

## *Men Want Something Else*

*Beauty is in the adaptations of the beholder.*

—Donald Symons, "What Do Men Want?"

WHY MEN MARRY poses a puzzle. Since all an ancestral man needed to do to reproduce was to impregnate a woman, casual sex without commitment would have sufficed for him. For evolution to have produced men who desire marriage and who are willing to commit years of investment to a woman, there must have been powerful adaptive advantages, at least under some circumstances, to that state over seeking casual sex partners.

One solution to the puzzle comes from the ground rules set by women. Since it is clear that many ancestral women required reliable signs of male commitment before consenting to sex, men who failed to commit would have suffered selectively on the mating market. Men who failed to fulfill women's standards typically would have failed to attract the most desirable women and perhaps even failed to attract any women at all. Women's requirements for consenting to sex made it costly for most men to pursue a short-term mating strategy exclusively. In the economics of reproductive effort, the costs of not pursuing a permanent mate may have been prohibitively high for most men.

A further cost of failing to seek marriage was impairment of the survival and reproductive success of the man's children. In human ancestral environments, it is likely that infants and young children were more likely to die without prolonged investment from two parents or related kin.<sup>1</sup> Even today, among the Ache Indians of Paraguay, when a man dies in a club fight, the other villagers often make a mutual decision to kill his children, even when the children have a living mother. In one case reported by the anthropologist Kim Hill, a boy of thirteen was killed after his father

had died in a club fight. Overall, Ache children whose fathers die suffer a death rate more than 10 percent higher than children whose fathers remain alive. Such are the hostile forces of nature among the Ache.

Over human evolutionary history, even children who did survive without the father's investment would have suffered from the absence of his teaching and political alliances, since both of these assets help to solve mating problems later in life. Fathers in many cultures past and present have a strong hand in arranging beneficial marriages for their sons and daughters. The absence of these benefits hurts children without fathers. These evolutionary pressures, operating over thousands of generations, gave an advantage to men who married.

Another benefit of marriage is an increase in the quality of the mate a man is able to attract. The economics of the mating marketplace typically produce an asymmetry between the sexes in their ability to obtain a desirable mate in a committed as opposed to a temporary relationship.<sup>2</sup> Most men can obtain a much more desirable mate if they are willing to commit to a long-term relationship. The reason is that women typically desire a lasting commitment, and highly desirable women are in the best position to get what they want. In contrast, most women can obtain a much more desirable temporary mate by offering sex without requiring commitment, since high-status men are willing to relax their standards and have sex with a variety of women if the relationship is only short-term and carries no commitment. Men of high status typically insist on more stringent standards for a spouse than most women are able to meet.

The puzzle remains as to precisely what characteristics were desired by ancestral men when they sought a long-term mate. To be reproductively successful, ancestral men had to marry women with the capacity to bear children. A woman with the capacity to bear many children was more valuable in reproductive currencies than a woman who was capable of bearing few or none. Men needed some basis, however, on which to judge a woman's reproductive capacity.

The solution to this problem is more difficult than it first might appear. Ancestral men had few obvious aids for figuring out which women possessed the highest reproductive value. The number of children a woman is likely to bear in her lifetime is not stamped on her forehead. It is not imbued in her social reputation. Her family is clueless. Even women themselves lack direct knowledge of their reproductive value.

A preference nevertheless evolved for this quality that cannot be discerned directly. Ancestral men evolved mechanisms to sense cues to a woman's underlying reproductive value. These cues involve observable features of females. Two obvious cues are youth and health.<sup>3</sup> Old or unhealthy women clearly could not reproduce as much as young, healthy

women. Ancestral men solved the problem of finding reproductively valuable women in part by preferring those who are young and healthy.

## Youth

Youth is a critical cue, since women's reproductive value declines steadily with increasing age after twenty. By the age of forty, a woman's reproductive capacity is low, and by fifty it is close to zero. Thus, women's capacity for reproduction is compressed into a fraction of their lives.

Men's preferences capitalize on this cue. Within the United States men uniformly express a desire for mates who are younger than they are. Among college students surveyed from 1939 through 1988 on campuses coast to coast, the preferred age difference hovers around 2.5 years.<sup>4</sup> Men who are 21 years old prefer, on average, women who are 18.5 years old.

Men's preoccupation with a woman's youth is not limited to Western cultures. When the anthropologist Napoleon Chagnon was asked which females are most sexually attractive to Yanomamö Indian men of the Amazon, he replied without hesitation, "Females who are *moko dude*."<sup>5</sup> The word *moko*, when used with respect to fruit, means that the fruit is harvestable, and when used with respect to a woman, it means that the woman is fertile. Thus, *moko dude*, when referring to fruit, means that the fruit is perfectly ripe and, when referring to a woman, means that she is postpubescent but has not yet borne her first child, or about fifteen to eighteen years of age. Comparative information on other tribal peoples suggests that the Yanomamö men are not atypical in their preference.

Nigerian, Indonesian, Iranian, and Indian men are similarly inclined. Without exception, in every one of the thirty-seven societies examined in the international study on choosing a mate, men prefer wives who are younger than themselves. Nigerian men who are 23.5 years old, for example, express a preference for wives who are six and a half years younger, or just over 17 years old. Yugoslavian men who are 21.5 years old express a desire for wives who are approximately 19 years old. Chinese, Canadian, and Colombian men share with their Nigerian and Yugoslavian brethren a powerful desire for younger women. On average, men from the thirty-seven cultures express a desire for wives approximately 2.5 years younger than themselves.

