

CONTENTS

ACKNOWLEDGMENTS	xi
INTRODUCTION	1
 PART I—The Past: An Illuminating Place to Visit, but You Don't Want to Live There	
CH. 1—The Voice in Your Head—and Why It's So Often Wrong	11
CH. 2—How Programming Formed in Childhood Can Control You When You're an Adult	27
CH. 3—Your Conscious and Unconscious Beliefs	39
CH. 4—How Childhood Traumas Influence Your Programming	49
 PART II—The Mind and the Brain: Why Your Machinery Works the Way It Does and How Your Brain Allows You to Change	
CH. 5—What You Need to Know about Your Brain and How It Influences the Way You Act	61
CH. 6—Using Your Mind to Change Your Brain and Your Behavior	79
CH. 7—Mindful Awareness: The Key to Disengaging from Your Dysfunctional Programming	89
CH. 8—Learning to Recognize and Let Go of Self-Defeating Beliefs	105
CH. 9—What Brain Science Teaches about How to Change Your Wiring to Improve Your Life	125

CH. 10—Parenting Yourself through Practicing Mindfulness.	139
CH. 11—Formulating Guiding Principles to Help You Act Mindfully	157
PART III—Frog in Hot Water: Long-Term Patterns That Create Frustration and Suffering and How to Break Them	
CH. 12—How Do You Become a Frog in Hot Water?	169
CH. 13—Recognizing Your Resistance to Change—and What You Can Do about It	177
CH. 14—A First Step toward Choosing a Door: Analyzing the Bind That Keeps You a Frog in Hot Water	187
CH. 15—Other Ways That You Can Keep Yourself Stuck	193
CH. 16—Choosing a Door	201
CH. 17—Seven Lessons I Learned from Being a Frog in Hot Water and Finally Choosing a Door	207
PART IV—Tools and Techniques for a Happier, Healthier Life	
CH. 18—Decreasing Anxiety, Increasing Gratitude, Mindfulness, Loving-Kindness, and Well-Being.	227
CH. 19—Creating Your Wisdom Pages	239
CONCLUSION—My Shorthand Messages for You to Live a Life of Authenticity and Aliveness	247
NOTES	255
INDEX	263
ABOUT THE AUTHORS.	273

INTRODUCTION



As a result of the rapid evolution of technological intelligence, we find ourselves living in a time of unprecedented innovation. These technological advances bring incredible benefits, yet, at the same time, the exponential rate of change they've produced is so great I believe it's upsetting our mental equilibrium as individuals and the equilibrium of the world as a whole.

Imagine what it was like living in 1491 when people thought the Earth was flat and that if you went to the edge of it you would fall off. Then, in 1492, Columbus sailed to the Americas. It took thirty-three days for him to make the voyage and almost seven weeks in 1493 to sail back to Europe with the news that the Earth was round. That was a sea change for humankind's understanding of the planet, and it took a long time to occur. Now it seems as though sea changes are happening every five minutes.

Technology has changed everything in our lives and will continue to do so at speeds previously unheard of. Digital and cellular/Internet connectivity have revolutionized communication and made it easy to be in touch instantaneously with anything or anyone anywhere. We don't need to remember as many personal facts—birthdays, phone numbers, appointments—as we used to or even do simple calculations since our smartphones perform these functions for us. We don't have to remember other types of general facts, either, because they are instantly available on the Internet.

People who aren't computer, Internet, and smartphone literate are increasingly isolated from those who are. Technology has changed the economy by simultaneously creating and eliminating jobs in every field. Frequently we now deal with digital voices, making much of our lives literally impersonal, as well as frustrating and alienating.

Digital communication and social networking were the backbone of the Arab Spring uprisings of 2012 that led to changes in government and gave us a view of history as it was actually happening. But in America many of us are confused about what is really happening and what it all means because the reporting and commentaries of Internet columnists, bloggers, and political organizations are so partisan and conflicting that it's hard to tell fact from fiction.

We worry about identity theft, viruses, phishing for our money. We worry about credit reports, and with good reason: *One out of five* credit reports contains a mistake, and the credit-rating agencies and credit card companies have a dismal record of correcting them.¹

As our lives have become increasingly computerized, we have also become increasingly enmeshed with numbers. We're identified

by our Social Security number, the number on our driver's license, and the numbers on our credit cards and bank accounts. We have passwords to open our computer, to open our email, and for our various bank and online purchasing accounts.

All of this—not just the things we worry about individually but the change itself—creates anxiety at both a personal and a global level. So many far-reaching technological innovations have arrived in such a short time, and so many keep arriving, that we haven't connected the dots to tell us how to cope with such massive change. Our society has not yet created the mental infrastructure needed to integrate all the changes, and this creates an underlying nervousness that affects all of us.

Long before the onset of our Digital Age, I became interested in discovering methods for creating a happier life in order to “fix” what seemed to be broken in my own inner world. Growing up, I'd always assumed that having money would bring happiness and peace of mind. At thirty, I found that I'd achieved my dream of money and success, but I was still anxious and frustrated, and despite being married, having two wonderful children, and being surrounded by friends and business colleagues and the luxuries my wealth afforded me, I felt isolated and alone.

Through therapy, self-actualization workshops, and self-examination and reflection, I learned that the only way I could fix what seemed to be broken in my inner world was to learn how my inner world had been formed, how it limited me, and about the power I had to change it.

I learned that we human beings unconsciously develop patterns of thinking and acting in childhood that, by the time we're adults,

become our programmed strategies to “handle” the world. Unless we become aware of our individual programming and learn to interrupt it, this programming runs us on automatic pilot and, without our realizing it, determines our beliefs and behavior.

