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## Embodied Self-Awareness

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### Meet Your Somatic Intelligence

There is one thing that, when cultivated and regularly practiced, leads to deep spiritual intention, to peace, to mindfulness and clear comprehension, to vision and knowledge, to a happy life here and now, and to the culmination of wisdom and awakening.

And what is that one thing?

It is mindfulness centered on the body.

—Gautama Buddha

Brian's story is a remarkable illustration of universal principles that operate in all of us, all the time. For most of us, though, the process of biobehavioral learning is far less dramatic. So the fact that our body plays such an influential role in our everyday lives remains invisible. Apart from athletics, we rarely think about the body as a domain of learning. But the truth is our most important personal learning inherently involves the body.

In this chapter I expand on a few of the key principles that Brian's experience so aptly illustrates and introduce some new ideas about biobehavioral learning. In order to lay a foundation for the stories to come, we'll take a slightly more technical turn here. My intention is to introduce some key concepts that will support our exploration in subsequent chapters.

Let's begin by summarizing a few main points from the last two chapters:

- Three primary evolutionary pressures drove the development of the brain: the need for physical safety, the need for emotional communication, and the need for social navigation. Your brain is your social and emotional sense organ.
- The brain takes physical shape as it learns behaviors that optimize access to three essential nutrients: safety, connection, and respect.
- Your brain is distributed throughout your entire body, and your body also subtly takes shape in response to your life experience. Through the unconscious and highly adaptive processes of implicit memory and armoring, you put successful behaviors on neuromuscular autopilot.
- This can create biobehavioral blind spots that are exceedingly resistant to change.
- Your body is a lens of perception. Everything you perceive is filtered through the medium of your body. So those blind spots affect the possibilities you see.
- Your body is an instrument of action. Every single action you take involves your body. So your biobehavioral blind spots also affect your actions.

The bottom line: Your body is a finely tuned social and emotional sense organ shaped by your life experience. And that shaping affects both the possibilities you see and the actions you take. Your results in almost every area of life are subtly but inescapably influenced by the characteristics and qualities you've come to embody.

## **Your Body is Your Social and Emotional Sense Organ**

If your body plays such an important role in the outcomes of your life, then it would be wise to learn something about what it's telling you. Let's take a look.

### **Exteroception**

*Pause for a moment and notice what's in your direct line of sight right now. What's in your peripheral vision? Are there any smells in the air? Perhaps you didn't notice any a moment ago, but now that you stop to pay attention, you do. Are you surrounded by sound or by silence? Can you feel the texture of your clothes on your body? As I write this sentence (and many others in this book, truth be told), I'm enjoying the taste of chocolate. Perhaps you're enjoying something tasty, too.*

Try to make this more than a mental exercise. Stop and take a moment to really *experience* your sensory perceptions as they're occurring, right now.

Now tell me: How many senses do you have?

If you answered five, you're partially right. But you actually have a sixth sense, and a seventh... and even more beyond that. There are actually several classes of sensation, and our five senses are merely a subset of one of them.<sup>†</sup>

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<sup>†</sup> There are other classes of sensation beyond those discussed in this chapter, including noci-ception—the sense of pain—and neuroception, a direct visceral perception of safety or danger.

That class of sensation, known as exteroception, encompasses the familiar five senses of sight, sound, smell, taste, and touch. These senses take in information from our surroundings. Because the world around us changes unpredictably, the nerves that travel from our exteroceptive sense receptors to our brains are especially large and fast.<sup>1</sup> This makes it easy—practically instantaneous, even—for you to sit up and take notice when a loud sound suddenly catches your attention. It's biologically adaptive for us to perceive and quickly respond to changing external circumstances, so nature has evolved a way for us to easily do that.

But the background level of sensory stimulus is so immense that we can't possibly perceive it all. If you paid attention to every sight, sound, and smell that came along as you were reading this book, you'd never be able to concentrate.

So our senses keenly filter in what's important, and screen out things that aren't relevant. This is nowhere more clearly demonstrated than in a famous experiment on selective attention, in which an actor in a gorilla suit walks slowly into a group of students passing a few basketballs back and forth, turns toward the camera, beats his chest, and walks out. If you're busy counting the number of passes, as the experimenter would have asked you to do, chances are high—50 percent, in fact—that you won't see the gorilla at all.<sup>†</sup>

I've mentioned before that bees see ultraviolet light and dogs smell and hear things that we can't. Those stimuli surround us even though we can't perceive them. Our senses are like our own personal radio dial, tuned first to what humans are physically capable of perceiving, and then more finely to your own unique channel. That might be limited by color blindness or dulled taste buds or years of too-loud music. If you lived your entire life on the sea, as do the Sea Gypsies of Southeast Asia, you might have developed a visual cortex that allows you to see clearly and catch your dinner thirty feet underwater.<sup>2</sup> Musicians with perfect pitch live in a different soundscape than people who haven't developed that skill. Celebrated sommeliers experience their wines very differently

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<sup>†</sup> You can try this for yourself at [www.theinvisiblegorilla.com](http://www.theinvisiblegorilla.com). Although now that I've tipped you off, you may find it easier to see the gorilla.

than an elderly person with dimming taste buds. We each get access to a narrow and uniquely filtered piece of the world. In fact it's not too much to say that we are each, quite literally, living in a world of our own making.

