

Introduction: Too Much Wisdom

WHAT SHOULD I DO, how should I live, and whom should I become? Many of us ask such questions, and, modern life being what it is, we don't have to go far to find answers. Wisdom is now so cheap and abundant that it floods over us from calendar pages, tea bags, bottle caps, and mass e-mail messages forwarded by well-meaning friends. We are in a way like residents of Jorge Luis Borges's *Library of Babel*—an infinite library whose books contain every possible string of letters and, therefore, somewhere an explanation of why the library exists and how to use it. But Borges's librarians suspect that they will never find that book amid the miles of nonsense.

Our prospects are better. Few of our potential sources of wisdom are nonsense, and many are entirely true. Yet, because our library is also effectively infinite—no one person can ever read more than a tiny fraction—we face the paradox of abundance: Quantity undermines the quality of our engagement. With such a vast and wonderful library spread out before us, we often skim books or read just the reviews. We might already have encountered the Greatest Idea, the insight that would have transformed us had we savored it, taken it to heart, and worked it into our lives.

This is a book about ten Great Ideas. Each chapter is an attempt to savor one idea that has been discovered by several of the world's civilizations—to question it in light of what we now know from scientific research, and to extract from it the lessons that still apply to our modern lives.

x *Introduction: Too Much Wisdom*

I am a social psychologist. I do experiments to try to figure out one corner of human social life, and my corner is morality and the moral emotions. I am also a teacher. I teach a large introductory psychology class at the University of Virginia in which I try to explain the entire field of psychology in twenty-four lectures. I have to present a thousand research findings on everything from the structure of the retina to the workings of love, and then hope that my students will understand and remember it all. As I struggled with this challenge in my first year of teaching, I realized that several ideas kept recurring across lectures, and that often these ideas had been stated eloquently by past thinkers. To summarize the idea that our emotions, our reactions to events, and some mental illnesses are caused by the mental filters through which we look at the world, I could not say it any more concisely than Shakespeare: "There is nothing either good or bad, but thinking makes it so."¹ I began to use such quotations to help my students remember the big ideas in psychology, and I began to wonder just how many such ideas there were.

To find out, I read dozens of works of ancient wisdom, mostly from the world's three great zones of classical thought: India (for example, the Upanishads, the Bhagavad Gita, the sayings of the Buddha), China (the Analects of Confucius, the Tao te Ching, the writings of Meng Tzu and other philosophers), and the cultures of the Mediterranean (the Old and New Testaments, the Greek and Roman philosophers, the Koran). I also read a variety of other works of philosophy and literature from the last five hundred years. Every time I found a psychological claim—a statement about human nature or the workings of the mind or heart—I wrote it down. Whenever I found an idea expressed in several places and times I considered it a possible Great Idea. But rather than mechanically listing the top ten all-time most widespread psychological ideas of humankind, I decided that coherence was more important than frequency. I wanted to write about a set of ideas that would fit together, build upon each other, and tell a story about how human beings can find happiness and meaning in life.

Helping people find happiness and meaning is precisely the goal of the new field of positive psychology,² a field in which I have been active,³ so this book is in a way about the origins of positive psychology in ancient wisdom and the applications of positive psychology today. Most of the research

Introduction: Too Much Wisdom xi

I will cover was done by scientists who would not consider themselves positive psychologists. Nonetheless, I have drawn on ten ancient ideas and a great variety of modern research findings to tell the best story I can about the causes of human flourishing, and the obstacles to well being that we place in our own paths.

The story begins with an account of how the human mind works. Not a full account, of course, just two ancient truths that must be understood before you can take advantage of modern psychology to improve your life. The first truth is the foundational idea of this book: The mind is divided into parts that sometimes conflict. Like a rider on the back of an elephant, the conscious, reasoning part of the mind has only limited control of what the elephant does. Nowadays, we know the causes of these divisions, and a few ways to help the rider and the elephant work better as a team. The second idea is Shakespeare's, about how "thinking makes it so." (Or, as Buddha⁴ said, "Our life is the creation of our mind.") But we can improve this ancient idea today by explaining why most people's minds have a bias toward seeing threats and engaging in useless worry. We can also do something to change this bias by using three techniques that increase happiness, one ancient and two very new.

The second step in the story is to give an account of our social lives—again, not a complete account, just two truths, widely known but not sufficiently appreciated. One is the Golden Rule. Reciprocity is the most important tool for getting along with people, and I'll show you how you can use it to solve problems in your own life and avoid being exploited by those who use reciprocity against you. However, reciprocity is more than just a tool. It is also a clue about who we humans are and what we need, a clue that will be important for understanding the end of the larger story. The second truth in this part of the story is that we are all, by nature, hypocrites, and this is why it is so hard for us to follow the Golden Rule faithfully. Recent psychological research has uncovered the mental mechanisms that make us so good at seeing the slightest speck in our neighbor's eye, and so bad at seeing the log in our own. If you know what your mind is up to, and why you so easily see the world through a distorting lens of good and evil, you can take steps to reduce your self-righteousness. You can thereby reduce the frequency of conflicts with others who are equally convinced of their righteousness.

xii *Introduction: Too Much Wisdom*

At this point in the story, we'll be ready to ask: Where does happiness come from? There are several different "happiness hypotheses." One is that happiness comes from getting what you want, but we all know (and research confirms) that such happiness is short-lived. A more promising hypothesis is that happiness comes from within and cannot be obtained by making the world conform to your desires. This idea was widespread in the ancient world: Buddha in India and the Stoic philosophers in ancient Greece and Rome all counseled people to break their emotional attachments to people and events, which are always unpredictable and uncontrollable, and to cultivate instead an attitude of acceptance. This ancient idea deserves respect, and it is certainly true that changing your mind is usually a more effective response to frustration than is changing the world. However, I will present evidence that this second version of the happiness hypothesis is wrong. Recent research shows that there are some things worth striving for; there are external conditions of life that can make you lastingly happier. One of these conditions is relatedness—the bonds we form, and need to form, with others. I'll present research showing where love comes from, why passionate love always cools, and what kind of love is "true" love. I'll suggest that the happiness hypothesis offered by Buddha and the Stoics should be amended: Happiness comes from within, and happiness comes from without. We need the guidance of both ancient wisdom and modern science to get the balance right.

The next step in this story about flourishing is to look at the conditions of human growth and development. We've all heard that what doesn't kill us makes us stronger, but that is a dangerous oversimplification. Many of the things that don't kill you can damage you for life. Recent research on "posttraumatic growth" reveals when and why people grow from adversity, and what you can do to prepare yourself for trauma, or to cope with it after the fact. We have also all heard repeated urgings to cultivate virtue in ourselves, because virtue is its own reward, but that, too, is an oversimplification. I'll show how concepts of virtue and morality have changed and narrowed over the centuries, and how ancient ideas about virtue and moral development may hold promise for our own age. I'll also show how positive psychology is beginning to deliver on that promise by offering you a way to "diagnose" and develop your own strengths and virtues.

Introduction: Too Much Wisdom xiii

The conclusion of the story is the question of meaning: Why do some people find meaning, purpose, and fulfillment in life, but others do not? I begin with the culturally widespread idea that there is a vertical, spiritual dimension of human existence. Whether it is called nobility, virtue, or divinity, and whether or not God exists, people simply *do* perceive sacredness, holiness, or some ineffable goodness in others, and in nature. I'll present my own research on the moral emotions of disgust, elevation, and awe to explain how this vertical dimension works, and why the dimension is so important for understanding religious fundamentalism, the political culture war, and the human quest for meaning. I'll also consider what people mean when they ask, "What is the meaning of life?" And I'll give an answer to the question—an answer that draws on ancient ideas about having a purpose but that uses very recent research to go beyond these ancient ideas, or any ideas you are likely to have encountered. In doing so, I'll revise the happiness hypothesis one last time. I could state that final version here in a few words, but I could not explain it in this brief introduction without cheapening it. Words of wisdom, the meaning of life, perhaps even the answer sought by Borges's librarians—all of these may wash over us every day, but they can do little for us unless we savor them, engage with them, question them, improve them, and connect them to our lives. That is my goal in this book.



The Divided Self

For what the flesh desires is opposed to the Spirit, and what the Spirit desires is opposed to the flesh; for these are opposed to each other, to prevent you from doing what you want.

—ST. PAUL, GALATIANS 5:17¹

If Passion drives, let Reason hold the Reins.

—BENJAMIN FRANKLIN²

I FIRST RODE A HORSE in 1991, in Great Smoky National Park, North Carolina. I'd been on rides as a child where some teenager led the horse by a short rope, but this was the first time it was just me and a horse, no rope. I wasn't alone—there were eight other people on eight other horses, and one of the people was a park ranger—so the ride didn't ask much of me. There was, however, one difficult moment. We were riding along a path on a steep hillside, two by two, and my horse was on the outside, walking about three feet from the edge. Then the path turned sharply to the left, and my horse was heading straight for the edge. I froze. I knew I had to steer left, but there was another horse to my left and I didn't want to crash into it. I might have called out for help, or screamed, "Look out!"; but some part of me preferred the risk of going over the edge to the certainty of looking stupid. So I just froze. I did nothing at all during the critical five

2 THE HAPPINESS HYPOTHESIS

seconds in which my horse and the horse to my left calmly turned to the left by themselves.

As my panic subsided, I laughed at my ridiculous fear. The horse knew exactly what she was doing. She'd walked this path a hundred times, and she had no more interest in tumbling to her death than I had. She didn't need me to tell her what to do, and, in fact, the few times I tried to tell her what to do she didn't much seem to care. I had gotten it all so wrong because I had spent the previous ten years driving cars, not horses. Cars go over edges unless you tell them not to.

Human thinking depends on metaphor. We understand new or complex things in relation to things we already know.³ For example, it's hard to think about life in general, but once you apply the metaphor "life is a journey," the metaphor guides you to some conclusions: You should learn the terrain, pick a direction, find some good traveling companions, and enjoy the trip, because there may be nothing at the end of the road. It's also hard to think about the mind, but once you pick a metaphor it will guide your thinking. Throughout recorded history, people have lived with and tried to control animals, and these animals made their way into ancient metaphors. Buddha, for example, compared the mind to a wild elephant:

In days gone by this mind of mine used to stray wherever selfish desire or lust or pleasure would lead it. Today this mind does not stray and is under the harmony of control, even as a wild elephant is controlled by the trainer.⁴

Plato used a similar metaphor in which the self (or soul) is a chariot, and the calm, rational part of the mind holds the reins. Plato's charioteer had to control two horses:

The horse that is on the right, or nobler, side is upright in frame and well jointed, with a high neck and a regal nose; . . . he is a lover of honor with modesty and self-control; companion to true glory, he needs no whip, and is guided by verbal commands alone. The other horse is a crooked great jumble of limbs . . . companion to wild boasts and indecency, he is

shaggy around the ears—deaf as a post—and just barely yields to horse-whip and goad combined.⁵

For Plato, some of the emotions and passions are good (for example, the love of honor), and they help pull the self in the right direction, but others are bad (for example, the appetites and lusts). The goal of Platonic education was to help the charioteer gain perfect control over the two horses. Sigmund Freud offered us a related model 2,300 years later.⁶ Freud said that the mind is divided into three parts: the ego (the conscious, rational self); the superego (the conscience, a sometimes too rigid commitment to the rules of society); and the id (the desire for pleasure, lots of it, sooner rather than later). The metaphor I use when I lecture on Freud is to think of the mind as a horse and buggy (a Victorian chariot) in which the driver (the ego) struggles frantically to control a hungry, lustful, and disobedient horse (the id) while the driver's father (the superego) sits in the back seat lecturing the driver on what he is doing wrong. For Freud, the goal of psychoanalysis was to escape this pitiful state by strengthening the ego, thus giving it more control over the id and more independence from the superego.

Freud, Plato, and Buddha all lived in worlds full of domesticated animals. They were familiar with the struggle to assert one's will over a creature much larger than the self. But as the twentieth century wore on, cars replaced horses, and technology gave people ever more control over their physical worlds. When people looked for metaphors, they saw the mind as the driver of a car, or as a program running on a computer. It became possible to forget all about Freud's unconscious, and just study the mechanisms of thinking and decision making. That's what social scientists did in the last third of the century: Social psychologists created "information processing" theories to explain everything from prejudice to friendship. Economists created "rational choice" models to explain why people do what they do. The social sciences were uniting under the idea that people are rational agents who set goals and pursue them intelligently by using the information and resources at their disposal.

But then, why do people keep doing such stupid things? Why do they fail to control themselves and continue to do what they know is not good for them? I, for one, can easily muster the willpower to ignore all the

4 THE HAPPINESS HYPOTHESIS

desserts on the menu. But if dessert is placed on the table, I can't resist it. I can resolve to focus on a task and not get up until it is done, yet somehow I find myself walking into the kitchen, or procrastinating in other ways. I can resolve to wake up at 6:00 A.M. to write; yet after I have shut off the alarm, my repeated commands to myself to get out of bed have no effect, and I understand what Plato meant when he described the bad horse as "deaf as a post." But it was during some larger life decisions, about dating, that I really began to grasp the extent of my powerlessness. I would know exactly what I should do, yet, even as I was telling my friends that I would do it, a part of me was dimly aware that I was not going to. Feelings of guilt, lust, or fear were often stronger than reasoning. (On the other hand, I was quite good at lecturing friends in similar situations about what was right for them.) The Roman poet Ovid captured my situation perfectly. In *Metamorphoses*, Medea is torn between her love for Jason and her duty to her father. She laments:

I am dragged along by a strange new force. Desire and reason are pulling in different directions. I see the right way and approve it, but follow the wrong.⁷

Modern theories about rational choice and information processing don't adequately explain weakness of the will. The older metaphors about controlling animals work beautifully. The image that I came up with for myself, as I marveled at my weakness, was that I was a rider on the back of an elephant. I'm holding the reins in my hands, and by pulling one way or the other I can tell the elephant to turn, to stop, or to go. I can direct things, but only when the elephant doesn't have desires of his own. When the elephant really wants to do something, I'm no match for him.

I have used this metaphor to guide my own thinking for ten years, and when I began to write this book I thought the image of a rider on an elephant would be useful in this first chapter, on the divided self. However, the metaphor has turned out to be useful in every chapter of the book. To understand most important ideas in psychology, you need to understand how the mind is divided into parts that sometimes conflict. We assume

that there is one person in each body, but in some ways we are each more like a committee whose members have been thrown together to do a job, but who often find themselves working at cross purposes. Our minds are divided in four ways. The fourth is the most important, for it corresponds most closely to the rider and the elephant; but the first three also contribute to our experiences of temptation, weakness, and internal conflict.

FIRST DIVISION: MIND VS. BODY

We sometimes say that the body has a mind of its own, but the French philosopher Michel de Montaigne went a step further and suggested that each part of the body has its own emotions and its own agenda. Montaigne was most fascinated by the independence of the penis:

We are right to note the license and disobedience of this member which thrusts itself forward so inopportunistly when we do not want it to, and which so inopportunistly lets us down when we most need it. It imperiously contests for authority with our will.⁸

Montaigne also noted the ways in which our facial expressions betray our secret thoughts; our hair stands on end; our hearts race; our tongues fail to speak; and our bowels and anal sphincters undergo “dilations and contractions proper to [themselves], independent of our wishes or even opposed to them.” Some of these effects, we now know, are caused by the autonomic nervous system—the network of nerves that controls the organs and glands of our bodies, a network that is completely independent of voluntary or intentional control. But the last item on Montaigne’s list—the bowels—reflects the operation of a second brain. Our intestines are lined by a vast network of more than 100 million neurons; these handle all the computations needed to run the chemical refinery that processes and extracts nutrients from food.⁹ This gut brain is like a regional administrative center that handles stuff the head brain does not need to bother with. You might expect, then, that this gut brain takes its orders from the head brain

6 THE HAPPINESS HYPOTHESIS

and does as it is told. But the gut brain possesses a high degree of autonomy, and it continues to function well even if the vagus nerve, which connects the two brains together, is severed.

The gut brain makes its independence known in many ways: It causes irritable bowel syndrome when it “decides” to flush out the intestines. It triggers anxiety in the head brain when it detects infections in the gut, leading you to act in more cautious ways that are appropriate when you are sick.¹⁰ And it reacts in unexpected ways to anything that affects its main neurotransmitters, such as acetylcholine and serotonin. Hence, many of the initial side effects of Prozac and other selective serotonin reuptake inhibitors involve nausea and changes in bowel function. Trying to improve the workings of the head brain can directly interfere with those of the gut brain. The independence of the gut brain, combined with the autonomic nature of changes to the genitals, probably contributed to ancient Indian theories in which the abdomen contains the three lower chakras—energy centers corresponding to the colon/anus, sexual organs, and gut. The gut chakra is even said to be the source of gut feelings and intuitions, that is, ideas that appear to come from somewhere outside one’s own mind. When St. Paul lamented the battle of flesh versus Spirit, he was surely referring to some of the same divisions and frustrations that Montaigne experienced.

