The three wishes of every man: to be healthy, to be rich by honest means, and to be beautiful.

—PLATO

There must . . . be in our very nature a very radical and widespread tendency to observe beauty, and to value it. No account of the principles of the mind can be at all adequate that passes over so conspicuous a faculty.

—GEORGE SANTAYANA

(Yes, I know. You haven't the slightest idea what I'm talking about. Beauty has long since disappeared. It has slipped beneath the surface of the noise, the noise of words, sunk deep as Atlantis. The only thing left of it is the word, whose meaning loses clarity from year to year.)

—MILAN KUNDERA

Philosophers ponder it and pornographers proffer it. Asked why people desire physical beauty, Aristotle said, "No one that is not blind could ask that question." Beauty ensnares hearts, captures minds, and stirs up emotional wildfires. From Plato to pinups, images of human beauty have catered to a limitless desire to see and imagine an ideal human form.

But we live in the age of ugly beauty, when beauty is morally suspect and ugliness has a gritty allure. Beauty is equal parts flesh and imagination: we imbue it with our dreams, saturate it with our longings. But to spin this another way, reverence for beauty is just an escape from reality, it is the perpetual adolescent in us refusing to accept a flawed world. We wave it away with a cliché, "Beauty is in the eye of the beholder," meaning that beauty is whatever pleases us (with the subtext that it is inexplicable). But defined this way, beauty is meaningless—as Gertrude Stein once said about her childhood home, Oakland, California, "There is no there there."

In 1991, Naomi Wolf set aside centuries of speculation when she said that beauty as an objective and universal entity does not exist. "Beauty is a currency system like the gold standard. Like any economy, it is determined by politics, and in the modern age in the West it is the last, best belief system that keeps male dominance intact." According to Wolf, the images we see around us are based on a myth. Their beauty is like the tales of Aphrodite, the judgment of Paris, and the apple of discord: made up. Beauty is a convenient fiction used by multibillion-dollar industries that create images of beauty and peddle them as opium for the female masses. Beauty ushers women to a place where men want them, out of the power structure. Capitalism

and the patriarchy define beauty for cultural consumption, and plaster images of beauty everywhere to stir up envy and desire. The covetousness they inspire serves their twin goals of making money and preserving the status quo.

Many intellectuals would have us believe that beauty is inconsequential. Since it explains nothing, solves nothing, and teaches us nothing, it should not have a place in intellectual discourse. And we are supposed to breathe a collective sigh of relief. After all, the concept of beauty has become an embarrassment.

But there is something wrong with this picture. Outside the realm of ideas, beauty rules. Nobody has stopped looking at it, and no one has stopped enjoying the sight. Turning a cold eye to beauty is as easy as quelling physical desire or responding with indifference to a baby's cry. We can say that beauty is dead, but all that does is widen the chasm between the real world and our understanding of it.

Before beauty sinks any deeper, let me reel it in for closer examination. Suggesting that men on Madison Avenue have Svengali-like powers to dictate women's behavior and preferences, and can define their sense of beauty, is tantamount to saying that women are not only powerless but mindless. On the contrary, isn't it possible that women cultivate beauty and use the beauty industry to optimize the power beauty brings? Isn't the problem that women often lack the opportunity to cultivate their other assets, not that they can cultivate beauty?

As we will see, Madison Avenue cleverly exploits universal preferences but it does not create them, any more than Walt Disney created our fondness for creatures with big eyes and little limbs, or Coca-Cola or McDonald's created our cravings for sweet or fatty foods. Advertisers and businessmen help to define what adornments we wear and find beautiful, but I will show that this belongs to our sense of fashion, which is not the same thing as our sense of beauty. Fashion is what Charles Baudelaire described as "the amusing, enticing, appetizing icing on the divine cake," not the cake itself.

The media channel desire and narrow the bandwidth of our preferences. A crowd-pleasing image becomes a mold, and a beauty is followed by her imitator, and then by the imitator of her imitator. Marilyn Monroe was such a crowd pleaser that she's been imitated by everyone from Jayne Mansfield to Madonna. Racism and class snobbery are reflected in images of beauty, although beauty itself is indifferent to race and thrives on diversity. As Darwin wrote, "If everyone were cast in the same mold, there would be no such thing as beauty."

