that women now earn 98 cents for every dollar men make,²⁰ and sex has no statistically significant

effect on workers' earnings.²¹ Adjusted for occupation and motivation, men today do not earn significantly more than women do.

Just as most women are not as single-mindedly motivated to earn money and attain higher status than the average man, most women do not earn as much money and attain as high status as men do. Browne rhetorically asks the question, "Once one breaks the glass ceiling, does it still exist?"²² In liberal capitalist societies like the US and the UK, both men and women are free to pursue what they want. They just tend to want to achieve different things.

Q. Why Are Most Neurosurgeons Male and Most Kindergarten Teachers Female?

In a series of scientific articles and books, and in the popular science book *The Essential Difference*, the Cambridge psychologist and autism researcher Simon Baron-Cohen advances the "extreme male brain" theory of autism.²³ His theory can simultaneously account for many (though not all) clinical manifestations of autism (such as exhibiting severe deficits in interpersonal domains, while maintaining normal or even exceptional abilities in others) as well as the fact that an overwhelming majority of autistics are male.

Baron-Cohen's theory begins with the two crucial concepts of the *male brain* and the *female brain*. The male brain is primarily designed for *systemizing*, and the female brain is primarily designed for *empathizing*. What are systemizing and empathizing?

"Systemizing" is the drive to analyze, explore, and construct a system. The systemizer intuitively figures out how things work, or extracts the underlying rules that govern the behavior of a system. The purpose of this is to understand and predict the system, or to invent a new one.²⁴ Baron-Cohen enumerates six different types of

systems: technical systems (artifacts, machines); natural systems (ecology, geography); abstract systems (logic, mathematics); social systems (law, economics); organizable systems (classifications, taxonomies); and motoric systems (physical movements, such as playing musical instruments or throwing darts). His definition of what constitutes a system is therefore very comprehensive, and seems to include everything that has to do with things rather than people. By a "system," Baron-Cohen means anything that is governed by logical and systematic rules.²⁵

In contrast, "empathizing" is the drive to identify another person's emotions and thoughts, and to respond to them with an appropriate emotion. Empathizing occurs when we feel an appropriate emotional reaction in response to the other person's emotions. The purpose of this is to understand another person, to predict his or her behavior, and to connect or resonate with him or her emotionally.²⁶ In other words, empathizing is about spontaneously and naturally tuning in to the other person's thoughts and feelings. A good empathizer can immediately sense when an emotional change has occurred in someone, what the causes of this might be, and what might make this particular person feel better or worse. A good empathizer responds intuitively to a change in another person's mood with concern, appreciation, understanding, comforting, or whatever the appropriate emotion might be. A natural empathizer not only notices others' feelings but also continually thinks about what the other person might be feeling, thinking, or intending.²⁷ Empathy is a defining feature of human relationships and also makes real communication possible.²⁸

Having defined what systemizing and empathizing are, Baron-Cohen then describes the distribution of systemizing and empathizing skills among men and women. Both systemizing and empathizing skills are distributed normally among the general

populations of men and women. Men have a higher mean of systemizing skills than women, while women have a higher mean of empathizing skills than men. However, the sex distributions of systemizing and empathizing skills substantially overlap. This means that while men on average are better at systemizing and women on average are better at empathizing, there are many men who are better empathizers than women and many women who are better systemizers than men.²⁹

The distribution of height provides a perfect analogy. Height is distributed normally both among men and among women. Men have a higher mean height than women. However, the sex distributions of height overlap sufficiently so that, while most men are taller than the average women, there are some men who are shorter than the average woman and some women who are taller than the average man. In Baron-Cohen's theory, the systemizing and empathizing skills have similar distributions and sex differences.

Two Types of Brains

Baron-Cohen defines the brain of someone who is better at systemizing than empathizing as the "type S" brain, or the male brain (even though not everyone who possesses the male brain is male), and the brain of someone who is better at empathizing than systemizing as the "type E" brain, or the female brain (even though not everyone who possesses the female brain is female). Baron-Cohen then suggests that the type S brain was particularly adaptive for ancestral men, because systemizing ability was necessary for inventing and making tools and weapons, and because low empathizing ability was helpful for tolerating solitude during long hunting and tracking trips, and for committing acts of interpersonal violence and aggression necessary for male competition.

Similarly, Baron-Cohen argues that the type E brain was adaptive for ancestral women, because empathizing ability facilitates various aspects of mothering, such as anticipating and understanding the needs of infants who could not yet talk, or making friends and allies in new environments, in which ancestral women found themselves upon marriage. (In the ancestral environment, women left their group and married into a neighboring group upon puberty, a practice necessary to avoid inbreeding.) Natural and sexual selection would therefore have favored ancestral men having the type S brain and ancestral women having the type E brain.

Baron-Cohen then explains autism (and other autism spectrum disorders such as Asperger's syndrome) as a result of possessing the "extreme male brain," which is exceedingly good at systemizing but correspondingly poor at empathizing. Not only does Baron-Cohen's conceptualization of autism as a manifestation of the extreme male brain explain many of the clinical features of autism, but it also explains why it is so much more prevalent among men than among women.

