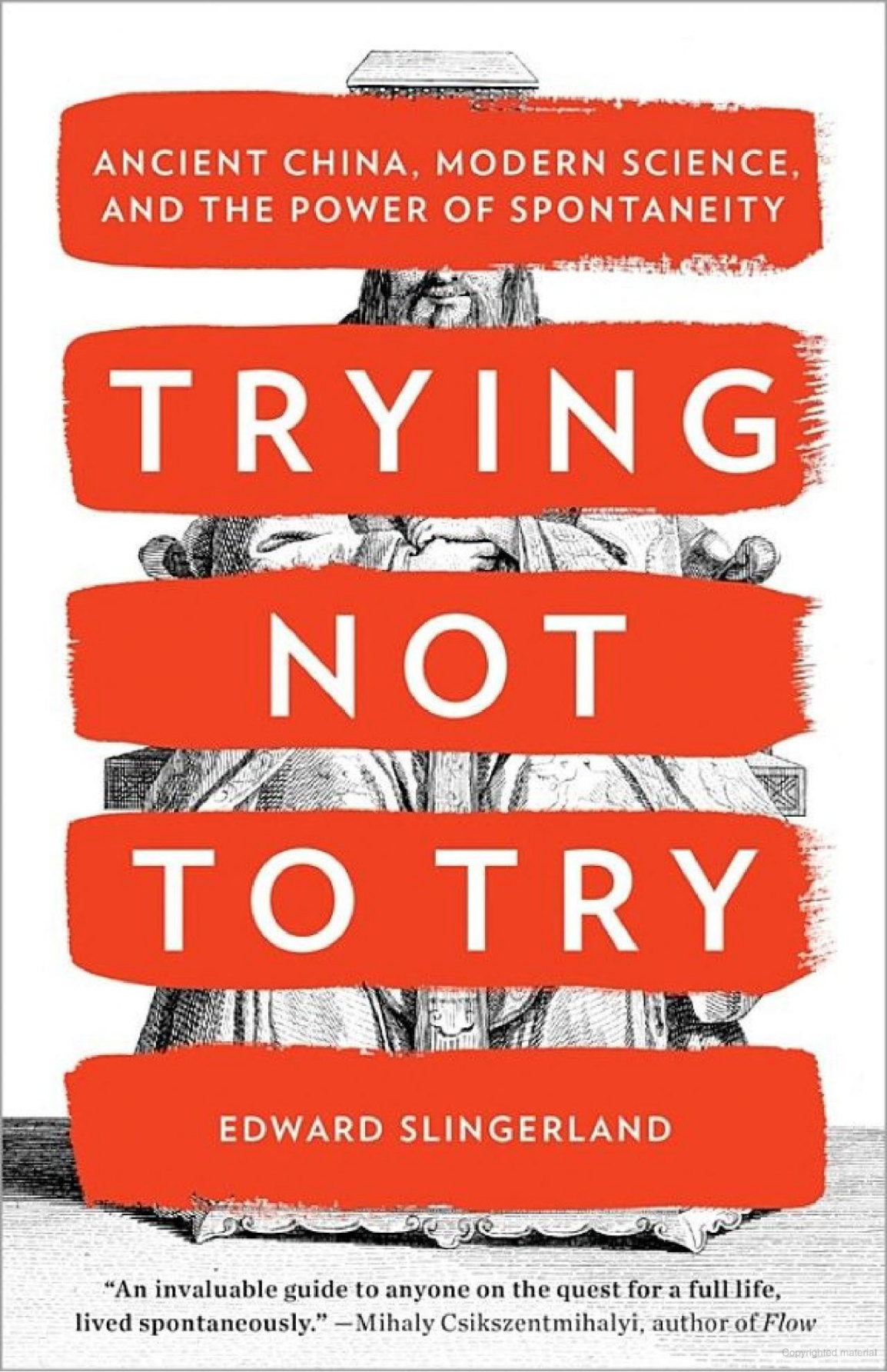

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Introduction

There is a wonderful game at my local science museum called Mindball. Two players sit at opposite ends of a long table. Each wears a headband equipped with electrodes, designed to pick up general patterns of electrical activity on the surface of the brain. Between the players is a metal ball. The goal is to mentally push this ball all the way to the other end of the table, and the player who does so first wins. The motive force—measured by each player's electrodes, and conveyed to the ball by a magnet hidden underneath the table—is the combination of alpha and theta waves produced by the brain when it's relaxed: the more alpha and theta waves you produce, the more force you mentally exert on the ball. Essentially, Mindball is a contest of who can be the most calm. It's fun to watch. The players visibly struggle to relax, closing their eyes, breathing deeply, adopting vaguely yogic postures. The panic they begin to feel as the ball approaches their end of the table is usually balanced out by the overeagerness of their opponent, both players alternately losing their cool as the big metal ball rolls back and forth. You couldn't wish for a better, more condensed illustration of how difficult it is to try not to try.

In our culture, the benefit of not trying too hard—of "going with the flow" or "being in the zone"—has long been appreciated by artists. The jazz great Charlie Parker is said to have advised aspiring musicians, "Don't play the saxophone. Let it play you." This same openness is also crucial in acting and other performing arts, which fundamentally rely on spontaneity and seemingly effortless responsiveness. A stand-up comedian who is not in the zone is not funny, and an actor who is not fully inhabiting his or her role comes across as wooden and fake. Explaining how to prepare for a role, the actor Michael Caine cautions that simply memorizing the script and trying to act it out step by step will never work;

when it comes time for your line, the only way to bring it off authentically is to not try to remember it. "You must be able to stand there *not* thinking of that line. You take it off the other actor's face. He is presumably new-minting the dialogue as if he himself just thought of it by listening and watching, as if it were all new to him, too. Otherwise, for your next line, you're not listening and not free to respond naturally, to act spontaneously."

The importance of being in the zone is perhaps nowhere more appreciated than in professional sports, where the competitive edge provided by complete absorption is the stuff of myth. A 2005 piece in *Sports Illustrated* consists solely of quotations from professional basketball players about what it feels like to be on fire:

> There are books you can read about how to get into that shooting zone, how to prepare yourself, but it's never something you can predict. The ball feels so light, and your shots are effortless. You don't even have to aim. You let it go, and you know the ball is going in. It's wonderful … It's like a good dream, and you don't want to wake up.
>
> —Pat Garrity, Orlando Magic forward

> It's like an out-of-body experience, like you're watching yourself. You almost feel like you don't even see the defense. Every move you make, you feel, God, that guy is slow. You're going by people. You don't even hear the regular noise you hear. It's muffled. You go to practice the next day, and you say, "God, why can't I do that every night?" Guys have wanted to bottle that feeling.
>
> —Joe Dumars, former NBA All-Star guard

The reason professional athletes would love to bottle that feeling is that it all too easily disappears. As Garrity says, professional basketball players in the shooting zone don't want to wake up, but they often do. Ben Gordon, formerly a guard for the Chicago Bulls, puts it like this: "When the feeling starts going away, it's terrible. I talk to myself and

say, 'C'mon, you gotta be more aggressive.' That's when you know it's gone. It's not instinctive anymore."