Although men universally prefer younger women as wives, the strength of this preference varies somewhat from culture to culture. Scandinavian men in Finland, Sweden, and Norway prefer their brides to be only one or two years younger. Men in Nigeria and Zambia prefer their brides to be 6.5 and 7.5 years younger, respectively. In Nigeria and

Zambia, which practice polygyny, like many cultures worldwide, men who can afford it are legally permitted to marry more than one woman. Since men in polygynous mating systems are typically older than men in monogamous systems by the time they have acquired sufficient resources to attract wives, the larger age difference preferred by Nigerian and Zambian men may reflect their greater age when they acquire wives.<sup>6</sup>

A comparison of the statistics derived from personal advertisements in newspapers reveals that a man's age has a strong effect on his preferences. As men get older, they prefer as mates women who are increasingly younger than they are. Men in their thirties prefer women who are roughly five years younger, whereas men in their fifties prefer women ten to twenty years younger.<sup>7</sup>

Actual marriage decisions confirm the preference of men for women who are increasingly younger as they age. American grooms exceed their brides in age by roughly three years at first marriage, five years at second marriage, and eight years at third marriage.<sup>8</sup> Men's preference for younger women also translates into actual marriage decisions worldwide. In Sweden during the 1800s, for example, church documents reveal that men who remarried following a divorce selected new brides 10.6 years younger on average. In all countries around the world where information is available on the ages of brides and grooms, men on average exceed their brides in age.<sup>9</sup> Among European countries, the age difference ranges from about two years in Poland to roughly five years in Greece. Averaged across all countries, grooms are three years older than their brides, or roughly the difference expressly desired by men worldwide. In polygynous cultures, the age difference runs even larger. Among the Tiwi of Northern Australia, for example, high-status men often have wives who are two and three decades younger than they are.<sup>10</sup> In short, contemporary men prefer young women because they have inherited from their male ancestors a preference that focused intently upon this cue to a woman's reproductive value. This psychologically based preference translates into everyday mating decisions.

## Standards of Physical Beauty

A preference for youth, however, is merely the most obvious of men's preferences linked to a woman's reproductive capacity. Evolutionary logic leads to an even more powerful set of expectations for universal standards of beauty. Just as our standards for attractive landscapes embody cues such as water, game, and refuge, mimicking our ancestors' savanna habitat, so our standards for female beauty embody cues to

women's reproductive capacity.<sup>11</sup> Beauty may be in the eyes of the beholder, but those eyes and the minds behind the eyes have been shaped by millions of years of human evolution.

Our ancestors had access to two types of observable evidence of a woman's health and youth: features of physical appearance, such as full lips, clear skin, smooth skin, clear eyes, lustrous hair, and good muscle tone, and features of behavior, such as a bouncy, youthful gait, an animated facial expression, and a high energy level. These physical cues to youth and health, and hence to reproductive capacity, constitute the ingredients of male standards of female beauty.

Because physical and behavioral cues provide the most powerful observable evidence of a woman's reproductive value, ancestral men evolved a preference for women who displayed these cues. Men who failed to prefer qualities that signal high reproductive value—men who preferred to marry gray-haired women lacking in smooth skin and firm muscle tone—would have left fewer offspring, and their line would have died out.

Clelland Ford and Frank Beach discovered several universal cues that correspond precisely with this evolutionary theory of beauty.<sup>12</sup> Signs of youth, such as clear skin and smooth skin, and signs of health, such as the absence of sores and lesions, are universally regarded as attractive. Any cues to ill health or older age are seen as less attractive. Poor complexion is always considered sexually repulsive. Pimples, ringworm, facial disfigurement, and filthiness are universally repugnant. Cleanliness and freedom from disease are universally attractive.

Among the Trobriand Islanders in northwestern Melanesia, for example, the anthropologist Bronislaw Malinowski reports that "sores, ulcers, and skin eruptions are naturally held to be specially repulsive from the viewpoint of erotic contact."<sup>13</sup> The "essential conditions" for beauty, in contrast, are "health, strong growth of hair, sound teeth, and smooth skin." Specific features, such as bright eyes and full, well-shaped lips rather than thin or pinched lips, are especially important to the islanders.

Cues to youth are also paramount in the aesthetics of women's attractiveness. When men and women rate a series of photographs of women differing in age, judgments of facial attractiveness decline with the increasing age of the woman.<sup>14</sup> The decline in ratings of beauty occurs regardless of the age or sex of the judge. The value that men attach to women's faces, however, declines more rapidly than do women's ratings of other women's faces as the age of the woman depicted in the photograph increases, highlighting the importance to men of age as a cue to reproductive capacity.

Most traditional psychological theories of attraction have assumed

that standards of attractiveness are learned gradually through cultural transmission, and therefore do not emerge clearly until a child is at least three or four years old. The psychologist Judith Langlois and her colleagues have overturned this conventional wisdom by studying infants' social responses to faces.<sup>15</sup> Adults evaluated color slides of white and black female faces for their attractiveness. Then infants of two to three months of age and six to eight months of age were shown pairs of these faces that differed in their degree of attractiveness. Both younger and older infants looked longer at the more attractive faces, suggesting that standards of beauty apparently emerge quite early in life. In a second study, Langlois and her colleagues found that twelve-month-old infants showed more observable pleasure, more play involvement, less distress, and less withdrawal when interacting with strangers who wore attractive masks than when interacting with strangers who wore unattractive masks.<sup>16</sup> In a third study, they found that twelve-month-old infants played significantly longer with attractive dolls than with unattractive dolls. No training seems necessary for these standards to emerge. This evidence challenges the common view that the idea of attractiveness is learned through gradual exposure to current cultural standards.

The constituents of beauty are neither arbitrary nor culture bound. When the psychologist Michael Cunningham asked people of different races to judge the facial attractiveness of photographs of women of various races, he found great consensus about who is and is not good looking.<sup>17</sup> Asian and American men, for example, agree with each other on which Asian and American women are most and least attractive. Consensus has also been found among the Chinese, Indian, and English; between South Africans and Americans; and between black and white Americans.<sup>18</sup>

Recent scientific breakthroughs confirm the evolutionary theory of female beauty. To find out what makes for an attractive face, composites of the human face were generated by means of the new technology of computer graphics. These faces were then superimposed upon each other to create new faces. The new composite faces were made up of a differing number of individual faces—four, eight, sixteen, or thirty-two. People were asked to rate the attractiveness of each composite face, as well as the attractiveness of each individual face that made up the composite. A startling result emerged. The composite faces were uniformly judged to be more physically attractive than any of the individual ones. The sixteen-face composite was more attractive than the four-face or eight-face composites, and the thirty-two-face composite was the most attractive of all. Because superimposing individual faces tends to eliminate their irregularities and make them more symmetrical, the average or symmetrical faces are more attractive than actual faces.<sup>19</sup>