This is radically different from how we generally think about our beliefs and behavior.

Most of us think that our conscious mind—which we believe is responding accurately to whatever is happening here and now—is the source of our beliefs, and that our beliefs are true because the voice in our head tells us they are. We also believe we act the way we do because it’s right or because that’s just the way we have to act—again, the voice in our head tells us that’s the way it is.

The reality is that the coping strategies we learned as children, many of which we may not even be aware of, are so ingrained and powerful that *until we learn to focus our attention in the present to make mindful decisions, these habitual coping strategies are the source of what we think and how we act and react*. I call these ingrained childhood coping strategies our *default programming*, or, as I referred to it earlier, simply our *programming*.

The problem with our default programming is that it’s often dysfunctional. That’s why earlier when I talked about strategies to handle the world, I put the word *handle* in quotes, because the way our default programming handles the world is often self-defeating.

Here’s why: When our default programming is running us, even though we think we’re in the here and now, we’re not in the here and now at all; we’re just repeating past behaviors that keep us in the past and rob us of what we want in the present.

That's why, at age thirty, after achieving everything I'd always dreamed about, I was still unhappy; internally I was still the same unhappy child, unaware that I was being run by the same default programming that had made me an unhappy child.

Fortunately, through the work I've undertaken since then, I've learned how we can identify our self-defeating programming and how we can learn to think and act in ways that work for us instead of against us. The process of recognizing your dysfunctional patterns of thinking and behaving and replacing them with healthier ones that make you happier and more fulfilled is *self-transformation*.

Self-transformation and steps for accomplishing it are the subject of the first book in this series, *My Mind Is Not Always My Friend: A Guide for How to Not Get in Your Own Way*. I wrote it to share the lessons I'd learned to that point, which had helped me increase the happiness in my life. The positive feedback I've gotten from readers and from the many people I mentor professionally and personally inspired me to write this second book to share additional lessons I've discovered about how your default programming can sabotage you without your knowing it and about how to interrupt it and make choices to act in healthier ways that will help you achieve your goals and create more joy in your life.

Let me stop for a minute here to say that you don't need to have read book one in order to benefit from *Your Mind Is What Your Brain Does for a Living*. Each book stands alone and is a companion book for the other. In this new book, I further explore and refine the fundamental concepts outlined in *My Mind Is Not Always My Friend*. In addition, I share what I've learned about the valuable

findings of neuroscientists about the human brain and how our minds work. You'll see why the structure and the functioning of the brain allow us to transform ourselves in ways that help us to become happier and more fulfilled.

In Part I, I explain how your default programming is formed and how it influences the way you think and act. In Part II, I share with you what the current research in neuroscience—the life science that studies the brain and the nervous system (*neuro* means “nerve”)—has revealed to us about how our thought processes and behaviors are related to how our brain works. In Part III, I discuss what I've learned about how to resolve long-term dysfunctional relationships and situations—which I call frog-in-hot-water experiences—that cause stress, frustration, and pain. In Part IV, I share with you tools and techniques for disengaging from your dysfunctional programming and leading a fulfilling life. I conclude the book with five shorthand messages for you as you embark on the journey to live a fuller life of authenticity and aliveness.



Several years ago I went to a lecture given by Deborah Szekely, founder of the Golden Door, a retreat in California that focuses on balancing mind, body, and spirit. Deborah, who was then eighty-four years old, spoke to us about being ageless. Her main message was to look at each day's elective experiences and see whether each particular experience is enhancing your life or diminishing it: If it's diminishing it, don't do it; do only those things that enhance your life.

In *The Art of Living*, the Dalai Lama points out that certain things that may give you pleasure, such as the rush from gambling, drugs, or promiscuous sex, aren't good for you, and he contrasts these with the pleasure gained from love or from a job well done. He explains that one way to know if an action is worth doing is to ask yourself, before you do it, if ultimately the act will give you inner peace. He advises you to do only those things that will give you inner peace since they are the only things that are truly pleasurable.

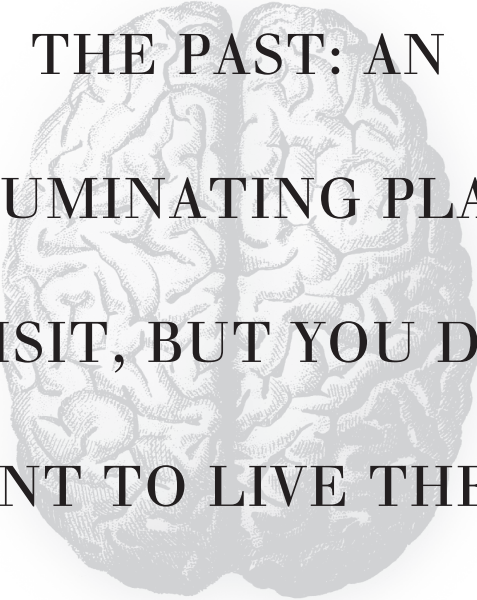
Deborah Szekely and the Dalai Lama are right, of course. To be ageless, and to experience inner peace, we should choose to do the things that enhance our lives on the way to inner peace, and we should eliminate the things that, even if pleasurable for the short term, ultimately diminish our lives and create inner stress. The question is, why is something that seems so simple so hard for so many of us to do? And how can we accomplish it?