SECOND DIVISION: LEFT VS. RIGHT

A second division was discovered by accident in the 1960s when a surgeon began cutting people’s brains in half. The surgeon, Joe Bogen, had a good reason for doing this: He was trying to help people whose lives were destroyed by frequent and massive epileptic seizures. The human brain has two separate hemispheres joined by a large bundle of nerves, the corpus callosum. Seizures always begin at one spot in the brain and spread to the surrounding brain tissue. If a seizure crosses over the corpus callosum, it can spread to the entire brain, causing the person to lose consciousness, fall down, and writhe uncontrollably. Just as a military leader might blow up a bridge to prevent an enemy from crossing it, Bogen wanted to sever the corpus callosum to prevent the seizures from spreading.

At first glance this was an insane tactic. The corpus callosum is the largest single bundle of nerves in the entire body, so it must be doing something important. Indeed it is: It allows the two halves of the brain to communicate and coordinate their activity. Yet research on animals found that, within a few weeks of surgery, the animals were pretty much back to normal. So Bogen took a chance with human patients, and it worked. The intensity of the seizures was greatly reduced.

But was there really no loss of ability? To find out, the surgical team brought in a young psychologist, Michael Gazzaniga, whose job was to look for the after-effects of this “split-brain” surgery. Gazzaniga took advantage of the fact that the brain divides its processing of the world into its two hemispheres—left and right. The left hemisphere takes in information from the right half of the world (that is, it receives nerve transmissions from the right arm and leg, the right ear, and the *left* half of each retina, which receives light from the *right* half of the visual field) and sends out commands to move the limbs on the right side of the body. The right hemisphere is in this respect the left’s mirror image, taking in information from the left half of the world and controlling movement on the left side of the body. Nobody knows why the signals cross over in this way in all vertebrates; they just do. But in other respects, the two hemispheres are specialized for different tasks. The left hemisphere is specialized for language processing and analytical tasks. In visual tasks, it is better at noticing details. The right hemisphere is better at processing patterns in space, including that all-important pattern, the face. (This is the origin of popular and oversimplified ideas about artists being “right-brained” and scientists being “left-brained”).

Gazzaniga used the brain’s division of labor to present information to each half of the brain separately. He asked patients to stare at a spot on a screen, and then flashed a word or a picture of an object just to the right of the spot, or just to the left, so quickly that there was not enough time for the patient to move her gaze. If a picture of a hat was flashed just to the right of the spot, the image would register on the left half of each retina (after the image had passed through the cornea and been inverted), which then sent its neural information back to the visual processing areas in the left hemisphere. Gazzaniga would then ask, “What did you see?” Because

8 THE HAPPINESS HYPOTHESIS

the left hemisphere has full language capabilities, the patient would quickly and easily say, "A hat." If the image of the hat was flashed to the left of the spot, however, the image was sent back only to the right hemisphere, which does not control speech. When Gazzaniga asked, "What did you see?", the patient, responding from the left hemisphere, said, "Nothing." But when Gazzaniga asked the patient to use her left hand to point to the correct image on a card showing several images, she would point to the hat. Although the right hemisphere had indeed seen the hat, it did not report verbally on what it had seen because it did not have access to the language centers in the left hemisphere. It was as if a separate intelligence was trapped in the right hemisphere, its only output device the left hand.¹¹

When Gazzaniga flashed different pictures to the two hemispheres, things grew weirder. On one occasion he flashed a picture of a chicken claw on the right, and a picture of a house and a car covered in snow on the left. The patient was then shown an array of pictures and asked to point to the one that "goes with" what he had seen. The patient's right hand pointed to a picture of a chicken (which went with the chicken claw the left hemisphere had seen), but the left hand pointed to a picture of a shovel (which went with the snow scene presented to the right hemisphere). When the patient was asked to explain his two responses, he did not say, "I have no idea why my left hand is pointing to a shovel; it must be something you showed my right brain." Instead, the left hemisphere instantly made up a plausible story. The patient said, without any hesitation, "Oh, that's easy. The chicken claw goes with the chicken, and you need a shovel to clean out the chicken shed."¹²

This finding, that people will readily fabricate reasons to explain their own behavior, is called "confabulation." Confabulation is so frequent in work with split-brain patients and other people suffering brain damage that Gazzaniga refers to the language centers on the left side of the brain as the interpreter module, whose job is to give a running commentary on whatever the self is doing, even though the interpreter module has no access to the real causes or motives of the self's behavior. For example, if the word "walk" is flashed to the right hemisphere, the patient might stand up and walk away. When asked why he is getting up, he might say, "I'm going to

get a Coke.” The interpreter module is good at making up explanations, but not at knowing that it has done so.

Science has made even stranger discoveries. In some split-brain patients, or in others who have suffered damage to the corpus callosum, the right hemisphere seems to be actively fighting with the left hemisphere in a condition known as alien hand syndrome. In these cases, one hand, usually the left, acts of its own accord and seems to have its own agenda. The alien hand may pick up a ringing phone, but then refuse to pass the phone to the other hand or bring it up to an ear. The hand rejects choices the person has just made, for example, by putting back on the rack a shirt that the other hand has just picked out. It grabs the wrist of the other hand and tries to stop it from executing the person’s conscious plans. Sometimes, the alien hand actually reaches for the person’s own neck and tries to strangle him.¹³

These dramatic splits of the mind are caused by rare splits of the brain. Normal people are not split-brained. Yet the split-brain studies were important in psychology because they showed in such an eerie way that the mind is a confederation of modules capable of working independently and even, sometimes, at cross-purposes. Split-brain studies are important for this book because they show in such a dramatic way that one of these modules is good at inventing convincing explanations for your behavior, even when it has no knowledge of the causes of your behavior. Gazzaniga’s “interpreter module” is, essentially, the rider. You’ll catch the rider confabulating in several later chapters.

THIRD DIVISION: NEW VS. OLD

If you live in a relatively new suburban house, your home was probably built in less than a year, and its rooms were laid out by an architect who tried to make them fulfill people’s needs. The houses on my street, however, were all built around 1900, and since then they have expanded out into their backyards. Porches were extended, then enclosed, then turned into kitchens. Extra bedrooms were built above these extensions, then bathrooms were tacked on to these new rooms. The brain in vertebrates

10 THE HAPPINESS HYPOTHESIS

has similarly expanded, but in a forward direction. The brain started off with just three rooms, or clumps of neurons: a hindbrain (connected to the spinal column), a midbrain, and a forebrain (connected to the sensory organs at the front of the animal). Over time, as more complex bodies and behaviors evolved, the brain kept building out the front, away from the spinal column, expanding the forebrain more than any other part. The forebrain of the earliest mammals developed a new outer shell, which included the hypothalamus (specialized to coordinate basic drives and motivations), the hippocampus (specialized for memory), and the amygdala (specialized for emotional learning and responding). These structures are sometimes referred to as the limbic system (from Latin *limbus*, “border” or “margin”) because they wrap around the rest of the brain, forming a border.

As mammals grew in size and diversified in behavior (after the dinosaurs became extinct), the remodeling continued. In the more social mammals, particularly among primates, a new layer of neural tissue developed and spread to surround the old limbic system. This neocortex (Latin for “new covering”) is the gray matter characteristic of human brains. The front portion of the neocortex is particularly interesting, for parts of it do not appear to be dedicated to specific tasks (such as moving a finger or processing sound). Instead, it is available to make new associations and to engage in thinking, planning, and decision making—mental processes that can free an organism from responding only to an immediate situation.

This growth of the frontal cortex seems like a promising explanation for the divisions we experience in our minds. Perhaps the frontal cortex is the seat of reason: It is Plato’s charioteer; it is St. Paul’s Spirit. And it has taken over control, though not perfectly, from the more primitive limbic system—Plato’s bad horse, St. Paul’s flesh. We can call this explanation the Promethean script of human evolution, after the character in Greek mythology who stole fire from the gods and gave it to humans. In this script, our ancestors were mere animals governed by the primitive emotions and drives of the limbic system until they received the divine gift of reason, installed in the newly expanded neocortex.

The Promethean script is pleasing in that it neatly raises us above all other animals, justifying our superiority by our rationality. At the same time, it captures our sense that we are not yet gods—that the fire of ratio-

nality is somehow new to us, and we have not yet fully mastered it. The Promethean script also fits well with some important early findings about the roles of the limbic system and the frontal cortex. For example, when some regions of the hypothalamus are stimulated directly with a small electric current, rats, cats, and other mammals can be made gluttonous, ferocious, or hypersexual, suggesting that the limbic system underlies many of our basic animal instincts.¹⁴ Conversely, when people suffer damage to the frontal cortex, they sometimes show an increase in sexual and aggressive behavior because the frontal cortex plays an important role in suppressing or inhibiting behavioral impulses.

There was recently such a case at the University of Virginia's hospital.¹⁵ A schoolteacher in his forties had, fairly suddenly, begun to visit prostitutes, surf child pornography Web sites, and proposition young girls. He was soon arrested and convicted of child molestation. The day before his sentencing, he went to the hospital emergency room because he had a pounding headache and was experiencing a constant urge to rape his landlady. (His wife had thrown him out of the house months earlier.) Even while he was talking to the doctor, he asked passing nurses to sleep with him. A brain scan found that an enormous tumor in his frontal cortex was squeezing everything else, preventing the frontal cortex from doing its job of inhibiting inappropriate behavior and thinking about consequences. (Who in his right mind would put on such a show the day before his sentencing?) When the tumor was removed, the hypersexuality vanished. Moreover, when the tumor grew back the following year, the symptoms returned; and when the tumor was removed again, the symptoms disappeared again.

There is, however, a flaw in the Promethean script: It assumes that reason was installed in the frontal cortex but that emotion stayed behind in the limbic system. In fact, the frontal cortex enabled a great expansion of emotionality in humans. The lower third of the prefrontal cortex is called the orbitofrontal cortex because it is the part of the brain just above the eyes (*orbit* is the Latin term for the eye socket). This region of the cortex has grown especially large in humans and other primates and is one of the most consistently active areas of the brain during emotional reactions.¹⁶ The orbitofrontal cortex plays a central role when you size up the reward

12 THE HAPPINESS HYPOTHESIS

and punishment possibilities of a situation; the neurons in this part of the cortex fire wildly when there is an immediate possibility of pleasure or pain, loss or gain.¹⁷ When you feel yourself drawn to a meal, a landscape, or an attractive person, or repelled by a dead animal, a bad song, or a blind date, your orbitofrontal cortex is working hard to give you an emotional feeling of *wanting* to approach or to get away.¹⁸ The orbitofrontal cortex therefore appears to be a better candidate for the id, or for St. Paul's flesh, than for the superego or the Spirit.

The importance of the orbitofrontal cortex for emotion has been further demonstrated by research on brain damage. The neurologist Antonio Damasio has studied people who, because of a stroke, tumor, or blow to the head, have lost various parts of their frontal cortex. In the 1990s, Damasio found that when certain parts of the orbitofrontal cortex are damaged, patients lose most of their emotional lives. They report that when they ought to feel emotion, they feel nothing, and studies of their autonomic reactions (such as those used in lie detector tests) confirm that they lack the normal flashes of bodily reaction that the rest of us experience when observing scenes of horror or beauty. Yet their reasoning and logical abilities are intact. They perform normally on tests of intelligence and knowledge of social rules and moral principles.¹⁹

So what happens when these people go out into the world? Now that they are free of the distractions of emotion, do they become hyperlogical, able to see through the haze of feelings that blinds the rest of us to the path of perfect rationality? Just the opposite. They find themselves unable to make simple decisions or to set goals, and their lives fall apart. When they look out at the world and think, "What should I do now?" they see dozens of choices but lack immediate internal feelings of like or dislike. They must examine the pros and cons of every choice with their reasoning, but in the absence of feeling they see little reason to pick one or the other. When the rest of us look out at the world, our emotional brains have instantly and automatically appraised the possibilities. One possibility usually jumps out at us as the obvious best one. We need only use reason to weigh the pros and cons when two or three possibilities seem equally good.

Human rationality depends critically on sophisticated emotionality. It is only because our emotional brains work so well that our reasoning can work at all. Plato's image of reason as charioteer controlling the dumb beasts of passion may overstate not only the wisdom but also the power of the charioteer. The metaphor of a rider on an elephant fits Damasio's findings more closely: Reason and emotion must both work together to create intelligent behavior, but emotion (a major part of the elephant) does most of the work. When the neocortex came along, it made the rider possible, but it made the elephant much smarter, too.

FOURTH DIVISION: CONTROLLED VS. AUTOMATIC

In the 1990s, while I was developing the elephant/rider metaphor for myself, the field of social psychology was coming to a similar view of the mind. After its long infatuation with information processing models and computer metaphors, psychologists began to realize that there are really two processing systems at work in the mind at all times: controlled processes and automatic processes.

Suppose you volunteered to be a subject in the following experiment.²⁰ First, the experimenter hands you some word problems and tells you to come and get her when you are finished. The word problems are easy: Just unscramble sets of five words and make sentences using four of them. For example, "they her bother see usually" becomes either "they usually see her" or "they usually bother her." A few minutes later, when you have finished the test, you go out to the hallway as instructed. The experimenter is there, but she's engaged in a conversation with someone and isn't making eye contact with you. What do you suppose you'll do? Well, if half the sentences you unscrambled contained words related to rudeness (such as bother, brazen, aggressively), you will probably interrupt the experimenter within a minute or two to say, "Hey, I'm finished. What should I do now?" But if you unscrambled sentences in which the rude words were swapped with words related to politeness ("they her *respect* see usually"), the odds

are you'll just sit there meekly and wait until the experimenter acknowledges you—ten minutes from now.

Likewise, exposure to words related to the elderly makes people walk more slowly; words related to professors make people smarter at the game of Trivial Pursuit; and words related to soccer hooligans make people dumber.²¹ And these effects don't even depend on your consciously reading the words; the same effects can occur when the words are presented subliminally, that is, flashed on a screen for just a few hundredths of a second, too fast for your conscious mind to register them. But some part of the mind does see the words, and it sets in motion behaviors that psychologists can measure.

According to John Bargh, the pioneer in this research, these experiments show that most mental processes happen automatically, without the need for conscious attention or control. Most automatic processes are completely unconscious, although some of them show a part of themselves to consciousness; for example, we are aware of the "stream of consciousness"²² that seems to flow on by, following its own rules of association, without any feeling of effort or direction from the self. Bargh contrasts automatic processes with controlled processes, the kind of thinking that takes some effort, that proceeds in steps and that always plays out on the center stage of consciousness. For example, at what time would you need to leave your house to catch a 6:26 flight to London? That's something you have to think about consciously, first choosing a means of transport to the airport and then considering rush-hour traffic, weather, and the strictness of the shoe police at the airport. You can't depart on a hunch. But if you drive to the airport, almost everything you do on the way will be automatic: breathing, blinking, shifting in your seat, daydreaming, keeping enough distance between you and the car in front of you, even scowling and cursing slower drivers.

Controlled processing is limited—we can think consciously about one thing at a time only—but automatic processes run in parallel and can handle many tasks at once. If the mind performs hundreds of operations each second, all but one of them must be handled automatically. So what is the relationship between controlled and automatic processing? Is controlled processing the wise boss, king, or CEO handling the most impor-

tant questions and setting policy with foresight for the dumber automatic processes to carry out? No, that would bring us right back to the Promethean script and divine reason. To dispel the Promethean script once and for all, it will help to go back in time and look at why we have these two processes, why we have a small rider and a large elephant.

When the first clumps of neurons were forming the first brains more than 600 million years ago, these clumps must have conferred some advantage on the organisms that had them because brains have proliferated ever since. Brains are adaptive because they integrate information from various parts of the animal's body to respond quickly and automatically to threats and opportunities in the environment. By the time we reach 3 million years ago, the Earth was full of animals with extraordinarily sophisticated automatic abilities, among them birds that could navigate by star positions, ants that could cooperate to fight wars and run fungus farms, and several species of hominids that had begun to make tools. Many of these creatures possessed systems of communication, but none of them had developed language.

Controlled processing requires language. You can have bits and pieces of thought through images, but to plan something complex, to weigh the pros and cons of different paths, or to analyze the causes of past successes and failures, you need words. Nobody knows how long ago human beings developed language, but most estimates range from around 2 million years ago, when hominid brains became much bigger, to as recently as 40,000 years ago, the time of cave paintings and other artifacts that reveal unmistakably modern human minds.²³ Whichever end of that range you favor, language, reasoning, and conscious planning arrived in the most recent eye-blink of evolution. They are like new software, Rider version 1.0. The language parts work well, but there are still a lot of bugs in the reasoning and planning programs.²⁴ Automatic processes, on the other hand, have been through thousands of product cycles and are nearly perfect. This difference in maturity between automatic and controlled processes helps explain why we have inexpensive computers that can solve logic, math, and chess problems better than any human beings can (most of us struggle with these tasks), but none of our robots, no matter how costly, can walk through the woods as well as the average six-year-old child (our perceptual and motor systems are superb).