One explanation for why symmetrical faces are considered more attractive comes from research conducted by the psychologist Steve Gangestad and the biologist Randy Thornhill, who examined the relationship between facial and bodily asymmetries and judgments of attractiveness.<sup>20</sup> Repeated environmental insults produce asymmetries during development. These include not just injuries and other physical insults, which may provide a cue to health, but also the parasites that inhabit the human body. Because parasites cause physical asymmetries, the degree of asymmetry can be used as a cue to the health status of the individual and as an index of the degree to which the individual's development has been perturbed by various stressors. In scorpionflies and swallows, for example, males prefer to mate with symmetrical females and tend to avoid those that show asymmetries. In humans as well, when Gangestad and Thornhill measured people's features, such as foot breadth, hand breadth, ear length, and ear breadth, and independently had these people evaluated on attractiveness, they found that less symmetrical people are seen as less attractive. Human asymmetries also increase with age. Older people's faces are far more asymmetrical than younger people's faces, so that symmetry provides another cue to youth as well. This evidence provides yet another confirmation of the theory that cues to health and cues to youth are embodied in standards of attractiveness—standards that emerge remarkably early in life.

## Body Shape

Facial beauty is only part of the picture. Features of the rest of the body provide an abundance of cues to a woman's reproductive capacity. Standards for female bodily attractiveness vary from culture to culture, along such dimensions as a plump versus slim body build or light versus dark skin. Emphasis on particular physical features, such as eyes, ears, or genitals, also varies by culture. Some cultures, such as the Nama, a branch of Hottentots residing in Southwest Africa, consider an elongated labia majora to be sexually attractive, and they work at pulling and manipulating the vulvar lips to enhance attractiveness. Men in many cultures prefer large, firm breasts, but in a few, such as the Azande of Eastern Sudan and the Ganda of Uganda, men view long, pendulous breasts as the more attractive.<sup>21</sup>

The most culturally variable standard of beauty seems to be in the preference for a slim versus plump body build. This variation is linked with the social status that body build conveys. In cultures where food is scarce, such as among the Bushmen of Australia, plumpness signals

wealth, health, and adequate nutrition during development.<sup>22</sup> In cultures where food is relatively abundant, such as the United States and many western European countries, the relationship between plumpness and status is reversed, and the rich distinguish themselves through thinness.<sup>23</sup> Men apparently do not have an evolved preference for a particular amount of body fat per se. Rather, they have an evolved preference for whatever features are linked with status, which vary in predictable ways from culture to culture. Clearly such a preference does not require conscious calculation or awareness.

Studies by the psychologist Paul Rozin and his colleagues reveal a disturbing aspect of women's and men's perceptions of the desirability of plump versus thin body types.<sup>24</sup> American men and women viewed nine female figures that varied from very thin to very plump. The women were asked to indicate their ideal for themselves, as well as their perception of what men's ideal female figure was. In both cases, women selected a figure slimmer than average. When men were asked to select which female figure they preferred, however, they selected the figure of average body size. American women erroneously believe that men desire thinner women than is the case. These findings refute the belief that men desire women who are emaciated.

While men's preferences for a particular body size vary, the psychologist Devendra Singh has discovered one preference for body shape that is invariant—the preference for a particular ratio of waist size to hip size.<sup>25</sup> Before puberty, boys and girls show a similar fat distribution. At puberty, however, a dramatic change occurs. Boys lose fat from their buttocks and thighs, while the release of estrogen in pubertal girls causes them to deposit fat in their lower trunk, primarily on their hips and upper thighs. Indeed, the volume of body fat in this region is 40 percent greater for women than for men.

The waist-to-hip ratio is thus similar for the sexes before puberty. After puberty, however, women's hip fat deposits cause their waist-to-hip ratio to become significantly lower than men's. Healthy, reproductively capable women have a waist-to-hip ratio between 0.67 and 0.80, while healthy men have a ratio in the range of 0.85 to 0.95. Abundant evidence now shows that the waist-to-hip ratio is an accurate indicator of women's reproductive status. Women with a lower ratio show earlier pubertal endocrine activity. Married women with a higher ratio have more difficulty becoming pregnant, and those who do become pregnant do so at a later age than women with a lower ratio. The waist-to-hip ratio is also an accurate indication of long-term health status. Diseases such as diabetes, hypertension, heart problems, previous



stroke, and gallbladder disorders have been shown to be linked with the distribution of fat, as reflected by the ratio, rather than with the total proportion of body fat. The link between the waist-to-hip ratio and both health and reproductive status makes it a reliable cue for ancestral men's preferences in a mate.

Singh discovered that waist-to-hip ratio is a powerful cue to women's attractiveness. In a dozen studies conducted by Singh, men rated the attractiveness of female figures, which varied in both their waist-to-hip ratio and their total amount of fat. Men find the average figure to be more attractive than a thin or fat figure. Regardless of the total amount of fat, however, men find women with a low waist-to-hip ratio to be the most attractive. Women with a ratio 0.70 are seen as more attractive than women with a ratio of 0.80, who in turn are seen as more attractive than women with a ratio of 0.90. Studies with line drawings and with computer-generated photographic images produced the same results. Finally, Singh's analysis of *Playboy* centerfolds and winners of beauty contests within the United States over the past thirty years confirmed the invariance of this cue. Although both centerfolds and beauty contest winners got thinner over that period, their waist-to-hip ratio remained exactly the same at 0.70.

There is one more possible reason for the importance of waist-to-hip ratio in men's evolved preferences. Pregnancy alters this ratio dramatically. A higher ratio mimics pregnancy and therefore may render women less attractive as mates or sexual partners. A lower ratio, in turn, signals health, reproductive capacity, and lack of current pregnancy. Men's standards of female attractiveness have evolved over thousands of generations to pick up this reliable cue.