You can learn to lead a happier, more fulfilled life at any age. You can also grow older without growing wiser. Age doesn't necessarily bring wisdom; *evolving* brings wisdom. It's up to each of us as individuals to choose whether we will evolve and how committed we are to evolving. The commitment begins with choosing to become more mindfully aware of how you make the choices in your life, whether you're mindfully making choices about how you think and behave or letting your default programming make the choices for you on automatic pilot without you even knowing it. If you're dissatisfied with your current experience of life, it's a clue that your programming is running you, and this is your opportunity to learn to interrupt it and make healthier, more productive choices.

My purpose in writing this book is to share insights, information, and methods to help you have more pleasurable experiences that will enhance your life and lead to inner peace.

..... PART I

THE PAST: AN
ILLUMINATING PLACE
TO VISIT, BUT YOU DON'T
WANT TO LIVE THERE



CHAPTER ONE

THE VOICE IN YOUR HEAD— AND WHY IT'S SO OFTEN WRONG



Enlightenment can come only when we can transcend and silence the voice in our head. For most of us, that voice is talking to us all the time, making judgments and telling us how to act.

The first step to enlightenment occurs when you recognize that *the voice in your head is not you; it's only a part of you. It's also not your boss, and it's not necessarily accurate*; what it says *may* be accurate, but often it is wrong and just has the appearance of being “the way it is.”

The voice in your head never intentionally lies to you, but what it tells you is its *interpretation* of the truth. All of its interpretations are viewed through the filter of your mind's programming. Once you learn how your mind is programmed, you'll see why the voice in your head is frequently wrong in what it tells you about a given situation—and you'll see how what it tells you may be very bad advice that actually prevents you from getting what you want.

Understanding the Way Your Mind Works

The story of Adam and Eve is a great metaphor to help us understand how our minds work. When Adam and Eve lived in the Garden of Eden they lived in a state of pure *beingness*, experiencing complete harmony, without worry, fear, or the need to protect themselves or strategize for their survival. They were *always* in the now, the present, connected to each other, to Source, to Higher Power. No value judgments or interpretations interfered with their bliss. They would have remained in that state for eternity were it not for the serpent tempting them to disobey God.

As a result of eating the forbidden fruit, Adam and Eve were thrust out of Eden and became the first mortals, and with that came the need to survive. All at once the world contained threats, and they needed a mind capable of preemptive, defensive thinking, a mind able to anticipate, to identify, and to judge everything they encountered in the outside world. This became the voice in their head as they emerged from Eden.

Adam and Eve's fearless days lounging around the pool in the Garden of Eden without a worry or care were replaced by experiencing their lives with the commentary of the often-critical voice in their head as it attempted to help them with their constant struggle for survival. From that point forward, humanity rarely experienced harmony.

As Adam and Eve's descendants, we have inherited the same kind of judging mind that scans every situation, evaluating everyone and everything as it looks for threats and tells us what to think and to feel about ourselves and the world outside us. The mind has become our central command center. When the mind is on

automatic pilot, preoccupied with scanning and evaluating, I refer to it as our *machinery*, which speaks to us through the voice in our head. It's like having a constant GPS voice just like the device in our cars, except instead of telling us, "Turn left in a quarter of a mile and you will arrive at your destination," it tells us what to think and how to act and feel. The machinery that triggers the voice is still programmed to attempt to ensure your survival at any cost, whether it's telling you how you should flirt with someone you're attracted to or how to talk a traffic officer out of giving you a ticket when he just pulled you over for a rolling stop.

Generations after Adam and Eve, our cave-dwelling ancestors were hunter-gatherers living in tribes in the era of woolly mammoths. Back then, humans needed to live in tribes to survive, and they knew that being shunned by the tribe was a probable death sentence. As a result, the human mind became programmed with techniques designed to keep one's place in the tribe. Many, many millennia have passed since then, but our machinery is still programmed the same way. *We can still experience the possibility of being rejected or disapproved of by others as a matter of life and death*, and often we continue to react to those perceived threats in unnecessary ways that are inappropriate and unproductive, creating a lot of collateral damage to our relationships.

The most important words in the previous sentence are "experience . . . as a matter of life and death"; what our minds—fixated as they are on survival—may perceive momentarily as a life-and-death matter is often nothing of the sort. In the next section, I'll show you what accounts for this curious condition.

Why Being on Automatic Pilot Is Dysfunctional

To understand this common phenomenon of the mind's being so off base, remember that everything it tells you is based on its *interpretation*. The mind's interpretation of current events is based on experiences you had long ago, starting in childhood, and the way it tells you to act is based on what it believes worked in a similar situation in the past. This is how your default programming, which becomes the machinery's software, was created, and if you let it operate on automatic pilot, it will work the same way 24/7.

Automatic pilot is the opposite of being *mindfully aware*. When we are mindfully aware, we are making our decisions with thoughtful intention in the present; we are navigating our life with intention rather than simply reacting with our default programming. When we're mindfully aware, we're not being run by the voice in our head but by our being free from the judgments contained in our programming, free from allowing our machinery to control our life based on its interpretations, which may be self-defeating.

In many areas, the machinery runs things properly most of the time. For example, when your senses perceive an oncoming car, your machinery can cause you to take action that will likely save your life. But it can also mistakenly turn a simple nonissue into huge drama. For example, someone gives you what you interpret as a dirty look, and you're off to the races, ready to attack or to run away (the "fight or flight" behaviors we inherited from our cave-dwelling forebears), and the unnecessary drama takes on a life of its own.

We tend to believe that everything our machinery tells us is a fact when it isn't necessarily reporting facts. That's why it's vital to

evaluate what your mind is telling you and to make a mindfully aware choice instead of listening to a false interpretation that ultimately won't serve you.