Part of the backlash against beauty grew out of concern that the pursuit of beauty had reached epic proportions, and that this is a sign of a diseased culture. When we examine the historical and anthropological literature we will discover that, throughout human history, people have scarred, painted, pierced, padded, stiffened, plucked, and buffed their bodies in the name of beauty. When Darwin traveled on the *Beagle* in the nineteenth century, he found a universal "passion for ornament," often involving sacrifice and suffering that was "wonderfully great."

We allow that violence is done to the body among "primitive" cultures or that it was done by ancient societies, but we have yet to realize that beauty brings out the primitive in every person. During 1996 a reported 696,904 Americans underwent voluntary aesthetic surgery that involved tearing or burning their skin, shucking their fat, or implanting foreign materials. Before the FDA limited silicone gel implants in 1992, four hundred women were getting them every day. Breast implants were once the province of porn stars; they are now the norm for Hollywood actresses, and no longer a rarity for the housewife.

These drastic procedures are done not to correct deformities but to improve aesthetic details. Kathy Davis, a professor at the University of Utrecht, watched as more than fifty people tried to persuade surgeons in the Netherlands to alter their appearance. Except for a man with a "cauliflower nose," she was unable to anticipate which feature they wanted to alter just by looking at them. She wrote, "I found myself astounded that anyone could be willing to undergo such drastic measures for what seemed to me such a minor imperfec-

tion." But there is no such thing as a minor imperfection when it comes to the face or body. Every person knows the topography of her face and the landscape of her body as intimately as a mapmaker. To the outside world we vary in small ways from our best hours to our worst. In our mind's eye, however, we undergo a kaleidoscope of changes, and a bad hair day, a blemish, or an added pound undermines our confidence in ways that equally minor fluctuations in our moods, our strength, or our mental agility usually do not.

People do extreme things in the name of beauty. They invest so much of their resources in beauty and risk so much for it, one would think that lives depended on it. In Brazil there are more Avon ladies than members of the army. In the United States more money is spent on beauty than on education or social services. Tons of makeup—1,484 tubes of lipstick and 2,055 jars of skin care products—are sold every minute. During famines, Kalahari bushmen in Africa still use animal fats to moisturize their skin, and in 1715 riots broke out in France when the use of flour on the hair of aristocrats led to a food shortage. The hoarding of flour for beauty purposes was only quelled by the French Revolution.

Either the world is engaged in mass insanity or there is method in this madness. Deep inside we all know something: no one can withstand appearances. We can create a big bonfire with every issue of *Vogue*, *GQ*, and *Details*, every image of Kate Moss, Naomi Campbell, and Cindy Crawford, and still, images of youthful perfect bodies would take shape in our heads and create a desire to have them. No one is immune. When Eleanor Roosevelt was asked if she had any regrets, her response was a poignant one: she wished she had been prettier. It is a sobering statement from one of the most revered and beloved of women, one who surely led a life with many satisfactions. She is not uttering just a woman's lament. In *Childhood, Boyhood, Youth*, Leo Tolstoy wrote, "I was frequently subject to moments of despair. I imagined that there was no happiness on earth for a man with such a wide nose, such thick lips, and such tiny gray eyes as mine. . . . Nothing has such a striking impact on a man's development as his appearance, and not so much his actual appearance as a conviction that it is either attractive or unattractive."

Appearance is the most public part of the self. It is our sacrament, the visible self that the world assumes to be a mirror of the invisible, inner self. This assumption may not be fair, and not how the best of all moral worlds would conduct itself. But that does not make it any less true. Beauty has consequences that we cannot erase by denial. Beauty will continue to operate—outside jurisdiction, in the lawless world of human attraction. Academics may ban it from intelligent discourse and snobs may sniff that beauty is trivial and shallow but in the real world the beauty myth quickly collides with reality.