## Importance of Physical Appearance

Because of the many cues conveyed by a woman's physical appearance, and because male standards of beauty have evolved to correspond to these cues, men place a premium on physical appearance and attractiveness in their mate preferences. Within the United States mate preferences for physical attractiveness, physical appearance, good looks, or beauty have been lavishly documented. When five thousand college students were asked in the 1950s to identify the characteristics they wanted in a future husband or wife, what men listed far more often than women was physical attractiveness.<sup>26</sup> The sheer number of terms that men listed betrays their values. They wanted a wife who was pretty, attractive, beautiful, gorgeous, comely, lovely, ravish-

ing, and glamorous. American college women, at that time at least, rarely listed physical appearance as paramount in their ideal husband.

A cross-generational mating study, spanning a fifty-year period within the United States from 1939 to 1989, gauged the value men and women place on different characteristics in a mate. The same eighteen characteristics were measured at roughly one-decade intervals to determine how mating preferences have changed over time within the United States. In all cases, men rate physical attractiveness and good looks as more important and desirable in a potential mate than do women.<sup>27</sup> Men tend to see attractiveness as important, whereas women tend to see it as desirable but not very important. The sex difference in the importance of attractiveness remains constant from one generation to the next. Its size does not vary throughout the entire fifty years. Men's greater preference for physically attractive mates is among the most consistently documented psychological sex differences.<sup>28</sup>

This does not mean that the importance people place on attractiveness is forever fixed by our genes. On the contrary, the importance of attractiveness has increased dramatically within the United States in this century alone.<sup>29</sup> For nearly every decade since 1930, physical appearance has gone up in importance for men and women about equally, corresponding with the rise in television, fashion magazines, advertising, and other media depictions of attractive models. For example, the importance attached to good looks in a marriage partner on a scale of 0.00 to 3.00 increased between 1939 and 1989 from 1.50 to 2.11 for men and from 0.94 to 1.67 for women. These shifts show that mate preferences can change. But the sex difference so far remains invariant. The gap between men and women has been constant since the late 1930s.

These sex differences are not limited to the United States, or even to Western cultures. Regardless of the location, habitat, marriage system, or cultural living arrangement, men in all thirty-seven cultures included in the international study on choosing a mate value physical appearance in a potential mate more than women. China typifies the average difference in importance attached to beauty, with men giving it a 2.06 and women giving it a 1.59. This internationally consistent sex difference persists despite variations in ranking, in wording, and in race, ethnicity, religion, hemisphere, political system, and mating system. Men's preference for physically attractive mates is a species-wide psychological mechanism that transcends culture.

## Men's Status and Women's Beauty

The importance that men assign to a woman's attractiveness has reasons other than her reproductive value. The consequences for a man's social status are critical. Everyday folklore tells us that our mate is a reflection of ourselves. Men are particularly concerned about status, reputation, and hierarchies because elevated rank has always been an important means of acquiring the resources that make men attractive to women. It is reasonable, therefore, to expect that a man will be concerned about the effect that his mate has on his social status—an effect that has consequences for gaining additional resources and mating opportunities.

A person's status and resource holdings, however, often cannot be observed directly. They must instead be inferred from tangible characteristics. Among humans, one set of cues is people's ornamentation. Gold chains, expensive artwork, or fancy cars may signal to both sexes an abundance of resources that can be directed toward parental investment.<sup>30</sup> Men seek attractive women as mates not simply for their reproductive value but also as signals of status to same-sex competitors and to other potential mates.<sup>31</sup>

This point was vividly illustrated by the real-life case of Jim, who complained to a friend about his wife, an unusually attractive woman. "I'm thinking about getting a divorce," he said. "We are incompatible, have different values, and argue all the time." His friend, though sympathetic, offered this counsel: "In spite of your troubles, Jim, you might want to reconsider. She looks great on your arm when you walk into a party." Although Jim and his wife eventually divorced, he delayed the split for several years, in part because of his friend's advice. Jim felt that he would be losing a valuable social asset if he divorced his attractive wife. "Trophy" wives are not just the perquisites of high status, but in fact increase the status of the man who can win them.

Experiments have documented the influence of attractive mates on men's social status. When people are asked to evaluate men on a variety of characteristics, based on photographs of the men with "spouses" of differing physical attractiveness, the consequences are especially great for evaluations of men's status. Unattractive men paired with attractive spouses are rated most favorably on criteria related to status, such as occupational prestige, in comparison with all other possible pairings, such as attractive men with unattractive women, unattractive women with unattractive men, and even attractive men with attractive women. People suspect that a homely man must have high status if he can interest a stunning woman, presumably because people know that

attractive women have high value as mates and hence usually can get what they want in a mate.

Another indication of the consequences of an attractive mate comes from a comparison of the effects of different kinds of mating behavior on the status and reputation of men and women.<sup>32</sup> In my study of human prestige criteria, American men and women evaluated the relative influence of experiences such as dating someone who is physically attractive, having sex with a date on the first night, and treating a date to an expensive dinner on the status and reputation of both men and women. Dating someone who is physically attractive greatly increases a man's status, whereas it increases a woman's status only somewhat. In contrast, a man who dates an unattractive woman experiences a moderate decrease in status and reputation, whereas a woman who dates a physically unattractive man experiences only a trivial decrease in status. On a scale of +4.00 (great increase in status) to -4.00 (great decrease in status), going out with someone who was not physically attractive affected men's status by -1.47, whereas it affected women's status by only -0.89.

These trends occur in different cultures. When my research collaborators and I surveyed native residents of China, Poland, Guam, and Germany in parallel studies of human prestige criteria, we found that in each of these countries, acquiring a physically attractive mate enhances a man's status more than a woman's. In each country, having an unattractive mate hurts a man's status more than a woman's. And in each country dating an unattractive person hurts a man's status moderately but has only a slight or inconsequential effect on a woman's status. Men across cultures today value attractive women not only because attractiveness signals a woman's reproductive capacity but also because it signals status.

## Homosexual Mate Preferences

The premium that men place on a mate's appearance is not limited to heterosexuals. Homosexual relationships provide an acid test for the evolutionary basis of sex differences in the desires for a mate.<sup>33</sup> The issues are whether homosexual men show preferences more or less like those of other men, differing only in the sex of the person they desire; whether they show preferences similar to those of women; or whether they have unique preferences unlike the typical preferences of either sex.