Evolution never looks ahead. It can't plan the best way to travel from point A to point B. Instead, small changes to existing forms arise (by genetic mutation), and spread within a population to the extent that they help organisms respond more effectively to current conditions. When language evolved, the human brain was not reengineered to hand over the reins of power to the rider (conscious verbal thinking). Things were already working pretty well, and linguistic ability spread to the extent that it helped the elephant do something important in a better way. *The rider evolved to serve to the elephant.* But whatever its origin, once we had it, language was a powerful tool that could be used in new ways, and evolution then selected those individuals who got the best use out of it.

One use of language is that it partially freed humans from "stimulus control." Behaviorists such as B. F. Skinner were able to explain much of the behavior of animals as a set of connections between stimuli and responses. Some of these connections are innate, such as when the sight or smell of an animal's natural food triggers hunger and eating. Other connections are learned, as demonstrated by Ivan Pavlov's dogs, who salivated at the sound of a bell that had earlier announced the arrival of food. The behaviorists saw animals as slaves to their environments and learning histories who blindly respond to the reward properties of whatever they encounter. The behaviorists thought that people were no different from other animals. In this view, St. Paul's lament could be restated as: "My flesh is under stimulus control." It is no accident that we find the carnal pleasures so rewarding. Our brains, like rat brains, are wired so that food and sex give us little bursts of dopamine, the neurotransmitter that is the brain's way of making us enjoy the activities that are good for the survival of our genes.²⁵ Plato's "bad" horse plays an important role in pulling us toward these things, which helped our ancestors survive and succeed in becoming our ancestors.

But the behaviorists were not exactly right about people. The controlled system allows people to think about long-term goals and thereby escape the tyranny of the here-and-now, the automatic triggering of temptation by the sight of tempting objects. People can imagine alternatives that are not visually present; they can weigh long-term health risks against present pleasures, and they can learn in conversation about which choices will bring success

and prestige. Unfortunately, the behaviorists were not entirely wrong about people, either. For although the controlled system does not conform to behaviorist principles, it also has relatively little power to cause behavior. The automatic system was shaped by natural selection to trigger quick and reliable action, and it includes parts of the brain that make us feel pleasure and pain (such as the orbitofrontal cortex) and that trigger survival-related motivations (such as the hypothalamus). The automatic system has its finger on the dopamine release button. The controlled system, in contrast, is better seen as an advisor. It's a rider placed on the elephant's back to help the elephant make better choices. The rider can see farther into the future, and the rider can learn valuable information by talking to other riders or by reading maps, but the rider cannot order the elephant around against its will. I believe the Scottish philosopher David Hume was closer to the truth than was Plato when he said, "Reason is, and ought only to be the slave of the passions, and can never pretend to any other office than to serve and obey them."²⁶

In sum, the rider is an advisor or servant; not a king, president, or charioteer with a firm grip on the reins. The rider is Gazzaniga's interpreter module; it is conscious, controlled thought. The elephant, in contrast, is everything else. The elephant includes the gut feelings, visceral reactions, emotions, and intuitions that comprise much of the automatic system. The elephant and the rider each have their own intelligence, and when they work together well they enable the unique brilliance of human beings. But they don't always work together well. Here are three quirks of daily life that illustrate the sometimes complex relationship between the rider and the elephant.

FAILURES OF SELF CONTROL

Imagine that it is 1970 and you are a four-year-old child in an experiment being conducted by Walter Mischel at Stanford University. You are brought into a room at your preschool where a nice man gives you toys and plays with you for a while. Then the man asks you, first, whether you like marshmallows (you do), and, then, whether you'd rather have this plate here with one marshmallow or that plate there with two marshmallows (that one, of

course). Then the man tells you that he has to go out of the room for a little while, and if you can wait until he comes back, you can have the two marshmallows. If you don't want to wait, you can ring this bell here, and he'll come right back and give you the plate with one; but if you do that, you can't have the two. The man leaves. You stare at the marshmallows. You salivate. You want. You fight your wanting. If you are like most four-year-olds, you can hold out for only a few minutes. Then you ring the bell.

Now let's jump ahead to 1985. Mischel has mailed your parents a questionnaire asking them to report on your personality, your ability to delay gratification and deal with frustration, and your performance on your college entrance exams (the Scholastic Aptitude Test). Your parents return the questionnaire. Mischel discovers that the number of seconds you waited to ring the bell in 1970 predicts not only what your parents say about you as a teenager but also the likelihood that you were admitted to a top university. Children who were able to overcome stimulus control and delay gratification for a few extra minutes in 1970 were better able to resist temptation as teenagers, to focus on their studies, and to control themselves when things didn't go the way they wanted.²⁷

What was their secret? A large part of it was strategy—the ways that children used their limited mental control to shift attention. In later studies, Mischel discovered that the successful children were those who looked away from the temptation or were able to think about other enjoyable activities.²⁸ These thinking skills are an aspect of emotional intelligence—an ability to understand and regulate one's own feelings and desires.²⁹ An emotionally intelligent person has a skilled rider who knows how to distract and coax the elephant without having to engage in a direct contest of wills.

It's hard for the controlled system to beat the automatic system by willpower alone; like a tired muscle,³⁰ the former soon wears down and caves in, but the latter runs automatically, effortlessly, and endlessly. Once you understand the power of stimulus control, you can use it to your advantage by changing the stimuli in your environment and avoiding undesirable ones; or, if that's not possible, by filling your consciousness with thoughts about their less tempting aspects. Buddhism, for example, in an effort to break people's carnal attachment to their own (and others') flesh, developed methods of meditating on decaying corpses.³¹ By choosing to

stare at something that revolts the automatic system, the rider can begin to change what the elephant will want in the future.

MENTAL INTRUSIONS

Edgar Allan Poe understood the divided mind. In *The Imp of the Perverse*, Poe's protagonist carries out the perfect murder, inherits the dead man's estate, and lives for years in healthy enjoyment of his ill-gotten gains. Whenever thoughts of the murder appear on the fringes of his consciousness, he murmurs to himself, "I am safe." All is well until the day he remodels his mantra to "I am safe—yes—if I be not fool enough to make open confession." With that thought, he comes undone. He tries to suppress the thought of confessing, but the harder he tries, the more insistent the thought becomes. He panics, he starts running, people start chasing him, he blacks out, and, when he returns to his senses, he is told that he has made a full confession.

I love this story, for its title above all else. Whenever I am on a cliff, a rooftop, or a high balcony, the imp of the perverse whispers in my ear, "Jump." It's not a command, it's just a word that pops into my consciousness. When I'm at a dinner party sitting next to someone I respect, the imp works hard to suggest the most inappropriate things I could possibly say. Who or what is the imp? Dan Wegner, one of the most perverse and creative social psychologists, has dragged the imp into the lab and made it confess to being an aspect of automatic processing.

In Wegner's studies, participants are asked to try hard *not* to think about something, such as a white bear, or food, or a stereotype. This is hard to do. More important, the moment one stops trying to suppress a thought, the thought comes flooding in and becomes even harder to banish. In other words, Wegner creates minor obsessions in his lab by instructing people not to obsess. Wegner explains this effect as an "ironic process" of mental control.³² When controlled processing tries to influence thought ("Don't think about a white bear!"), it sets up an explicit goal. And whenever one pursues a goal, a part of the mind automatically monitors progress, so that it can order corrections or know when success has been achieved. When that goal is an action in the world (such as arriving at the airport on time), this feedback

system works well. But when the goal is mental, it backfires. Automatic processes continually check: "Am I not thinking about a white bear?" As the act of monitoring for the absence of the thought introduces the thought, the person must try even harder to divert consciousness. Automatic and controlled processes end up working at cross purposes, firing each other up to ever greater exertions. But because controlled processes tire quickly, eventually the inexhaustible automatic processes run unopposed, conjuring up herds of white bears. Thus, the attempt to remove an unpleasant thought can guarantee it a place on your frequent-play list of mental ruminations.

Now, back to me at that dinner party. My simple thought "don't make a fool of yourself" triggers automatic processes looking for signs of foolishness. I know that it would be stupid to comment on that mole on his forehead, or to say "I love you," or to scream obscenities. And up in consciousness, I become aware of three thoughts: comment on the mole, say "I love you," or scream obscenities. These are not commands, just ideas that pop into my head. Freud based much of his theory of psychoanalysis on such mental intrusions and free associations, and he found they often have sexual or aggressive content. But Wegner's research offers a simpler and more innocent explanation: Automatic processes generate thousands of thoughts and images every day, often through random association. The ones that get stuck are the ones that particularly shock us, the ones we try to suppress or deny. The reason we suppress them is not that we know, deep down, that they're true (although some may be), but that they are scary or shameful. Yet once we have tried and failed to suppress them, they can become the sorts of obsessive thoughts that make us believe in Freudian notions of a dark and evil unconscious mind.

THE DIFFICULTY OF WINNING AN ARGUMENT

Consider the following story:

Julie and Mark are sister and brother. They are traveling together in France on summer vacation from college. One night they are staying alone in a cabin near the beach. They decide that it would be interesting

and fun if they tried making love. At the very least, it would be a new experience for each of them. Julie is already taking birth control pills, but Mark uses a condom, too, just to be safe. They both enjoy making love, but decide not to do it again. They keep that night as a special secret, which makes them feel even closer to each other.

Do you think it is acceptable for two consenting adults, who happen to be siblings, to make love? If you are like most people in my studies,³³ you immediately answered no. But how would you justify that judgment? People often reach first for the argument that incestuous sex leads to offspring that suffer genetic abnormalities. When I point out that the siblings used two forms of birth control, however, no one says, "Oh, well, in that case it's okay." Instead, people begin searching for other arguments, for example, "It's going to harm their relationship." When I respond that in this case the sex has made the relationship stronger, people just scratch their heads, frown, and say, "I know it's wrong, I'm just having a hard time explaining why."

The point of these studies is that moral judgment is like aesthetic judgment. When you see a painting, you usually know instantly and automatically whether you like it. If someone asks you to explain your judgment, you confabulate. You don't really know why you think something is beautiful, but your interpreter module (the rider) is skilled at making up reasons, as Gazzaniga found in his split-brain studies. You search for a plausible reason for liking the painting, and you latch on to the first reason that makes sense (maybe something vague about color, or light, or the reflection of the painter in the clown's shiny nose). Moral arguments are much the same: Two people feel strongly about an issue, their feelings come first, and their reasons are invented on the fly, to throw at each other. When you refute a person's argument, does she generally change her mind and agree with you? Of course not, because the argument you defeated was not the cause of her position; it was made up after the judgment was already made.

If you listen closely to moral arguments, you can sometimes hear something surprising: that it is really the elephant holding the reins, guiding the rider. It is the elephant who decides what is good or bad, beautiful or ugly. Gut feelings, intuitions, and snap judgments happen constantly and

22 THE HAPPINESS HYPOTHESIS

automatically (as Malcolm Gladwell described in *Blink*),³⁴ but only the rider can string sentences together and create arguments to give to other people. In moral arguments, the rider goes beyond being just an advisor to the elephant; he becomes a lawyer, fighting in the court of public opinion to persuade others of the elephant's point of view.

This, then, is our situation, lamented by St. Paul, Buddha, Ovid, and so many others. Our minds are loose confederations of parts, but we identify with and pay too much attention to one part: conscious verbal thinking. We are like the proverbial drunken man looking for his car keys under the street light. ("Did you drop them here?" asks the cop. "No" says the man, "I dropped them back there in the alley, but the light is better over here.") Because we can see only one little corner of the mind's vast operation, we are surprised when urges, wishes, and temptations emerge, seemingly from nowhere. We make pronouncements, vows, and resolutions, and then are surprised by our own powerlessness to carry them out. We sometimes fall into the view that we are fighting with our unconscious, our id, or our animal self. But really we are the whole thing. We are the rider, and we are the elephant. Both have their strengths and special skills. The rest of this book is about how complex and partly clueless creatures such as ourselves can get along with each other (chapters 3 and 4), find happiness (chapters 5 and 6), grow psychologically and morally (chapters 7 and 8), and find purpose and meaning in our lives (chapters 9 and 10). But first we have to figure out why the elephant is such a pessimist.

ALSO BY JONATHAN HAIDT

Flourishing: Positive Psychology and the Life Well-Lived (co-editor)

The Happiness Hypothesis

FINDING MODERN TRUTH
IN ANCIENT WISDOM



JONATHAN HAIDT

BASIC

BOOKS

A Member of the Perseus Books Group
New York

you prepare your own matching disclosure, but some other part of you resists sharing intimate details with a near-stranger. But when it's played at the right time, the past-relationships-mutual-disclosure conversation can be a memorable turning point on the road to love.

Reciprocity is an all-purpose relationship tonic. Used properly, it strengthens, lengthens, and rejuvenates social ties. It works so well in part because the elephant is a natural mimic. For example, when we interact with someone we like, we have a slight tendency to copy their every move, automatically and unconsciously.²⁸ If the other person taps her foot, you are more likely to tap yours. If she touches her face, you are more likely to touch yours. But it's not just that we mimic those we like; we like those who mimic us. People who are subtly mimicked are then more helpful and agreeable toward their mimicker, and even toward others.²⁹ Waitresses who mimic their customers get larger tips.³⁰

Mimicry is a kind of social glue, a way of saying "We are one." The unifying pleasures of mimicry are particularly clear in synchronized activities, such as line dances, group cheers, and some religious rituals, in which people try to do the same thing at the same time. A theme of the rest of this book is that humans are partially hive creatures, like bees, yet in the modern world we spend nearly all our time outside of the hive. Reciprocity, like love, reconnects us with others.

4



The Faults of Others

Why do you see the speck in your neighbor's eye, but do not notice the log in your own eye? . . . You hypocrite, first take the log out of your own eye, and then you will see clearly to take the speck out of your neighbor's eye.

— MATTHEW 7:3–5

It is easy to see the faults of others, but difficult to see one's own faults. One shows the faults of others like chaff winnowed in the wind, but one conceals one's own faults as a cunning gambler conceals his dice.

— BUDDHA¹

IT'S FUN TO LAUGH at a hypocrite, and recent years have given Americans a great deal to laugh at. Take the conservative radio show host Rush Limbaugh, who once said, in response to the criticism that the United States prosecutes a disproportionate number of black men for drug crimes, that white drug users should be seized and "sent up the river," too. In 2003, he was forced to eat his words when Florida officials discovered his illegal purchase of massive quantities of Oxycontin, a painkiller also known as "hillbilly heroin." Another case occurred in my home state of Virginia. Congressman Ed Schrock was an outspoken opponent of gay rights, gay marriage, and of

gays serving in the military. Speaking of the horrors of such coservice, he said, "I mean, they are in the showers with you, they are in the dining hall with you."² In August 2004, audio tapes were made public of the messages that Schrock, a married man, had left on Megamates, an interactive phone sex line. Schrock described the anatomical features of the kind of man he was seeking, along with the acts he was interested in performing.

There is a special pleasure in the irony of a moralist brought down for the very moral failings he has condemned. It's the pleasure of a well-told joke. Some jokes are funny as one-liners, but most require three verses: three guys, say, who walk into a bar one at a time, or a priest, a minister, and a rabbi in a lifeboat. The first two set the pattern, and the third violates it. With hypocrisy, the hypocrite's preaching is the setup, the hypocritical action is the punch line. Scandal is great entertainment because it allows people to feel contempt, a moral emotion that gives feelings of moral superiority while asking nothing in return. With contempt you don't need to right the wrong (as with anger) or flee the scene (as with fear or disgust). And best of all, contempt is made to share. Stories about the moral failings of others are among the most common kinds of gossip,³ they are a staple of talk radio, and they offer a ready way for people to show that they share a common moral orientation. Tell an acquaintance a cynical story that ends with both of you smirking and shaking your heads and voila, you've got a bond.

Well, stop smirking. One of the most universal pieces of advice from across cultures and eras is that we are all hypocrites, and in our condemnation of others' hypocrisy we only compound our own. Social psychologists have recently isolated the mechanisms that make us blind to the logs in our own eyes. The moral implications of these findings are disturbing; indeed, they challenge our greatest moral certainties. But the implications can be liberating, too, freeing you from destructive moralism and divisive self-righteousness.