One of the discoveries by Baron-Cohen and his team of researchers is the high prevalence of physicists, engineers, and mathematicians among the families of autistics and those afflicted with Asperger's syndrome.³⁰ This is because brain types (type S vs. type E) are largely genetically heritable and therefore "run in the family," and because these professions require high systemizing skills. This seems to be why most scientists and engineers are men. Contrary to what the Standard Social Science Model's social scientists claim, it has very little to do with "gender socialization" and much more to do with sex-typical brain types. (Once again, "gender socialization"—to the extent that it is widely practiced—simply reinforces and solidifies the innate genetic differences between the male and female brains.) By the same token, any occupation that requires

a large amount of empathizing skills, such as kindergarten, pre-school, and elementary school teachers; nurses and other caretakers; and social workers, are more likely to be female, because the typical female (type E) brain is highly useful in such occupations.

In liberal capitalist societies like the US or the UK, both men and women try to pursue occupations and professions that best suit them. Because some men have type E brains and some women have type S brains, there are some male nurses and kindergarten teachers, and some female neuroscientists and engineers. However, a majority of those in "systemizing" occupations are men, and a majority of those in "empathizing" occupations are women, and Baron-Cohen's theory can explain why.

Q. Why Is Sexual Harassment So Persistent?

One of the unfortunate consequences of the ever-growing number of women joining the labor force and working side by side with men is the increasing number of sexual harassment cases, particularly in the United States. Why is this? Is sexual harassment a necessary consequence of the sexual integration of the workplace? What is sexual harassment, anyway, and how can evolutionary psychology explain it?

As with the study of sex differences in earnings and the "glass ceiling" (see "Why Do Men Earn More Money and Attain Higher Status Than Women?" above), the evolutionary psychologist who pioneered the study of sexual harassment is Kingsley R. Browne.³¹ Browne identifies two types of sexual harassment cases: the quid pro quo cases ("You must sleep with me if you want to keep your job or be promoted") and the "hostile environment" cases (where the workplace is deemed too sexualized for workers to feel safe and

comfortable). While feminists and other Standard Social Science Model scholars tend to explain sexual harassment in terms of patriarchy and other nefarious ideologies,³² Browne locates the ultimate cause of both types of sexual harassment in the sex differences in evolved psychological mechanisms and mating strategies, thereby "seeking roots in biology rather than ideology."³³

Studies unequivocally demonstrate that men are far more interested in short-term casual sex than women. For example, in a classic study,³⁴ 75 percent of undergraduate men approached by an attractive female stranger agree to have sex with her; none of the women approached by an attractive male stranger do. Many men who would not go on a date with the stranger nonetheless agree to have sex with her. In another study,³⁵ men on average desire nearly twenty sex partners in their lifetimes; women desire less than five. Men on average seriously consider having sex with someone after only one week of acquaintance; women's average is six months.

The quid pro quo and similar types of harassment are manifestations of men's greater desire for short-term casual sex than women's, and their willingness to use any available means to achieve their goal. While feminists often claim that sexual harassment is "not about sex but about power,"³⁶ Browne astutely points out that it is both; it is about men using power to get sex. "To say that it is only about power makes no more sense than saying that bank robbery is only about guns, not about money."³⁷

The male-female differences in the desire for short-term casual sex are exacerbated by another male-female difference in evolved psychological mechanisms: the woman's desire to understate her sexual desire in a particular man and to engage in "token resistance."³⁸ In one study,³⁹ nearly 40 percent of undergraduate women admitted to saying no to sexual advances from a man even though they actually wanted to have sex with him. More than a third of

these cases where the women initially said no eventually resulted in consensual sex. As the late behavior geneticist Linda Mealey eloquently puts it: "That females are selected to be coy will mean that sometimes saying 'no' really does mean 'try a little harder.'"⁴⁰ Of course, women sometimes do mean no when they say no, but this isn't always the case.

Hostile Environment: When Men Are Equal-Opportunity Harassers

Browne explains the incidence of sexual harassment cases of the second variety (hostile environment) as a result of the sex differences in what men and women perceive as "overly sexual" or "hostile." While the courts in the United States often employ the standard of a fictitious "reasonable person" to determine whether a given workplace constitutes a hostile environment, Browne points out that there is no such thing as a "reasonable person"; there is only a reasonable man and a reasonable woman. What a reasonable man and a reasonable woman perceive to be a hostile environment may be entirely different. Browne questions the exclusive focus on the alleged victim's perspective.

While many women legitimately complain that they have been subjected to abusive, intimidating, and degrading treatment by their male colleagues and employers, Browne points out that long before women entered the labor force, men subjected *each other* to such abusive, intimidating, and degrading treatment. Abuse, intimidation, and degradation are all part of men's unfortunate repertoire of tactics employed in competitive situations. In other words, men are *not* harassing women in this fashion because they are treating women differently from men (which is the definition of discrimination under which sexual harassment legally falls), but the exact

opposite: men harass women precisely because they are *not* discriminating between men and women.