No one knows what the exact percentage of homosexuals is in any culture, past or present. Part of the difficulty lies with definitions. The sexologist Alfred Kinsey estimated that more than a third of all men engaged at some point in life in some form of homosexual activity, typi-

cally as part of adolescent experimentation. Far fewer people, however, express a strong preference for the same sex as a mate. Conservative estimates put the figure at about 3 to 4 percent for men and 1 percent for women.<sup>34</sup> The discrepancy between the percentages of people who have engaged in some kinds of homosexual acts and people who express a core preference for partners of the same sex suggests an important distinction between the underlying psychology of preference and the outward manifestation of behavior. Many men who prefer women as mates may nonetheless substitute a man as a sex partner, either because of an inability to attract women or because of a temporary situational constraint that precludes access to women, such as being in prison.

No one knows why some people have a strong preference for members of their own sex as mates, although this lack of knowledge has not held back speculation. One suggestion is the so-called kin selection theory of homosexuality, which holds that homosexuality evolved when some people served better as an aide to their close genetic relatives than as a reproducer.<sup>35</sup> For example, an ancestral man who had difficulty in attracting a woman might have been better off investing effort in his sister's children than in trying to secure a mate himself. A related theory is that some parents manipulate particular children, perhaps those who might have a lower value on the mating market, to become homosexual in order to aid other family members, even if it would be in the child's best reproductive interest to reproduce directly.<sup>36</sup> No current evidence exists to support either of these theories. The origins of homosexuality remain a mystery.

Homosexual preferences in a mate, in contrast, are far less mysterious. Studies document the great importance that homosexual men place on the youth and physical appearance of their partners. William Jankowiak and his colleagues asked homosexual and heterosexual individuals, both men and women, to rank sets of photographs of men and women differing in age on physical attractiveness.<sup>37</sup> Homosexual and heterosexual men alike rank the younger partners as consistently more attractive. Neither lesbian nor heterosexual women, on the contrary, place any importance on youth in their ranking of attractiveness. These results suggest that lesbian women are very much like heterosexual women in their mate preferences, except with respect to the sex of the person they desire. And homosexual men are similar to heterosexual men in their mate preferences.

The psychologists Kay Deaux and Randel Hanna conducted the most systematic study of homosexual mate preferences.<sup>38</sup> They collected eight hundred ads from several East Coast and West Coast newspapers, equally sampling male heterosexuals, female heterosexuals, male homo-

sexuals, and female homosexuals. Using a coding scheme, they calculated the frequency with which each of these groups offers and seeks particular characteristics, such as physical attractiveness, financial security, and personality traits.

Lesbians tend to be similar to heterosexual women in placing little emphasis on physical appearance, with only 19.5 percent of the heterosexual women and 18 percent of the lesbians mentioning this quality. In contrast, 48 percent of heterosexual men and 29 percent of homosexual men state that they are seeking attractive partners. Among all groups, lesbians list their own physical attractiveness less often than any other group; mentions appear in only 30 percent of their ads. Heterosexual women, in contrast, offer attractiveness in 69.5 percent of the ads, male homosexuals in 53.5 percent of the ads, and male heterosexuals in 42.5 percent of the ads. Only 16 percent of the lesbians request a photograph of respondents to their ads, whereas 35 percent of heterosexual women, 34.5 percent of homosexual men, and 37 percent of heterosexual men make this request.

Lesbians are distinct from the other three groups in specifying fewer physical characteristics, such as weight, height, eye color, or body build. Whereas only 7 percent of lesbian women mention their desire for specific physical attributes, 20 percent of heterosexual women, 38 percent of homosexual men, and 33.5 percent of heterosexual men request particular physical traits. And as with overall attractiveness, lesbians stand out in that only 41.5 percent list physical attributes among their assets offered, whereas 64 percent of heterosexual women, 74 percent of homosexual men, and 71.5 percent of heterosexual men offer particular physical assets. It is clear that homosexual men are similar to heterosexual men in the premium they place on physical appearance. Lesbians are more like heterosexual women in their desires, but where they differ, they place even less value on physical qualities, both in their offerings and in the qualities they seek.

Less formal studies confirm the centrality of youth and physical appearance for male homosexuals. Surveys of the gay mating market consistently find that physical attractiveness is the key determinant of the desirability of a potential partner. Male homosexuals place great emphasis on dress, grooming, and physical condition. And youth is a key ingredient in judging attractiveness: "Age is the monster figure of the gay world."<sup>39</sup>

The sociologists Philip Blumstein and Pepper Schwartz found that the physical beauty of a partner is critical to the desires of homosexual and heterosexual men more than to lesbian or heterosexual women, even among already coupled individuals.<sup>40</sup> All members of their sample were in relationships. They found that 57 percent of gay men and 59

percent of heterosexual men feel that it is important that their partner be sexy looking. In contrast, only 31 percent of the heterosexual women and 35 percent of the lesbians state that sexy looks are important in a partner. Male homosexuals and male heterosexuals seem to have indistinguishable mating preferences, except with respect to the sex of their preferred partner. Both place a premium on appearance, and youth is a central ingredient in their definition of beauty.