Falling out of the zone is terrifying, and athletes try to avoid it at all costs. The history of sports is full of stories of otherwise promising athletes who somehow lose their mojo and then disappear into obscurity—or, perhaps worse, become famous precisely *for* having lost their stuff. Baseball fans are familiar with "Steve Blass Disease," named after a superstar pitcher for the Pittsburgh Pirates in the 1960s and 1970s. After almost a decade of effortlessly intimidating the best players in the world, Blass suddenly began to lose the ability to perform in actual games. He continued to be fine in practice. He'd suffered no injuries, lost none of his actual physical skill. He just could no longer *throw* when it really mattered. Armies of sports psychologists analyzed him, coaches tried beating it out of him through grueling exercise routines, but nothing worked, and Blass was eventually forced into early retirement.

An inability to relax into the zone is also a danger for artistic performers. One famous example is the pop singer Carly Simon. She had always been reluctant to be up in front of a crowd, but her stage fright came to a head at a concert in 1981, when the tension caused her to freeze. "After two songs, I was still having palpitations," she later told a reporter. "I suggested that I might feel better if someone came on the stage. About 50 people came up, and it was like an encounter group. They rubbed my arms and legs and said, 'We love you,' and I was able to finish the first show. But I collapsed before the second show with 10,000 people waiting." Simon's onstage meltdown led to a long hiatus from the public eye, although—unlike Blass—she later managed to make a professional comeback.

There is a widespread recognition that this tension—how to force yourself to relax, to shut off your mind when you need to—is a challenge for professional athletes or other performers. For those functioning at an elite, competitive level, spontaneity is a basic job requirement; their livelihood depends on the ability to reliably get into the zone. What fewer people realize is that this is a challenge we *all* face. We

may not be subject to the same public pressures as Steve Blass or Carly Simon, but in many ways our lives can be seen as a massive game of Mindball.

The pervasiveness of the problem is perhaps more obvious when it comes to physical activities. Even casual athletes or performers are familiar with the pain of falling out of the zone or finding it just beyond their grasp. Imagine that you are in the final set of a tennis match—playing your best game ever and about to defeat your former intercollegiate tennis star friend for the first time in recorded history—and the dawning realization that you are about to win makes you begin to lose. You become tense, overly cautious. You begin to *think* about your swing instead of just swinging, and your friend begins to close the gap. You know what you need to do: just *relax* and get back into the groove. The more you think about relaxing, though, the more you tighten up, and you watch helplessly as your lead disappears and your friend gets to gloat once again.

Or imagine that you are taking an introductory salsa class, and your initial awkwardness is exacerbated by an annoying instructor who keeps telling you to *be spontaneous*. "Relax! Have fun with it!" she chirps, as you stumble through the steps you've been taught and do your best not to crush the feet of your partner. "Relax! *Feel* the music!" The more she urges you to *have fun* the more tense you become. You find that a generous quantity of tequila helps with the relaxing side of things, but only at the cost of radically diminished motor coordination. Simultaneously skillful *and* enjoyable salsa dancing seems forever out of your reach.

Getting the mind to shut off and allow the body to do its thing is clearly a challenge. An even bigger problem—and one we encounter much more often—is the trick of getting your mind to let go of *itself*. This is the central problem in Mindball, where you can win the game only by relaxing, which seems to mean that you can win only if you don't *try* to win. In our everyday lives, this tension is perhaps most intensely distilled in the throes of insomnia. You have a big meeting tomorrow and need to be at the top of your game, so you go to bed early and try to relax into sleep, only to find

yourself tortured by incessant thoughts, helpless in the grip of the restless monkey-brain. Counting sheep just makes it worse, no position seems comfortable; you feel in your bones how tired you really are, but how do you make your brain shut off? *RELAX!* you think to yourself, but it's no use.

Insomnia is a fairly simple case, but the problem also manifests itself in more complex—typically social—situations, where the impact is far greater. Consider dating. Anyone who has ever been single for a significant amount of time is familiar with the "never rains but it pours" phenomenon: you can sometimes go for long periods of being miserably alone, desperately trying to meet someone but having absolutely no luck. Then something happens, an encounter occurs, you go out, you have a great time, and suddenly it's raining women or men (or both, if you're so inclined). Attractive potential partners smile at you on the street, strike up conversations with you in cafés. The previously inaccessible beauty at the video store counter—who in the midst of your dry stretch would never even make eye contact with you—suddenly shows an interest in your predilection for Wim Wenders films, and the next thing you know you have plans for that Friday (a Friday!) to watch *Wings of Desire* and eat takeout Indian food. (This example is in no way autobiographical.) You sniff your clothes trying to detect any special pheromones you might be emitting, but if the phenomenon is biochemically based your senses are too dull to detect it. Bathing appears to have no negative effect.

Everyone enjoys these periods of deluge, but once you're back in a dry spell the pattern seems wasteful and fundamentally unjust. There are too many potential dates when you can't enjoy them all, and none when they are really needed. Serious reflection—and during a drought you have a lot of time to reflect—suggests a possible reason for the pattern, or at least why it is so hard to consciously alter: the best way to get a date seems to be to *not want to* get a date. The problem is that it's hard to know what to do with this knowledge. How do you make yourself *not* want something that you actually *do* want?

For the most part, we—and by "we" I mean pretty much

anyone with access to this book, inhabitants of modern, industrialized societies around the world—are preoccupied with effort, the importance of *working, striving,* and *trying.* Three-year-olds attend drill sessions to get an edge on admission to the best preschool and then grow into hypercompetitive high school students popping Ritalin to enhance their test results and keep up with a brutal schedule of after-school activities. Both our personal and our professional lives increasingly revolve around a relentless quest for greater efficiency and higher productivity, crowding out leisure time, vacation, and simple unstructured pleasures. The result is that people of all ages spend their days stumbling around tethered umbilically to their smartphones, immersed in an endless stream of competitive games, e-mails, texts, tweets, dings, pings, and pokes, getting up too early, staying up too late, in the end somehow falling into a fitful sleep illumined by the bright glow of tiny LCD screens.

Our excessive focus in the modern world on the power of conscious thought and the benefits of willpower and self-control causes us to overlook the pervasive importance of what might be called "body thinking": tacit, fast, and semiautomatic behavior that flows from the unconscious with little or no conscious interference. The result is that we too often devote ourselves to pushing *harder* or moving faster in areas of our life where effort and striving are, in fact, profoundly counterproductive. This is because the problem of choking or freezing up extends far beyond sports or artistic performance. A politician who is not, at some level, truly relaxed and sincere while giving a speech will come off as stiff and uncharismatic—a problem that plagued U.S. presidential candidate Mitt Romney. In the same way, a real love of reading, a genuine commitment to learning, and a deep curiosity about the world cannot be forced. Like that most elusive of modern goals, happiness, spontaneity seems to be as tricky to capture and keep as the hot hand in basketball. Consciously try to grab it and it's gone.