All kinds of pointless issues get blown out of proportion when you let your mind run you instead of you running your mind, and that is the source of self-defeating behavior. The reason I like the term *machinery* to describe the workings of the mind on autopilot is that it emphasizes that what's happening is mechanical—rote—as opposed to you making mindfully aware choices.

The difference between allowing your machinery to run you and you taking charge of making mindfully aware choices is so critical, I want to give you a few more examples to drive home its importance.

Say a friend calls to invite you to dinner. You don't really feel like going, but without even thinking you say yes. Why? Because your machinery made a snap (automatic) judgment based on “staying in the tribe” (a good tribe member would never be rude and decline a dinner invitation) instead of being mindful and looking more deeply into your feelings to see what you really feel.

Or perhaps this next example has happened to you. A friend recently said to me, “You seem angry.” In the past, my old way of reacting would have been to be on automatic pilot, with no idea why she said that or whether or not I was, in fact, angry. My machinery would have interpreted the comment as unnecessary criticism and then have morphed into the interpretation that my friend was shaming and rejecting me. I would probably have gotten upset and acted defensively, denying her perception of me and attacking her.

Because today I am more present and mindfully aware, however, I recognize that being angry isn't a crime—in fact, it's sometimes a

justifiable response—and that the other person’s comment doesn’t mean our relationship is about to end. My friend is just voicing her perception of what I was communicating at that moment. By being mindful, I can look inside to see if I am angry, and if I am, I can acknowledge it and see where the conversation goes from there.

All of us have seen that at times we have behaved inappropriately on automatic pilot. Your actions may have been inappropriate because they didn’t authentically represent what you truly felt about something (as in the example of accepting an invitation when you really would rather have said no) or because your machinery misinterprets what is happening as if it’s a threat (as in the example of my machinery misinterpreting a friend’s comment “you seem angry” to mean that she is criticizing, shaming, and rejecting me). Today, when I act on automatic pilot in situations in which my machinery’s misinterpretation leads me to behave in hurtful ways and I later reflect on my behavior, I see—and say—“It was my machinery.”

I don’t do this to absolve myself of responsibility—my actions are *always* my responsibility. I do this to make it clear to myself and to other people with whom I’ve interacted that I reacted mechanically; that I heard what I expected to hear or saw what I expected to see as a result of my mind’s interpretations; that I reacted with a default response instead of reflecting on whether I heard or saw correctly so that I could respond with a mindfully aware choice.

How to Interrupt Your Machinery

To make choices with *mindful awareness*—a key concept to self-transformation that we will explore in this book—you have to be present in the moment, which means you have to *interrupt your*

machinery. In other words, to just *be* in whatever situation you're in, letting go of whatever judgments and interpretations come to mind, including those about what is “good,” what is “bad,” what the situation “should be” (compared to what it is), and how you “should be” (compared to how you are).

Letting go of these judgments and interpretations—a major component of mindful awareness—allows you to see the facts of that situation exactly as they are and feel your own feelings exactly as they are, without judgment, without interpretation. Only then can you respond to the facts and to your actual feelings and make a mindfully aware choice about how to act.

This is why the first step toward enlightenment is recognizing that the voice in your head isn't you and that what it's telling you isn't always the truth. This recognition gives you the ability to question the voice in your head. It makes you realize that your mind's programming—with its multitude of beliefs and interpretations—*should* be questioned, that some of your most basic beliefs could be false. These include possible beliefs about yourself—for example, that you're unworthy and undeserving; about others—for example, that no one will give you what you want, so it's pointless to ask for it; and about the world—for example, that nothing ever goes your way, so why bother to strive to achieve your goals.

It may seem like a radical idea that your beliefs, which are so embedded in your programming that you've probably never questioned them, are not facts and that many may actually be wrong. In order to understand why this is so, we will look at how we unconsciously created our own programming. Before we focus on the creation of our programming, however, I want to briefly introduce you

to the crucial subject of the interrelationship between your mind and your brain, which I'll discuss fully in Part II.

Your Mind and Your Brain

I once heard it said that “the mind is what the brain does for a living.” I've also heard it said that “the mind's job is survival.”

The meaning of “the mind's job is survival” is clear from our discussion of the way the mind scans, judges, and evaluates everything we encounter and gives us instructions to help us survive what it interprets as threats and potential threats. I've learned that “your mind is what your brain does for a living” is more than just a funny line; it's an accurate description of the way the mind and the brain interrelate, and it's why understanding how our brains work helps us understand how our minds work.

We've looked at how, because of your programming, the mind can react to something you encounter as a threat or a potential threat when in reality it's not, and we've seen that reacting as if it is can be very dysfunctional. Now let's look at how Samuel Wang, associate professor in the Department of Molecular Biology and Neuroscience at Princeton and faculty member of the Princeton Neuroscience Institute, explains how the brain functions to make dysfunctional choices.

“Popular belief has it that the brain is like a computer,” Wang says. “The brain processes information, but beyond that, the analogy does not hold up well. Everyday experiences reveal ways in which your brain operates in a most uncomputer-like fashion. Examples include visual illusions, the emotional basis of decision making, irrational approaches to problem-solving, and the unreliability of

human memory. These phenomena reflect the evolutionary history of the brain, which has been optimized by natural selection to help you live to fight another day and to reproduce.”¹

We can see in Wang’s explanation that “visual illusions, the emotional basis of decision making, irrational approaches to problem-solving, and the unreliability of memory” are not just functions of our minds, they are functions of our brains. Although we may think of it as happening in our mind, neuroscientists have discovered that what we see, what we feel, how we decide, what we remember actually happens because of what happens in our brain, or, more properly, as you’ll see in Part II, the interrelationship between the mind and the brain.