## Men Who Achieve Their Desires

Although most men place a premium on youth and beauty in a mate, it is clear that not all men are successful in achieving their desires. Men who lack the status and resources that women want, for example, generally have the most difficult time attracting pretty young women and must settle for less than their ideal. Evidence for this possibility comes from men who have historically been in a position to get exactly what they prefer, such as kings and other men of unusually high status. In the 1700s and 1800s, for example, wealthier men from the Krummerhörn population of Germany married younger brides than did men lacking wealth. Similarly, high-status men, from the Norwegian farmers of 1700 to 1900 to the Kipsigis in contemporary Kenya, consistently secured younger brides than did their lower-status counterparts.<sup>41</sup>

Kings and despots routinely stocked their harems with young, attractive, nubile women and had sex with them frequently. The Moroccan emperor Moulay Ismail the Bloodthirsty, for example, acknowledged having sired 888 children. His harem had 500 women. But when a woman reached the age of thirty, she was banished from the emperor's harem, sent to a lower-level leader's harem, and replaced by a younger woman. Roman, Babylonian, Egyptian, Incan, Indian, and Chinese emperors all shared the tastes of Emperor Ismail and enjoined their trustees to scour the land for as many young pretty women as could be found.<sup>42</sup>

Marriage patterns in modern America confirm the fact that the men with the most resources are the best equipped to actualize their preferences. High-status men, such as the aging rock stars Rod Stewart and Mick Jagger and the movie stars Warren Beatty and Jack Nicholson, frequently select women two or three decades younger. One study examined the impact of a man's occupational status on the woman he marries. Men who are high in occupational status are able to marry women who are considerably more physically attractive than are men who are low in occupational status.<sup>43</sup> Indeed, a man's occupational sta-

tus seems to be the best predictor of the attractiveness of the woman he marries. Men in a position to attract younger women often do.

Men who enjoy high status and income are apparently aware of their ability to attract women of higher value. In a study of a computer dating service involving 1,048 German men and 1,590 German women, the ethologist Karl Grammer found that as men's income goes up, they seek younger partners.<sup>44</sup> Men earning more than 10,000 deutsche marks, for example, advertised for mates who were between five and fifteen years younger, whereas men earning less than 1,000 deutsche marks advertised for mates who were up to five years younger. Each increment in income is accompanied by a decrease in the age of the woman sought.

Not all men, however, have the status, position, or resources to attract young women, and some men end up mating with older women. Many factors determine the age of the woman at marriage, including the woman's preferences, the man's own age, the man's mating assets, the strength of the man's other mating preferences, and the woman's appearance. Mating preferences are not invariably translated into actual mating decisions for all people all of the time, just as food preferences are not invariably translated into actual eating decisions for all people all of the time. But men who are in a position to get what they want often marry young, attractive women. Ancestral men who actualized these preferences enjoyed greater reproductive success than those who did not.

## Media Effects on Standards

Advertisers exploit the universal appeal of beautiful, youthful women. Madison Avenue is sometimes charged with inflicting pain on people by advancing a single, arbitrary standard of beauty that everyone must live up to.<sup>45</sup> Advertisements are thought to convey unnatural images of beauty and to tell people to strive to embody those images. This interpretation is at least partially false. The standards of beauty are not arbitrary but rather embody reliable cues to reproductive value. Advertisers have no special interest in inculcating a particular set of beauty standards and merely want to use whatever sells most easily. Advertisers perch a clear-skinned, regular-featured young woman on the hood of the latest model car because the image exploits men's evolved psychological mechanisms and therefore sells cars, not because they want to promulgate a single standard of beauty.

The media images we are bombarded with daily, however, have a potentially pernicious consequence. In one study, after groups of men looked at photographs of either highly attractive women or women of



average attractiveness, they were asked to evaluate their commitment to their current romantic partner.<sup>46</sup> Disturbingly, the men who had viewed pictures of attractive women thereafter judged their actual partner to be less attractive than did the men who had viewed analogous pictures of women who were average in attractiveness. Perhaps more important, the men who had viewed attractive women thereafter rated themselves as less committed, less satisfied, less serious, and less close to their actual partners. Parallel results were obtained in another study in which men viewed physically attractive nude centerfolds—they rated themselves as less attracted to their partners.<sup>47</sup>

The reason for these distressing changes are found in the unrealistic nature of the images. The few attractive women selected for advertisements are chosen from thousands of applicants. In many cases, literally thousands of pictures are taken of a chosen woman. *Playboy*, for example, is reputed to shoot roughly six thousand pictures for its centerfold each month. From thousands of pictures, a few are selected for advertisements and centerfolds. So what men see are the most attractive women in their most attractive pose with the most attractive background in the most attractive airbrushed photographs. Contrast these photographs with what you would have witnessed in ancestral times, living in a band of a few score individuals. It is doubtful that you would see hundreds or even dozens of attractive women in that environment. If there were plenty of attractive and hence reproductively valuable women, however, a man might reasonably consider switching mates, and hence he would decrease his commitment to his existing mate.

We carry with us the same evaluative mechanisms that evolved in ancient times. Now, however, these mechanisms are artificially stimulated by the dozens of attractive women we witness daily in our visually saturated culture in magazines, billboards, television, and movies. These images do not represent real women in our actual social environment. Rather, they exploit mechanisms designed for a different environment. But they may create sources of unhappiness by interfering with existing real-life relationships.

As a consequence of viewing such images, men become dissatisfied and less committed to their mates. The potential damage inflicted by these images affects women as well, because they create a spiraling and unhealthy competition with other women. Women find themselves competing with each other to embody the images they see daily—images desired by men. The unprecedented rates of anorexia nervosa and radical cosmetic surgery may stem in part from these media images; some women go to extreme lengths to fulfill men's desires. But the images do not cause this unfortunate result by creating standards of beauty that

were previously absent. Rather, they work by exploiting men's existing evolved standards of beauty and women's competitive mating mechanisms on an unprecedented and unhealthy scale.

Facial and bodily beauty, as important as they are in men's mating preferences, solve for men only one set of adaptive problems, that of identifying and becoming aroused by women who show signs of high reproductive capacity. Selecting a reproductively valuable woman, however, provides no guarantee that her value will be monopolized exclusively by one man. The next critical adaptive problem is to ensure paternity.

## Chastity and Fidelity

Mammalian females typically enter estrus only at intervals. Vivid visual cues and strong scents often accompany estrus and powerfully attract males. Sexual intercourse occurs primarily in this narrow envelope of time. Women, however, do not have any sort of genital display when they ovulate. Nor is there evidence that women secrete detectable olfactory cues. Indeed, women are rare among primates in possessing the unusual adaptation of concealed or cryptic ovulation.<sup>48</sup> Cryptic female ovulation obscures a woman's reproductive status.