KEEPING UP APPEARANCES

Research on the evolution of altruism and cooperation has relied heavily on studies in which several people (or people simulated on a computer)

play a game. On each round of play, one person interacts with one other player and can choose to be cooperative (thereby expanding the pie they then share) or greedy (each grabbing as much as possible for himself). After many rounds of play, you count up the number of points each player accumulated and see which strategy was most profitable in the long run. In these games, which are intended to be simple models of the game of life, no strategy ever beats tit for tat.⁴ In the long run and across a variety of environments, it pays to cooperate while remaining vigilant to the danger of being cheated. But those simple games are in some ways simple minded. Players face a binary choice at each point: They can cooperate or defect. Each player then reacts to what the other player did in the previous round. In real life, however, you don't react to what someone did; you react only to what you *think* she did, and the gap between action and perception is bridged by the art of impression management. If life itself is but what you deem it, then why not focus your efforts on persuading others to *believe* that you are a virtuous and trustworthy cooperator? Thus Niccolo Machiavelli, whose name has become synonymous with the cunning and amoral use of power, wrote five hundred years ago that "the great majority of mankind are satisfied with appearances, as though they were realities, and are often more influenced by the things that seem than by those that are."⁵ Natural selection, like politics, works by the principle of survival of the fittest, and several researchers have argued that human beings evolved to play the game of life in a Machiavellian way.⁶ The Machiavellian version of tit for tat, for example, is to do all you can to cultivate the *reputation* of a trustworthy yet vigilant partner, whatever the reality may be.

The simplest way to cultivate a reputation for being fair is to really be fair, but life and psychology experiments sometimes force us to choose between appearance and reality. Dan Batson at the University of Kansas devised a clever way to make people choose, and his findings are not pretty. He brought students into his lab one at a time to take part in what they thought was a study of how unequal rewards affect teamwork.⁷ The procedure was explained: One member of each team of two will be rewarded for correct responses to questions with a raffle ticket that could win a valuable prize. The other member will receive nothing. Subjects were also told that an additional part of the experiment concerned the effects of control: You,

the subject, will decide which of you is rewarded, which of you is not. Your partner is already here, in another room, and the two of you will not meet. Your partner will be told that the decision was made by chance. You can make the decision in any way you like. Oh, and here is a coin: Most people in this study seem to think that flipping the coin is the fairest way to make the decision.

Subjects were then left alone to choose. About half of them used the coin. Batson knows this because the coin was wrapped in a plastic bag, and half the bags were ripped open. Of those who did not flip the coin, 90 percent chose the positive task for themselves. For those who did flip the coin, the laws of probability were suspended and 90 percent of them chose the positive task for themselves. Batson had given all the subjects a variety of questionnaires about morality weeks earlier (the subjects were students in psychology classes), so he was able to check how various measures of moral personality predicted behavior. His finding: People who reported being most concerned about caring for others and about issues of social responsibility were more likely to open the bag, but they were not more likely to give the other person the positive task. In other words, people who think they are particularly moral are in fact more likely to “do the right thing” and flip the coin, but when the coin flip comes out against them, they find a way to ignore it and follow their own self-interest. Batson called this tendency to value the appearance of morality over the reality “moral hypocrisy.”

Batson’s subjects who flipped the coin reported (on a questionnaire) that they had made the decision in an ethical way. After his first study, Batson wondered whether perhaps people tricked themselves by not stating clearly what heads or tails would mean (“Let’s see, heads, that means, um, oh yeah, I get the good one.”). But when he labeled the two sides of the coin to erase ambiguity, it made no difference. Placing a large mirror in the room, right in front of the subject, and at the same time stressing the importance of fairness in the instructions, was the only manipulation that had an effect. When people were forced to think about fairness and could see themselves cheating, they stopped doing it. As Jesus and Buddha said in the opening epigraphs of this chapter, it is easy to spot a cheater when our eyes are looking outward, but hard when looking inward. Folk wisdom from around the world concurs:

Though you see the seven defects of others, we do not see our own ten defects. (Japanese proverb)⁸

A he-goat doesn’t realize that he smells. (Nigerian proverb)⁹

Proving that people are selfish, or that they’ll sometimes cheat when they know they won’t be caught, seems like a good way to get an article into the *Journal of Incredibly Obvious Results*. What’s not so obvious is that, in nearly all these studies, people don’t think they are doing anything wrong. It’s the same in real life. From the person who cuts you off on the highway all the way to the Nazis who ran the concentration camps, most people think they are good people and that their actions are motivated by good reasons. Machiavellian tit for tat requires devotion to appearances, including protestations of one’s virtue even when one chooses vice. And such protestations are most effective when the person making them really believes them. As Robert Wright put it in his masterful book *The Moral Animal*, “Human beings are a species splendid in their array of moral equipment, tragic in their propensity to misuse it, and pathetic in their constitutional ignorance of the misuse.”¹⁰

If Wright is correct about our “constitutional ignorance” of our hypocrisy, then the sages’ admonition to stop smirking may be no more effective than telling a depressed person to snap out of it. You can’t change your mental filters by willpower alone; you have to engage in activities such as meditation or cognitive therapy that train the elephant. But at least a depressed person will usually admit she’s depressed. Curing hypocrisy is much harder because part of the problem is that we don’t believe there’s a problem. We are well-armed for battle in a Machiavellian world of reputation manipulation, and one of our most important weapons is the delusion that we are non-combatants. How do we get away with it?

FIND YOUR INNER LAWYER

Remember Julie and Mark, the sister and brother who had sex back in chapter 1? Most people condemned their actions even in the absence of harm,

and then made up reasons, sometimes bad ones, to justify their condemnation. In my studies of moral judgment, I have found that people are skilled at finding reasons to support their gut feelings: The rider acts like a lawyer whom the elephant has hired to represent it in the court of public opinion.

One of the reasons people are often contemptuous of lawyers is that they fight for a client's interests, not for the truth. To be a good lawyer, it often helps to be a good liar. Although many lawyers won't tell a direct lie, most will do what they can to hide inconvenient facts while weaving a plausible alternative story for the judge and jury, a story that they sometimes know is not true. Our inner lawyer works in the same way, but, somehow, we actually believe the stories he makes up. To understand his ways we must catch him in action; we must observe him carrying out low-pressure as well as high-pressure assignments.

People sometimes call their lawyers to ask whether a particular course of action is permissible. No pressure, just tell me whether I can do this. The lawyer looks into the relevant laws and procedures and calls back with a verdict: Yes, there is a legal or regulatory precedent for that; or perhaps no, as your lawyer I would advise against such a course. A good lawyer might look at all sides of a question, think about all possible ramifications, and recommend alternative courses of action, but such thoroughness depends in part on his client—does she really want advice or does she just want to be given a red or a green light for her plan?

Studies of everyday reasoning show that the elephant is not an inquisitive client. When people are given difficult questions to think about—for example, whether the minimum wage should be raised—they generally lean one way or the other right away, and then put a call in to reasoning to see whether support for that position is forthcoming. For example, a person whose first instinct is that the minimum wage should be raised looks around for supporting evidence. If she thinks of her Aunt Flo who is working for the minimum wage and can't support her family on it then yes, that means the minimum wage should be raised. All done. Deanna Kuhn,¹¹ a cognitive psychologist who has studied such everyday reasoning, found that most people readily offered "pseudoevidence" like the anecdote about Aunt Flo. Most people gave no real evidence for their positions, and most made no effort to look for evidence opposing their initial positions. David Perkins,¹² a

Harvard psychologist who has devoted his career to improving reasoning, found the same thing. He says that thinking generally uses the "makes-sense" stopping rule. We take a position, look for evidence that supports it, and if we find some evidence—enough so that our position "makes sense"—we stop thinking. But at least in a low-pressure situation such as this, if someone *else* brings up reasons and evidence on the other side, people can be induced to change their minds; they just don't make an effort to do such thinking for themselves.

Now let's crank up the pressure. The client has been caught cheating on her taxes. She calls her lawyer. She doesn't confess and ask, "Was that OK?" She says, "Do something." The lawyer bolts into action, assesses the damaging evidence, researches precedents and loopholes, and figures out how some personal expenses might be plausibly justified as business expenses. The lawyer has been given an order: Use all your powers to defend me. Studies of "motivated reasoning"¹³ show that people who are motivated to reach a particular conclusion are even worse reasoners than those in Kuhn's and Perkins's studies, but the mechanism is basically the same: a one-sided search for supporting evidence only. People who are told that they have performed poorly on a test of social intelligence think extra hard to find reasons to discount the test; people who are asked to read a study showing that one of their habits—such as drinking coffee—is unhealthy think extra hard to find flaws in the study, flaws that people who don't drink coffee don't notice. Over and over again, studies show that people set out on a cognitive mission to bring back reasons to support their preferred belief or action. And because we are usually successful in this mission, we end up with the illusion of objectivity. We really believe that our position is rationally and objectively justified.

Ben Franklin, as usual, was wise to our tricks. But he showed unusual insight in catching himself in the act. Though he had been a vegetarian on principle, on one long sea crossing the men were grilling fish, and his mouth started watering:

I balanc'd some time between principle and inclination, till I recollected that, when the fish were opened, I saw smaller fish taken out of their stomachs; then thought I, "if you eat one another, I don't see why we

mayn't eat you." So I din'd upon cod very heartily, and continued to eat with other people, returning only now and then occasionally to a vegetable diet.¹⁴

Franklin concluded: "So convenient a thing is it to be a reasonable creature, since it enables one to find or make a reason for every thing one has a mind to do."

THE ROSE-COLORED MIRROR

I don't want to blame everything on the lawyer. The lawyer is, after all, the rider—your conscious, reasoning self; and he is taking orders from the elephant—your automatic and unconscious self. The two are in cahoots to win at the game of life by playing Machiavellian tit for tat, and both are in denial about it.

To win at this game you must present your best possible self to others. You must appear virtuous, whether or not you are, and you must gain the benefits of cooperation whether or not you deserve them. But everyone else is playing the same game, so you must also play defense—you must be wary of others' self-presentations, and of their efforts to claim more for themselves than they deserve. Social life is therefore always a game of social comparison. We must compare ourselves to other people, and our actions to their actions, and we must somehow spin those comparisons in our favor. (In depression, part of the illness is that spin goes the other way, as described by Aaron Beck's cognitive triad: I'm bad, the world is terrible, and my future is bleak.) You can spin a comparison either by inflating your own claims or by disparaging the claims of others. You might expect, given what I've said so far, that we do both, but the consistent finding of psychological research is that we are fairly accurate in our perceptions of others. It's our self-perceptions that are distorted because we look at ourselves in a rose-colored mirror.

In Garrison Keillor's mythical town of Lake Wobegon, all the women are strong, all the men good looking, and all the children above average. But if the Wobegonians were real people, they would go further: Most of them

would believe they were stronger, better looking, or smarter than the average Wobegonian. When Americans and Europeans are asked to rate themselves on virtues, skills, or other desirable traits (including intelligence, driving ability, sexual skills, and ethics), a large majority say they are above average.¹⁵ (This effect is weaker in East Asian countries, and may not exist in Japan.)¹⁶

In a brilliant series of experiments,¹⁷ Nick Epley and David Dunning figured out how we do it. They asked students at Cornell University to predict how many flowers they would buy in an upcoming charity event and how many the average Cornell student would buy. Then they looked at actual behavior. People had greatly overestimated their own virtue, but were pretty close on their guesses about others. In a second study, Epley and Dunning asked people to predict what they would do in a game that could be played for money either selfishly or cooperatively. Same findings: Eighty-four percent predicted that they'd cooperate, but the subjects expected (on average) that only 64 percent of others would cooperate. When they ran the real game, 61 percent cooperated. In a third study, Epley and Dunning paid people five dollars for participating in an experiment and then asked them to predict how much of the money they and others would donate, hypothetically, had they been given a particular charitable appeal after the study. People said (on average) they'd donate \$2.44, and others would donate only \$1.83. But when the study was rerun with a real request to give money, the average gift was \$1.53.

In their cleverest study, the researchers described the details of the third study to a new group of subjects and asked them to predict how much money they would donate if they had been in the "real" condition, and how much money other Cornell students would donate. Once again, subjects predicted they'd be much more generous than others. But then subjects saw the actual amounts of money donated by real subjects from the third study, revealed to them one at a time (and averaging \$1.53). After being given this new information, subjects were given a chance to revise their estimates, and they did. They lowered their estimates of what others would give, but they did not change their estimates of what they themselves would give. In other words, subjects used base rate information properly to revise their predictions of *others*, but they refused to apply it to their rosy self-assessments. We judge others

by their behavior, but we think we have special information about ourselves—we know what we are “really like” inside, so we can easily find ways to explain away our selfish acts and cling to the illusion that we are better than others.

Ambiguity abets the illusion. For many traits, such as leadership, there are so many ways to define it that one is free to pick the criterion that will most flatter oneself. If I’m confident, I can define leadership as confidence. If I think I’m high on people skills, I can define leadership as the ability to understand and influence people. When comparing ourselves to others, the general process is this: Frame the question (unconsciously, automatically) so that the trait in question is related to a self-perceived strength, then go out and look for evidence that you have the strength. Once you find a piece of evidence, once you have a “makes-sense” story, you are done. You can stop thinking, and revel in your self-esteem. It’s no wonder, then, that in a study of 1 million American high school students, 70 percent thought they were above average on leadership ability, but only 2 percent thought they were below average. Everyone can find *some* skill that might be construed as related to leadership, and then find *some* piece of evidence that one has that skill.¹⁸ (College professors are less wise than high school students in this respect—94 percent of us think we do above-average work.)¹⁹ But when there is little room for ambiguity—how tall are you? how good are you at juggling?—people tend to be much more modest.

If the only effect of these rampant esteem-inflating biases was to make people feel good about themselves, they would not be a problem. In fact, evidence shows that people who hold pervasive positive illusions about themselves, their abilities, and their future prospects are mentally healthier, happier, and better liked than people who lack such illusions.²⁰ But such biases can make people feel that they deserve more than they do, thereby setting the stage for endless disputes with other people who feel equally over-entitled.

I fought endlessly with my first-year college roommates. I had provided much of our furniture, including the highly valued refrigerator, and I did most of the work keeping our common space clean. After a while, I got tired of doing more than my share; I stopped working so hard and let the space become messy so that someone else would pick up the slack. Nobody did. But they did pick up my resentment, and it united them in their

dislike of me. The next year, when we no longer lived together, we became close friends.

When my father drove me and my refrigerator up to college that first year, he told me that the most important things I was going to learn I would not learn in the classroom, and he was right. It took many more years of living with roommates, but I finally realized what a fool I had made of myself that first year. Of course I thought I did more than my share. Although I was aware of every little thing I did for the group, I was aware of only a portion of everyone else’s contributions. And even if I had been correct in my accounting, I was self-righteous in setting up the accounting categories. I picked the things I cared about—such as keeping the refrigerator clean—and then gave myself an A-plus in that category. As with other kinds of social comparison, ambiguity allows us to set up the comparison in ways that favor ourselves, and then to seek evidence that shows we are excellent co-operators. Studies of such “unconscious overclaiming” show that when husbands and wives estimate the percentage of housework each does, their estimates total more than 120 percent.²¹ When MBA students in a work group make estimates of their contributions to the team, the estimates total 139 percent.²² Whenever people form cooperative groups, which are usually of mutual benefit, self-serving biases threaten to fill group members with mutual resentment.

I’M RIGHT; YOU’RE BIASED

If spouses, colleagues, and roommates so easily descend into resentment, things get worse when people who lack affection or shared goals have to negotiate. Vast societal resources are expended on litigation, labor strikes, divorce disputes, and violence after failed peace talks because the same self-serving biases are at work fomenting hypocritical indignation. In these high-pressure situations, the lawyers (real and metaphorical) are working round the clock to spin and distort the case in their clients’ favor. George Loewenstein²³ and his colleagues at Carnegie Mellon found a way to study the process by giving pairs of research subjects a real legal case to read (about a motorcycle accident in Texas), assigning one subject to play the

defendant and one the plaintiff, and then giving them real money to negotiate with. Each pair was told to reach a fair agreement and warned that, if they failed to agree, a settlement would be imposed and “court costs” deducted from the pool of money, leaving both players worse off. When both players knew which role each was to play from the start, each read the case materials differently, made different guesses about what settlement the judge in the real case had imposed, and argued in a biased way. More than a quarter of all pairs failed to reach an agreement. However, when the players didn’t know which role they were to play until after they had read all the materials, they became much more reasonable, and only 6 percent of pairs failed to settle.

Recognizing that hiding negotiators’ identities from them until the last minute is not an option in the real world, Loewenstein set out to find other ways to “de-bias” negotiators. He tried having subjects read a short essay about the kinds of self-serving biases that affect people in their situation to see whether subjects could correct for the biases. No dice. Although the subjects used the information to predict their opponent’s behavior more accurately, they did not change their own biases at all. As Epley and Dunning had found, people really are open to information that will predict the behavior of others, but they refuse to adjust their self-assessments. In another study, Loewenstein followed the advice often given by marriage therapists to have each subject first write an essay arguing the other person’s case as convincingly as possible. Even worse than no dice. The manipulation backfired, perhaps because thinking about your opponent’s arguments automatically triggers additional thinking on your own part as you prepare to refute them.