WU-WEI ("OOO-WAY") AND *DE* ("DUH")

The goal of this book is to explore the many facets of spontaneity, as well as the conundrum it presents: why it's so crucial to our well-being and yet so elusive. In fact, the problem of how to try not to try is an ancient one, and it has engaged thinkers throughout history and across the world. Some of the most important and influential of them lived in early China. It is my belief that these thinkers, hailing from the so-called Confucian and Daoist schools, had deep insights into the human condition that can still prove very useful to us today. Looking at our lives through this early Chinese lens will require learning about two tightly linked concepts: the first is *wu-wei* 無為 (pronounced *oooo-way*), and the second is *de* 德 (pronounced *duh*, as in "no duh").

Wu-wei literally translates as "no trying" or "no doing," but it's not at all about dull inaction. In fact, it refers to the dynamic, effortless, and unselfconscious state of mind of a person who is optimally active and effective. People in *wu-wei* feel as if they are doing nothing, while at the same time they might be creating a brilliant work of art, smoothly negotiating a complex social situation, or even bringing the entire world into harmonious order. For a person in *wu-wei*, proper and effective conduct follows as automatically as the body gives in to the seductive rhythm of a song. This state of harmony is both complex and holistic, involving as it does the integration of the body, the emotions, and the mind. If we have to translate it, *wu-wei* is probably best rendered as something like "effortless action" or "spontaneous action." Being in *wu-wei* is relaxing and enjoyable, but in a deeply rewarding way that distinguishes it from cruder or more mundane pleasures. In many respects, it resembles the psychologist Mihaly Csikszentmihalyi's well-known concept of "flow," or the idea of being in the zone, but with important—and revealing—differences that we will explore.

People who are in *wu-wei* have *de*, typically translated as "virtue," "power," or "charismatic power." *De* is radiance that others can detect, and it serves as an outward signal that one is in *wu-wei. De* comes in handy in a variety of ways. For rulers and others involved in political life, *de* has a powerful,

seemingly magical effect on those around them, allowing them to spread political order in an instantaneous fashion. They don't have to issue threats or offer rewards, because people simply want to obey them. On a smaller scale, *de* allows a person to engage in one-on-one interactions in a perfectly efficacious way. If you have *de*, people like you, trust you, and are relaxed around you. Even wild animals leave you alone. The payoff provided by *de* is one of the reasons that *wu-wei* is so desirable, and why early Chinese thinkers spent so much time figuring out how to get it.

The fact that no other language has a good equivalent to either *wu-wei* or *de* is quite illuminating and reflects a corresponding gap in our conceptual world. Just as the German loan of *Schadenfreude* has allowed English speakers to focus attention on an ever present but otherwise overlooked aspect of their emotional lives, I think that adding the words *wu-wei* and *de* to our verbal repertoires will help us gain insight into aspects of our mental and social worlds that we have tended to miss. Since I was introduced to these concepts as an undergraduate they've become a basic part of my vocabulary and have also spread quickly among my family members, friends, and acquaintances. "You're not being very *wu-wei* about this," my wife now chides me when I'm trying to force something that shouldn't be forced—a recalcitrant door, an obstructionist bureaucrat. "That guy just doesn't have *de*, but you do," I tell a colleague, in an attempt to explain why I want *her* rather than someone else to join me for an important potential grant interview. And she knows precisely what I mean.

Understanding these two concepts is essential to understanding early Chinese philosophy, which we'll explore by looking at five thinkers who lived and taught during the so-called "Warring States" period (fifth to third century B.C.E.) of China. This was a time of great social chaos and political upheaval. Powerful states swallowed up weaker ones, with the rulers of the losing side often put to the sword. Huge conscript armies roamed the land, devastating crops and making life miserable for the common people. It was also

(not incidentally) a period of incredible philosophical creativity that witnessed the founding of all the major indigenous schools of Chinese thought. Despite considerable differences among these thinkers on a wide variety of issues—nature versus nurture, learning versus instinct—they all built their religious systems around the virtues of naturalness and spontaneity and felt that overall success in life was linked to the charisma that one radiates when completely at ease, or the effectiveness that one displays when fully absorbed. In other words, they all wanted to reach a state of *wu-wei* and get *de*.

They also all faced their own version of the Mindball challenge. How could they ask their followers to strive for a state of unselfconscious, effortless spontaneity? How does one *try* not to try? Doesn't the very act of trying contaminate the result? This is what I will be calling the paradox of *wu-wei*. All of our thinkers believed that they had a surefire way to resolve the paradox and get people safely into a state of *wu-wei*, as well as explanations for why their rivals *couldn't* do so. This was viewed as a particularly urgent problem because, for them, *wu-wei* and *de* were not just about winning a tennis match or getting a date—they were the key to personal, political, and religious success.

ANCIENT CHINA MEETS MODERN SCIENCE

Chinese thinkers living more than two thousand years ago inhabited a social and religious world very different from our own. I therefore find it particularly revealing that over the past few decades many of their insights about the importance of spontaneity have been rediscovered by contemporary science. A growing literature in psychology and neuroscience suggests that these thinkers had a much more accurate picture of how people really think and behave than we find in recent Western philosophy or religious thought and that early Chinese debates about how to attain *wu-wei* reflect real tensions built into the human brain. Scientists are beginning to better appreciate the role that "fast and frugal"

unconscious thinking plays in everyday human life and now have a clearer sense of why spontaneity and effectiveness hang together.

We also now know something about the psychological mechanisms involved in *wu-wei*, including some details about which brain regions are being turned off, as it were, and which are firing at full speed. Technologies such as fMRI (functional magnetic resonance imaging), which tracks neural activity by measuring blood flow to the brain, even allow us to see vivid images of the *wu-wei* brain in action. This is not to fetishize brain science as some magic pathway to the truth. The snazzy fMRI diagrams that festoon popular articles and books are not snapshots of the mind itself. That said, they are almost certainly telling us *something*, ideally something we didn't already know about how the brain works. They are a helpful piece in the puzzle. Moreover, contemporary neuroscience is useful because it moves us toward a greater appreciation of the complexities of our embodied mind. When we are consciously struggling with temptation, for instance, what's involved is not a disembodied soul pulling on the reins of a brutish body, but a set of brain regions dedicated to certain functions in conflict with another set of brain regions. Neuroscience therefore gives us a more accurate description of ourselves than we've ever had.

Another important piece in the spontaneity puzzle comes from evolutionary psychology, which gives us insight into why *wu-wei* is so pleasant for the individual and attractive to others. Things tend to give pleasure when evolution approves of them: think orgasms or chocolate. It feels good to be in *wu-wei* because a whole slew of tasks simply can't be performed by our plodding, conscious minds—we need to unleash the power of our fast, unconscious processes in order to get them done. Moreover, we are attracted to people in *wu-wei* because we *trust* the automatic, unconscious mind. We have a very strong intuition—increasingly confirmed by work in cognitive science—that the conscious, verbal mind is often a sneaky, conniving liar, whereas spontaneous, unselfconscious gestures are reliable indicators of what's

really going on inside another person. Physiologically, it is hard to consciously kick-start spontaneity, and this is probably why we value it so much in our social lives. It's also why we find spontaneous people attractive and trustworthy, as well as why conscious attempts to simulate spontaneous ease—think of any of the commercially marketed dating strategies, from "the Rules" to "the System"—tend to fall flat.