This book is an inquiry into what we find beautiful and why—what in our nature makes us susceptible to beauty, what qualities in people evoke this response, and why sensitivity to beauty is ubiquitous in human nature. I will argue that our passionate pursuit of beauty reflects the workings of a basic instinct. As George Santayana has said, "Had our perceptions no connection with our pleasures, we should soon close our eyes to this world . . . that we are endowed with the sense of beauty is a pure gain." My argument will be guided by cutting-edge research in cognitive science and evolutionary psychology. An evolutionary viewpoint cannot explain everything about beauty, but I hope to show you that it can help explain a good many things, and offer a perspective on the place of beauty in human life.

What Is Beauty and How Do We Know It?

We are always sizing up other people's looks: our beauty detectors never close up shop and call it a day. We notice the attractiveness of each face we see as automatically as we register whether or not they look familiar. Beauty detectors scan the environment like radar: we can see a face for a fraction of a second (150 msec. in one psychology experiment) and rate its beauty, even give it the same rating we would give it on longer inspection. Long after we forget

many important details about a person, our initial response stays in our memory.

Beauty is a basic pleasure. Try to imagine that you have become immune to beauty. Chances are, you would consider yourself unwell—sunk in a physical, spiritual, or emotional malaise. The absence of response to physical beauty is one sign of profound depression—so prevalent that the standard screening measures for depression include a question about changes in the perception of one's own physical attractiveness.

But what is beauty? As you will see, no definition can capture it entirely. I started by mining what those who peddle beauty as a business had to say, thinking they might have concrete details about their criteria rather than airy abstractions to float. Aaron Spelling, creator of "Baywatch" and "Melrose Place," said, "I can't define it, but I know it when it walks into the room." I talked with a modeling agency that books top male models, and they were more descriptive: "It's when someone walks in the door and you almost can't breathe. It doesn't happen often. You can feel it rather than see it. I mean someone you literally can't walk past in the street." It is noteworthy that the experts describe the experience of seeing beauty, and not what beauty looks like. On that end, all I got was that they should be young and tall and have good skin. But it was a start.

The Oxford English Dictionary defines the word "beautiful" as "Excelling in grace of form, charm of coloring, and other qualities, which delight the eye and call forth admiration: a. of the human face and figure: b. of other objects." As a secondary definition it states, "In modern colloquial use the word is often applied to anything that a person likes very much." The dictionary that my computer network provides says that beauty "gives pleasure to the senses or pleasurably exalts the mind or spirit."

The dictionaries define beauty as something intrinsic to the object (its color, form, and other qualities) or simply as the pleasure an object evokes in the beholder (The philosopher Santayana called beauty "pleasure objectified.") If we follow a time line of ideas on

beauty, the pendulum clearly swings from one direction to the other. For the ancient Greeks, beauty was like a sixth sense. In the twentieth century, when Marcel Duchamp could make a toilet the subject of high art, and Andy Warhol could do the same for a soup can, beauty came to reside not in objects themselves but in the eye that viewed those objects and conferred beauty on them.

Although the *object* of beauty is debated, the experience of beauty is not. Beauty can stir up a snarl of emotions but pleasure must always be one (tortured longings and envy are not incompatible with pleasure). Our body responds to it viscerally and our names for beauty are synonymous with physical cataclysms and bodily obliteration—breathtaking, femme fatale, knockout, drop-dead gorgeous, bombshell, stunner, and ravishing. We experience beauty not as rational contemplation but as a response to physical urgency.

In 1688, Jean de La Bruyère expressed these transgender wishes, "to be a girl and a beautiful girl from the age of thirteen to the age of twenty-two and then after that to be a man." There is tremendous power in a young woman's beauty. In 1957, Brigitte Bardot was twenty-three years old and had starred in the film *And God Created Woman.* That year, the magazine *Cinémonde* reported that a million lines had been devoted to her in French dailies, and two million in the weeklies, and that this torrent of words was accompanied by 29,345 images of her. *Cinémonde* even reported that she was the subject of forty-seven percent of French conversation! In 1994, the model Claudia Schiffer spent four minutes modeling a black velvet dress on Rome's Spanish Steps. According to British journalists covering the "event" for the *Daily Telegraph,* four and a half million people watched and the city came to "a standstill."