Because of all the media attention and the soaring costs of litigation, most American firms and universities now have sexual harassment policies that categorically prohibit any sexual relations between and among their employees. Browne makes a sharp observation in this connection. Although sexual harassment surveys typically ask whether the respondent has ever been subjected to unwanted sexual advances in the workplace, they seldom, if ever, ask whether she has been subjected to *welcome* sexual advances. The answer must commonly be in the affirmative, since a large number of workers find their romantic partners at work.⁴¹

Men's and women's behavior that sometimes results in charges of sexual harassment is most often simply part of the normal repertoire of human mating strategies. They work well most of the time (as when a large number of men and women find satisfactory long-term and short-term mates in their workplace) but occasionally result in miscommunication and misunderstanding due to the evolved differences between the sexes, which is then given the label of sexual harassment. (See "He Said, She Said: Why Do Men and Women Perceive the Same Situation Differently?" in chapter 3.) While it might deter some legitimately abusive behavior, the current sexual harassment policy commonly practiced in many American organizations, which categorically prohibits any sexual relations between employees, is therefore likely to be *detrimental to women's sexual interests as much as men's*, because such prohibition eliminates *welcome* sexual attention and advances along with the unwelcome.

The Good, the Bad, and the Ugly

THE EVOLUTIONARY PSYCHOLOGY OF RELIGION
AND CONFLICT

The topics we explore in our last substantive chapter—those concerning religion and group conflict—are the least explored areas of application for evolutionary psychology, probably because these are most remote from the immediate concerns with sex and mating. The connection between sex and religion is not as obvious as the connection between sex and marriage, for example. However, there is a connection. There have been a small number of important studies in the area of religion and group conflict from the evolutionary psychological perspective, and they shed new and often surprising light, providing novel answers to old questions.

There have been two seemingly contradictory findings in the area of conflict between groups: racism is innate, but race is not. More accurately, *ethnocentrism* (the tendency to value one's own group and correspondingly to devalue other groups) is an evolved innate tendency that all humans have. If you have read this far in this book, you should know why by now. We are designed to promote

our own reproductive fitness and spread our genes. There is no place for universal love of all people in cold Darwinian logic. So contrary to what social scientists and hippies alike proclaim, we *don't* learn to be a racist through parental socialization; we learn *not* to be one.

Even though the tendency to favor "ingroup" members at the cost of "outgroup" members is innate (although we can overcome it through socialization and conscious effort), what counts as "ingroup" and "outgroup" is not. In particular, a very ingenious experiment¹ has shown that we can erase racial categories that we normally use under the right circumstances. This makes perfect sense, in retrospect, when you remember that our ancestors evolved in a mostly racially homogeneous environment. Encountering people of different races on a daily basis is a very recent phenomenon in human evolutionary history, so there could not be innate categories for different races in our brain, as there are for age and sex.

We will get to the topic of group conflict shortly. But first we start with religion and where it came from in the first place. . . .

Q. Where Does Religion Come From?

It may be tempting to believe that religion² is an adaptation (or, in our language, an evolved psychological mechanism) designed by evolution by natural and sexual selection, since there are genetic and biological bases of religion. All human societies practice religion (making it one of the cultural universals);³ whether one is religious or not, especially in adulthood, is largely genetically determined;⁴ and certain parts of the brain are involved in religious thoughts and experiences.⁵ However, this explanation of religion as an adaptation runs into one significant problem: What is the adaptive problem that religion is designed to solve? Do religious people

live longer or have greater reproductive success?⁶ So far, no one has been able to point to an adaptive problem that religion is designed to solve.⁷

As a result, many recent evolutionary psychological theories on the origins of religious beliefs share the view that religion is not an adaptation in itself but a *byproduct* of other adaptations. In other words, these theories contend that religion itself did not evolve to solve an adaptive problem so that religious people can live longer and reproduce more successfully, but instead emerged as a byproduct of adaptations that evolved to solve unrelated adaptive problems.

These theories,⁸ in part or in whole, go as follows: When our ancestors faced some ambiguous situation, such as rustling noises nearby at night or a large fruit falling from a tree branch and hitting them on the head, they could attribute them to impersonal, inanimate, unintentional forces (such as wind blowing gently to make the rustling noises among the bushes and leaves, the mature fruit falling by its own weight from the branch by the force of gravity and hitting them on the head purely by coincidence) or to personal, animate, intentional forces (a predator sneaking up on them to attack, an enemy hiding in the tree branches and throwing fruit at their head). The question is, which is it?