One manipulation did work. When subjects read the essay about self-serving biases and were then asked to write an essay about weaknesses in *their own* case, their previous righteousness was shaken. Subjects in this study were just as fair-minded as those who learned their identities at the last minute. But before you get too optimistic about this technique for reducing hypocrisy, you should realize that Loewenstein was asking subjects to find weaknesses in their *cases*—in the positions they were arguing for—not in their *characters*. When you try to persuade people to look at their own per-

sonal picture of Dorian Gray, they put up a much bigger fight. Emily Pronin at Princeton and Lee Ross at Stanford have tried to help people overcome their self-serving biases by teaching them about biases and then asking, “OK, now that you know about these biases, do you want to change what you just said about yourself?” Across many studies, the results were the same:²⁴ People were quite happy to learn about the various forms of self-serving bias and then apply their newfound knowledge to predict others’ responses. But their self-ratings were unaffected. Even when you grab people by the lapels, shake them, and say, “Listen to me! Most people have an inflated view of themselves. Be realistic!” they refuse, muttering to themselves, “Well, other people may be biased, but I *really am* above average on leadership.”

Pronin and Ross trace this resistance to a phenomenon they call “naive realism”: Each of us thinks we see the world directly, as it really is. We further believe that the facts as we see them are there for all to see, therefore others should agree with us. If they don’t agree, it follows either that they have not yet been exposed to the relevant facts or else that they are blinded by their interests and ideologies. People acknowledge that their own backgrounds have shaped their views, but such experiences are invariably seen as deepening one’s insights; for example, being a doctor gives a person special insight into the problems of the health-care industry. But the background of other people is used to explain their biases and covert motivations; for example, doctors think that lawyers disagree with them about tort reform not because they work with the victims of malpractice (and therefore have their own special insights) but because their self-interest biases their thinking. It just seems plain as day, to the naive realist, that everyone is influenced by ideology and self-interest. Except for me. I see things as they are.

If I could nominate one candidate for “biggest obstacle to world peace and social harmony,” it would be naive realism because it is so easily ratcheted up from the individual to the group level: My group is right because we see things as they are. Those who disagree are obviously biased by their religion, their ideology, or their self-interest. Naive realism gives us a world full of good and evil, and this brings us to the most disturbing implication of the sages’ advice about hypocrisy: Good and evil do not exist outside of our beliefs about them.

SATAN SATISFIES

One day in 1998 I received a handwritten letter from a woman in my town whom I did not know. The woman wrote about how crime, drugs, and teen pregnancy were all spiraling out of control. Society was going downhill as Satan spread his wings. The woman invited me to come to her church and find spiritual shelter. As I read her letter, I had to agree with her that Satan had spread his wings, but only to fly away and leave us in peace. The late 1990s was a golden age. The cold war was over, democracy and human rights were spreading, South Africa had vanquished apartheid, Israelis and Palestinians were reaping the fruits of the Oslo accords, and there were encouraging signs from North Korea. Here in the United States, crime and unemployment had plummeted, the stock market was climbing ever higher, and the ensuing prosperity was promising to erase the national debt. Even cockroaches were disappearing from our cities because of widespread use of the roach poison Combat. So what on earth was she talking about?

When the moral history of the 1990s is written, it might be titled *Desperately Seeking Satan*. With peace and harmony ascendant, Americans seemed to be searching for substitute villains. We tried drug dealers (but then the crack epidemic waned) and child abductors (who are usually one of the parents). The cultural right vilified homosexuals; the left vilified racists and homophobes. As I thought about these various villains, including the older villains of communism and Satan himself, I realized that most of them share three properties: They are invisible (you can't identify the evil one from appearance alone); their evil spreads by contagion, making it vital to protect impressionable young people from infection (for example from communist ideas, homosexual teachers, or stereotypes on television); and the villains can be defeated only if we all pull together as a team. It became clear to me that people want to believe they are on a mission from God, or that they are fighting for some more secular good (animals, fetuses, women's rights), and you can't have much of a mission without good allies and a good enemy.

The problem of evil has bedeviled many religions since their birth. If God is all good and all powerful, either he allows evil to flourish (which means he is not all good), or else he struggles against evil (which means he is not all powerful). Religions have generally chosen one of three resolutions of this

paradox.²⁵ One solution is straight dualism: There exists a good force and an evil force, they are equal and opposite, and they fight eternally. Human beings are part of the battleground. We were created part good, part evil, and we must choose which side we will be on. This view is clearest in religions emanating from Persia and Babylonia, such as Zoroastrianism, and the view influenced Christianity as a long-lived doctrine called Manichaeism. A second resolution is straight monism: There is one God; he created the world as it needs to be, and evil is an illusion, a view that dominated religions that developed in India. These religions hold that the entire world—or, at least, its emotional grip upon us—is an illusion, and that enlightenment consists of breaking out of the illusion. The third approach, taken by Christianity, blends monism and dualism in a way that ultimately reconciles the goodness and power of God with the existence of Satan. This argument is so complicated that I cannot understand it. Nor, apparently, can many Christians who, judging by what I hear on gospel radio stations in Virginia, seem to hold a straight Manichaean world view, according to which God and Satan are fighting an eternal war. In fact, despite the diversity of theological arguments made in different religions, concrete representations of Satan, demons, and other evil entities are surprisingly similar across continents and eras.²⁶

From a psychological perspective, Manichaeism makes perfect sense. "Our life is the creation of our mind," as Buddha said, and our minds evolved to play Machiavellian tit for tat. We all commit selfish and shortsighted acts, but our inner lawyer ensures that we do not blame ourselves or our allies for them. We are thus convinced of our own virtue, but quick to see bias, greed, and duplicity in others. We are often correct about others' motives, but as any conflict escalates we begin to exaggerate grossly, to weave a story in which pure virtue (our side) is in a battle with pure vice (theirs).

THE MYTH OF PURE EVIL

In the days after receiving that letter, I thought a lot about the need for evil. I decided to write an article on this need and use the tools of modern psychology to understand evil in a new way. But as soon as I started my research, I found out I was too late. By one year. A three-thousand-year-old

question had been given a complete and compelling psychological explanation the previous year by Roy Baumeister, one of today's most creative social psychologists. In *Evil: Inside Human Cruelty and Aggression*,²⁷ Baumeister examined evil from the perspective of both victim and perpetrator. When taking the perpetrator's perspective, he found that people who do things we see as evil, from spousal abuse all the way to genocide, rarely think they are doing anything wrong. They almost always see themselves as responding to attacks and provocations in ways that are justified. They often think that they themselves are victims. But, of course, you can see right through this tactic; you are good at understanding the biases that others use to protect their self-esteem. The disturbing part is that Baumeister shows us our own distortions as victims, and as righteous advocates of victims. Almost everywhere Baumeister looked in the research literature, he found that victims often shared some of the blame. Most murders result from an escalating cycle of provocation and retaliation; often, the corpse could just as easily have been the murderer. In half of all domestic disputes, both sides used violence.²⁸ Baumeister points out that, even in instances of obvious police brutality, such as the infamous videotaped beating of Rodney King in Los Angeles in 1991, there is usually much more to the story than is shown on the news. (News programs gain viewers by satisfying people's need to believe that evil stalks the land.)

Baumeister is an extraordinary social psychologist, in part because in his search for truth he is unconcerned about political correctness. Sometimes evil falls out of a clear blue sky onto the head of an innocent victim, but most cases are much more complicated, and Baumeister is willing to violate the taboo against "blaming the victim" in order to understand what really happened. People usually have reasons for committing violence, and those reasons usually involve retaliation for a perceived injustice, or self-defense. This does not mean that both sides are equally to blame: Perpetrators often grossly overreact and misinterpret (using self-serving biases). But Baumeister's point is that we have a deep need to understand violence and cruelty through what he calls "the myth of pure evil." Of this myth's many parts, the most important are that evildoers are pure in their evil motives (they have no motives for their actions beyond sadism and greed);

victims are pure in their victimhood (they did nothing to bring about their victimization); and evil comes from outside and is associated with a group or force that attacks our group. Furthermore, anyone who questions the application of the myth, who dares muddy the waters of moral certainty, is in league with evil.

The myth of pure evil is the ultimate self-serving bias, the ultimate form of naive realism. And it is the ultimate cause of most long-running cycles of violence because both sides use it to lock themselves into a Manichean struggle. When George W. Bush said that the 9/11 terrorists did what they did because they "hate our freedom," he showed a stunning lack of psychological insight. Neither the 9/11 hijackers nor Osama Bin Laden were particularly upset because American women can drive, vote, and wear bikinis. Rather, many Islamic extremists want to kill Americans because they are using the Myth of Pure Evil to interpret Arab history and current events. They see America as the Great Satan, the current villain in a long pageant of Western humiliation of Arab nations and peoples. They did what they did as a reaction to America's actions and impact in the Middle East, as they see it through the distortions of the Myth of Pure Evil. However horrifying it is for terrorists to lump all civilians into the category of "enemy" and then kill them indiscriminately, such actions at least make psychological sense, whereas killing because of a hatred for freedom does not.

In another unsettling conclusion, Baumeister found that violence and cruelty have four main causes. The first two are obvious attributes of evil: greed/ambition (violence for direct personal gain, as in robbery) and sadism (pleasure in hurting people). But greed/ambition explains only a small portion of violence, and sadism explains almost none. Outside of children's cartoons and horror films, people almost never hurt others for the sheer joy of hurting someone. The two biggest causes of evil are two that we think are good, and that we try to encourage in our children: high self-esteem and moral idealism. Having high self-esteem doesn't directly cause violence, but when someone's high esteem is unrealistic or narcissistic, it is easily threatened by reality; in reaction to those threats, people—particularly young men—often lash out violently.²⁹ Baumeister questions the usefulness of programs that try raise children's self-esteem directly instead of by teaching

them skills they can be proud of. Such direct enhancement can potentially foster unstable narcissism.

Threatened self-esteem accounts for a large portion of violence at the individual level, but to really get a mass atrocity going you need idealism—the belief that your violence is a means to a moral end. The major atrocities of the twentieth century were carried out largely either by men who thought they were creating a utopia or else by men who believed they were defending their homeland or tribe from attack.³⁰ Idealism easily becomes dangerous because it brings with it, almost inevitably, the belief that the ends justify the means. If you are fighting for good or for God, what matters is the outcome, not the path. People have little respect for rules; we respect the moral principles that underlie most rules. But when a moral mission and legal rules are incompatible, we usually care more about the mission. The psychologist Linda Skitka³¹ finds that when people have strong moral feelings about a controversial issue—when they have a “moral mandate”—they care much less about procedural fairness in court cases. They want the “good guys” freed by any means, and the “bad guys” convicted by any means. It is thus not surprising that the administration of George W. Bush consistently argues that extra-judicial killings, indefinite imprisonment without trial, and harsh physical treatment of prisoners are legal and proper steps in fighting the Manichaeian “war on terror.”

FINDING THE GREAT WAY

In philosophy classes, I often came across the idea that the world is an illusion. I never really knew what that meant, although it sounded deep. But after two decades studying moral psychology, I think I finally get it. The anthropologist Clifford Geertz wrote that “man is an animal suspended in webs of significance that he himself has spun.”³² That is, the world we live in is not really one made of rocks, trees, and physical objects; it is a world of insults, opportunities, status symbols, betrayals, saints, and sinners. All of these are human creations which, though real in their own way, are not real in the way that rocks and trees are real. These human creations are like

fairies in J. M. Barrie’s *Peter Pan*: They exist only if you believe in them. They are the Matrix (from the movie of that name); they are a consensual hallucination.

The inner lawyer, the rose-colored mirror, naive realism, and the myth of pure evil—these mechanisms all conspire to weave for us a web of significance upon which angels and demons fight it out. Our ever-judging minds then give us constant flashes of approval and disapproval, along with the certainty that we are on the side of the angels. From this vantage point it all seems so silly, all this moralism, righteousness, and hypocrisy. It’s beyond silly; it is tragic, for it suggests that human beings will never achieve a state of lasting peace and harmony. So what can you do about it?

The first step is to see it as a game and stop taking it so seriously. The great lesson that comes out of ancient India is that life as we experience it is a game called “samsara.” It is a game in which each person plays out his “dharma,” his role or part in a giant play. In the game of samsara, good things happen to you, and you are happy. Then bad things happen, and you are sad or angry. And so it goes, until you die. Then you are reborn back into it, and it repeats. The message of the *Bhagavad Gita* (a central text of Hinduism) is that you can’t quit the game entirely; you have a role to play in the functioning of the universe, and you must play that role. But you should do it in the right way, without being attached to the “fruits” or outcomes of your action. The god Krishna says:

I love the man who hates not nor exults, who mourns not nor desires . . . who is the same to friend and foe, [the same] whether he be respected or despised, the same in heat and cold, in pleasure and in pain, who has put away attachment and remains unmoved by praise or blame . . . contented with whatever comes his way.³³

Buddha went a step further. He, too, counseled indifference to the ups and downs of life, but he urged that we quit the game entirely. Buddhism is a set of practices for escaping samsara and the endless cycle of rebirth. Though divided on whether to retreat from the world or engage with it, Buddhists all agree on the importance of training the mind to stop its incessant

judging. Sen-ts'an, an early Chinese Zen master, urged nonjudgmentalism as a prerequisite to following "the perfect way" in this poem from the eighth century CE:

*The Perfect Way is only difficult for those who pick and choose;
Do not like, do not dislike; all will then be clear.
Make a hairbreadth difference, and Heaven and Earth are set apart;
If you want the truth to stand clear before you, never be for or against.
The struggle between "for" and "against" is the mind's worst disease.³⁴*

Judgmentalism is indeed a disease of the mind: it leads to anger, torment, and conflict. But it is also the mind's normal condition—the elephant is always evaluating, always saying "Like it" or "Don't like it." So how can you change your automatic reactions? You know by now that you can't simply resolve to stop judging others or to stop being a hypocrite. But, as Buddha taught, the rider can gradually learn to tame the elephant, and meditation is one way to do so. Meditation has been shown to make people calmer, less reactive to the ups and downs and petty provocations of life.³⁵ Meditation is the Eastern way of training yourself to take things philosophically.

Cognitive therapy works, too. In *Feeling Good*,³⁶ a popular guide to cognitive therapy, David Burns has written a chapter on cognitive therapy for anger. He advises using many of the same techniques that Aaron Beck used for depression: Write down your thoughts, learn to recognize the distortions in your thoughts, and then think of a more appropriate thought. Burns focuses on the *should* statements we carry around—ideas about how the world *should* work, and about how people *should* treat us. Violations of these *should* statements are the major causes of anger and resentment. Burns also advises empathy: In a conflict, look at the world from your opponent's point of view, and you'll see that she is not entirely crazy.

Although I agree with Burns's general approach, the material I have reviewed in this chapter suggests that, once anger comes into play, people

find it extremely difficult to empathize with and understand another perspective. A better place to start is, as Jesus advised, with yourself and the log in your own eye. (Batson and Loewenstein both found that debiasing occurred only when subjects were forced to look at themselves.) And you will see the log only if you set out on a deliberate and effortful quest to look for it. Try this now: Think of a recent interpersonal conflict with someone you care about and then find one way in which your behavior was not exemplary. Maybe you did something insensitive (even if you had a right to do it), or hurtful (even if you meant well), or inconsistent with your principles (even though you can readily justify it). When you first catch sight of a fault in yourself, you'll likely hear frantic arguments from your inner lawyer excusing you and blaming others, but try not to listen. You are on a mission to find at least one thing that you did wrong. When you extract a splinter it hurts, briefly, but then you feel relief, even pleasure. When you find a fault in yourself it will hurt, briefly, but if you keep going and acknowledge the fault, you are likely to be rewarded with a flash of pleasure that is mixed, oddly, with a hint of pride. It is the pleasure of taking responsibility for your own behavior. It is the feeling of honor.

Finding fault with yourself is also the key to overcoming the hypocrisy and judgmentalism that damage so many valuable relationships. The instant you see some contribution you made to a conflict, your anger softens—maybe just a bit, but enough that you might be able to acknowledge some merit on the other side. You can still believe you are right and the other person is wrong, but if you can move to believing that you are *mostly* right, and your opponent is *mostly* wrong, you have the basis for an effective and nonhumiliating apology. You can take a small piece of the disagreement and say, "I should not have done X, and I can see why you felt Y." Then, by the power of reciprocity, the other person will likely feel a strong urge to say, "Yes, I was really upset by X. But I guess I shouldn't have done P, so I can see why you felt Q." Reciprocity amplified by self-serving biases drove you apart back when you were matching insults or hostile gestures, but you can turn the process around and use reciprocity to end a conflict and save a relationship.

The human mind may have been shaped by evolutionary processes to play Machiavellian tit for tat, and it seems to come equipped with cognitive processes that predispose us to hypocrisy, self-righteousness, and moralistic

conflict. But sometimes, by knowing the mind's structure and strategies, we can step out of the ancient game of social manipulation and enter into a game of our choosing. By seeing the log in your own eye you can become less biased, less moralistic, and therefore less inclined toward argument and conflict. You can begin to follow the perfect way, the path to happiness that leads through acceptance, which is the subject of the next chapter.