So although early Chinese thinkers had all sorts of metaphysical theories about how and why *de* is attractive to others, it can probably be explained by this very simple psychological fact: spontaneous behavior is hard to fake, which means that spontaneous, unselfconscious people are unlikely to be fakers. We're also attracted to effectiveness, and people in *wu-wei* tend to be socially competent as they move through life. Taken together, these considerations give us an empirically grounded, scientific basis for taking both *wu-wei* and *de* seriously as concepts that can help us make sense of our own lives. We'll therefore spend time exploring the deep evolutionary and neuroscientific reasons for why *wu-wei* is effective, why *de* works, and why certain contemporary ideas of spontaneity miss important aspects of the *wu-wei* experience.

CONTEMPORARY INSIGHTS FROM ANCIENT PHILOSOPHY

If modern science can tell us so much about *wu-wei*, why bother with these early Chinese guys? (And, yes, as far as we know they were all guys.) As a historian of early Chinese thought—and, not incidentally, someone raised in New Jersey, with a Jerseyite's low tolerance for B.S.—I get a psychosomatic headache from people who glorify "the East" as if it were an exclusive and unfailing source of spiritual wisdom. Nonetheless, there is a kernel of truth lurking at the center of New Age exoticism. There are several important ways that early Chinese thought can help us get beyond some of our philosophical and political hang-ups and better prepare us to grasp the biological and cultural worlds we inhabit.

If we take "the West" to refer to the dominant mode of thinking in post-Enlightenment Europe and its colonies, one thing we *can* say is that it tends to portray rational thought as the essence of human nature, and reasoning as something that occurs in an ethereal realm completely disconnected from the noise and heat of the physical world around us. This view is strongly *dualistic* in the sense that the mind, and its supposedly abstract rationality, are seen as radically distinct from, and superior to, the body and its emotions. Although some sort of mind-body dualism seems to be a human psychological universal, the tradition that can be traced from Plato down to Descartes converted vague intuitions about the distinction between *people* (who possess minds) and *things* (which do not) into a bizarre metaphysical dichotomy between a completely invisible, disembodied *mind* and the physical *stuff* that makes up our material world.

This strongly dualist perspective has not only confused us about ourselves but also had an extraordinarily bad effect on science. Early (mid-twentieth-century) cognitive scientists treated the human mind as a brain in a vat, performing abstract information processing, and this led them down some very unproductive paths. Fortunately, over the past few decades cognitive science has begun to free itself from the conceptual shackles of dualism and to treat human thought as fundamentally "embodied." What this means is that our thinking is grounded in concrete experiences and that even what seem like quite abstract concepts are linked to our bodily experience through analogy and metaphor. It is difficult to think about "justice" without summoning the image of a scale or some physical thing being evenly split; when reasoning about our lives, we inevitably think in terms of journeys and paths not taken. The embodied view of cognition also views thought as inherently tied to feeling, which calls into question any rigid distinction between rationality and emotion. Moreover, cognitive scientists are beginning to emphasize the fact that the human brain is designed primarily for guiding *action*, not for representing abstract information—although it can also do this when necessary. This "embodied cognition" revolution was at least

partially inspired by insights from Asian religious thought—including both early Chinese and later Chinese Buddhist accounts of *wu-wei*—which makes this book's melding of cognitive science and Chinese thought particularly relevant.

Although typically a bit slower off the starting block than scientists, Western philosophers are also beginning to realize the importance of both empirical knowledge and alternative traditions for their discipline. A small but growing number of psychologically attuned philosophers now recognize that the early Chinese tradition, with its embodied model of the self, offers an important corrective to the tendency of modern Western philosophy to focus on conscious thought, rationality, and willpower. For instance, while recent Western thought has emphasized the importance of abstract, representational knowledge—that is, information about the world, like the fact that Rome is the capital of Italy or that $E = mc^2$—early Chinese thought instead emphasized what we could call *know-how*: the practical, tacit, and often unformulizable ability to *do* something well. I cannot explain exactly how to ride a bike, but I can ride one. In fact, as we'll discuss later, consciously focusing on how to ride, or trying to explain the process in words to others, may actually impair your ability to do it.

For the early Chinese thinkers whom we'll meet in this book, the culmination of knowledge is understood, not in terms of grasping a set of abstract principles, but rather as entering a state of *wu-wei*. The goal is to acquire the ability to move through the physical and social world in a manner that is completely spontaneous and yet fully in harmony with the proper order of the natural and human worlds (the *Dao* or "Way"). Because of this focus on knowing *how* rather than knowing *this* or *that*, the Chinese tradition has spent a great deal of energy over the past two thousand years exploring the interior, psychological feel of *wu-wei*, worrying about the paradox at the heart of it, and developing a variety of behavioral techniques to get around it. The ideal person in early China is more like a well-trained athlete or cultivated artist than a dispassionate cost-benefit analyzer. This better fits both our intuitive sense of what real human excellence

looks like and our best current scientific understanding of how the mind works.

In addition to helping us get beyond strong mind-body dualism, the Chinese concepts of *wu-wei* and *de* reveal important aspects of spontaneity and human cooperation that have slipped through the nets of modern science, which is still very grounded in another basic feature of Western thought: extreme individualism. The ideal person in Western philosophy is not only disembodied but also radically alone. For the past couple hundred years in the West, the dominant view of human nature has been that we are all individual agents pursuing our own self-interest, responsive only to objective rewards and punishments. Human societies, according to this narrative, were formed when lone hunter-gatherers—typically men, suspiciously unaccompanied by their mates, children, elderly parents, or sick friends—met in a clearing, negotiated the rules they would live under, and then shook hands and agreed to cooperate. As economists and political scientists have only recently begun to realize, this is a fairy tale cooked up over the last century or two by a bunch of elite, landowning males—what the philosopher Annette Baier has scathingly referred to as "a collection of clerics, misogynists, and puritan bachelors."

In reality, we are not autonomous, self-sufficient, purely rational individuals but emotional pack animals, intimately dependent on other human beings at every stage of our lives. We get along, not because we're good at calculating costs and benefits, but because we are emotionally bound to our immediate family and friends and have been trained to adopt a set of *values* that allows us to cooperate spontaneously with others in our society. These shared values are the glue that holds together large-scale human groups, and a key feature of these values is that they need to be embraced sincerely and spontaneously—in an *wu-wei* fashion—to do their job. This is why the tensions surrounding *wu-wei* and *de* are linked to basic puzzles surrounding human cooperation, especially in the anonymous, large communities we tend to inhabit today.