Two Different Ways to Get It Wrong

Given that the situation is inherently ambiguous and could be caused by either intentional or unintentional forces, our ancestors could have made one of two possible errors. They could have attributed the events to intentional forces when they in fact were caused by unintentional forces (in other words, they could have committed the error of false-positive), or they could have attributed the events to unintentional forces when they in fact were caused by intentional

forces (they could have committed the error of false-negative).^[9] The consequences of false-positive errors were that our ancestors became unnecessarily paranoid and looked for predators and enemies where there were none. The consequences of false-negative errors were that our ancestors were attacked and killed by the predator or the enemy when they least expected an attack. The consequences of committing false-negative errors are much more seriously detrimental to survival and reproductive success than the consequences of committing false-positive errors, and thus evolution should favor psychological mechanisms that predispose their carriers to over-infer intentions and agency behind potentially harmless phenomena caused by inanimate objects. Evolutionarily speaking, it's good to be paranoid, because it might save your life.¹⁰

Different theorists call this innate human tendency to commit false-positive errors rather than false-negative errors (and as a consequence be a bit paranoid) "animistic bias"¹¹ or "the agency-detector mechanism."¹² These theorists argue that the evolutionary origins of religious beliefs in supernatural forces come from such an innate bias to commit false-positive errors rather than false-negative errors. The human brain, according to them, is biased to perceive intentional forces behind a wide range of natural physical phenomena, because the costs of committing false-negative errors are much greater than the costs of committing false-positive errors. It predisposes us to see the hand of God at work behind natural, physical phenomena whose exact causes are unknown.^[13]

Some readers may recognize this argument as a variant of "Pascal's wager." The seventeenth-century French philosopher Blaise Pascal (1623-1662) argued that given that one cannot know for sure if God exists, it is nonetheless rational to believe in God. If one does not believe in God when He indeed exists (false-negative error),

one must spend eternity in hell and damnation, whereas if one believes in God when he actually does not exist (false-positive error), one only wastes a minimal amount of time and effort spent on religious services. The cost of committing the false-negative error is much greater than the cost of committing the false-positive error. Hence, one should rationally believe in God.

In Church and on the Dance Floor

More interestingly, if you have read "He Said, She Said: Why Do Men and Women Perceive the Same Situation Differently?" in chapter 3, you may see a clear parallel between the evolutionary psychological explanations of the origins of religious beliefs and Haselton and Buss's error management theory,¹⁴ as does Haselton herself.^[15] The intriguing suggestion here is that we may believe in God and the supernatural for the same reasons that men over-infer women's sexual interest in them while women under-infer men's sexual interest in them. Both religious beliefs and sexual miscommunication are consequences of the human brain designed for efficient error management, to minimize the total costs (rather than the total numbers) of committing false-positive and false-negative errors. We may believe in God for the same reason that women have to keep slapping men to set them straight or that sexual harassment is so rampant.

Q. Why Are Women More Religious Than Men?

Apart from the practice of religion itself, there is something else about religion that is culturally universal. Women in virtually every society are more religious than men.

A worldwide survey asked more than one hundred thousand people from seventy different countries and regions the following two questions: "Do you believe in God" and "Independent of whether you go to church or not, would you say you are a religious person, not a religious person, or a convinced atheist?" By these measures, with only a couple of minor exceptions,^[16] women in all nations and regions are more religious than men.

The sex differences in religiosity are greater in some countries (Russia) than in others (US). It is present in societies with very high levels of religiosity (Ghana, Poland, Nigeria) and in those with very low levels of religiosity (China, Japan, Estonia). It is present in all six populated continents, regardless of the particular religion involved (Catholicism in Italy and Spain, Protestantism in Germany and Sweden, Russian Orthodox in Russia and Belarus, Islam in Turkey and Azerbaijan, Shintoism in Japan, indigenous religions in Ghana, and even official atheism in China). Women are more religious than men in virtually every society surveyed. Nor is this a contemporary phenomenon. Historical records show that the sex differences in religiosity existed throughout history.¹⁷

Why is this? Why are women more religious than men in virtually all cultures and throughout history? What explains the universal sex difference in religiosity?

As with all other sex differences, the Standard Social Science Model offers a blanket explanation of "gender socialization." Social scientists in the Standard Social Science Model tradition contend that women are socialized to be nurturing and submissive, qualities that make religious acceptance and commitment more likely.¹⁸ Similarly, they argue that the role of the mother subsumes religiousness, since it involves such activities as teaching the children morality and caring for the physical and spiritual welfare of other family

members.¹⁹ Some even argue that women are more religious than men because they do not traditionally work outside the home and therefore have more free time to pursue and practice religion.²⁰

Unfortunately for the Standard Social Science Model, however, it turns out that there is not much empirical support for these explanations for the sex difference in religiosity. Women are more religious than men both in traditional societies, where women receive strict gender socialization, and in modern societies, where women are not subject to such strict gender socialization;²¹ the experience of child rearing appears unrelated to a woman's religiosity;²² career women are just as religious as housewives, and both are far more religious than men.²³ The preponderance of empirical evidence is therefore contrary to the Standard Social Science Model explanation for the sex difference in religiosity in terms of gender socialization.

Another Case of Risk Management

The sex difference in religiosity directly follows from the evolutionary psychological theory of the origins of religious beliefs (see "Where Does Religion Come From?" above) and the sex difference in risk taking (see "Why Are Almost All Violent Criminals Men?" in chapter 6). You'll recall that the evolutionary origins of religiosity are in risk management; it is less risky to over-infer agency and hence be susceptible to religious beliefs. It is an error-management strategy to minimize the total costs of errors by predisposing the human brain to commit more false-positive errors than false-negative errors when the former has less costly consequences than the latter.²⁴ You'll recall, too, that women are inherently more risk-averse than men, both because women benefit far less from taking

risks (given that there is a limit to how many children women can have and that all women are more or less guaranteed to have some children in their lifetime)²⁵ and because their offspring suffer if women are risk-seeking.²⁶ If men are more risk-seeking than women, and if religion is an evolutionary means to minimize risk, then it naturally follows that women are more religious than men.