Digital technology has enabled us to see as never before the brain as we human beings use it, and the recent gains we’ve made in understanding our brains and the insight this gives us into ourselves is astounding. Congress declared the 1990s as “The Decade of the Brain.”² And in 2013, President Obama announced the “BRAIN” (Brain Research through Advancing Innovative Neurotechnologies) Initiative, a plan for federal investment in brain research.³ These are just two signs that there’s been an explosion of new, often startling information about the brain as humanity approached and entered the twenty-first century. Neuroscience is the new frontier.

Discoveries about the brain are happening every day; here are just a few of them.

For years we believed that we only use 10 percent of our brain; now neuroscientists have discovered that we use all of our brain, but that at any given time certain parts of it show more activity than other parts, which doesn’t mean that we aren’t using them.⁴

We also used to believe that babies are born with blank slates and develop judgments only as a result of their experiences, but recent research has revealed that three-month-old babies have a sense of right and wrong. This was demonstrated in a study in which hundreds of babies were tested and showed a distinct preference for a puppet that was helpful to another puppet and a strong dislike of a puppet that hindered another puppet.⁵

Furthermore, dispelling the misconception that our brains are fully developed by late adolescence, scientists have learned that our brain isn't fully developed until we're around age twenty-five, and the last parts to mature and fully develop are those that have to do with responsible decision making and impulse control.⁶ No wonder young adults often make poor decisions and engage in irresponsible behavior!

Research has also revealed that certain habits, which are formed over time and governed by the part of the brain known as the *basal ganglia*, are so powerful that even an individual who has suffered extreme brain damage can continue to perform tasks he's done many times before. For example, a brain-damaged man with little or no short-term memory can nevertheless take a walk in his neighborhood, indicating familiarity with it, even though he's unable to consciously recognize his own house or draw a map of the streets. Likewise, this man can go to the kitchen to make meals even though he can't consciously draw a floor plan of his house and indicate where the kitchen is.⁷ This is *the power of habit*.

Habit is so powerful that it can lead to our persistently doing things that are self-defeating, even self-destructive. It's often been observed that one of the differences between human beings and

rats is that if rats find there's no cheese at the end of a path, they stop going down that path. But we human beings often keep going down the same path even after we've found there's no cheese at the end of it. It's like the old definition of insanity: doing the same thing over and over and expecting a different result. Research on the brain has revealed why this is so: There are very specific reasons, having to do with the nature of the brain, why, when we're operating on automatic pilot, the brain will do what is familiar even if it's useless or destructive.

In other words, research on the brain has given us a clear understanding of how our default programming works *physiologically*. It has revealed the relationship between the voice in your head (that internal GPS that tells you what to think and how to act) and your brain (the organ in your skull connected to the nervous system throughout your body).

In so doing, it's revealed the connection between our individual psychology—the particular ways our experiences as individuals have influenced our mental traits—and the development of our brain. It also shows the way that our particular brain develops and then functions to influence how we think and act. Neuroscientists have discovered that our individual psychology and the physiology and functioning of our brain are inextricably tied to each other because *the experiences that have a psychological effect on us also shape our brain and influence the particular ways our brain tends to function from that time forward*.

For each person's machinery, every new experience, especially an experience that affects us significantly, is like another fork in the road, and we respond to it (consciously or unconsciously) by going

down one of the roads at the fork and not another. Once this choice is made, our machinery gives us a new road map (just like the GPS system gives us new instructions after a wrong turn). Put in terms of brain science, the brain develops in such a way that it tends to keep us on the road we've chosen with "blinders"—it doesn't develop in alternative ways that lie along the road we haven't taken.

Here's an example from my childhood that should help you see how this plays out in our lives. When I was in kindergarten, we had a "rainy day afternoon" during which my teacher gave out small cartons of milk. When she gave me my carton, she told me she would open it, but I stopped her and told her I'd do it myself. While trying to open it, I spilled the milk all over her skirt, and she became very angry. Her reaction scared and humiliated me. I apologized profusely, and from that point on, I chose the road of "I'm going to do what the teacher says. Period."

As a result of that incident, my brain began developing in very specific ways (the process of which I'll explain in Part II), not only in the classroom but also in situations that felt the same, situations in which I felt that if I took a stance that conflicted with what another person wanted, he or she might become angry and humiliate me.

This kept me on the same road. The alternative road at the fork, when asserting myself as a kindergartener I accidentally spilled milk on my teacher, might have been to apologize to my teacher and to decide that, despite the embarrassment, opening the milk carton myself had still been a risk worth taking.

But this doesn't mean I was fated to go down the road of "I'm going to do what the teacher says" for the rest of my life. Nor are you fated to go down the roads that you've taken in your life up to now.

As you'll see in the chapters in Part II, brain research has revealed that our brains are malleable, with the capacity to be shaped and reshaped—scientists refer to this as the brain's *neuroplasticity*—and that however you've developed your brain before now, you can learn to use your mind to transform your brain to help you function more healthily from this point forward.⁸

Brain research has revealed what self-transformation is about on a physiological level. The malleability of your brain means that by its nature the brain makes transforming yourself possible. In fact, the research shows that *changing the way you think and act—changing your programming—by changing your brain is part of your potential as a human being, and that you can do it throughout your life!*

When you understand how your programming is formed, which is the focus in the next chapter, it will be even clearer to you why I titled this first part of the book “The Past: An Illuminating Place to Visit, but You Don't Want to Live There.”