Moreover, situating *wu-wei* in its original, early Chinese context helps us to see how it is a fundamentally spiritual or

religious concept. One of the key features of the *wu-wei* state is a sense of being absorbed in some larger, valued whole—typically referred to as the *Dao* or "Way." While modern readers are highly unlikely to subscribe to the early Chinese religious worldview, I'll show that, even for us, something quite similar to the Way is at work in the background of any genuine *wu-wei* experience: a sense of being at home in some framework of values, however vague or tenuous. This will make it clear how *wu-wei* differs from modern psychological concepts such as "flow," allowing us to recover the crucial *social* dimension of spontaneity.

There is one final benefit to looking at *wu-wei* and *de* in their original Chinese context, at least for readers outside East Asia. It's important to realize that Chinese culture has never entirely lost its focus on *wu-wei*—it never took that trip down the rabbit hole of hyper-rationality and extreme individualism. The thinkers explored in this book are still alive and well in the contemporary Chinese mind-set. Because Chinese is not a phonetic language, its written form has remained essentially the same over several millennia, even as the spoken dialects have undergone massive changes. The texts that we will be exploring were written from roughly the fifth to the third century B.C.E., in so-called "classical Chinese," which continued to serve as the sole literary language of China until the early twentieth century. Indeed, until quite recently, classical Chinese was the lingua franca and medium of scholarship across East Asia. For much of this history, the texts that we will be discussing were memorized by every educated person throughout the Chinese cultural sphere. In terms of sheer numbers, then, the *Analects* of Confucius has influenced far more people than the Bible. Even today large portions of these texts are internalized by schoolchildren throughout East Asia, and the classical language—bearing with it particular ways of thinking—permeates all of the spoken dialects of China.

The result is an unusually high degree of continuity between the formative period of Chinese thought and the modern culture of China in particular, and East Asia more

generally. To take one example, the contemporary East Asian emphasis on personal relationships (*guanxi*) and informal business networks initially strikes Westerners doing business in China as simply a front for corruption and nepotism—and no doubt it often is. However, it has its own rationale, one grounded in an ancient Confucian preference for character-based, intuitive judgments over rigid rule following. You deal with people face to face because their spontaneous expressions and casual remarks—their *wu-wei* behavior, the quality of the *de* that they emanate—tell you everything that you need to know about them. The best way to ensure that agreements are honored is to forge intense personal loyalties, typically over the course of several evenings fueled by good food and staggering quantities of alcohol. Even in ancient China there was a clear awareness that such personal networks are open to abuse, and there were many who argued that the only way to prevent this was to replace spontaneous, trust-based social ties with rule-bound, impersonal public institutions. In practice, China ended up with a mixture of the two, but the culturally dominant social norms have continued to be grounded in *wu-wei* and *de*. One cannot understand contemporary China without grasping this point. So, among other things, this book is intended to provide some insights into the nature of Chinese thought, which should be helpful for anyone living in an age where China has reemerged—after what was really just a short hiatus—as a major world power.

REDISCOVERING THE VALUE OF SPONTANEITY

At a very broad level, early Chinese accounts of spontaneity provide us with a unique window into an aspect of human spiritual and social life that has been overlooked in recent centuries in the West. More concretely, although this book will not present a 100 percent guaranteed, ten-step program for achieving *wu-wei*, you will end up learning quite a bit about strategies that have worked for people in the past. One reason that no one has ever come up with a single, surefire

technique for achieving *wu-wei* is that the barriers to spontaneity vary from person to person and situation to situation. This means that having a grab bag of strategies at one's disposal is probably quite useful. Whatever technique works in helping you fall asleep the night before a big meeting may prove useless when it comes to helping you get into the zone during your tennis match that afternoon. What tends to help me—an introverted, slow-moving academic—to relax into *wu-wei* at the beginning of a workday (silence, solitude, sunlight, and large quantities of coffee) may be completely different from what an extroverted, hyperactive actor needs (a stiff shot of bourbon, loud music, and a frenetic group brainstorming session). My hope is that by exploring the distilled wisdom of ancient traditions of thought—as well as the best findings from contemporary cognitive science—you will gain new insights that you can apply to your own life.

Moreover, simply adopting *wu-wei* and *de* into our vocabularies forces us to fundamentally change the way we think about human behavior and relationships. We tend to think of spontaneity—when we do at all—as a helpful ingredient at a cocktail party or as something that concerns only artists or athletes. There is increasing evidence, however, that the early Chinese were right that spontaneity is, in fact, a cornerstone of individual well-being and human sociality. This means that the paradox of *wu-wei* is also more central than we realize, and the problem of overcoming it more urgent than we think.

We have been taught to believe that the best way to achieve our goals is to reason about them carefully and strive consciously to reach them. Unfortunately, in many areas of life this is terrible advice. Many desirable states—happiness, attractiveness, spontaneity—are best pursued indirectly, and conscious thought and effortful striving can actually interfere with their attainment. In the pages that follow, we'll learn how to foster spontaneity in our own lives and gain some insight into how spontaneity affects our relationships with others. Our exploration of *wu-wei* and *de* will offer no easy solutions, no corny "ancient Chinese secrets" that will

instantly turn us into serene Zen masters. I am convinced, though, that becoming aware of the power and problems of spontaneity—and thinking through these issues with both early Chinese thinkers and cognitive scientists at our side—can give us a deeper understanding of how we move through the world and interact with others, and can help us to do it more effectively.

1

Skillful Butchers and Graceful Gentlemen

THE CONCEPT OF *WU-WEI*

THE STORY OF BUTCHER DING IS PERHAPS THE BEST-KNOWN AND most vivid portrayal of *wu-wei* in the early Chinese tradition. The butcher has been called upon to play his part in a traditional religious ceremony involving the sacrifice of an ox, in a public space with the ruler and a large crowd looking on. This is a major religious event, and Butcher Ding is at center stage. The text is not specific, but we are probably witnessing a ceremony to consecrate a newly cast bronze bell. In this ritual, the still-smoking metal is brought fresh from the foundry and cooled with the blood of a sacrificial animal—a procedure that demands precise timing and perfectly smooth execution.

Butcher Ding is up to the task, dismembering the massive animal with effortless grace: "At every touch of his hand, every bending of his shoulder, every step of his feet, every thrust of his knee—swish! swoosh! He guided his blade along with a whoosh, and all was in perfect tune: one moment as if he were joining in the Dance of the Mulberry Grove, another as if he were performing in the Jingshou Symphony." The Dance of the Mulberry Grove and the Jingshou Symphony were ancient, venerated art forms: Ding's body and blade move in such perfect harmony that a seemingly mundane task is turned into an artistic performance. Lord Wenhui is amazed and is moved to exclaim, "Ah! How wonderful! Can skill really reach such heights?" Butcher Ding puts down his cleaver and replies, "What I, your humble servant, care about is the Way [*Dao,* 道], which goes beyond mere skill." He then launches into an explanation of what it feels like to perform in such a state of perfect ease:

> When I first began cutting up oxen, all I could see was the ox itself. After three years, I no longer saw the ox as a whole. And now—now I meet it with my spirit and don't look with my eyes. My senses and conscious awareness have shut down and my spiritual desires take me away. I follow the Heavenly pattern of the ox, thrusting into the big hollows, guiding the knife through the big openings, and adapting my motions to the fixed structure of the ox. In this way, I never touch the smallest ligament or tendon, much less a main joint.