Perhaps these are media-driven frenzies, no more real than the canned laughter chortling from our television screens. But small epiphanies are common in daily life. The most lyrical description of an encounter with beauty—solitary, spontaneous, with an unknown other—comes in James Joyce's *Portrait of the Artist as a Young Man* when Stephen Dedalus sees a young woman standing by the shore

with "long, slender bare legs," and a face "touched with the wonder of mortal beauty." Her beauty is transformative and gives form to his sensual and spiritual longings. "Her image had passed into his soul for ever and no word had broken the holy silence of his ecstasy. . . . A wild angel had appeared to him, the angel of mortal youth and beauty, an envoy from the fair courts of life, to throw open before him in an instant of ecstasy the gates of all the ways of error and glory. On and on and on and on!"

Ezra Pound had a moment of recognition that inspired him to write a two-line poem "In a station at the Métro," which comprised these brief sentences: "The apparition of these faces in the crowd: Petals, on a wet, black bough." Later, Pound described how he came to write it. "Three years ago in Paris I got out of a Métro train at La Concorde, and saw suddenly a beautiful face, and then another and another, and then a beautiful child's face, and then another beautiful woman, and I tried all day to find words for what this had meant to me, and I could not find any words that seemed to me worthy or as lovely as that sudden emotion. . . . In a poem of this sort one is trying to record the precise instant when a thing outward and objective transforms itself or darts into a thing inward and subjective."

It is difficult to put into words why a particular set of eyes or a certain mouth move us while others do not. Even for the poets, it is often beyond language. Looking to the object of beauty, we confront centuries of struggle to capture beauty's essence.

An Ideal of Beauty Exists in the Mind, Not the Flesh

People judge appearances as though somewhere in their minds an ideal beauty of the human form exists, a form they would recognize if they saw it, though they do not expect they ever will. It exists in the imagination. Emily Dickinson, spending most of her time in her parents' attic, once wrote about the power of the imagination to envision the beautiful: "I never saw a moor, I never saw the sea, Yet I

know how the heather looks, And what a wave must be." Kenneth Clark observed in *The Nude* that every time we criticize a human figure, for example that the neck is too short, or the nose too long, or the feet too big, we are revealing that we hold an ideal of physical beauty. Albrecht Dürer wrote that "there lives on earth no one beautiful person who could not be more beautiful."

Donald Symons, an anthropologist at the University of California at Santa Barbara, related this Cartesian experience to me. He attended a talk given by a plastic surgeon in southern California. The surgeon accompanied his talk with a series of slides of very beautiful people. What impressed Symons was that each of these individuals was very beautiful but imperfect. He couldn't help but notice an upper lip that was too long or a nose that seemed too sharply angled. In fact, he felt that their beauty threw this "flaw" into bold relief. But, he wondered, too long or too angled compared to what? For Symons, the experience of looking at such strikingly beautiful faces and seeing these minor deviations from "perfection" was compelling evidence that we possess an innate beauty template which we are unlikely to access directly but against which we measure all that we see. These faces almost matched it, but not quite. Like Dürer, he could envision them being more beautiful.

The human image has been subjected to all manner of manipulation in an attempt to create an ideal that does not seem to have a human incarnation. When Zeuxis painted Helen of Troy he gathered five of the most beautiful living women and represented features of each in the hope of capturing and depicting her beauty. There are no actual descriptions of Helen, nor of other legendary beauties such as Dante's Beatrice. Their faces are blank slates, Rorschach inkblot tests of our imaginings of the features of perfect beauty.

In cinema and in magazines, modern Zeuxises create images of beauty out of the ideal parts of many. Hollywood uses body doubles for stunts requiring a grace and athleticism that actors may not possess. But just as often they do it because someone else's great body looks better matched to that actor's or actress's great face. Jennifer

Beals rose to fame in the 1980s film, *Flashdance,* although it was later revealed that the closeups of her body were not of her body. And it seemed not to matter in the long run. Most people easily melded the face of Beals with the body of her double and kept this composite image in their imaginations.