..... **PAUSE YOUR MACHINERY**

Here, and in the chapters that follow, I'll ask you to stop and take a moment to “pause your machinery.” The concepts and techniques I present throughout *Your Mind Is What Your Brain Does for a Living* require mindfulness to learn and master, and these brief written exercises will give you the opportunity to rest, step outside the pattern of passive reading, and bring yourself into the present moment to reflect and see how the information I'm sharing can be integrated into your own life.

Keep your written answers, because they will be valuable for you to review later and to refer to in doing subsequent exercises. You may want to buy a notebook or open a computer file so that you can keep all of your responses together in one place.

- Take out your notebook (or open a new computer file) and describe in writing two or three recent incidents in which you now recognize that you acted or reacted the way you did because your machinery was on automatic pilot. In other words, situations about which you'd now say in reference to your behavior, "It was my machinery."
- Read over the list of incidents one at a time. Bring up the memory of each incident by pretending it's a scene in a movie being projected on the screen of your mind. Watch the scene and remember what thoughts and emotions came up for you during the action.
- See if you can identify the thoughts (interpretations, judgments) and feelings that triggered your machinery to act on automatic pilot. Write down the trigger(s) for each incident. Keep this list, because these thoughts and feelings are likely to trigger your machinery to act on automatic pilot in other situations in which they come up.

Did any negative self-thoughts come into your mind when you did this exercise? For example, in realizing that in these incidents you acted on automatic pilot, did you think that you were "wrong" or "bad" to have acted as you did? If so, recognize that this is a judgment, an interpretation, and it's part of your programming.

In each incident you've described, what happened is just what happened; *it simply is what it is*. Taking responsibility within yourself for your actions and being responsible to others doesn't mean judging or shaming yourself for them. Criticism aimed at yourself hurts you and doesn't help anyone else either. If you did judge yourself, do you think that this is part of a general pattern for you? If so, write down the kinds of judgments you habitually make about yourself. Remember to keep what you've written; it will remind you that these self-criticisms are not facts but interpretations that are part of your default programming.



Now let's look at how your programming began in childhood and can still affect your thoughts, emotions, and behaviors when you're an adult.

CHAPTER TWO

HOW PROGRAMMING FORMED IN CHILDHOOD CAN CONTROL YOU WHEN YOU'RE AN ADULT



I jokingly tell people that the only person I'm aware of who has had more therapy than me is Woody Allen. When I first started therapy, I was thirty-one years old. At the time, I had no idea of my programming, let alone how it affected my relationships, nor did I realize I had played any role whatsoever in creating my own unhappiness.

I'd been married for nine years and had two daughters, yet despite deeply loving my family, I'd felt unhappy in my marriage. I moved into an apartment on my own, and my wife and I started going to a save-the-marriage therapist. I'd already become successful in business, and while I gave myself credit for my professional success, I took no responsibility for my lack of fulfillment in my marriage. I thought I was unhappy because being unhappy was the

nature of life. I felt like a victim; I assumed that was just the way it was and there was nothing I could do about it.

Looking back, I can now see that the voice in my head spoke to me all the time with a running, highly judgmental and negative critique of both me and my situation. I didn't think about the voice in my head; I believed the voice *was* me. I believed that whatever it said was the truth.

The voice in my head told me I was emotionally incomplete, that somehow I was unable to understand or perhaps respond to people emotionally as other people could. I created a vivid image to explain this: All the souls were waiting in line to be outfitted with "supplies" before being born to human life, and whoever was handing out the skills for proper emotional balance was on a cigarette break when my turn came, so I didn't get any.

Up to that time, the voice in my head offered me no hope that it would ever stop being critical of me. It also offered me no hope that I could lessen the anxiety that was always with me in my personal relationships, especially in regard to potential confrontations and rejection. It never hinted to me that I wasn't a victim of life but rather a victim of my own dysfunctional programming—that I was doing the same things over and over and expecting different results!

The Moment the Baby Chick Leaves the Shell

My first glimmer that I had what I now call machinery, and that it was keeping me from really knowing myself, came early in individual therapy. When the therapist asked me about my father and my childhood, I told him everything had been "normal." When he asked me specific questions, I was shocked because I had only a few

memories and had blocked everything else out. That moment of shock as I sat in the chair opposite the therapist felt as if someone had snuck the 100-plus-piece University of Southern California marching band into the room and I hadn't noticed it, even though they had been there all the time.

In the month that followed, I became aware of how much pain I was in and that I had shoved it all deep inside me, pretending there was no problem. I believed that emotional pain was par for the course—everyone had it—and therefore it was best not to pay attention to it. When I recognized I was in denial about the pain, and finally allowed myself to start feeling it, I told my therapist about a painful situation in my life and that I felt helpless to do anything about it. He responded with “It sounds like you have somebody stepping on your toe, and you don't know how to negotiate getting them off of it.”

That was a moment of illumination: I realized that I felt trapped, not only in that situation but also in whatever problems I was having in my most precious relationships, because I believed that asking for my true “inner-world” needs to be met would result in other people getting so angry they would abandon me.

I'd allowed the people closest to me to step on my feet for years without ever telling them to get off because I'd never felt safe doing so. Now I was hearing the therapist tell me it was possible to ask for what I wanted; I just didn't know how to do it. As his words sank in, I was like a newborn chick poking a hole through the top of the eggshell in which it was born, seeing its first glimpse of light in the world outside the confines of its shell. A glimpse of enlightenment.