5



The Pursuit of Happiness

Good men, at all times, surrender in truth all attachments. The holy spend not idle words on things of desire. When pleasure or pain comes to them, the wise feel above pleasure and pain.

—BUDDHA¹

Do not seek to have events happen as you want them to, but instead want them to happen as they do happen, and your life will go well.

—EPICTETUS²

IF MONEY OR POWER could buy happiness, then the author of the Old Testament book of Ecclesiastes should have been overjoyed. The text attributes itself to a king in Jerusalem, who looks back on his life and his search for happiness and fulfillment. He tried at one point to “make a test of pleasure,” by seeking happiness in his riches:

I made great works; I built houses and planted vineyards for myself; I made myself gardens and parks, and planted in them all kinds of fruit trees . . . I also had great possessions of herds and flocks, more than any who had been before me in Jerusalem. I also gathered for myself silver

6



Love and Attachments

No one can live happily who has regard to himself alone and transforms everything into a question of his own utility; you must live for your neighbour, if you would live for yourself.

—SENECA¹

No man is an island, entire of itself; every man is a piece of the continent, a part of the main.

—JOHN DONNE²

IN 1931, AT THE AGE of four, my father was diagnosed with polio. He was immediately put into an isolation room at the local hospital in Brooklyn, New York. There was no cure and no vaccine for polio at that time, and city dwellers lived in fear of its spread. For several weeks my father had no human contact, save for an occasional visit by a masked nurse. His mother came to see him every day, but that's all she could do—wave to him and try to talk to him through the glass pane on the door. My father remembers calling out to her, begging her to come in. It must have broken her heart, and one day she ignored the rules and went in. She was caught and sternly reprimanded. My father recovered with no paralysis, but this image has always stayed with me: a small boy alone in a room, gazing at his mother through a pane of glass.

My father had the bad luck to be born at the confluence point of three big ideas. The first was germ theory, proposed in the 1840s by Ignaz Semmelweis and incorporated into hospitals and homes with gradually increasing ferocity over the next century. When they began to collect statistics from orphanages and foundling homes in the 1920s, pediatricians came to fear germs above all else. As far back as records went, they showed that most children dropped off at foundling homes died within one year. In 1915, a New York physician, Henry Chapin, reported to the American Pediatric Society that out of the ten foundling homes he had examined, in all but one of them *all* the children had died before their second birthday.³ As pediatricians came to grips with the deadly effects of institutions on young children, they reacted in a logical way by launching a crusade against germs. It became a priority in orphanages and hospitals to isolate children as much as possible in clean cubicles to prevent them from infecting each other. Beds were separated, dividers were placed between beds, nurses retreated behind masks and gloves, and mothers were scolded for violating quarantine.

The other two big ideas were psychoanalysis and behaviorism. These two theories agreed on very little, but they both agreed that the infant's attachment to its mother is based on milk. Freud thought that the infant's libido (desire for pleasure) is first satisfied by the breast, and therefore the infant develops its first attachment (psychological need) to the breast. Only gradually does the child generalize that desire to the woman who owns the breast. The behaviorists didn't care about libido, but they, too, saw the breast as the first reinforcer, the first reward (milk) for the first behavior (sucking). The heart of behaviorism, if it had one, was conditioning—the idea that learning occurs when rewards are *conditional* upon behaviors. Unconditional love—holding, nuzzling, and cuddling children for no reason—was seen as the surest way to make children lazy, spoiled, and weak. Freudians and behaviorists were united in their belief that highly affectionate mothering damages children, and that scientific principles could improve child rearing. Three years before my father entered the hospital, John Watson, the leading American behaviorist (in the years before B. F. Skinner), published the best-seller *Psychological Care of Infant and Child*.⁴ Watson wrote of his dream that one day babies would be raised in baby farms, away from the corrupting influences of parents. But until that day arrived, parents were

urged to use behaviorist techniques to rear strong children: Don't pick them up when they cry, don't cuddle or coddle them, just dole out benefits and punishments for each good and bad action.

How could science have gotten it so wrong? How could doctors and psychologists not have seen that children need love as well as milk? This chapter is about that need—the need for other people, for touch, and for close relationships. No man, woman, or child is an island. Scientists have come a long way since John Watson, and there is now a much more humane science of love. The story of this science begins with orphans and rhesus monkeys and ends with a challenge to the dismal view of love held by many of the ancients, East and West. The heroes of this story are two psychologists who rejected the central tenets of their training: Harry Harlow and John Bowlby. These two men knew that something was missing in behaviorism and in psychoanalysis, respectively. Against great odds they changed their fields, they humanized the treatment of children, and they made it possible for science to greatly improve upon the wisdom of the ancients.

TO HAVE AND TO HOLD

Harry Harlow⁵ earned his Ph.D. in 1930 at Stanford, where he wrote his dissertation on the feeding behavior of baby rats. He took a job at the University of Wisconsin, where he found himself overwhelmed with teaching and undersupplied with research subjects—he had no lab space, no rats, no way to perform the experiments he was expected to publish. Out of desperation, Harlow took his students to the little zoo in Madison, Wisconsin, which had a small number of primates. Harlow and his first graduate student, Abe Maslow, couldn't run controlled experiments using so few animals. They were forced instead to observe, to keep their minds open, and to learn from species closely related to human beings. And one of the first things they saw was curiosity. The apes and monkeys liked to solve puzzles (the humans gave them tests to measure physical dexterity and intelligence), and would work at tasks for what seemed to be the sheer pleasure of it. Behaviorism, in contrast, said that animals will only do what they have been reinforced for doing.

Harlow sensed he had found a flaw in behaviorism, but he couldn't prove it with anecdotes from the local zoo. He desperately wanted a lab in which to study primates, not rats, so he built one himself—literally built it, in the shell of an abandoned building, with the help of his students. In that makeshift lab, for the next thirty years, Harlow and his students infuriated behaviorists by demonstrating with ever more precision that monkeys are curious, intelligent creatures who like to figure things out. They follow the laws of reinforcement to some degree, as do humans, but there is much more going on in a monkey brain than the brain of a behaviorist could grasp. For example, giving monkeys raisins as a reward for each correct step in solving a puzzle (such as opening a mechanical latch with several moving parts) actually interferes with the solving, because it distracts the monkeys.⁶ They enjoy the task for its own sake.

As Harlow's lab grew, he faced perennial shortages of monkeys. They were hard to import and, when they arrived they were often sick, bringing a stream of new infections into the lab. In 1955, Harlow conceived the bold idea of starting his own breeding colony of rhesus monkeys. Nobody had ever created a self-sustaining breeding colony of monkeys in the United States, let alone in the cold climate of Wisconsin, but Harlow was undeterred. He allowed his rhesus monkeys to mate, and then he took away the children within hours of their birth—to save them from infections in the crowded lab. After much experimentation, he and his students created an artificial baby formula full of nutrients and antibiotics. They found the optimum pattern of feeding, light and dark cycles, and temperature. Each baby was raised in its own cage, safe from disease. Harlow had in a way realized Watson's dream of a baby farm, and the crop grew large and healthy-looking. But when the farm-raised monkeys were brought into the company of others, they were stunned and unnerved. They never developed normal social or problem-solving skills, so they were useless for experiments. Harlow and his students were stumped. What had they forgotten?

The clue was in plain sight, clutched in the monkeys' hands, until finally a grad student, Bill Mason, noticed it: diapers. The cages in the baby hatchery were sometimes lined with old diapers to provide bedding material and protect the babies from the cold floor. The monkeys clung to the diapers, especially when they were afraid, and took them along when they

were carried to new cages. Mason proposed a test to Harlow: Let's expose some young monkeys to a bundle of cloth and a bundle of wood. Let's see whether the monkeys just need to hold on to something, anything, or whether there's something special about the softness of the cloth. Harlow loved the idea, and, as he thought it over, he saw an even grander question: Were the diapers really substitutes for mothers? Did the monkeys have an innate need to hold and be held, a need that was utterly starved in the baby farm? If so, how could he prove it? Harlow's proof became one of the most famous experiments in all of psychology.

Harlow put the milk hypothesis to a direct test. He created two kinds of surrogate mother, each one a cylinder about the size of an adult female rhesus monkey, complete with a wooden head that had eyes and a mouth. One kind was made of wire mesh, the other was covered with a layer of foam and then a layer of soft terrycloth. Each of eight baby rhesus monkeys was raised alone in a cage with two surrogate mothers, one of each kind. For four of the monkeys, milk was delivered only from a tube coming through the chest of the wire mother. For the other four, the tube came through the chest of the cloth mother. If Freud and Watson were right that milk was the cause of attachment, the monkeys should attach to their milk givers. But that's not what happened. All the monkeys spent nearly all their time clinging to, climbing on, and pushing themselves into the soft folds of the cloth mother. Harlow's experiment⁷ is so elegant and so convincing that you don't need to see statistics to understand the results. You just need to see the famous photo, now included in every introductory psychology book, in which a baby monkey clings to the cloth mother with its hind legs while stretching over to feed from the tube protruding from the wire mother.

Harlow argued that "contact comfort" is a basic need that young mammals have for physical contact with their mother. In the absence of a real mother, young mammals will seek out whatever feels most like a mother. Harlow chose the term carefully, because the mother, even a cloth mother, provides comfort when it is most needed, and that comfort comes mostly from direct contact.

Displays of familial love often move people to tears, and Deborah Blum's wonderful biography of Harlow, *Love at Goon Park*,⁸ is full of touching expressions of familial love. It is an uplifting story, ultimately, but along the

way it is full of sadness and unrequited love. The cover of the book, for example, shows a picture of a young rhesus monkey alone in a cage, gazing at its cloth “mother” through a pane of glass.

LOVE CONQUERS FEAR

John Bowlby’s life followed an entirely different path from Harlow’s, even though it led, ultimately, to the same discovery.⁹ Bowlby was an English aristocrat, raised by a nanny, and sent to boarding school. He studied medicine and became a psychoanalyst, but during his early training years, he did some volunteer work that shaped the rest of his career. He worked at two homes for maladjusted children, many of whom had no real contact with their parents. Some were aloof and uncommunicative; others were hopelessly clingy, following him around anxiously if he paid the slightest attention to them. After serving in World War II, Bowlby returned to England to run the children’s clinic in a hospital. He began to do research on how separation from parents affects children. Europe at that time had just experienced more parent-child separations than had any place in all of human history. The war had created vast numbers of orphans, refugees, and children sent away to the countryside for their own safety. The new World Health Organization commissioned Bowlby to write a report on the best way to deal with these children. Bowlby toured hospitals and orphanages, and his report, published in 1951, was a passionate argument against prevailing notions that separation and isolation are harmless, and that biological needs such as nutrition are paramount. Children need love to develop properly, he argued; children need mothers.

Throughout the 1950s, Bowlby developed his ideas and weathered the scorn of psychoanalysts such as Anna Freud and Melanie Klein, whose theories (about libido and breasts) he contradicted. He had the good luck to meet a leading ethologist of the day, Robert Hinde, who taught him about new research on animal behavior. Konrad Lorenz, for example, had demonstrated that ducklings, ten to twelve hours after they hatch, will lock onto whatever duck-sized thing moves around in their environment and then follow it around for months.¹⁰ In nature this thing is always mom, but

in Lorenz's demonstrations, anything he moved around worked—even his own boots (with him in them). This visual “imprinting” mechanism is quite different from what happens in people, but once Bowlby began to think about how evolution creates mechanisms to make sure that mothers and children stay together, the way was open for an entirely new approach to human parent-child relationships. There's no need to derive the bond from milk, reinforcement, libido, or anything else. Rather, the attachment of mother and child is so enormously important for the survival of the child that a dedicated system is built into mother and child in all species that rely on maternal care. As Bowlby began to pay more attention to animal behavior, he saw many similarities between the behaviors of baby monkeys and baby humans: clinging, sucking, crying when left behind, following whenever possible. All these behaviors functioned in other primates to keep the child close to mom, and all were visible in human children, even the “pick me up” signal of upstretched arms.

In 1957, Hinde learned about Harlow's not-yet-published cloth-mother studies and told Bowlby, who wrote to Harlow and later visited him in Wisconsin. The two men became great allies and supporters of each other. Bowlby, the great theorist, created the framework that has unified most subsequent research on parent-child relations; and Harlow, the great experimentalist, provided the first irrefutable lab demonstrations of the theory.

Bowlby's grand synthesis is called attachment theory.¹¹ It borrows from the science of cybernetics—the study of how mechanical and biological systems can regulate themselves to achieve preset goals while the environment around and inside them changes. Bowlby's first metaphor was the simplest cybernetic system of all—a thermostat that turns on a heater when the temperature drops below a set point.

Attachment theory begins with the idea that two basic goals guide children's behavior: safety and exploration. A child who stays safe survives; a child who explores and plays develops the skills and intelligence needed for adult life. (This is why all mammal babies play; and the larger their frontal cortex, the more they need to play).¹² These two needs are often opposed, however, so they are regulated by a kind of thermostat that monitors the level of ambient safety. When the safety level is adequate, the child plays and explores. But as soon as it drops too low, it's as though a switch were thrown

and suddenly safety needs become paramount. The child stops playing and moves toward mom. If mom is unreachable, the child cries, and with increasing desperation; when mom returns, the child seeks touch, or some other reassurance, before the system can reset and play can resume. This is an instance of the “design” principle I discussed in chapter 2: opposing systems push against each other to reach a balance point. (Fathers make perfectly good attachment figures, but Bowlby focused on mother-child attachments, which usually get off to a faster start.)

If you want to see the system in action, just try engaging a two-year-old in play. If you go to a friend’s house and meet her child for the first time, it should take only a minute. The child feels secure in his familiar surroundings, and his mother functions as what Bowlby called a “secure base”—an attachment figure whose presence guarantees safety, turns off fear, and thereby enables the explorations that lead to healthy development. But if your friend brings her son over to *your* house for the first time, it will take longer. You’ll probably have to walk around your friend just to find the little head hiding behind her thighs. And then, if you succeed in starting a game—making faces at him to make him laugh, perhaps—just watch what happens when his mother goes to the kitchen to get a glass of water. The thermostat clicks, the game ends, and your play partner scampers off to the kitchen, too. Harlow had shown all the same behavior in monkeys.¹³ Young monkeys placed with their cloth mother in the center of an open room full of toys eventually climbed down from mom to explore, but they returned often to touch her and reconnect. If the cloth mother was removed from the room, all play stopped and frantic screaming ensued.

When children are separated from their attachment figures for a long time, as in a hospital stay, they quickly descend into passivity and despair. When they are denied a stable and enduring attachment relationship (raised, for example, by a succession of foster parents or nurses), they are likely to be damaged for life, Bowlby said. They might become the aloof loners or hopeless clingers that Bowlby had seen in his volunteer work. Bowlby’s theory directly contradicted Watson as well as the Freuds (Sigmund and Anna): If you want your children to grow up to be healthy and independent, you should hold them, hug them, cuddle them, and love them. Give them a secure base and they will explore and then conquer the world on their own. The power of

love over fear was well expressed in the New Testament: "There is no fear in love, but perfect love casts out fear" (I JOHN 4:18).

THE PROOF IS IN THE PARTING

If you're going to contradict the prevailing wisdom of your day, you'd better have darn good evidence. Harlow's studies were darn good, but skeptics claimed they didn't apply to people. Bowlby needed more proof, and he got it from a Canadian woman who happened to answer an ad he placed for a research assistant in 1950. Mary Ainsworth, who had moved to London with her husband, spent three years working with Bowlby on his early studies of hospitalized children. When her husband took an academic job in Uganda, Ainsworth went with him again and took advantage of the opportunity to make careful observations of children in Ugandan villages. Even in a culture where women share mothering duties for all the children in the extended family household, Ainsworth observed a special bond between a child and his own mother. The mother was much more effective as a secure base than were other women. Ainsworth then moved to the Johns Hopkins University in Baltimore, and after that to the University of Virginia, where she thought about how to test Bowlby's ideas, and her own, about the mother-child relationship.

In Bowlby's cybernetic theory, the action is in the changes. You can't just watch a child play; you have to look at how the exploration and safety goals shift in response to changing conditions. So Ainsworth developed a little drama, later called the "Strange Situation," and cast the child in the starring role.¹⁴ In essence, she re-created the experiments in which Harlow had placed monkeys in an open room with novel toys. In the first scene, the mother and her child enter a comfortable room, full of toys. Most children in the experiment soon crawl or toddle off to explore. In scene two, a friendly woman enters, talks with the mother for a few minutes, and then joins the child in play. In scene three, the mother gets up and leaves the child alone for a few minutes with the stranger. In scene four, she returns and the stranger leaves. In scene five, the mother leaves again, and the child is all alone in the room. In scene six, the stranger returns; and in

scene seven, the mother returns for good. The play is designed to ratchet up the child's stress level in order to see how the child's attachment system manages the scene changes. Ainsworth found three common patterns of managing.