Top models are genetic freaks whose facial and bodily proportions are well designed to excite and please. But even they bear the marks of human imperfection. Supermodel Cindy Crawford's wrists are different sizes (not to mention her mole!) and supermodel Linda Evangelista hates her mouth because it is "tiny" and "frowny." But there are individuals who have "perfect" feet or hands or lips, and these "specialty models" work full time at modeling only the perfect part. Their hands are placed with the faces of models such as Cheryl Tiegs and Lauren Hutton. The hand market is further specialized into "glamour" hands and "product" hands. The glamour ones have to have great skin and long tapered fingers—"the sort of hands made to wear jewelry and use that American Express card." Product hands are action hands, handling detergents or shampoo bottles with dexterity and steady nerves. Feet are another area of specialty modeling, especially because top models are on average between five feet nine and five feet ten inches tall—they have big feet. For centuries, the ideal foot has been small and delicate, the foot of Cinderella. Foot models have size six (American) feet, with smooth skin and perfect little toes that look like "five little shrimp," as one agency explained.

Of course people come as indivisible packages and the alternate approach to combining the perfect parts of many is to primp and pose one individual into the most pleasing vision possible. Kenneth Clark has written that the naked body is difficult to make into art by a direct rendering. A human body is "not like the tiger or the snow landscape . . . naked figures do not move us to empathy but to disillusion and dismay. We do not wish to imitate, we wish to perfect." This was the approach to portraiture until modernism changed the way bodies were represented. In its most extreme form, images were so idealized that they bore only a cursory resemblance to their

subjects. Portraits of the sixteenth-century Queen Elizabeth I rendered her face as "an opaque and unblemished mask." When Horace Walpole was asked to identify true portraits of her, his criteria were the presence of a roman nose, hair laced with jewels, a crown, and a splendid costume of rich fabric, an enormous ruff, and "bushels" of pearls. Elizabeth's portraits were probably never lifelike, but as she aged they became increasingly abstract, focusing attention on the beauty of her spectacular clothing and sketching her face in a shorthand of red-gold hair, pale skin, and a nose with a prominent bridge.

Watch a person looking in the mirror and you will see a person trying to please himself. If we pose for ourselves, we surely always pose for others, attempting to display ourselves as we want to be seen. Icons of beauty just take this several steps further. They undergo elaborate treatment before each appearance, each photograph. In the 1930s screen actresses were presented in dramatic makeup, fabulous clothes, and striking poses in front of filtered lenses. The artifice was obvious and the glamour up front. Today we think we favor natural beauty but natural beauty is as much an artifice as glamour. As model Veronica Webb said when asked how long it took to make her natural beauty, "Two hours and two hundred dollars. . . . I could never make myself look the way I do in a magazine."

In a world where we provide fake, vivid color, airbrushing, and now digital alterations to pictures of everything imaginable, it hardly seems surprising that we want to doctor images of people. We attempt to make everything look better so as to please and to tempt. And we would be fools not to want to please and tempt one another.

Modern artists present us with images stripped of glamour. Diane Arbus photographed people not considered beautiful in unblinking closeups. Photographer Richard Avedon shot a famous series of portraits from the American West, all starkly realized. Painters such as Lucien Freud and Phillip Pearlstein show human flesh with wrinkles, freckles, pallor, and body flab exposed. But these may not be more accurate representations of people—of how our eyes see them, or how they see themselves. We don't usually view people under photogra-

pher's lights or get close enough to see all their pores and stray hairs. There is no reason to think that these images are any more "real" than more flattering images. They are cast in the cold light of a surgeon's operating theater, seen through the eyes of the voyeur or your worst enemy. When we look at people we love, or even like, do we ever see them exactly like this? It is just art imposing a different artifice, pretending that we ever view others as just piles of mortal flesh.

Paul Valéry would say that we suffer from the "three-body problem," and can never resolve it. One body is the one we "possess," that we live in. It is for each of us, he says, "the most important object in the world." This is the self that we experience. The second body is the public facade, "the body which has form and is apprehended in the arts, the body on which materials, ornaments, armor sit, which love sees or wants to see, and yearns to touch." We can call the second body the subject of traditional artistic portrayal. The third body is the physical machine that we know about "only for having dissected and dismembered it . . . nothing leads us to suspect a liver or brain or kidney." It is the body we are most estranged from and that beauty covers and helps us to deny.