Consistent with this explanation, studies show that an individual's risk preference is strongly related to his or her religiosity both across and within the sexes. Not only are women more risk-averse and more religious than men, but more risk-averse men are more religious than more risk-seeking men, and more risk-averse women are more religious than more risk-seeking women.²⁷ Further, consistent with this explanation, the sex difference in religiosity is larger in societies where being nonreligious is considered risky (such as in fundamentalist Christian or Muslim societies) than in societies with greater religious freedom, where individuals can freely choose to be religious or not. The sex difference is also smaller in societies where there is no widespread belief that nonbelievers go to hell, such as Buddhist societies.²⁸

In the previous section of this chapter (see "Where Does Religion Come From?"), we present the intriguing possibility that humans may believe in God and the supernatural for the same reasons of error management that men over-infer women's sexual interest in them and women underinfer men's sexual interest in them. Now, in our discussion in this section of the universal sex difference in religiosity, our suggestion is that women are uniformly more religious than men for the same reasons of risk preference that men are more criminal and violent in every society. Sex differences in risk preference, religiosity, and criminality are all direct consequences of sex differences in reproductive strategy. In all areas of life, it pays for men to take risks because avoiding risks has the disastrous conse-

quence of ending up a total reproductive loser. Religion is just another area where men are more risk-seeking than women.

Q. Why Are Most Suicide Bombers Muslim?

According to Oxford University sociologist Diego Gambetta, editor of *Making Sense of Suicide Missions*—a comprehensive history of this topical yet puzzling phenomenon—while suicide missions are not always religiously motivated, when religion is involved, it is *always* Islam.²⁹ Why is this? Why is Islam the only religion that motivates its followers to commit suicide missions?

The surprising answer from the evolutionary psychological perspective is that Muslim suicide bombing may have nothing to do with Islam or the Koran (except for two lines of its text). It may have nothing to do with religion, politics, the culture, the race, the ethnicity, the language, or the region. As with everything else from this perspective, it may have a lot to do with sex—or, in this case, the *absence* of sex.

What distinguishes Islam from other major world religions (Christianity and Judaism) is that it tolerates polygyny. As we explain in chapter 2 ("Why Are Men and Women So Different?"), by allowing some men to monopolize all women and altogether excluding many men from reproductive opportunities, polygyny creates shortages of available women. If 50 percent of men have two wives each, then the other 50 percent don't get any wives at all. If 25 percent of men have four wives each, then three-quarters of men don't get any reproductive opportunities and face the distinct possibility of ending their lives as total reproductive losers.

So polygyny increases competitive pressure on men, especially young men of low status, who are most likely to be left without

reproductive opportunities when older men of high status marry polygynously. It therefore increases the likelihood that young men resort to violent means to gain access to mates because they have little to lose and much to gain by doing so compared to men who already have wives. Across all societies, polygyny increases violent crimes, such as murder and rape, even after controlling for such obvious factors like economic development, economic inequality, population density, the level of democracy, and world regions.³⁰ So the first unique feature of Islam, which partially contributes to the prevalence of suicide bombings among its followers, is polygyny, which makes young men violent everywhere. This is the first line in the Koran that partially explains it.

Polygyny Is Not Enough

However, polygyny by itself, while it increases violence, is not sufficient to cause suicide bombings. Societies in sub-Saharan Africa and the Caribbean are much more polygynous than the Muslim nations in the Middle East and Northern Africa; eighteen of the twenty most polygynous nations in the world are in sub-Saharan Africa and the Caribbean.³¹ Accordingly, nations in these regions have very high levels of violence, and sub-Saharan Africa suffers from a long history of continuous civil wars, *but not suicide bombings*. So polygyny itself is not a sufficient cause of suicide bombings.

The other key ingredient is the promise of seventy-two virgins waiting in heaven for any martyr in Islam. This creates a strong motive for any young Muslim men who are excluded from reproductive opportunities on earth to get to heaven as martyrs. The prospect of exclusive access to seventy-two virgins in heaven may not be so appealing to anyone who has even one mate on earth, which strict monogamy guarantees. However, the prospect is quite appealing to

anyone who faces a bleak reality on earth of being complete reproductive losers because of polygyny.