The result is that Butcher Ding is not so much cutting up the ox as *releasing* its constituent parts, letting the razor-sharp edge of his cleaver move through the spaces between the bones and ligaments without encountering the slightest resistance:

> A skilled butcher has to change his cleaver once a year, because he cuts; an ordinary butcher has to change his cleaver once a month, because he hacks. As for me, I have been using this particular cleaver for nineteen years now, and have cut up thousands of oxen with it, and yet its edge is still as sharp as when it first came off the whetstone. Between the joints of the ox there is space, and the edge of the blade has no thickness; if you use that which has no thickness to pass through gaps where there is space, it's no problem, there's plenty of room to let your cleaver play. That's why, after nineteen years, the edge of my blade looks like it just came from the whetstone.

It is not *all* smooth sailing. Occasionally Butcher Ding's effortless dance is interrupted when he senses trouble, at which point his conscious mind seems to reengage a bit, although he still remains completely relaxed and open to the situation confronting him: "Whenever I come to a knot, I see the difficulty ahead, become careful and alert, focus my vision, slow my movements, and move the blade with the greatest subtlety, so that the ox simply falls apart, like a clod

of earth falling to the ground." Lord Wenhui clearly sees something in this account that goes far beyond simply cutting up oxen. "Wonderful!" he exclaims. "From the words of Butcher Ding I've learned how to live my life!" This remark signals to us that we should be taking the story of the ox as a metaphor: we are Butcher Ding's blade, and the bones and ligaments of the ox are the barriers and obstacles that we face in life. Just as Butcher Ding's blade remains razor-sharp because it never touches a bone or ligament—moving only through the gaps in between—so does the *wu-wei* person move only through the open spaces in life, avoiding the difficulties that damage one's spirit and wear out one's body. This is a metaphor that has not lost any of its power. I, for one, can attest that, after forty-odd years of sometimes hard living, my own blade feels a bit nicked and dull.

Another of my favorite portrayals of *wu-wei* also concerns an artisan. A woodcarver named Qing has received commissions to carve massive wooden stands for sets of bronze bells—precisely the sort of bells that were consecrated in Butcher Ding's ritual sacrifice. Again, this is high-stakes public art, commissioned by the ruler himself, and involving the promise of a juicy monetary reward and official honors. As with Ding, Qing demonstrates almost supernatural skill: the bell stands that he produces are so exquisite that people think they must be the work of ghosts or spirits. Like Butcher Ding, he is praised by his ruler, who exclaims, "What technique allows you to produce something that beautiful?" Again, like Ding, the woodcarver demurs, denying that what he does is all that special. "I, your servant, am merely a humble artisan. What technique could I possibly possess?" After being pressed a bit, though, he acknowledges that perhaps there is a secret to his success, having to do with how he prepares himself mentally to begin the work: "When I am getting ready to make a bell stand, the most important thing is not to exhaust my energy *[qi]*, so first I fast in order to still my mind. After I have fasted for three days, concerns about congratulations or praise, titles or stipends no longer trouble my mind. After five days, thoughts of blame or acclaim, skill or clumsiness have also left my

these Daoist accounts also plays a central role in early Confucianism. This may come as a surprise, because Confucianism is typically associated with hidebound traditionalism and stuffy ritual—both of which strike us as the opposite of *wu-wei*. It can't be denied that the Confucians do a lot to earn this reputation. In the early stages of training, an aspiring Confucian gentleman needs to memorize entire shelves of archaic texts, learn the precise angle at which to bow, and learn the length of the steps with which he is to enter a room. His sitting mat must always be perfectly straight. All of this rigor and restraint, however, is ultimately aimed at producing a cultivated, but nonetheless genuine, form of spontaneity. Indeed, the process of training is not considered complete until the individual has passed completely beyond the need for thought or effort.

Confucius himself, in a passage that serves as a wonderfully concise spiritual autobiography, portrays *wu-wei* as the goal for which he has spent his entire life striving: "The Master said, 'At fifteen I set my mind upon learning; at thirty I took my place in society; at forty I became free of doubts; at fifty I understood Heaven's Mandate; at sixty my ear was attuned; and at seventy I could follow my heart's desires without transgressing the bounds of propriety.' " The phrase "my ear was attuned" literally means "my ear flowed along / went with the flow" and suggests that when hearing the teachings of the ancients Confucius immediately grasped and took joy in them. By age seventy, he had so internalized the Confucian Way that he could act upon whatever thought or desire popped into his head and yet still behave in a perfectly moral and exemplary fashion. The end result looks as effortless and unselfconscious as that of the Zhuangzian butcher or Laozian sage but is, in fact, the product of a lifelong process of training in traditional cultural forms.

Confucius's form of *wu-wei*—an effortless, unselfconscious, but eminently *cultured* spontaneity—was inherited as an ideal by his two Warring States followers, Mencius and Xunzi, although they disagreed profoundly about what's required to reach this state. Mencius tried to split the difference, as it were, between the Daoists and Confucius by presenting *wu-*

wei as the natural outgrowth of cultivating our nature. For him, morally proper *wu-wei* was like a sprout waiting to break through the ground, or a body prepared to move with a catchy beat. Xunzi, on the other hand, was unimpressed by the Daoist celebration of nature and returned to the model championed by Confucius, whereby *wu-wei* was the result of a lifetime of rigorous education. For Xunzi, "not trying" was neither easy nor fun: the perfection of form and emotion that finds its ideal expression in dance was, for him, a hard-won achievement resulting from years of difficult training and cultural learning. In any case, this preoccupation with how to cultivate *wu-wei* was at the center of early Chinese controversies about how to attain the good life. This is a conversation worth paying attention to, because it brings to the forefront ideas, like spontaneity and charisma, that have fallen through the cracks of our contemporary mind-set.

YOUR BRAIN ON *WU-WEI*

In the early Chinese accounts of *wu-wei* described above, a couple of features are immediately apparent. First, although there is only one Butcher Ding or Confucius in the world, these *wu-wei* exemplars experience themselves as *split*. They seem to feel a gap between an "I" (the locus of consciousness and personal identity) and various forces—spiritual desires, desires of the heart—that take over when they enter *wu-wei*. *Wu-wei* is characterized by an internal sense of effortlessness and unselfconsciousness, even though the person in *wu-wei* may actually be very active in the world. Someone or something else must be doing the work besides the conscious mind that we normally think of as "us." Second, people in *wu-wei* are extremely effective: huge oxen fall apart with a few swipes of the blade, and complex social situations are negotiated with masterly aplomb. My guess is that we have all experienced this combination of effortlessness and effectiveness at some point in our lives. While we are completely absorbed in chopping and sautéing, a complex dinner simply assembles itself before our eyes. Fully relaxed,

we breeze through an important job interview without even noticing how well it's going. Our own experiences of the pleasure and power of spontaneity explain why these early Chinese stories are so appealing and also suggest that these thinkers were on to something important. Combining Chinese insights and modern science, we are now in a position to understand how such states can actually come about.