I began to sense the possibility of a world outside the confines of my own mind—the possibility of looking at my thoughts,

feelings, and behavior and learning new ways of responding to situations that would be better than the ones I'd always believed were the *only* options.

In other words, for the first time, I was hearing I could learn to think and respond in ways that could get me what I instinctively craved, ways that were beyond the thoughts and responses of my default programming that was running me when I was on automatic pilot.

In the next few years I focused on gaining insights to answer the question, How did the programming that causes our automatic responses get to be the way it is? How much is nature (biology) and how much is nurture (environment)? I learned that our programming is a combination of our DNA, the genetic makeup we inherit from our parents, and environmental factors that contribute to our learned behavior. Some of it is old pre-bundled software, inherited at birth from our species's woolly mammoth days. Much of it is from our childhood experiences in the particular environment in which we were raised. This includes our interactions with our parents and others close to us as well as the messages they downloaded to us.

Our mind's machinery incorporates everything we have taken in through our five senses—seeing, hearing, touching, tasting, smelling—to create our default programming, which is constantly being updated and elaborated on, on a daily basis, for as long as we live. This programming is based on our *interpretations* of what we've experienced. Even though the process that creates our programming is the same for all of us, our programming is as individual as we are because our individual experiences and interpretations are unique to us. Indeed, it's what makes us individuals. It's as if we have all

created our own individual virtual reality; we have created our own personal universe!

Growing up, I was told not to eat meat from a pig, and I didn't, but later I came to believe that "bacon doesn't count." On the other hand, as a child I had a belief that being summoned by an authority figure was a "bad thing," and it's never changed.

One of the first and most powerful times I remember experiencing this was when I was in third grade and I was called to the principal's office. I immediately became fearful that I was in trouble and would be punished. But all he wanted was to give me back a Valentine's Day lollipop that I'd brought to school for Debbi, my eight-year-old crush, and had lost before giving it to her. I thought I was in trouble but I wasn't, yet still to this day I react to a call from authority figures with default programming that makes me fearful something is wrong as opposed to responding with an expectation that I'm being called about something good! For some reason, my machinery was willing to rewrite my interpretation of bacon but not of being summoned by an authority figure.

These are minor examples of the types of judgments that get embedded in our programming, many so strongly that, like my fear of the primary school principal, they don't appear subject to change. Because we're so used to them being part of us, they just seem inevitable. Based on judgments and interpretations such as these, the voice in our head tells us stories over and over again, and these stories become the basis of our programming, which forms the patterns of our behavior.

From early childhood on, the machinery uses this programming to respond over and over to what happens in the present. These

responses are very predictable, with the exception that every now and then, for no apparent reason, the machinery will react differently. This is one of the things that make us so interesting: We react to a given situation the same way over and over again and then—suddenly, inexplicably—in the same situation, we react in another way. When this happens, we may comment to ourselves that we've changed, but later we find that we go back to our old patterns. This is part of being human: We're predictable, except when we're not! But one thing that is consistently predictable is that when we're run by our default programming, most of the time we will respond in the same ways.

What Happens When Childhood Hurts Are Not Resolved

As I've said, in addition to our genetic makeup, the emotionally impactful experiences we have growing up and our reactions to those experiences are a major factor in creating our programming. We come into the world with the potential for full self-expression, able to speak and to act without censoring ourselves. But events happen that we experience as traumas, and we start suppressing our self-expression.

The word *trauma* may make you think of major catastrophic events such as an earthquake or a tsunami or a terrible accident. But a trauma can be any event that is intensely disturbing or shocking and that leaves an emotional wound—often invisible to the naked eye. It doesn't necessarily need to be a big event; a person watching it might see it as small, even inconsequential. What makes it a trauma is that it *feels* so intensely disturbing to the person experiencing

it. In childhood, your reactions to events that you experience as traumatic create programming that, if you let your machinery run you on automatic pilot, will determine your behavior in response to events in the present that your conscious or unconscious mind categorizes as similar to the earlier traumatic events.

While the traumas that contribute to our programming differ, they share a common dynamic: An event occurs and our minds interpret the event to mean that *something is wrong*; then our minds draw a lesson from it about how we should act in the future, and the lesson becomes part of our programming.

For example, as an eight-year-old I was playing in the sandpit beneath the trapeze rings at the park next to our house. Older kids were swinging on the set of high rings, and two of them lifted me up to try it too. I fell off and it knocked the wind out of me; I thought I was going to die. Someone gave me artificial respiration as best he could, and once again my lungs filled with air and I was safe. I ran home, wanting to be comforted by my mom and dad yet filled with fear that if I told my parents, I would get into horrible trouble. I felt blamed, ashamed, and scared even though that was only my *perception* of what would happen.

Without knowing it, my preprogrammed machinery had kicked in. I was back in the Woolly Mammoth Age, afraid that my dad, leader of my hunting pack, would be so mad that he would yell at and punish me. My unconscious interpretation was, “You’ll be out of the tribe!”—a potential death sentence.

The most common childhood traumas, according to Los Angeles psychologist Robin L. Kay, Ph.D., are ruptures of a significant emotional attachment. In the incident I just described, I assumed

my father and mother would be furious that, as my child's mind saw it, I had almost died, so I couldn't even trust telling them how scared I was. This made me feel very distant from my parents, unable to communicate with them about something important and disturbing—traumatic—to me.

