



The humorist Fran Lebowitz once said in an interview, “People who get married because they’re in love make a ridiculous mistake. It makes much more sense to marry your best friend. You *like* your best friend more than anyone you’re ever going to be in love with. You don’t choose your best friend because they have a cute nose, but that’s all you’re doing when you get married; you’re saying, ‘I will spend the rest of my life with you because of your lower lip.’”

It is a puzzle, and the obvious place to look for an answer is the fact that you don’t make children with your best friend but you do with your spouse. Perhaps we care about a few millimeters of flesh here or there because it is a perceptual signal of a deeper trait that cannot be measured directly: how well equipped the person’s body is to serve as the other parent of your children. Fitness as a dam or stud is like any other feature of the world. It is not written on a tag but has to be inferred from appearances, using assumptions about how the world works.

Could we really be equipped with an innate eye for beauty? What about the natives in *National Geographic* who file their teeth, stretch their necks with stacks of rings, burn scars into their cheeks, and put plates in their lips? What about the fat women in the Rubens paintings and Twiggy in the 60s? Don’t they show that standards of beauty are arbitrary and vary capriciously? They do not. Who says that *everything* people do to their bodies is an attempt to look sexy? That is the tacit assumption behind the *National Geographic* argument, but it’s obviously false. People decorate their bodies for many reasons: to look rich, to look well connected, to look tough, to look “in,” to earn membership in an elite group by enduring a painful initiation. Sexual attractiveness is different. People outside a culture usually agree with the people inside about who is beautiful and who is not, and people everywhere want good-looking partners. Even three-month-old infants prefer to look at a pretty face.

What goes into sexiness? Both sexes want a spouse who has developed normally and is free of infection. Not only is a healthy spouse vigorous, non-contagious, and more fertile, but the spouse’s hereditary resistance to the local parasites will be passed on to the children. We haven’t evolved stethoscopes and tongue-depressors, but an eye for beauty does some of the same things. Symmetry, an absence of deformities, cleanliness, unblemished skin, clear eyes, and intact teeth are attractive in all cultures. Orthodontists

have found that a good-looking face has teeth and jaws in the optimal alignment for chewing. Luxuriant hair is always pleasing, possibly because it shows not only current health but a record of health in the years before. Malnutrition and disease weaken the hair as it grows from the scalp, leaving a fragile spot in the shaft. Long hair implies a long history of good health.

A subtler sign of good genes is being average. Not average in attractiveness, of course, but average in the size and shape of every part of the face. The average measurement of a trait in a local population is a good estimate of the optimal design favored by natural selection. If people form a composite of the opposite-sex faces around them, they would have an ideal of the fittest mate against which any candidate could be matched. The exact facial geometry of the local race or ethnic group would not need to be built in. In fact, composite faces, whether formed by superimposing negatives in an enlarger or by sophisticated computer-graphics algorithms, are prettier or handsomer than the individual faces that went into them.

Average faces are a good start, but some faces are even more attractive than the average face. When boys reach puberty, testosterone builds up the bone in their jaws, brows, and nasal region. Girls' faces grow more evenly. The difference in 3-D geometry allows us to tell a man's head from a woman's even when they are both bald and shaved. If the geometry of a woman's face is similar to a man's, she is homelier; if it is less similar, she is prettier. Beauty in a woman comes from a short, delicate, smoothly curved jawbone, a small chin, a small nose and upper jaw, and a smooth forehead without brow ridges. The "high cheekbones" of a beautiful woman are not bones at all but soft tissue, and contribute to beauty because the other parts of a beautiful face (the jaws, forehead, and nose) are small by comparison.

Why are masculine-looking women less attractive? If a woman's face is masculinized, she probably has too much testosterone in her blood (a symptom of many diseases); if she has too much testosterone, she is likely to be infertile. Another explanation is that prettiness-detectors are really female-face detectors, designed to pick them out from every other object in the world and tuned to minimize the risk of a false alarm to a male face, which is the object most similar to a female face. The more unmanly the face, the louder the detector beeps. Similar engineering could explain why men with unfeminine faces are more handsome. A man with a large, angular jaw, a strong chin, and a prominent forehead and brow is undoubtedly an adult male with normal male hormones.

By the callous reckoning of natural selection, young women who have not yet had children are the best wives, because they have the longest reproductive career ahead of them and have no children from another man tagging along. Signs of youth and signs of never having been pregnant should make a woman prettier. Teenage women have larger eyes, fuller and redder lips, smoother, moister, and tighter skin, and firmer breasts, all long recognized as ingredients of pulchritude. Aging lengthens and coarsens a woman's facial bones, and so do pregnancies. Therefore a small-jawed, light-boned face is a clue to four reproductive virtues: being female, having the right hormones, being young, not having been pregnant. The equation of youth and beauty is often blamed on America's being obsessed with youth, but by that reasoning every culture is obsessed with youth. If anything, contemporary America is less youth-oriented. The age of *Playboy* models has *increased* over the decades, and in most times and places women in their twenties have been considered over the hill. Men's looks don't decline as quickly when they age, not because of a double standard in our society but because men's fertility doesn't decline as quickly when they age.