Colloquially, we often speak of ourselves as if we were split in two: "*I* couldn't make *myself* get out of bed this morning," "*I* had to force *myself* to be calm," "I had to hold *my tongue*." Although we use such phrases all the time, if you think about them they're a bit weird. Who is the self who doesn't want to get out of bed, and what is its relationship to me? Does my tongue really have a will of its own, and how do I go about holding it? (And who am I if not my tongue?) Since there is always only one "me" involved, this split-self talk is clearly metaphorical rather than literal. At the same time, the fact that we fall back upon this kind of language so frequently means that it must reflect something important about our experience. And talk of split selves is certainly not limited to English: we can see it in many *wu-wei* stories from early China that involve a narrative "I" confronting a part of the self that is more or less autonomous.

A typically colorful example from the *Zhuangzi* begins by introducing us to a *kui* (*kway*, ), a strange mythical creature that gets around by slowly and painfully hopping on a single foot. Glancing enviously at a millipede tearing past at full speed, its thousands of little legs busily churning along, the *kui* says, "The only way I have of getting around is to hop along on this one leg of mine, and although I have only a single leg, I still can't manage to control it very well. You, on the other hand, have *thousands* of legs—how in the world do you control them all?" The millipede replies, "You don't understand, I don't control them at all. It's like spitting on the ground—you just up and do it.… All I do is put my Heavenly mechanism in motion, and it does all the work, I have no idea how."

Only the author of the *Zhuangzi* would be irreverent

enough to use spitting as an example of our "Heavenly mechanism" in action. It certainly lacks the romanticism or mystical flair that is often associated with Daoism. But this may be precisely the point: when we're in *wu-wei*, it doesn't feel like anything special, it just *is*. Spitting is simply one example of a massive number of things our body knows how to do that we'd be hard-pressed to consciously control or explain in words. Walking with our own two legs, rather than the millipede's thousands or the *kui* monster's one, is another good example. We don't worry about how to walk, we don't consciously monitor ourselves while we're walking, we just walk. In fact, actually *thinking* about walking while trying to walk is a great way to trip. We'll talk in more detail later about the deleterious effects of this kind of conscious monitoring, but for now let's just note that there are many things our body knows how to do without any input at all from our conscious mind, and when we reflect upon this we get a strong sense of being split between a conscious "I" and an unconscious body, which often seems to have a mind of its own.

Recent research suggests that there might be some basis to this idea. Although there is only one me, in an important functional sense we *are* divided into two beings. There is now general agreement that human thought is characterized by two distinct systems that have very different characteristics. The first and most important of these (tacit, hot cognition, or "System 1") is fast, automatic, effortless, and mostly unconscious, corresponding roughly to what we think of as "the body" and what Zhuangzi calls the "Heavenly mechanism." The second (explicit, cold cognition, or "System 2") is slow, deliberate, effortful, and conscious, corresponding roughly to our "mind"—that is, our conscious, verbal selves.

So if I say that I had to force myself not to reach for that second helping of tiramisu, there is a more than metaphorical struggle going on. My conscious, cold system, which is concerned about long-range issues like health and weight gain, is fighting to control the more instinctive hot system, which really likes tiramisu and doesn't share my cold

system's concerns about the consequences. This isn't because hot cognition doesn't take future consequences into account. The problem is that this system's conception of relevant consequences was fixed a long time ago, evolutionarily speaking, and is fairly rigid. "Sugar and fat: *good*" was for most of our evolutionary history a great principle to live by, since acquiring adequate nutrition was a constant challenge. For those of us fortunate enough to live in the affluent industrialized world, however, sugar and fat are so widely and freely available that they no longer represent unqualified goods—on the contrary, allowing ourselves to indulge in them to excess has a variety of negative consequences. The great advantage of cold cognition is that it is capable of changing its priorities in light of new information. So another way to think about how the systems differ is that hot cognition is evolutionarily older and more rigid, while cold cognition is evolutionarily newer and more flexible—and therefore more likely to adapt to novel behavioral consequences.

These two systems are even, to some degree, neuroanatomically distinct—that is, they are implemented in different parts of the brain. In fact, our first hint that the two systems existed came from clinical cases where selective brain damage allowed researchers to watch one of them functioning without the other. Anyone who has seen the movie *Memento* (2000) is familiar with a condition called anterograde amnesia: patients afflicted with this condition cannot form new, explicit short-term memories. They remember who they are and the more distant past but are condemned—consciously, at least—to a perpetual forgetting of the present. What's interesting is that, although these patients can't form new conscious memories, at a subconscious level they are able to form new, *implicit* ones. They cannot consciously recall ever having met the doctor who greets them every day with a thumbtack hidden in his palm, but for some reason they don't want to shake his hand. We see a similar disjunction when it comes to different types of skills: unconscious "knowing how" seems distinct from conscious "knowing that." As with emotional memories, the

narrow trench in its surface and score a direct missile hit at a weak point in its armor. Being pursued by Darth Vader and his minions, Luke has only one chance to get it right. As he approaches his destination and begins to activate his targeting computer, he hears in his mind the voice of the recently slain Obi-Wan (in that wonderfully sonorous Alec Guinness voice): *Use the Force, Luke … Let go!* To the consternation of those tracking him at the rebel base, Luke shuts down his computer, closes his eyes, and taps into the Force in order to *feel* the right time to release his missiles. Of course he scores a direct hit, the Death Star is destroyed, and he is reunited as a hero with that universal object of late seventies/early eighties adolescent boy desire, Princess Leia. (I still find that bun hairstyle incredibly erotic.)

If Zhuangzi were still alive and suitably lawyered up, I'd advise him to go after some of the royalties from this movie, because Luke's strategy is essentially that of the Butcher Ding: "My senses and conscious awareness have shut down" (I've shut off my targeting computer) and "my spiritual desires take me away" (I let the Force guide me). In fact, the Zhuangzi–*Star Wars* connection is a historically accurate one. George Lucas, in conceptualizing the *Star Wars* mythology—particularly the Jedi Knights and figures such as Yoda—was at least partly inspired by the mystical *bushido* ("Way of the Warrior") code of the Japanese samurai, which combined a bit of Confucianism with big doses of Japanese Zen Buddhism. In turn, Japanese Zen Buddhism is derived from Chinese Chan Buddhism, and Chan Buddhism is (as I like to say when I want to annoy my Buddhologist colleagues) basically just Zhuangzi in Buddhist drag. Dress up Butcher Ding in a samurai outfit, swap out his cleaver for a sword, and he would not be at all out of place in *The Last Samurai*. So there is a direct line of intellectual descent between the story of Butcher Ding in the *Zhuangzi* and that of Luke Skywalker in *Star Wars*. The mythology that Lucas eventually ended up with is a bit of a mishmash—the whole idea of there being a "dark side" to the Force comes out of Christian notions about evil and wouldn't make sense in an East Asian religious context—but the image of a Jedi Knight being

moved solely by the Force looks very much like Butcher Ding closing his eyes and allowing himself to be guided by his "spiritual desires" as he dances his way through the ox.