The reason we have a universal passion for adornment, the reason that photos are doctored and painted representations idealized, is that we long to be not only works of nature but works of art. We want to unite Valéry's three bodies into a unified whole. In part, the longing is spiritual: to have an outer representation that matches our dreams and visions and moral aspirations. It is also a quest for love and acceptance, to have a face and a body that other people want to look at and know. Biologists would argue that at root the quest for beauty is driven by the genes pressing to be passed on and making their current habitat as inviting for visitors as possible. Quentin Bell writes in his stunning book, *On Human Finery*, that painters and dressmakers are all philosophers at heart. "Aristotle said that drama was more philosophical than history for history tells us only what did happen whereas drama tells us what ought to have happened. In this

sense the dressmaker and the painter are philosophers. The painter seeks to recreate the body in a state of perfection; the dressmaker seeks to arrange drapery so beautifully that the actual body becomes a mere starting point."

The Beauty Canon

Running as a common thread through the discourses on beauty, from pre-Socratic times onward, is an aesthetic based on proportion and number. The irreducible elements are clarity, symmetry, harmony, and vivid color. Plato said that beauty resided in proper measure and proper size, of parts that fit harmoniously into a seamless whole. He extended the idea of proportion to the beautiful in all things and wrote of the best length of a speech, the optimal organization of paintings, and the proper use of language in poetry. To St. Augustine, beauty was synonymous with geometric form and balance. He thought that equilateral triangles were more beautiful than scalene triangles because their parts were more even. Squares, being composed of equal-length segments, were more beautiful still, circles even more beautiful, and the point, indivisible and pure, was the most beautiful of all. "What is beauty of the body?" he asked. "A harmony of its parts with a certain pleasing color." For Aristotle, beauty resided in "order and symmetry and definiteness." For Cicero, it was "a certain symmetrical shape of the limbs combined with a certain charm of coloring." For Plotinus, it was a "symmetry of parts toward each other and towards a whole . . . the beautiful thing is essentially symmetrical." Plotinus believed that beauty must be present in details as well as the whole; "it cannot be constructed out of ugliness, its law must run throughout." Common to all these theories is the idea that the properties of beauty are the same whether we are seeing a beautiful woman, a flower, a landscape, or a circle.

Artists throughout history have tried to capture the geometric proportions of beauty by devising measurement systems for the human body. As art historian George Hersey has noted, the most im-

portant human proportion system in Western art dates to the fifth-century Greek Polyclitus, whose sculptures of a male spear bearer and wounded female Amazon represent much-imitated standards for representation of the human male and female form. Polyclitus's contemporary Praxiteles articulated a similar female paragon in his Aphrodite of Cnidos. These bodily canons influenced all of Western art from approximately 450 B.C. to the early twentieth century, until modernism expanded our representations of the body. Polyclitus called his male spear bearer the Canon, and so it has remained.

For Polyclitus, and later for Albrecht Dürer, Leon Battista Alberti, and Leonardo da Vinci, beauty resided in symmetry. For these artists and theoreticians, symmetry had a different meaning than it does today. When we speak of symmetry we mean exact correspondence of form on opposite sides of a dividing line or plane or central axis. To the Greeks and the Renaissance artists and scholars, symmetry meant the relation between, and the exact correspondence among parts, usually expressed in whole or rational numbers. It meant, as George Hersey has pointed out, "commensurability." So, for example, the whole body was measured in hand heights or head lengths or in relation to thumb length. Galen argued that an arm corresponding to three hand lengths is more symmetrical and hence more beautiful than one corresponding to two and a half or three and a half hand lengths.

Dürer used his own finger as the unit of measure to construct a proportional system in which the length of the middle finger equaled the width of the hand, and the width of the hand was proportional to the forearm. From there, he constructed a canon for the whole body. His entire system for measuring ideal beauty rested on the proportions of his hands, which were very long-fingered. We might wonder what would have happened to Western art if Dürer had had small fingers! But this is not an isolated example of an artist or scientist incorporating his own features into a universal canon. Edward Angle published a classic set of orthodontic indices in 1907 in which he

used his own (European) face as the ideal. This meant that all Asians and Africans would have needed to have their teeth straightened!