Concealed ovulation dramatically changed the ground rules of human mating. Women became attractive to men not just during ovulation but throughout their ovulatory cycles. Cryptic ovulation created a special adaptive problem for men by decreasing the certainty of their paternity. Consider a primate male who monopolizes a female for the brief period that she is in estrus. In contrast to human males, he can be fairly confident of his paternity. The period during which he must guard her and have sex with her is sharply constrained. Before and after her estrus, he can go about his other business without running the risk of cuckoldry.

Ancestral men did not have this luxury. Our human ancestors never knew when a woman was ovulating. Because mating is not the sole activity that humans require to survive and reproduce, women could not be guarded around the clock. And the more time a man spent in guarding, the less time he had available for grappling with other critical adaptive problems. Ancestral men, therefore, were faced with a unique paternity problem not faced by other primate males—how to be certain of their paternity when ovulation was concealed.

Marriage provided one solution.<sup>49</sup> Men who married would benefit reproductively relative to other men by substantially increasing their certainty of paternity. Repeated sexual contact throughout the ovulation cycle raised a man's odds that a woman would bear his child. The social

traditions of marriage function as public ties about the couple. Fidelity is enforced by family members as well as by the couple. Marriage also provides opportunities to learn intimately about the mate's personality, making it difficult for her to hide signs of infidelity. These benefits of marriage would have outweighed the costs of forgoing the sexual opportunities available to ancestral bachelors, at least under some conditions.

For an ancestral man to reap the reproductive benefits of marriage, he had to seek reasonable assurances that his wife would indeed remain sexually faithful to him. Men who failed to be aware of these cues would have suffered in reproductive success because they lost the time and resources devoted to searching, courting, and competing. Failure to be sensitive to these cues would have diverted years of the woman's parental investment to another man's children. Perhaps even more devastating in reproductive terms, failure to ensure fidelity meant that a man's efforts would be channeled to another man's gametes. Men who were indifferent to the potential sexual contact between their wives and other men would not have been successful at passing on their genes.

Our forebears solved this uniquely male adaptive problem by seeking qualities in a potential mate that might increase the odds of securing their paternity. At least two preferences in a mate could solve the problem for males: the desire for premarital chastity and the quest for post-marital sexual loyalty. Before the use of modern contraceptives, chastity provided a cue to the future certainty of paternity. On the assumption that a woman's proclivities toward chaste behavior would be stable over time, her premarital chastity signaled her likely future fidelity. A man who did not obtain a chaste mate risked becoming involved with a woman who would cuckold him.

In modern times men value virgin brides more than women value virgin grooms. Within the United States, a cross-generational mating study found that men value chastity in a potential mate more than women do. But the value they place on it has declined over the past half century, coinciding with the increasing availability of birth control and probably as a consequence of this cultural change.<sup>50</sup> In the 1930s, men viewed chastity as close to indispensable, but in the past two decades men have rated it as desirable but not crucial. Among the eighteen characteristics rated, chastity declined from the tenth most valued in 1939 to the seventeenth most valued in the late 1980s. Furthermore, not all American men value chastity equally. Regions differ. College students in Texas, for example, desire a chaste mate more than college students in California, rating it a 1.13 as opposed to 0.73 on a 3.00 scale. Despite the decline in the value of chastity in the twentieth century and

despite regional variations, the sex difference remains—men more than women emphasize chastity in a potential committed mateship.

The trend for men to value chastity more than women holds up worldwide, but cultures vary tremendously in the value placed on chastity. At one extreme, people in China, India, Indonesia, Iran, Taiwan, and the Palestinian Arab areas of Israel attach a high value to chastity in a potential mate. At the opposite extreme, people in Sweden, Norway, Finland, the Netherlands, West Germany, and France believe that virginity is largely irrelevant or unimportant in a potential mate.

In contrast to the worldwide consistency in the different preferences by sex for youth and physical attractiveness, only 62 percent of the cultures in the international study on choosing a mate place a significantly different value by sex on chastity in a committed mateship. Where sex differences in the value of virginity are found, however, men invariably place a greater value on it than women do. In no case do women value chastity more than men do.

The cultural variability in the preference of each sex for chastity is explained by several factors, including the prevailing incidence of premarital sex, the degree to which chastity can be demanded in a mate, the economic independence of women, and the reliability with which chastity can be evaluated. Chastity differs from other attributes, such as a woman's physical attractiveness, in that it is less directly observable. Even physical tests of female virginity are unreliable, whether from variations in the structure of the hymen, rupture due to nonsexual causes, or deliberate alteration.<sup>51</sup> In Japan, for example, there is currently a booming medical business in "remaking virgins" by surgically reconstructing the hymen, because Japanese men continue to place a relatively high value on chaste brides, rating it 1.42 on a scale of 0.00 to 3.00; American men rate chastity only 0.85, and German men rate it only 0.34.

Variation in the value people place on chastity may be traceable in part to variability in the economic independence of women and in women's control of their own sexuality. In some cultures, such as Sweden, premarital sex is not discouraged and practically no one is a virgin at marriage. One reason may be that women in Sweden are far less economically reliant on men than women in most other cultures. The legal scholar Richard Posner notes that marriage provides few benefits for Swedish women relative to women in most other cultures.<sup>52</sup> The Swedish social welfare system includes day care for children, long paid maternity leaves, and many other material benefits. The Swedish taxpayers effectively provide what husbands formerly provided, freeing women from their economic dependence on men. Women's economic independence from men lowers the cost to them of a free and active sex life

before marriage, or as an alternative to marriage. Thus, practically no Swedish women are virgins at marriage, and hence the value men place on chastity has commensurately declined to a worldwide low of 0.25.<sup>53</sup>

Differences in the economic independence of women, in the benefits provided by husbands, and in the intensity of competition for husbands all drive the critical cultural variation.<sup>54</sup> Where women benefit from marriage and where competition for husbands is fierce, women compete to signal chastity, causing the average amount of premarital sex to go down. Where women control their economic fate, do not require so much of men's investment, and hence need to compete less, women are freer to disregard men's preferences, which causes the average amount of premarital sex to go up. Men everywhere might value chastity if they could get it, but in some cultures they simply cannot demand it of their brides.