In about two-thirds of American children, the system does just what Bowlby said it should, that is, shift smoothly between play and security-seeking as the situation changes. Children following this pattern, called "secure" attachment, reduce or stop their play when their mothers leave, and then show anxiety, which the stranger cannot fully relieve. In the two scenes where mom returns, these children show delight, often moving toward her or touching her to reestablish contact with their secure base; but then they quickly settle down and return to play. In the other third of children, the scene changes are more awkward; these children have one of two types of insecure attachment. The majority of them don't seem to care very much whether mom comes or goes, although subsequent physiological research showed that they are indeed distressed by the separation. Rather, these children seem to be suppressing their distress by trying to manage it on their own instead of relying upon mom for comfort. Ainsworth called this pattern "avoidant" attachment. The remaining children, about 12 percent in the United States, are anxious and clingy throughout the study. They become extremely upset when separated from mom, they sometimes resist her efforts to comfort them when she returns, and they never fully settle down to play in the unfamiliar room. Ainsworth called this pattern "resistant."¹⁵

Ainsworth first thought these differences were caused entirely by good or bad mothering. She observed mothers at home and found that those who were warm and highly responsive to their children were most likely to have children who showed secure attachment in the strange situation. These children had learned that they could count on their mothers, and were therefore the most bold and confident. Mothers who were aloof and unresponsive were more likely to have avoidant children, who had learned not to expect much help and comfort from mom. Mothers whose responses were erratic and unpredictable were more likely to have resistant children, who had learned that their efforts to elicit comfort sometimes paid off, but sometimes not.

But whenever I hear about correlations between mother and child, I'm skeptical. Twin studies almost always show that personality traits are due

more to genetics than to parenting.¹⁶ Maybe it's just that happy women, those who won the cortical lottery, are warm and loving, and they pass on their happy genes to their children, who then show up as securely attached. Or maybe the correlation runs in reverse: Children do have stable inborn temperaments¹⁷—sunny, cranky, or anxious—and the sunny ones are just so much fun that their mothers *want* to be more responsive. My skepticism is bolstered by the fact that studies done after Ainsworth's home study have generally found only small correlations between mothers' responsiveness and the attachment style of their children.¹⁸ On the other hand, twin studies have found that genes play only a small role in determining attachment style.¹⁹ So now we have a real puzzle, a trait that correlates weakly with mothering and weakly with genes. Where does it come from?

Bowlby's cybernetic theory forces us to think outside the usual nature-nurture dichotomy. You have to see attachment style as a property that emerges gradually during thousands of interactions. A child with a particular (genetically influenced) temperament makes bids for protection. A mother with a particular (genetically influenced) temperament responds, or doesn't respond, based on her mood, on how overworked she is, or on what childcare guru she has been reading. No one event is particularly important, but over time the child builds up what Bowlby called an "internal working model" of himself, his mother, and their relationship. If the model says that mom is always there for you, you'll be bolder in your play and explorations. Round after round, predictable and reciprocal interactions build trust and strengthen the relationship. Children with sunny dispositions who have happy mothers are almost certain to play the game well and develop a secure attachment style, but a dedicated mother can overcome either her own or her child's less pleasant disposition and foster a secure internal working model of their relationship. (Everything I have reported above is true for fathers too, but most children in all cultures spend more time with their mothers.)

IT'S NOT JUST FOR CHILDREN

When I started writing this chapter, I planned to review attachment theory in a page or two and then move on to the stuff that we adults really care

about. When we hear the word “love,” we think of romantic love. We might hear an occasional song about love between parents and children on a country music radio station, but anywhere else on the dial love means the kind of love you fall into and then struggle to hold onto. The more I delved into the research, however, the more I realized that Harlow, Bowlby, and Ainsworth can help us understand grown-up love. See for yourself. Which of the following statements best describes you in romantic relationships?

1. I find it relatively easy to get close to others and am comfortable depending on them and having them depend on me. I don't often worry about being abandoned or about someone getting too close to me.
2. I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often love partners want me to be more intimate than I feel comfortable being.
3. I find that others are reluctant to get as close as I would like. I often worry that my partner doesn't really love me or won't want to stay with me. I want to merge completely with another person, and this desire sometimes scares people away.²⁰

The attachment researchers Cindy Hazan and Phil Shaver developed this simple test to see whether Ainsworth's three styles were still at work when adults try to form relationships. They are. Some people change style as they grow up, but the great majority of adults choose the descriptor that matched the way they were as a child.²¹ (The three choices above correspond to Ainsworth's secure, avoidant, and resistant patterns.) Internal working models are fairly stable (though not unchangeable), guiding people in their most important relationships throughout their lives. And just as secure babies are happier and more well-adjusted, secure adults enjoy happier, longer relationships as well as lower rates of divorce.²²

But does adult romantic love really grow out of the same psychological system that attaches children to their mothers? To find out, Hazan traced the process by which childhood attachment changes with age. Bowlby had been specific about the four defining features of attachment relationships:²³

1. proximity maintenance (the child wants and strives to be near the parent)
2. separation distress (self-explanatory)
3. safe haven (the child, when frightened or distressed, comes to the parent for comfort)
4. secure base (the child uses the parent as a base from which to launch exploration and personal growth)

Hazan and her colleagues²⁴ surveyed hundreds of people from the ages of six through eighty-two, asking which people in their lives fulfilled each of the four defining features of attachment (for example: “Whom do you most like to spend time with?” “Whom do you turn to when you are feeling upset?”). If babies could take the survey, they would nominate mom or dad as the answer to all questions, but by the time they are eight, children want most strongly to spend time with their peers. (When children resist leaving their friends to come home for dinner, that’s proximity maintenance.) Between the ages of eight and fourteen, safe haven expands from parents to include peers as adolescents begin turning to each other for emotional support. But it’s only at the end of adolescence, around the ages fifteen to seventeen, that all four components of attachment can be satisfied by a peer, specifically a romantic partner. The New Testament records this normal transference of attachment: “For this reason a man shall leave his father and mother and be joined to his wife, and the two shall become one flesh. So they are no longer two, but one flesh” (MARK 10:7–9).

Evidence that romantic partners become true attachment figures, like parents, comes from a review²⁵ of research on how people cope with the death of a spouse, or a long separation. The review found that adults experience the same sequence Bowlby had observed in children placed in hospitals: initial anxiety and panic, followed by lethargy and depression, followed by recovery through emotional detachment. Furthermore, the review found that contact with close friends was of little help in blunting the pain, but renewed contact with one’s *parents* was much more effective.

Once you think about it, the similarities between romantic relationships and parent-infant relationships are obvious. Lovers in the first rush of love spend endless hours in face-to-face mutual gaze, holding each other, nuzzling

and cuddling, kissing, using baby voices, and enjoying the same release of the hormone oxytocin that binds mothers and babies to each other in a kind of addiction. Oxytocin prepares female mammals to give birth (triggering uterine contractions and milk release), but it also affects their brains, fostering nurturant behaviors and reducing feelings of stress when mothers are in contact with their children.²⁶

This powerful attachment of mothers to infants—often called the “caregiving system”—is a different psychological system from the attachment system in infants, but the two systems obviously evolved in tandem. The infant’s distress signals are effective only because they trigger caregiving desires in the mother. Oxytocin is the glue that makes the two parts stick together. Oxytocin has been oversimplified in the popular press as a hormone that makes people (even ornery men) suddenly sweet and affectionate, but more recent work suggests that it can also be thought of as a stress hormone in women:²⁷ It is secreted when women are under stress and their attachment needs are *not* being met, causing a need for contact with a loved one. On the other hand, when oxytocin floods the brain (male or female) while two people *are* in skin-to-skin contact, the effect is soothing and calming, and it strengthens the bond between them. For adults, the biggest rush of oxytocin—other than giving birth and nursing—comes from sex.²⁸ Sexual activity, especially if it includes cuddling, extended touching, and orgasm, turns on many of the same circuits that are used to bond infants and parents. It’s no wonder that childhood attachment styles persist in adulthood: The whole attachment system persists.

LOVE AND THE SWELLED HEAD

Adult love relationships are therefore built out of two ancient and interlocking systems: an attachment system that bonds child to mother and a caregiving system that bonds mother to child. These systems are as old as mammals—older perhaps, because birds have them, too. But we still have to add something else to explain why sex is related to love. No problem; nature was motivating animals to seek each other out for sex long before mammals or birds existed. The “mating system” is completely separate from the other

two systems, and it involves distinctive brain areas and hormones.²⁹ In some animals, such as rats, the mating system draws male and female together just long enough for them to copulate. In other species, such as elephants, male and female are drawn together for several days—the duration of the fertile period—during which they share tender caresses, play joyfully, and show many other signs that remind human observers of mutual infatuation.³⁰ Whatever the duration, for most mammals (other than humans) the three systems are strung together with perfect predictability. First, hormonal changes in the female around the time of ovulation trigger advertisements of her fertility: Female dogs and cats, for example, release pheromones; female chimpanzees and bonobos exhibit enormous red genital swellings. Next, the males become turned on and compete (in some species) to see who gets to mate. The female makes some sort of choice (in most species), which in turn activates her own mating system; and then, some months later, birth activates the caregiving system in the mother and the attachment system in the child. Dad is left out in the cold, where he spends his time sniffing for more pheromones, or scanning for more swellings. Sex is for reproduction; lasting love is for mothers and children. So why are people so different? How did human females come to hide all signs of ovulation and get men to fall in love with them and their children?

Nobody knows, but the most plausible theory³¹ in my opinion begins with the enormous expansion of the human brain that I talked about in chapters 1 and 3. When the first hominids split off from the ancestors of modern chimpanzees, their brains were no bigger than those of chimpanzees. These human ancestors were basically just bipedal apes. But then, around 3 million years ago, something changed. Something in the environment, or perhaps an increase in tool use made possible by increasingly dextrous hands, made it highly adaptive to have a much larger brain and much higher intelligence. However, brain growth faced a literal bottleneck: the birth canal. There were physical limits to how large a head hominid females could give birth to and still have a pelvis that would allow them to walk upright. At least one species of hominid—our ancestor—evolved a novel technique that got around this limitation by sending babies out of the uterus long before their brains were developed enough to control their bodies. In all other primate species, brain growth slows dramatically soon after birth

because the brain is mostly complete and ready for service; only some fine tuning during a few years of childhood play and learning is needed. In humans, however, the rapid rate of embryonic brain growth continues for about two years after birth, followed by a slower but continuous increase in brain weight for another twenty years.³² Humans are the only creatures on Earth whose young are utterly helpless for years, and heavily dependent on adult care for more than a decade.

Given the enormous burden that is the human child, women can't do it on their own. Studies of hunter-gatherer societies show that mothers of young children cannot collect enough calories to keep themselves and their children alive.³³ They rely on the large quantity of food as well as the protection provided by males in their peak years of productivity. Big brains, so useful for gossip and social manipulation (as well as hunting and gathering), could therefore have evolved only if men began chipping in. But in the competitive game of evolution, it's a losing move for a male to provide resources to a child who is not his own. So active fathers, male-female pair-bonds, male sexual jealousy, and big-headed babies all co-evolved—that is, arose gradually but together. A man who felt some desire to stay with a woman, guard her fidelity, and contribute to the rearing of their children could produce smarter children than could his less paternal competitors. In environments in which intelligence was highly adaptive (which may have been all human environments, once we began making tools), male investment in children may have paid off for the men themselves (for their genes, that is), and therefore became more common with each successive generation.

But from what raw material could a tie evolve between men and women where one did not exist before? Evolution cannot design anything from scratch. Evolution is a process in which bones and hormones and behavioral patterns that were already coded for by the genes are changed slightly (by random mutation of those genes) and then selected if they confer an advantage on an individual. It didn't take much change to modify the attachment system, which every man and every woman had used as a child to attach to mom, and have it link up with the mating system, which was already turning on in each young person at the time of puberty.

Granted, this theory is speculative (the fossilized bones of a committed father look no different from those of an indifferent one), but it does tie together neatly many of the distinctive features of human life, such as our painful childbirth, long infancy, large brains, and high intelligence. The theory connects these biological quirks about human beings to some of the most important emotional oddities of our species: the existence of strong and (often) enduring emotional bonds between men and women, and between men and children. Because men and women in a relationship have many conflicting interests, evolutionary theory does not view love relationships as harmonious partnerships for childrearing,³⁴ but a universal feature of human cultures is that men and women form relationships intended to last for years (marriage) that constrain their sexual behavior in some way and institutionalize their ties to children and to each other.

TWO LOVES, TWO ERRORS

Take one ancient attachment system, mix with an equal measure of caregiving system, throw in a modified mating system and voila, that's romantic love. I seem to have lost something here; romantic love is so much more than the sum of its parts. It is an extraordinary psychological state that launched the Trojan war, inspired much of the world's best (and worst) music and literature, and gave many of us the most perfect days of our lives. But I think that romantic love is widely misunderstood, and looking at its psychological subcomponents can clear up some puzzles and guide the way around love's pitfalls.

In some corners of universities, the professors tell their students that romantic love is a social construction, invented by the French troubadours of the twelfth century with their stories of chivalry, idealization of women, and the uplifting ache of unconsummated desire. It's certainly true that cultures create their own understandings of psychological phenomena, but many of those phenomena will occur regardless of what people think about them. (For example, death is socially constructed by every culture, but bodies die without consulting those constructions.) A survey of ethnographies

from 166 human cultures³⁵ found clear evidence of romantic love in 88 percent of them; for the rest, the ethnographic record was too thin to be sure either way.

What the troubadours did give us is a particular myth of “true” love—the idea that real love burns brightly and passionately, and then it just keeps on burning until death, and then it just keeps on burning after death as the lovers are reunited in heaven. This myth seems to have grown and diffused in modern times into a set of interrelated ideas about love and marriage. As I see it, the modern myth of true love involves these beliefs: True love is passionate love that never fades; if you are in true love, you should marry that person; if love ends, you should leave that person because it was not true love; and if you can find the right person, you will have true love forever. You might not believe this myth yourself, particularly if you are older than thirty; but many young people in Western nations are raised on it, and it acts as an ideal that they unconsciously carry with them even if they scoff at it. (It’s not just Hollywood that perpetrates the myth; Bollywood, the Indian film industry, is even more romanticized.)

But if true love is defined as eternal passion, it is biologically impossible. To see this, and to save the dignity of love, you have to understand the difference between two kinds of love: passionate and companionate. According to the love researchers Ellen Berscheid and Elaine Walster, passionate love is a “wildly emotional state in which tender and sexual feelings, elation and pain, anxiety and relief, altruism and jealousy coexist in a confusion of feelings.”³⁶ Passionate love is the love you fall into. It is what happens when Cupid’s golden arrow hits your heart, and, in an instant, the world around you is transformed. You crave union with your beloved. You want, somehow, to crawl into each other. This is the urge that Plato captured in *The Symposium*, in which Aristophanes’ toast to love is a myth about its origins. Aristophanes says that people originally had four legs, four arms, and two faces, but one day the gods felt threatened by the power and arrogance of human beings and decided to cut them in half. Ever since that day, people have wandered the world searching for their other halves. (Some people originally had two male faces, some two female, and the rest a male and a female, thereby explaining the diversity of sexual orientation.) As proof, Aristophanes asks us to imagine that Hephaestus (the god of fire

and hence of blacksmiths) were to come upon two lovers as they lay together in an embrace, and say to them:

What is it you human beings really want from each other? . . . Is this your heart's desire, then—for the two of you to become parts of the same whole, as near as can be, and never to separate, day or night? Because if that's your desire, I'd like to weld you together and join you into something that is naturally whole, so that the two of you are made into one. Then the two of you would share one life, as long as you lived, because you would be one being, and by the same token, when you died, you would be one and not two in Hades, having died a single death. Look at your love, and see if this is what you desire.³⁷

Aristophanes says that no lovers would turn down such an offer.

Berscheid and Walster define companionate love, in contrast, as “the affection we feel for those with whom our lives are deeply intertwined.”³⁸ Companionate love grows slowly over the years as lovers apply their attachment and caregiving systems to each other, and as they begin to rely upon, care for, and trust each other. If the metaphor for passionate love is fire, the metaphor for companionate love is vines growing, intertwining, and gradually binding two people together. The contrast of wild and calm forms of love has occurred to people in many cultures. As a woman in a hunter-gatherer tribe in Namibia put it: “When two people come together their hearts are on fire and their passion is very great. After a while, the fire cools and that's how it stays.”³⁹

Passionate love is a drug. Its symptoms overlap with those of heroin (euphoric well-being, sometimes described in sexual terms) and cocaine (euphoria combined with giddiness and energy).⁴⁰ It's no wonder: Passionate love alters the activity of several parts of the brain, including parts that are involved in the release of dopamine.⁴¹ Any experience that feels intensely good releases dopamine, and the dopamine link is crucial here because drugs that artificially raise dopamine levels, as do heroin and cocaine, put you at risk of addiction. If you take cocaine once a month, you won't become addicted, but if you take it every day, you will. No drug can keep you continuously high. The brain reacts to a chronic surplus of dopamine, develops neurochemical

reactions that oppose it, and restores its own equilibrium. At that point, tolerance has set in, and when the drug is withdrawn, the brain is unbalanced in the opposite direction: pain, lethargy, and despair follow withdrawal from cocaine or from passionate love.