During the Renaissance, particular attention was paid to the proportions of the ideal human face as well as those of the body. Dürer proposed that the face in profile separates into four equal divisions, while others proposed a division into thirds with equal space from the hairline to the eyebrow, from the brow to the lower edge of the nostrils, and from the nostrils to the chin. Other neoclassical and Renaissance guidelines dictated that the height of the ear and the nose be equal, that the distance between the eyes equal the width of the nose, that the width of the mouth be one and a half times as wide as the nose, and that the inclination of the nose bridge parallel the axis of the ear. These rules dictated the representation of beauty in Western art for centuries, and in the twentieth century are the highly influential bases from which plastic surgeons pillage to resculpt and reconstruct faces.

The canons are revered in Western civilization. But surprisingly few people have been interested in scientifically testing whether they describe the actual proportions of living beauties. However, anthropometrist Leslie Farkas took out his calipers and measured the facial proportions of two hundred women, including fifty models, as well as young men and children, and had large numbers of people rate their beauty. Then he compared his measurements and the beauty ratings with the ideals of the classical canon. His results are hardly definitive, but they provide some intriguing information. The canon did not fare well. Many of the measures did not turn out to be important, such as the relative angles of the ear and nose. Some seemed pure idealizations: none of the faces and heads in profile corresponded to equal halves or thirds or fourths. Some were inaccurate—the distance between the eyes of the beauties was greater than that suggested by the canon (the width of the nose). Farkas's results do not mean that a beautiful face will never match the Renaissance and classical ideals. But they do suggest that classical artists might have

been wrong about the fundamental nature of human beauty. Perhaps they thought there was a mathematical ideal because this fit in a general way with platonic or religious ideas about the origin of the world.

Measurement systems have failed to turn up a beauty formula. Perhaps it isn't surprising that universal beauty does not conform to the ratio of Dürer's finger. In fact, as we will see, beauty may come from a mathematically messy set of criteria having more to do with our biology than with ideal numbers.

Beauty Satanic and Divine

No single attitude about beauty has been consistent throughout history. People have revered beauty, they have scorned it and loathed it. Plato believed that beauty made the spiritual visible. Sensual beauty imitates pure beauty, which we cannot access. Beauty, like truth and justice, is a platonic Pure Form, of which things of this world may offer us glimpses but never truly incarnate. This is how Plato explained beauty's strange power, its mysterious ability to awaken aesthetic bliss. As Thomas Mann wrote in *Death in Venice*, all virtues would inspire reverence if we could but see them: "beauty alone is . . . the only form of the spiritual which we can receive through the senses. Else what would become of us if the divine, if reason and virtue and truth, should appear to us through the senses? Should we not perish and be consumed with love, as Semele once was with Zeus?"

With the arrival of Christianity, the attitude toward beauty became more ambivalent. Church leaders grappled with the right way to respond to it. "There is nothing good in the flesh," St. Clement said, "the man of god must mortify the works of the flesh." Jerome saw the flesh as something to be "conquered." The teaching of Christ told his followers to renounce temptation and the transient things of this world. Beauty was feared as a sensual temptation and a worldly vanity. But it was also revered as an image of God's grace. According

to Genesis, man is made in the image of God, therefore his appearance is divine, and the more beautiful, the more Godlike. "Beauty is the mark of the well made, whether it be a universe or an object," said Thomas Aquinas, and the well made is an "imitation of an idea in the mind of the creator." The history of Judeo-Christian attitudes toward beauty reflects an agonized struggle to reconcile beauty as temptation and beauty as God's glory. In Dürer's four books of human proportion, released after his death in 1528, he speaks of the physical perfection of Apollo, Adam before the Fall, and Christ. Their perfect beauty is a sign of their divinity, while our imperfect beauty is a sign of our fall from grace.

Attitudes toward beauty are entwined with our deepest conflicts surrounding flesh and spirit. We view the body as a temple, a prison, a dwelling for the immortal soul, a tormentor, a garden of earthly delights, a biological envelope, a machine, a home. We cannot talk about our response to our body's beauty without understanding all that we project onto our flesh.