From the evolutionary psychological perspective, it is the combination of polygyny (and the resulting lack of reproductive opportunities on earth) *and* the promise of a large harem of virgins in heaven that motivates many young Muslim men to commit suicide bombings. Consistent with this explanation, all studies of suicide bombers indicate that they are significantly younger than not only the Muslim population in general but also other (nonsuicidal) members of their own extreme political organizations, like Hamas and Hezbollah. And nearly all suicide bombers are single.³²

Some Puzzles in the "War on Terror"

Some of the puzzles of the current situation in Iraq and the Middle East may begin to make sense when you shed evolutionary psychological light on them. For example, the Iraqi insurgents have killed more than six times as many Iraqis as Americans (6,004 Iraqi police and military personnel plus 10,131 civilians vs. 2,466 American troops, as of January 29, 2007).³³ From the evolutionary psychological perspective, the Iraqi insurgents may be unconsciously trying to eliminate as many of their male sexual rivals (fellow Iraqi men) as possible, rather than killing American troops (the infidels and occupiers). According to Yale University political scientist Stathis N. Kalyvas, this is precisely what happened in civil wars in two other Muslim nations (Algeria and Oman).³⁴ While it is difficult to remember in light of the daily news reports from the occupied Iraq, insurgency has not always been a necessary response to foreign occupation throughout history. There was absolutely no insurgency against the Allied occupation after World War II either in Germany or Japan.

While Muslim suicide bombers are collectively known as “the terrorists,” they are very different from traditional terrorist groups, such as the Irish Republican Army, ETA (Basque Fatherland and Liberty), the Japan Red Army, and other Marxist revolutionaries. Terrorists, traditionally, have clear political goals and are willing to resort to violence and destruction in order to achieve them. For traditional terrorists, what is most important are political goals, and violence and destruction are means to their goals. For example, while the IRA has assassinated many targeted individuals (mostly politicians and British soldiers), they do not aim to kill random civilians. That is why when the IRA sets explosive bombs on commercial targets in Britain, it usually gives a 45-minute advance warning, enough time for the occupants of the buildings to evacuate them safely, but not enough time to call the bomb squad to locate and defuse the bombs.³⁵ While the members of Greenpeace and other “eco-terrorist” groups often endanger their own lives, they are not known to intentionally endanger the lives of others. Traditional terrorist groups let the whole world know that they are responsible for the violence and destruction and often court media attention, because such publicity helps spotlight their political agenda.

Our enemies in the current “War on Terror” are very different. They aim to endanger as many lives as possible, including their own, and they do not seem to have clearly stated political goals.³⁶ They do not give advance warnings of their attacks, and they do not even publicly claim responsibility for the violence after the fact.³⁷ (Many of the claims of responsibility on various websites are usually false.) It appears that murder and destruction *is* the goal, rather than the means to political goals. This may be why, for example, the Palestinians did not stop their suicide bombings even when the Israeli government under Ehud Barak conceded virtually everything that the

Palestinians demanded (the total withdrawal of Israelis from the West Bank and the control of Jerusalem).³⁸

Many of these puzzles begin to make more sense when you look at the situation from the evolutionary psychological perspective. Maybe these devastating suicide bombings are not “terrorist” acts, as the term is usually used. Maybe they have nothing to do with Israel or the American and British troops. Maybe they’re all about sex, as everything else in life is.

Q. Why Is Ethnic and Nationalist Conflict So Persistent throughout the World?

If you pay attention to the world news, you know that ethnic and nationalist conflict has unfortunately been a constant feature of human history. It is no exaggeration to say that there has not been a region or a historical period that has not been affected by some sort of ethnic and nationalist conflict, and this is unfortunately still true at the dawn of the third millennium of recorded human history. The history of human civilization has in large part been a history of ethnic and nationalist conflict.

Why is this? Why is ethnic and nationalist conflict so persistent throughout history and the world?

Nationalism and other forms of ethnic movement pose a puzzle—especially for a school of the Standard Social Science Model called the rational choice theory.³⁹ All benefits of successful nationalist or ethnic movements, such as ethnic independence, political autonomy, and state recognition, are shared equally by everyone. So, for example, once ethnic independence is granted to a nation (say, Quebec in Canada), all members of the nation are equally independent, and

no one can be excluded from enjoying the newly acquired ethnic independence. It means that those members of an ethnic group or a nation who did not contribute at all toward the cause (the "freeriders") get to enjoy the benefits of successful ethnic movements as much as those who risked life and limb in order to achieve the success (the "zealots").⁴⁰ Freeriders and zealots enjoy the same level of freedom and independence. Why, then, would anybody risk injury and death in order to bring about the change? In any situation like this, it is always rational to freeride, and no rational actors will ever contribute.⁴¹ If everyone is rational, then no one will contribute to the cause, and it will not get off the ground, let alone succeed. How, then, can any ethnic and nationalist movement ever succeed?

Evolutionary Psychology Is Rational Choice for the Genes

Once again, evolutionary psychology can solve puzzles left unresolved by the Standard Social Science Model in general or the rational choice theory in particular.⁴² Joseph M. Whitmeyer was a student of Pierre L. van den Berghe, whom we have encountered a couple of times earlier. Whitmeyer argues, and mathematically proves, that any gene that inclines its carriers to help others whom they might marry, or those whose children their children might marry, or those whose grandchildren their grandchildren might marry, etc., will be favored by evolution and thus spread.⁴³ By contributing toward the welfare of other members of such an "extended family" or tribe, so to speak, you are essentially providing benefits for your genetic offspring, both distant and near. Whitmeyer argues that what usually passes as an ethnic group is essentially such an extended family because members of ethnic groups tend to intermarry.