There is no evidence, as far as I know, that George Lucas is a fan of the *Analects* of Confucius, but we can see the same combination of effortlessness and unselfconsciousness in all of the early Chinese exemplars. There is a great passage in the *Analects* describing the utter rapture that seized Confucius when he first heard the music of the ancient sage kings who served as his models of virtue: "For three months after, he did not even notice the taste of meat. He said, 'I never imagined that music could be so sublime.' " It is this joy that makes Confucius indifferent to material wealth and reputation and allows him to give free rein to his every desire without ever doing anything improper. We see something similar in the story of Woodcarver Qing, where his ability to perceive in a glance the tree that contains his bell stand is predicated on attaining a state of complete unselfconsciousness. More specifically, he needs to clear his mind of all external considerations, such as money, fame, honor, and a sense of his own physical self.

How are we to understand this from a contemporary perspective? Can we do without mystical entities like "spiritual desires" or the Force and still make sense of the experiences being described here? I think we can. To do so, we need a clear understanding of what *effort* and *consciousness* feel like from the inside.

Let's begin with a little exercise. Go down the column of words below, and as quickly as possible read each word silently and then say out loud either "upper" or "lower," depending on whether the word itself is written in upper- or lowercase letters.

UPPER
lower
lower
upper
LOWER

Unless you are an alien cyborg from Alpha Centauri, you were probably cruising along until you reached the last two, where you stumbled a bit and took longer to say "lower" while reading *upper*, and then "upper" while reading *LOWER*. That slight catch as you began to talk—that feeling of needing to stop yourself, to not *read* the word but instead focus on its case—has been referred to as the *oomph* that is the hallmark of conscious will or effort. A task that presents someone with this kind of mismatch between the meaning of a word and its physical appearance is commonly referred to as a "Stroop task," after the English psychologist who published a paper on the effect in the 1930s, originally using words printed in incompatible colors (for example, the word *green* printed in red ink). The Stroop task is a classic example of what's called a *cognitive control* or *executive control* task—that is, a situation where the cold, conscious mind (System 2) has to step in and override automatic, effortless processes (System 1).

Brain imaging studies suggest that a couple brain areas in particular are involved in cognitive control: the *anterior cingulate cortex* (ACC) and the *lateral prefrontal cortex* (lateral PFC). We'll be referring to these together as the "cognitive control regions" of the brain. There is still some debate about the precise role played by each of these regions, but one plausible characterization is that the ACC is a kind of smoke detector, and the lateral PFC is the fire response team. Like a smoke detector, the ACC is in constant monitoring mode, waiting to detect a whiff of danger, such as an instance of cognitive conflict. In the case of the Stroop task, we've got two automatic processes that are in conflict: the identification of a typeface or color versus the automatic processing of a simple word (assuming you're literate and it's your native language). This conflict alerts the ACC, which then sends out an alarm to the lateral PFC to come deal with the situation.

The lateral PFC is responsible for many higher cognitive functions, such as the integration of conscious and unconscious knowledge, working memory (the small spotlight of consciousness that allows us to focus on explicit

information), and conscious planning. Most relevantly, when it comes to the case of the Stroop task, the lateral PFC also exerts control over other areas of the brain by strengthening the activation of task-relevant networks at the expense of other networks. By weakening certain neural pathways, the lateral PFC essentially tells them to stop doing what they are doing, which is the neural equivalent of fire-retarding foam.

In the Stroop task presented above, you were asked to read the word *LOWER* but say the word *upper*. The ACC lets the lateral PFC know about the conflict between your perception of the word's case and your knowledge of the word's meaning. The lateral PFC then draws upon its understanding of what the task requires—you've been asked to say aloud the case, not read the word itself—and decides that saying "upper" should take precedence. It then sends a signal telling the visual system, which detects case, to get on with its business; this strengthening of the visual system encourages the word recognition system to just shut up. This whole rigmarole is what results in the slight delay and the feeling of effort that you don't get when the word *lower* is actually printed in lowercase letters. In the latter case, the two regions work together happily, the ACC conflict detector is not activated, and the lateral PFC is not called upon to adjudicate between squabbling sets of neurons.

Armed with this information, we can now see how a brain on *wu-wei* might function without our having to invoke Obi-Wan's Force. We can even get a reasonably precise *picture* of it, thanks to some recent neuroscientific work on *wu-wei*–like states. There are inherent challenges with using brain imaging techniques to study any type of activity, because the technology is typically uncomfortable, invasive, and incredibly bulky. The brain scanning technique that provides the best spatial discrimination—the one that allows us to see most clearly what's firing or not in a person's brain—is fMRI (functional magnetic resonance imaging), which measures blood flow to the neurons. Though imperfect, this functions as a reasonable proxy for neural activation. With fMRI, subjects have to lie perfectly still in a huge, extremely loud metal tube. This is not ideal for studying any kind of real

behavior. You could never get a decent fMRI image of Butcher Ding or Woodcarver Qing in action. However, a clever study by Charles Limb and Allen Braun was able to get around some of these limitations to look at professional jazz pianists in action. They designed a special, nonferromagnetic keyboard that could be taken inside the scanner, which is basically a huge magnet, and positioned their subjects so that they could sit with the keyboard resting on their laps. The researchers then had them play in two different conditions. In the first, "Scales," they were required to play, over and over, a one-octave C scale. In the "Jazz Improv" condition, they were asked to remain in the same key but improvise a melody based upon a composition they'd previously been asked to memorize.

The researchers' most striking finding was the pattern of activation when the pianists switched into improvisation mode: widespread deactivation of the lateral PFC and increased activity across relevant sensorimotor systems, the ACC, and the frontal polar portion of a region known as the medial prefrontal cortex (MPFC). The ACC, as we have seen, seems to be responsible for conflict monitoring. It typically works with the lateral PFC to maintain cognitive control. The ACC detects conflict, then calls in the lateral PFC to set things straight. And it is this combination of ACC and lateral PFC activation that appears to produce the subjective feeling of conscious, effortful activity.

What this study suggests is that, in a spontaneous yet high-skill situation such as jazz improv, the ACC remains alert in the background even when the lateral PFC is turned off. This particular neural configuration may correspond subjectively to the kind of relaxed but vigilant mode we enter into when we're fully absorbed in a complex activity. It is the ACC that is still paying attention when Butcher Ding is moving his blade effortlessly through the ox, ready to call for help if he runs into a "difficult spot." In other words, at least some forms of *wu-wei* appear to involve shutting down active conscious awareness and control while maintaining background situational alertness. When your conscious mind lets go, the body can take over.