The bond between you and your parents is generally the most vital attachment in your childhood; you need your parents' love to feel safe. Consequently, if you experience a rupture in that attachment, it's traumatic, even if that rupture is a result of your perception of a situation. The traumatic nature of a rupture in a childhood attachment is more obvious if the incident involves your parent yelling at, neglecting, hitting, or in some other way abusing you.

Prior to the time the incident in the sandpit occurred, there had been incidents in which my father had gotten very angry and yelled at me, and these experiences had triggered my fear that he would yell at and punish me the day I fell off the rings. The earlier experiences had set me on the road to avoiding his anger at all costs. The message that had entered my programming based on my interpretation of these incidents was, "You better be super good and never do anything wrong so that no one will be angry at you and you'll be safe!" (The incidents that included my father yelling at me also probably contributed to my fear of the principal and authority figures in general.)

Kay says that a parent, an older sibling, a neighbor, or someone else close to a child can repair a rupture in real time, soon after the event, by helping the child to process the reality of the event and the emotions associated with it. And according to some mental health professionals, in order for "good enough" development of a child to take place—meaning that the child will have a generally positive

self-image, function well in the world, and act in ways that are conducive to achieving his or her goals—only 50 percent of attachment ruptures need to be repaired. The fewer times someone helps you to repair traumas when you're a child, the more negative programming you have as an adult.

Let's look at an example of how a parent can repair a rupture in his or her child's attachment. When I was five years old, my father walked into the living room, found me drawing in his high school yearbook, and yelled at me. I became frightened and upset. My father grabbed his yearbook and left me in the living room, crying. I loved my father very much, and I believed he was punishing me with rejection for drawing in the book. In order to repair the rupture, my father could have calmed himself down, come back a few minutes later, and hugged and comforted me. He could have told me he loved me and he hadn't meant to get so angry at me. He could have said I was a good kid and that I was doing what good kids do, drawing and entertaining myself. He could have told me he realized that I didn't know I shouldn't draw in his special yearbook.

The problem is that it never occurred to my father to notice my distress and explain the situation to me; he probably handled it in the same way his father had treated him. Like many parents, my father didn't know how to heal the ruptured attachment and how important it is for parents to do so, and so he didn't do it. This event, in which the ruptured attachment wasn't resolved, occurred three years before the playground incident I described and was one of the reasons that, much as I needed comforting then, I was afraid to go to my father and mother after I'd fallen and had the wind knocked out of me.

Starting in the 1950s, psychologist Harry Harlow performed experiments with rhesus monkeys in order to study attachment between mother and baby during infancy. He removed the monkeys from their mothers shortly after birth and gave them surrogate mothers that provided them with milk. Some “mothers” were made of wire mesh and others were covered with foam and soft cloth. Both types of surrogate mothers had electric lights inside them that made them warm.

The monkeys that had wire surrogate mothers soon exhibited behavior, such as rocking, that showed they were distressed, and they also exhibited antisocial behavior. The monkeys that had cloth-and-foam-covered mothers didn’t exhibit distress or any antisocial behavior. Harlow’s experiment showed that food and warmth alone aren’t sufficient for baby monkeys to become emotionally healthy; affection and closeness (simulated in the experiment by the foam and softer covering, as well as the warmth of the electric light) are also necessary.

Because of the rhesus monkeys’ similarity to human beings, Harlow applied these findings to human babies, concluding that they, too, need their caregiver’s love, affection, and acceptance in addition to food, warmth, and safety. His findings contributed a great deal to our understanding of the bond between mother and child and the psychological and physical effects, which can continue into adulthood, that result from a caregiver’s insufficiently meeting a baby’s needs.¹

I think of parents who, because of their own biology or DNA or childhood environment or unresolved traumas—or a combination of these factors—aren’t capable of repairing ruptures with their

children at least 50 percent of the time, as “wire monkey parents.” If one or both of your parents was a wire monkey parent, you’re going to have had more unrepaired ruptures in your childhood, and your responses to these unrepaired ruptures will have had a major impact on your programming.

By definition, these unrepaired ruptures involve emotional pain. Other emotions, all of which are built on the basic emotions of love, anger, grief, and guilt, quickly become layered on top of the pain. When the trauma remains unrepaired, these emotions remain with you, but you may not be aware of them. Often you repress them with defenses, which blocks you from fully experiencing them because your conscious mind finds them unacceptable. Not only do these unrepaired traumas become part of your programming, so do the emotions layered on top of them and the beliefs you draw from your interpretations of the traumas. These elements of your past, embedded in your programming, contribute to dysfunctional behavior in the present.

..... **PAUSE YOUR MACHINERY**

- Reflect on your childhood to see if you remember any events in which your emotional bond with your mother or father (or someone else close to you) was ruptured in a way that felt traumatic to you at the time, or that you now see as traumatic. If you remember one or more such events, write a description of what happened in each and how you recall feeling at the time. It may help you to think about where you were when the incident

happened, what you were wearing, or if there is a particular smell or taste that you associate with the experience. Bring to mind as much as you can from that time. Also write down how you feel about it now and what thoughts occur to you as you look back on it.

- Write down whether you feel that the rupture was repaired or if it was left unrepaired (or unresolved).
- Write down your thoughts about whether your parents or others close to you were generally able or unable to repair ruptures that occurred. Please keep in mind that you may have the possibility of repairing these ruptures today if you use the information and tools you'll learn in this book.



As you've seen, the unresolved emotional pain we experienced in childhood has a profound effect on our default programming. In the next chapter, I'll discuss how it contributes to our conscious and unconscious beliefs about ourselves and the emotions we experience in our daily lives.