Psychoanalysis assumed a legacy of shame around the body. Freud wrote, "The love of beauty seems a perfect example of an impulse inhibited in its aim." That is, beauty derives from sexual excitement that must be deflected away from its source. "It is worth remarking that the genitals themselves, the sight of which is always exciting, are nevertheless hardly ever judged to be beautiful." Too much cultivation of beauty, he wrote, reflects pathological narcissism. Like masochism and passivity, narcissism is largely a female problem, a cover for shame and worthlessness, feelings to which women are prone.

Until recently, many people who sought cosmetic surgery ended up getting psychiatric diagnoses—they were labeled depressed, hysterical, obsessional, narcissistic. If the patient was a man, he was almost always given a psychiatric diagnosis since attention to appearance in a man was considered a graver sign than it was in a woman. In the last twenty years, the number of "healthy" recipients of plastic surgery has vastly increased according to psychiatric stud-

ies. Perhaps this is a reflection of more mainstream acceptance of plastic surgery and a greater diversity among its clients. But it is equally likely to reflect a change in modern psychiatry, which can look at appearance enhancement as something other than an unhealthy need. Psychoanalyst John Gedo recently made the radical suggestion that cosmetic surgery is not so different from altering character traits by means of psychoanalysis: both are attempts at refashioning the self. Psychiatrist Peter Kramer has made analogies between cosmetic surgery and what he calls "cosmetic psychopharmacology," for example the use of drugs such as Prozac not just to cure depression, but to transform personality, to feel "better than well."

The Evolution of Beauty

The social sciences have been strangely absent from the rich intellectual debate about the nature of human beauty. As you will see, much of the research that informs the arguments of this book emerged only in the 1970s and after. Gardner Lindzey's 1954 *Handbook of Social Psychology*, a lengthy tome devoted to the study of social interaction, listed only one entry for "physical factors." Any reading of psychology and anthropology texts written before the late 1960s would suggest that physical appearance had absolutely no bearing on human attitudes or affections, and no role in human mental life. Why have the social sciences had so little interest in the human body?

One reason is that the social sciences were not interested in the biological "givens." As anthropologist John Tooby and psychologist Leda Cosmides have pointed out, the standard social science model (SSSM) that developed over the past century viewed the mind as a blank slate whose contents were determined by the environment and the social world. The mind itself was believed to consist of a few general-purpose mechanisms for perceiving and understanding the environment. It was a model that divided biology from culture, and

then ignored biology (the mere slate) to probe the influential work of culture. The roots of the model within the social sciences of this century are political and social as well as intellectual.

As anthropologist Donald Symons says, you cannot understand what a person is saying unless you understand whom they are arguing with. Cultural relativism came to the intellectual forefront particularly in the United States during the 1920s as a reaction to claims that races, ethnic groups, classes, women, and so on were innately inferior. Such arguments were countered with evidence from behaviorism, showing that people can drastically alter their behavior in response to environmental rewards and punishments. As John B. Watson, the founder of behaviorism, wrote, "Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in and I'll guarantee to take any one at random and train him to become any type of specialist I might select—doctor, lawyer, artist, merchant-chief, and yes even beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors."

Similarly, the SSSM presented evidence from other cultures to show that human behavior was malleable, plastic, and largely or wholly acquired through experience. Margaret Mead's idyllic description of the sexual freedom of Samoan girls was in this tradition. In this context, it is not surprising that the most entrenched belief about beauty among social scientists was that "beauty is in the eye of the beholder." Focusing on the range and inventiveness of human adornment, from brass rings that create giraffe necks, to painted teeth and lip plates, they concluded that beauty must be a matter of individual taste or cultural dictate.

Gardner Lindzey brings up another reason that beauty was shunned by social scientists—the "spectacular failure" of previous attempts to link physical attributes to behavior (phrenology, physiognomy, and so on). In the next chapter we will review these studies and see that they yielded very little in the way of scientific fact and spread many fictions. It is no wonder that many scientists were eager