From a man's reproductive perspective, a more important cue to the certainty of paternity than virginity per se is the assurance of future fidelity. If men cannot reasonably demand that their mates be virgins, they can require of them sexual loyalty or fidelity. In fact, the study of temporary and permanent mating found that American men view the lack of sexual experience as desirable in a spouse. Furthermore, men see promiscuity as especially undesirable in a permanent mate, rating it -2.07 on a scale of -3.00 to +3.00. The actual amount of prior sexual activity in a potential mate, rather than virginity per se, would have provided an excellent guide for ancestral men who sought to solve the problem of uncertainty of paternity. Indeed, contemporary studies show that the single best predictor of extramarital sex is premarital sexual permissiveness—people who have many sexual partners before marriage are more unfaithful than those who have few sexual partners before marriage.<sup>55</sup>

Modern men place a premium on fidelity. When American men in the study of temporary and permanent partners evaluated sixty-seven possible characteristics for their desirability in a committed mateship, faithfulness and sexual loyalty emerged as the most highly valued traits.<sup>56</sup> All men give these traits the highest rating possible, an average of +2.85 on a scale of -3.00 to +3.00. Men regard unfaithfulness as the least desirable characteristic in a wife, rating it a -2.93, reflecting the high value that men place on fidelity. Men abhor promiscuity and infidelity in their wives. Unfaithfulness proves to be more upsetting to men than any other pain a spouse can inflict on her mate. Women also become extremely upset over an unfaithful mate, but several other factors, such as sexual aggressiveness, exceed infidelity in the grief they cause women.<sup>57</sup>

The sexual revolution of the 1960s and 1970s, with its promises of sexual freedom and lack of possessiveness, apparently has had a limited impact on men's preferences for sexual fidelity. Cues to fidelity still sig-

nal that the woman is willing to channel all of her reproductive value exclusively to her husband. A woman's future sexual conduct looms large in men's marriage decisions.

## Evolutionary Bases of Men's Desires

The great emphasis that men place on a woman's physical appearance is not some immutable biological law of the animal world. Indeed, in many other species, such as the peacock, it is the females who place the greater value on physical appearance. Nor is men's preference for youth a biological universal in the animal world. Some primate males, such as orangutans, chimpanzees, and Japanese macaques, prefer older females, who have already demonstrated their reproductive abilities by giving birth; they show low sexual interest in adolescent females because they have low fertility.<sup>58</sup> But human males have faced a unique set of adaptive problems and so have evolved a unique sexual psychology. They prefer youth because of the centrality of marriage in human mating. Their desires are designed to gauge a woman's future reproductive potential, not just immediate impregnation. They place a premium on physical appearance because of the abundance of reliable cues it provides to the reproductive potential of a potential mate.

Men worldwide want physically attractive, young, and sexually loyal wives who will remain faithful to them until death. These preferences cannot be attributed to Western culture, to capitalism, to white Anglo-Saxon bigotry, to the media, or to incessant brainwashing by advertisers. They are universal across cultures and are absent in none. They are deeply ingrained, evolved psychological mechanisms that drive our mating decisions, just as our evolved taste preferences drive our decisions on food consumption.

Homosexual mate preferences, ironically, provide a testament to the depth of these evolved psychological mechanisms. The fact that physical appearance figures centrally in homosexual men's mate preferences, and that youth is a key ingredient in their standards of beauty, suggests that not even variations in sexual orientation alter these fundamental mechanisms.

These circumstances upset some people, because they seem unfair. We can modify our physical attractiveness only in limited ways, and some people are born better looking than others. Beauty is not distributed democratically. A woman cannot alter her age, and a woman's reproductive value declines more sharply with age than a man's; evolution deals women a cruel hand, at least in this regard. Women fight the decline through cosmetics, through plastic surgery, through aerobics

classes—an eight billion dollar cosmetics industry has emerged in America to exploit these trends.

After a lecture of mine on the subject of sex differences in mate preferences, one woman suggested that I should suppress my findings because of the distress they would cause women. Women already have it hard enough in this male-dominated world, she felt, without having scientists tell them that their mating problems may be based in men's evolved psychology. Yet suppression of this truth is unlikely to help, just as concealing the fact that people have evolved preferences for succulent, ripe fruit is unlikely to change their preferences. Railing against men for the importance they place on beauty, youth, and fidelity is like railing against meat eaters because they prefer animal protein. Telling men not to become aroused by signs of youth and health is like telling them not to experience sugar as sweet.

Many people hold an idealistic view that standards of beauty are arbitrary, that beauty is only skin deep, that cultures differ dramatically in the importance they place on appearance, and that Western standards stem from brainwashing by the media, parents, culture, or other agents of socialization. But standards of attractiveness are not arbitrary—they reflect cues to youth and health, and hence to reproductive value. Beauty is not merely skin deep. It reflects internal reproductive capabilities. Although fertility technology may grant women greater latitude for reproducing across a wider age span, men's preferences for women who show apparent signs of reproductive capacity continue to operate today, in spite of the fact that they were designed in an ancestral world that may no longer exist.

Cultural conditions, economic circumstances, and technological inventions, however, play a critical role in men's evaluation of the importance of chastity. Where women are less economically dependent on men, as in Sweden, sexuality is highly permissive, and men do not desire or demand chastity from potential wives. These shifts highlight the sensitivity of some mate preferences to features of culture and context.

Despite cultural variations, sexual fidelity tops the list of men's long-term mate preferences. Although many men in Western culture cannot require virginity, they do insist on sexual loyalty. Even though birth control technology may render this mate preference unnecessary for its original function of ensuring paternity, the mate preference perseveres. A man does not relax his desire for fidelity in his wife just because she takes birth control pills. This constant demonstrates the importance of our evolved sexual psychology—a psychology that was designed to deal with critical cues from an ancestral world but that continues to operate with tremendous force in today's modern world of mating.

That world of mating, however, involves more than marriage. If ancestral couples had always remained faithful, there would have been no selection pressure for the intense concern with fidelity. The existence of this concern means that both sexes must also have engaged in short-term mating and casual sex. So we must turn to this dark and shrouded region of human sexuality.



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