At puberty a girl's hips become wider because her pelvis grows and because fat is deposited on her hips, a reserve of calories available to supply the body during pregnancy. The ratio of waist size to hip size decreases in most fertile women to between .67 and .80, whereas the ratio for most men, children, and postmenopausal women is between .80 and .95. Among women, a low waist-to-hip ratio has been found to correlate with youth, health, fertility, not being pregnant, and never having been pregnant. The psychologist Devendra Singh has shown photographs and computer-generated pictures of female bodies of different sizes and shapes to hundreds of people of various ages, sexes, and cultures. Everyone finds a ratio of .70 or lower the most attractive. The ratio captures the old idea of the hourglass figure, the wasp waist, and the 36–24–36 ideal measurements. Singh also measured the ratio in *Playboy* centerfolds and winners of beauty contests over seven decades. Their weight has gone down, but their waist-to-hip ratio has stayed the same. Even most of the Upper Paleolithic Venus figurines, carved tens of thousands of years ago, have the right proportions.

The geometry of beauty once was an indicator of youth, health, and nonpregnancy, but it no longer has to be. Women today have fewer babies, have them later, are less exposed to the elements, and are better nourished and less disease-ridden than their ancestors. They can look

like an ancestral teenager well into middle age. Women also have a technology to simulate and exaggerate the clues to youth, femaleness, and health: eye makeup (to enlarge the eyes), lipstick, eyebrow plucking (to reduce the appearance of a masculine brow ridge), makeup (to exploit the shape-from-shading mechanism of Chapter 4), products that increase the luster, thickness, and color of hair, bras and clothing that simulate young breasts, and hundreds of potions alleged to keep the skin looking young. Dieting and exercise can keep the waist thinner and the waist-to-hip ratio lower, and an illusion can be engineered with bodices, corsets, hoops, crinolines, bustles, girdles, pleats, tapering, and wide belts. Women's fashion has never embraced bulky cummerbunds.

Outside the scientific literature, more has been written about women's weight than any other aspect of beauty. In the West, women in pictures have weighed less and less over the past decades. That has been taken as evidence for the arbitrariness of beauty and for the oppression of women, who are expected to conform to these standards no matter how unreasonable. Slender models are commonly blamed for anorexia nervosa in teenage girls, and a recent book was called *Fat Is a Feminist Issue*. But weight may be the least important part of beauty. Singh found that very fat women and very thin women are judged less attractive (and in fact they are less fertile), but there is a range of weights considered attractive, and shape (waist-to-hip ratio) is more important than size. The hoopla about thinness applies more to women who pose for other women than to women who pose for men. Twiggy and Kate Moss are fashion models, not pinups; Marilyn Monroe and Jayne Mansfield were pinups, not fashion models. Weight is a factor mostly in the competition among women for status in an age in which wealthy women are more likely to be slender than poor ones, a reversal of the usual relation.

Still, the women posing for both sexes today are slimmer today than their historical counterparts, and it may be for reasons other than just changes in the signs of status. My own conjecture is that today's slender centerfolds and supermodels would not have had trouble finding a date at any time in history, because they are *not* like the skinny women eschewed in centuries past. Body parts do not vary independently. Tall men tend to have big feet, people with thick waists tend to have double chins, and so on. Undernourished women may tend to have more masculine bodies, and well-nourished ones more feminine bodies, so historically attractive women may have tended to be heavier. Neither kind of woman has the most beautiful shape conceivable—say, Jessica

Rabbit's—because real bodies did not evolve as cartoon sex lures. They are compromises among the demands of attractiveness, running, lifting, childbearing, nursing, and surviving famines. Perhaps modern technology *has* fabricated a sex lure, not with a cartoonist's brush but with artificial selection. In a world of five billion people there are bound to be women with wide feet and small heads, men with big ears and scrawny necks, and any other combination of body parts you want to specify. There may be a few thousand women with freakish combinations of small waists, flat abdomens, large firm breasts, and curved but medium-sized hips—optical illusions that send the needles of people's fertility and childlessness gauges into the red. When word gets around that they can parlay their freaky bodies into fame and fortune, they come out of the woodwork, and enhance their gifts with makeup, exercise, and glamour photography. The bodies in the beer commercials may be unlike anything seen in history.

Beauty is not, as some feminists have claimed, a conspiracy by men to objectify and oppress women. The *really* sexist societies drape women in chadors from head to foot. Throughout history the critics of beauty have been powerful men, religious leaders, sometimes older women, and doctors, who can always be counted on to say that the latest beauty craze is hazardous to women's health. The enthusiasts are women themselves. The explanation is simple economics and politics (though not the orthodox feminist analysis—quite insulting to women, incidentally—in which women are dupes who have been brainwashed into striving for something they don't want). Women in open societies want to look good because it gives them an edge in competing for husbands, status, and the attention of powerful people. Men in closed societies hate beauty because it makes their wives and daughters indiscriminately attractive to other men, giving the women a measure of control over the profits from their own sexuality and taking it away from the men (and, in the case of daughters, away from their mothers). Similar economics make men want to look good, too, but the market forces are weaker or different because men's looks matter less to women than women's looks matter to men.

Though the beauty industry is not a conspiracy against women, it is not innocuous either. We calibrate our eye for beauty against the people we see, including our illusory neighbors in the mass media. A daily diet of freakishly beautiful virtual people may recalibrate the scales and make the real ones, including ourselves, look ugly.