So if passionate love is a drug—literally a drug—it has to wear off eventually. Nobody can stay high forever (although if you find passionate love in a long-distance relationship, it's like taking cocaine once a month; the drug can retain its potency because of your suffering between doses). If passionate love is allowed to run its joyous course, there must come a day when it weakens. One of the lovers usually feels the change first. It's like waking up from a shared dream to see your sleeping partner drooling. In those moments of returning sanity, the lover may see flaws and defects to which she was blind before. The beloved falls off the pedestal, and then, because our minds are so sensitive to changes, her change in feeling can take on exaggerated importance. "Oh, my God," she thinks, "the magic has worn off—I'm not in love with him anymore." If she subscribes to the myth of true love, she might even consider breaking up with him. After all, if the magic ended, it can't be true love. But if she does end the relationship, she might be making a mistake.

Passionate love does not turn into companionate love. Passionate love and companionate love are two separate processes, and they have different time courses. Their diverging paths produce two danger points, two places where many people make grave mistakes. In figure 6.1, I've drawn out how the intensity of passionate and companionate love might vary in one person's relationship over the course of six months. Passionate love ignites, it burns, and it can reach its maximum temperature within days. During its weeks or months of madness, lovers can't help but think about marriage, and often they talk about it, too. Sometimes they even accept Hephaestus's offer and commit to marriage. This is often a mistake. Nobody can think straight when high on passionate love. The rider is as besotted as the elephant. People are not allowed to sign contracts when they are drunk, and I sometimes wish we could prevent people from proposing marriage when they are high on passionate love because once a marriage proposal is accepted, families are notified, and a date is set, it's very hard to stop the train. The drug is likely to wear off at some point during the stressful wed-

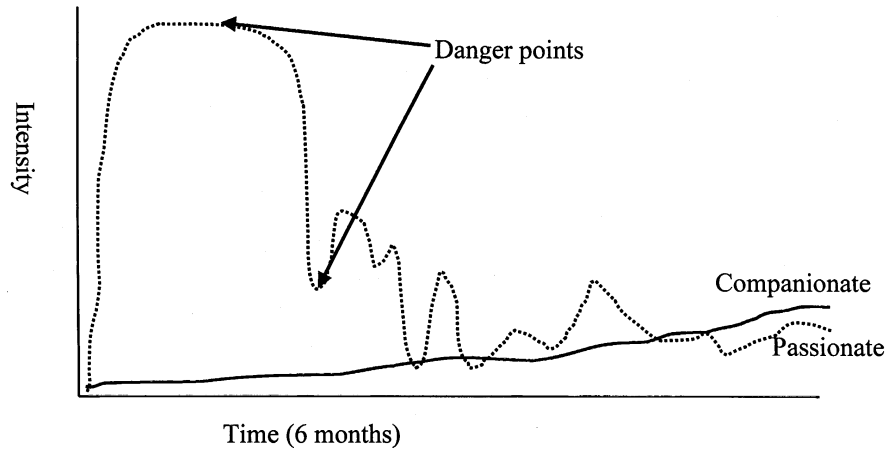


Fig. 6.1 The Time Course of the Two Kinds of Love (Short Run)

ding planning phase, and many of these couples will walk down the aisle with doubt in their hearts and divorce in their future.

The other danger point is the day the drug weakens its grip. Passionate love doesn't end on that day, but the crazy and obsessional high period does. The rider regains his senses and can, for the first time, assess where the elephant has taken them. Breakups often happen at this point, and for many couples that's a good thing. Cupid is usually portrayed as an impish fellow because he's so fond of joining together the most inappropriate couples. But sometimes breaking up is premature, because if the lovers had stuck it out, if they had given companionate love a chance to grow, they might have found true love.

True love exists, I believe, but it is not—cannot be—passion that lasts forever. True love, the love that undergirds strong marriages, is simply strong companionate love, with some added passion, between two people who are firmly committed to each other.⁴² Companionate love looks weak in the graph above because it can never attain the intensity of passionate love. But if we change the time scale from six months to sixty years, as in the next figure, it is passionate love that seems trivial—a flash in the pan—while companionate love can last a lifetime. When we admire a couple still in love on their fiftieth anniversary, it is this blend of loves—mostly companionate—that we are admiring.

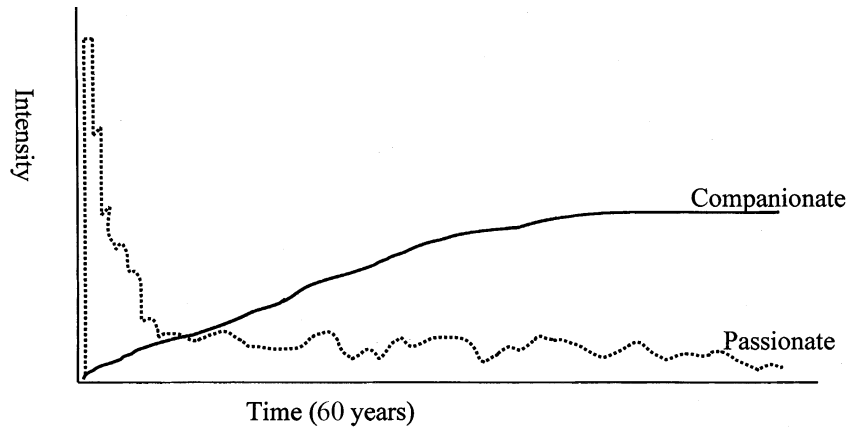


Fig. 6.2 The Time Course of the Two Kinds of Love (Long Run)

WHY DO PHILOSOPHERS HATE LOVE?

If you are in passionate love and want to celebrate your passion, read poetry. If your ardor has calmed and you want to understand your evolving relationship, read psychology. But if you have just ended a relationship and would like to believe you are better off without love, read philosophy. Oh, there is plenty of work extolling the virtues of love, but when you look closely, you find a deep ambivalence. Love of God, love of neighbor, love of truth, love of beauty—all of these are urged upon us. But the passionate, erotic love of a real person? Heavens no!

In the ancient East, the problem with love is obvious: Love *is* attachment. Attachments, particularly sensual and sexual attachments, must be broken to permit spiritual progress. Buddha said, “So long as lustful desire, however small, of man for women is not controlled, so long the mind of man is not free, but is bound like a calf tied to a cow.”⁴³ *The Laws of Manu*, an ancient Hindu treatise on how young Brahmin men should live, was even more negative about women: “It is the very nature of women to corrupt men here on earth.”⁴⁴ Even Confucius, who was not focused on breaking attachments, saw romantic love and sexuality as threats to the higher virtues of filial piety and loyalty to one’s superiors: “I have never seen anyone who loved virtue as much as sex.”⁴⁵ (Of course, Buddhism and Hinduism are diverse, and both have changed with time and place. Some modern leaders, such as the Dalai Lama, accept roman-

tic love and its attendant sexuality as an important part of life. But the spirit of the ancient religious and philosophical texts is much more negative.)⁴⁶

In the West, the story is a bit different: Love is widely celebrated by the poets from Homer onwards. Love launches the drama of the *Iliad*, and the *Odyssey* ends with the lusty return of Odysseus to Penelope. When the Greek and Roman philosophers get hold of romantic love, however, they usually either despise it or try to turn it into something else. Plato's *Symposium*, for example, is an entire dialogue devoted to the praise of love. But you never know what position Plato holds until Socrates speaks, and when Socrates speaks, he trashes the eulogies to love that Aristophanes and others have just given. He describes how love produces a "disease" among the animals: "First they are sick for intercourse with each other, then for nurturing their young."⁴⁷ (Note: Mating system leads to caregiving system.) For Plato, when human love resembles animal love, it is degrading. The love of a man for a woman, as it aims at procreation, is therefore a debased kind of love. Plato's Socrates then shows how love can transcend its animal origins by aiming at something higher. When an older man loves a young man, their love can be elevating for both because the older man can, in between rounds of intercourse, teach the young man about virtue and philosophy. But even this love must be a stepping stone only: When a man loves a beautiful body he must learn to love beauty in general, not the beauty of one particular body. He must come to find beauty in men's souls, and then in ideas and philosophy. Ultimately he comes to know the form of beauty itself:

The result is that he will see the beauty of knowledge and be looking mainly not at beauty in a single example—as a servant would who favored the beauty of a little boy or a man or a single custom . . . but the lover is turned to the great sea of beauty, and, gazing upon this, he gives birth to many gloriously beautiful ideas and theories, in unstinting love of wisdom. . . .⁴⁸

The essential nature of love as an attachment between two people is rejected; love can be dignified only when it is converted into an appreciation of beauty in general.

The later Stoics also object to the particularity of love, to the way it places the source of one's happiness in the hands of another person, whom

one cannot fully control. Even the Epicureans, whose philosophy was based on the pursuit of pleasure, value friendship but oppose romantic love. In *De Rerum Natura*, the philosophical poet Lucretius lays out the fullest surviving statement of the philosophy of Epicurus. The end of Book 4 is widely known as the “Tirade Against Love,” in which Lucretius compares love to a wound, a cancer, and a sickness. The Epicureans were experts on desire and its satisfaction; they objected to passionate love because it cannot be satisfied:

*When two lie tasting, limb by limb
life's bloom, when flesh gives foretaste of delight,
and Venus is ready to sow the female field,
they hungrily seize each other, mouth to mouth
the spittle flows, they pant, press tooth to lip—
vainly, for they can chafe no substance off
nor pierce and be gone, one body in the other.
For often this seems to be their wish, their goal,
so greedily do they cling in passion's bond.⁴⁹*

Christianity brought forward many of these classical fears of love. Jesus commands his followers to love God, using the same words as Moses (“With all your heart, and with all your soul, and with all your might,” MATTHEW, 22:37, in referring to DEUTERONOMY 6:5). Jesus’ second commandment is to love one another: “You shall love your neighbor as yourself” (MATTHEW 22:39). But what can it mean to love others as one loves oneself? The psychological origins of love are in attachment to parents and sexual partners. We do not attach to ourselves; we do not seek security and fulfillment in ourselves. What Jesus seems to mean is that we should *value* others as much as we value ourselves; we should be kind and generous even to strangers and even to our enemies. This uplifting message is relevant to the issues of reciprocity and hypocrisy that I talked about in chapters 3 and 4, but it has little to do with the psychological systems I have been covering in this chapter. Rather, Christian love has focused on two key words: *caritas* and *agape*. *Caritas* (the origin of our word “charity”) is a kind of intense benevolence and good will; *agape* is a Greek word that refers to a kind of selfless, spiritual love

with no sexuality, no clinging to a particular other person. (Of course, Christianity endorses the love of a man and a woman within marriage, but even this love is idealized as the love of Christ for his church—EPHESIANS 5:25) As in Plato, Christian love is love stripped of its essential particularity, its focus on a *specific* other person. Love is remodeled into a general attitude toward a much larger, even infinite, class of objects.

Caritas and agape are beautiful, but they are not related to or derived from the kinds of love that people *need*. Although I would like to live in a world in which everyone radiates benevolence toward everyone else, I would rather live in a world in which there was at least one person who loved me specifically, and whom I loved in return. Suppose Harlow had raised rhesus monkeys under two conditions. For the first group, each was reared in its own cage, but each day Harlow put in a new but very nurturing adult female monkey as a companion. For the second group, each was reared in a cage with its own mother, and then each day Harlow put in a new and not particularly nice other monkey. The monkeys in the first group got something like caritas—benevolence without particularity—and they would probably emerge emotionally damaged. Without having formed an attachment relationship, they would likely be fearful of new experiences and unable to love or care for other monkeys. The monkeys in the second group would have had something closer to a normal rhesus monkey childhood, and would probably emerge healthy and able to love. Monkeys and people need close and long-lasting attachments to particular others. In chapter 9, I will propose that agape is real, but usually short-lived. It can change lives and enrich lives, but it cannot substitute for the kinds of love based on attachments.

There are several reasons why real human love might make philosophers uncomfortable. First, passionate love is notorious for making people illogical and irrational, and Western philosophers have long thought that morality is grounded in rationality. (In chapter 8, I will argue against this view.) Love is a kind of insanity, and many people have, while crazed with passion, ruined their lives and those of others. Much of the philosophical opposition to love may therefore be well-intentioned advice by the sages to the young: Shut your ears to the sirens' deceitful song.

I think, however, that at least two less benevolent motivations are at work. First, there may be a kind of hypocritical self-interest in which the

older generation says, "Do as we say, not as we did." Buddha and St. Augustine, for example, drank their fill of passionate love as young men and came out only much later as opponents of sexual attachments. Moral codes are designed to keep order within society; they urge us to rein in our desires and play our assigned roles. Romantic love is notorious for making young people give less than a damn about the rules and conventions of their society, about caste lines, or about feuds between Capulets and Montagues. So the sages' constant attempts to redefine love as something spiritual and prosocial sound to me like the moralism of parents who, having enjoyed a variety of love affairs when they were young, now try to explain to their daughter why she should save herself for marriage.

A second motivation is the fear of death. Jamie Goldenberg⁵⁰ at the University of Colorado has shown that when people are asked to reflect on their own mortality, they find the physical aspects of sexuality more disgusting, and they are less likely to agree with an essay arguing for the essential similarity of people and animals. Goldenberg and her colleagues believe that people in all cultures have a pervasive fear of death. Human beings all know that they are going to die, and so human cultures go to great lengths to construct systems of meaning that dignify life and convince people that their lives have more meaning than those of the animals that die all around them. The extensive regulation of sex in many cultures, the attempt to link love to God and then to cut away the sex, is part of an elaborate defense against the gnawing fear of mortality.⁵¹

If this is true, if the sages have a variety of unstated reasons for warning us away from passionate love and attachments of many kinds, perhaps we should be selective in heeding their advice. Perhaps we need to look at our own lives, lived in a world very different from theirs, and also at the evidence about whether attachments are good or bad for us.

FREEDOM CAN BE HAZARDOUS TO YOUR HEALTH

In the late nineteenth century, one of the founders of sociology, Emile Durkheim, performed a scholarly miracle. He gathered data from across

Europe to study the factors that affect the suicide rate. His findings can be summarized in one word: constraints. No matter how he parsed the data, people who had fewer social constraints, bonds, and obligations were more likely to kill themselves. Durkheim looked at the “degree of integration of religious society” and found that Protestants, who lived the least demanding religious lives at the time, had higher suicide rates than did Catholics; Jews, with the densest network of social and religious obligations, had the lowest. He examined the “degree of integration of domestic society”—the family—and found the same thing: People living alone were most likely to kill themselves; married people, less; married people with children, still less. Durkheim concluded that people need obligations and constraints to provide structure and meaning to their lives: “The more weakened the groups to which [a man] belongs, the less he depends on them, the more he consequently depends only on himself and recognizes no other rules of conduct than what are founded on his private interests.”⁵²

A hundred years of further studies have confirmed Durkheim’s diagnosis. If you want to predict how happy someone is, or how long she will live (and if you are not allowed to ask about her genes or personality), you should find out about her social relationships. Having strong social relationships strengthens the immune system, extends life (more than does quitting smoking), speeds recovery from surgery, and reduces the risks of depression and anxiety disorders.⁵³ It’s not just that extroverts are naturally happier and healthier; when introverts are forced to be more outgoing, they usually enjoy it and find that it boosts their mood.⁵⁴ Even people who think they don’t want a lot of social contact still benefit from it. And it’s not just that “we all need somebody to lean on”; recent work on *giving* support shows that caring for others is often more beneficial than is receiving help.⁵⁵ We need to interact and intertwine with others; we need the give *and* the take; we need to belong.⁵⁶ An ideology of extreme personal freedom can be dangerous because it encourages people to leave homes, jobs, cities, and marriages in search of personal and professional fulfillment, thereby breaking the relationships that were probably their best hope for such fulfillment.

Seneca was right: “No one can live happily who has regard to himself alone and transforms everything into a question of his own utility.” John

134 THE HAPPINESS HYPOTHESIS

Donne was right: No man, woman, or child is an island. Aristophanes was right: We need others to complete us. We are an ultrasocial species, full of emotions finely tuned for loving, befriending, helping, sharing, and otherwise intertwining our lives with others. Attachments and relationships can bring us pain: As a character in Jean-Paul Sartre's play *No Exit* said, "Hell is other people."⁵⁷ But so is heaven.