Whitmeyer's insight is that while it is *economically* irrational to

contribute toward ethnic and nationalist movements, as the rational choice theorists point out, because the benefits of successful ethnic collective action cannot be excluded from freeriders, it is nonetheless *evolutionarily* and *biologically* rational. It is irrational from the individual's perspective; it is rational from the genes' perspective.⁴⁴

Whitmeyer's solution to the problem of ethnic and nationalist conflict contains both good and bad news. The bad news is that our tendency toward ethnocentrism—our desire to help and promote others of "our own kind"—is probably innate. Because they assume that humans are born blank slates, social scientists have always argued that individuals are born entirely free of prejudice, but learn to be racist and ethnocentric through childhood socialization, usually by racist parents. Evolutionary psychology in general and Whitmeyer's work in particular suggest that this is unlikely to be the case.⁴⁵ Humans are instead born racist and ethnocentric, and learn through socialization and education not to act on such innate tendencies. Humans are innately ethnocentric because ethnocentrism—helping others of one's group members at the cost of all others—was adaptive in the ancestral environment.

The good news is that we can easily overcome our innate ethnocentric tendencies. A recent experiment with an incredibly ingenious design—conducted by Robert O. Kurzban, John Tooby, and Leda Cosmides—demonstrates that while we are born with fixed categories for sex and age, we are not born with fixed categories of what constitutes a race or ethnic group, or what defines "us" versus "them."⁴⁶ We will never be able to eliminate our innate ethnocentric tendencies, but we can lessen hostility and conflict between any particular set of ethnic, religious, national, or cultural groups. How? Whitmeyer's mathematical model provides the answer: intermarriage. Our brain is designed to perceive anybody within an "extended family" of

intermarrying individuals as “us,” and anybody outside of it as “them.” If members of hostile groups began intermarrying, we could eventually eliminate the hostility itself.

Of course, this is far easier said than done. It would be very difficult to convince members from different ethnic and national groups in conflict to marry each other. But at least there is hope. Kurzban, Tooby, and Cosmides’ experiment shows that humans will never be able to stop treating men and women differently, or the young and the old differently, but they will be able to stop treating Catholics and Protestants differently in Northern Ireland; Muslims and Jews differently in Israel; or Serbs, Croats, and Muslims differently in Bosnia. While some may think there is a chicken-and-egg problem here—does ethnic conflict lead to a lack of intermarriage, or does a lack of intermarriage lead to ethnic conflict?—Whitmeyer’s mathematical model points to the latter answer and suggests that it is possible to reduce ethnic and nationalist conflict via increased intermarriage.

Q. Why Are Single Women More Likely to Travel Abroad—and Why Are Young Single Men More Likely to Be Xenophobic?

Ask a group of friends what their hobbies are. If you have many young, unmarried friends of both sexes, chances are that many of your female friends would mention traveling as one of their hobbies, while very few of your young unmarried male friends would. Alternatively, you may find that many of your young single female friends have recently been to a foreign country on a vacation, but few of your young single male friends have. Why is this?

Make a completely different observation. Pay close attention to the news coverage of the most recent Ku Klux Klan rally in the

United States or the convention of the British National Party or any other gathering of an expressly xenophobic organization. You will notice that most participants in such xenophobic organizations are young, unmarried men; there are comparatively few women or older men in the membership of such organizations. Why? It turns out that the reason why more young single women vacation abroad may be the same as why most neo-Nazis are young single men. It may have to do with a zoological phenomenon called *lekking*.

Lek is a Swedish word for “play” and refers in zoology to a complex of behavior whereby members of one sex, almost always male, strut and display their genetic quality in a contest, in front of an audience consisting of members of the other sex, almost always female. At the end of the lek, the females choose the winner and exclusively mate with him. The winner of lekking monopolizes all of the mating opportunities, and none of the others get any.

At first sight, humans appear to be an exception in nature. Among most species, males are gaudy, colorful, decorated, and ornamented, while females are drab in appearance. (Compare peacocks with peahens.) Males of lekking species display their physical features in order to attract mates, and females choose their mates on the basis of the males’ physical appearance; the gaudier and more colorful, the better. In contrast, among humans, it is women for whom physical appearance is more important for their mate value, and it is men who choose their mates mostly for their physical appearance. (See “Why Do Men Like Blonde Bombshells [and Why Do Women Want to Look Like Them]?” in chapter 3.) And, at least in industrial societies, women tend to be more decorated and ornamented than men, although men in many preindustrial societies often wear more elaborate ornamentation than do women.

The female of most species in nature does not receive any material benefit from her mates; the male does not make any parental

investment beyond the sperm deposited inside the female body during copulation. This is why the male's genetic quality is especially important for the female; in fact, nothing else matters. So among these species, males display their genetic quality in lekking, and the females choose their mates solely on the basis of their genetic quality. Human males are exceptional in nature in this regard; they make a large amount of material investment in their offspring, even though they don't make as much parental investment as women do (see "Why Are There So Many Deadbeat Dads but So Few Deadbeat Moms?" in chapter 5). This does not mean, however, that their genetic quality is not important to women; men's genetic quality can predict their future ability to acquire resources and attain status, hence their ability to make parental investment.⁴⁷ For humans, because of high male parental investment, what is important is not the male's genetic quality per se but earning potential. His genetic quality is important only to the extent that it predicts or correlates with his potential to earn and accumulate material resources.

This is why when men lek, they display their earning potential and accumulated wealth in addition to their genetic quality. And unlike other lekking species, like the sage grouse or the antelope, men lek mostly by nonphysical means. They drive luxury cars, wear expensive watches and designer suits,⁴⁸ carry electronic gadgets like cell phones and PDAs, and brag about their achievements in casual conversations.⁴⁹ Young men also advertise their genetic quality and earning potential by "cultural displays"—excelling in such "quantifiable, public, and costly" activities as music, art, literature, and science.⁵⁰

In one study, for example, researchers covertly observed patrons of a bar in central Liverpool in the late 1990s, when cell phones were still relatively rare and expensive. The researchers discovered

that men's tendency to place their cell phones on the table in clear view of others, unlike women's tendency to do the same, increases with the number of men in their group and its ratio of men to women.⁵¹ The researchers' interpretation is that men do this, consciously or unconsciously, in order to compete with other men in their group for the attention of the women, and to display their wealth and status and hence their genetic quality and earning potential. So men lek via social and cultural, rather than physical, ornamentation.⁵²

A Not-So-Universal Language

Such social and cultural ornamentation, however, presents men with one problem that males of other species, who lek via physical ornamentation, do not face: It does not travel well. Social and cultural ornamentation is, by definition, socially and culturally specific. Men cannot brag about their achievements in conversations with women unless they speak the same language. Yanomamö women in the Amazon rain forest would not be able to tell the difference between a BMW and a Hyundai or the difference between an Armani suit and a Burger King uniform, and their status implications; a Grammy or a Nobel Prize will not impress them at all. (Has any Nobel Prize winner ever had massive head scars, indicating their experience in club fights?) Conversely, Western women are unlikely to be impressed by body scars and large penis sheaths. Signs of men's status and mate value are specific to societies and cultures, and they lose meaning outside of them.

This is in clear contrast to women's status and mate value. Standards of youth and physical attractiveness, the two most important determinants of women's status and mate value, are culturally

universal⁵³ because they are innate⁵⁴ (see chapter 3, "Why Is Beauty Not in the Eye of the Beholder or Skin-Deep?"). Men in preliterate and innumerate cultures without any concept of fractions or the decimal point will be able to distinguish between women with 1.0 and 0.7 waist-to-hip ratios. Yanomamö men will see that a Victoria's Secret lingerie model is extremely *moko dude* (a Yanomamö phrase meaning "perfectly ripe").⁵⁵

A Sure Sign That Someone Wanted You

If men's status and mate value are specific to their own society and culture, then they should avoid different cultures, where a completely different set of rules, of which they are ignorant, may apply. In contrast, women should not avoid foreign cultures to the same extent that men do, because rules applicable to them are cross-culturally universal.

However, this sex difference should disappear once men marry, for a couple of reasons. First, married men who have achieved reproductive success should have less of an urgent need to attract mates by social and cultural ornamentation than do unmarried men.⁵⁶ Second, and more important, *mates are probably the only ornamentation or lekking device men can display that is cross-culturally meaningful*. There is evidence that females of species as varied as guppies,⁵⁷ Japanese medaka,⁵⁸ black grouse,⁵⁹ and Japanese quail⁶⁰ prefer to mate with males who have recently mated. Females use other females' choice of males as evidence of their genetic quality; in other words, they copy each other. And some suggest that human females might do the same.⁶¹

The idea is simple: If a woman meets a strange man, she has no basis on which to form an opinion of him. He can be a high-quality

man, or he can be a low-quality man; she just doesn't know. However, if he has a wife, that means that at least one woman, who presumably closely inspected his quality before marrying him, found him good enough to marry. So he couldn't be *that* bad after all; at least one woman found him desirable. So being married (the presence of a wife) is one cross-culturally transportable ornamentation or lekking device that signifies men's superior mate value, and married men should not avoid foreign cultures.^[62]

Dislike of foreign cultures can be measured by the likelihood of travel to foreign countries or by the expressions of xenophobic attitudes. One empirical study with a large European sample shows that, controlling for age, education, and income (factors that are expected to, and in most cases do, affect people's ability to travel), unmarried women are significantly more likely to vacation abroad than unmarried men.⁶³ The same study also demonstrates that, controlling for age and education, unmarried women are significantly less likely to express xenophobic attitudes than unmarried men toward individuals of other nationalities, races, and religions. The pattern is similar among Americans as well.⁶⁴ In all cases, the sex difference disappears once the respondents are married; married women are no more likely to travel to foreign countries (probably because married couples tend to vacation together) or no less likely to express xenophobic attitudes than married men.

Both the likelihood of travel abroad and expressions of xenophobia reflect men's need to attract women using social and cultural ornamentation. Men's status and mate value, unlike women's, are socially and culturally specific, and they cannot successfully attract women outside of their own society and culture. Married men, on the other hand, can use their wives as cross-culturally meaningful