## **Interoception**

Interoception is essentially the inverse of exteroception. It's the term scientists use for your internal visceral experience.<sup>3</sup>

*Get very quiet and still, and move your attention to the center of your chest. If you pay attention carefully, can you sense your heart beating? If you put your hand on your chest, does it become any easier to feel? Perhaps you notice your lungs moving with each inhale and exhale. Is there warmth anywhere in your body, or coolness? Maybe you have a relaxed sense of spaciousness on the inside. Maybe there's tension somewhere.*

These are your interoceptive sensations. You may notice that it's more difficult to become aware of what you're feeling from the inside. Perhaps you had to close your eyes to do so, shutting out the exteroceptive "noise" in order to become aware of your internal state. This is common, and one reason is biological.

Interoceptive nerve cells are smaller and slower than their exteroceptive cousins. Exteroceptive nerves equip you to act quickly in response to the unpredictably changing circumstances of your environment. By contrast, processes like homeostasis allow us to exercise automatic control over our internal environment. The brain uses smaller nerve cells to process interoceptive sensations in the background, filtering them out of conscious awareness unless and until something goes wrong.<sup>4</sup>

Just as exteroception is divided up into five senses, the interoceptive class of sensations can be divided up as well. Your heart, gut, lungs, skin, and connective tissue all provide unique signals to the brain about your internal state. These are the five internal senses of your social and emotional sense organ. What's known so far about these senses would

fill an entire book, and scientists make new discoveries every day. Here I'll summarize just a handful of the many fascinating facts:

## The Heart

- A small group of cells in the amygdala—a tiny bit of brain involved in assessing danger—fires six to eight milliseconds after each heartbeat. The implication: when there's something to be scared of, your rapidly beating heart lets your brain know.<sup>5</sup>
- In addition to pumping blood, the heart also produces oxytocin, sometimes referred to as “the love hormone.” Oxytocin supports bonding during breastfeeding, sexual activity, and cuddling.<sup>6</sup>
- Some nerve cells in the heart resemble cells in the hippocampus, a limbic structure involved in long-term memory storage.<sup>7</sup> And anecdotal evidence has shown that some heart transplant patients take on characteristics of their donors. Might the heart have a memory of its own?<sup>8</sup>

## The Gut

- The enteric nervous system in your gut operates largely independently of the brain in your head. This mini-brain is home to roughly 100 million neurons—more than either the spinal cord or the peripheral nervous system. It is the only known part of the nervous system that can override messages from the brain.<sup>9</sup>
- Sensations of hunger and satiety are closely tied to positive and negative mood states, especially in infancy. As we mature, this gut-mood association develops further, linking up nuanced emotional experiences with specific sensations in the gut.<sup>10</sup> In

fact, the very same brain cells involved in feeling sensations from the gut are *also* activated when we see another person in pain, hear about a disgusting experience, or feel a relaxed sense of calm.<sup>11</sup> Dr. Emeran Mayer at UCLA describes the gut as “a peripheral extension of the limbic system,” or, in other words, a vital part of our emotional brain.<sup>12</sup> In daily life, this gut-mood connection is commonly expressed in idioms like “my stomach was tied in knots,” and “he made me sick to my stomach.”

- The gut produces 95 percent of the body’s serotonin, a vital mood-stabilizing neurotransmitter. This is one reason SSRIs—a class of depression medications that change the availability of serotonin in the brain—often have digestive side effects.<sup>13</sup>

## The Lungs

- The muscles that support breathing are densely innervated by your autonomic nervous system, which plays a central role in your fight/flight response.<sup>14</sup> That’s why stress dissipates when you take a deep breath and a long, slow exhale. It’s also why you “catch your breath” when you’re startled, or sigh deeply when you’re sad.
- Different breathing patterns are correlated with different emotional states.<sup>15</sup> Think about sobbing or laughing and you get the idea. The same is true of more subtle emotions, too. The way you habitually breathe affects your state of mind.<sup>16</sup>

## The Vagus Nerve

- The vagus nerve innervates the heart, gut, and lungs directly, bypassing the spinal cord to snake straight up through the

middle of you. Eighty to ninety percent of vagal nerve fibers are afferent—meaning they send signals *to* the brain rather than receiving signals *from* the brain.<sup>17</sup> We tend to think of the brain as a top-down command center, but this is about as outdated as thinking the world is flat. The brain in your head receives vastly more “bottom-up” input from your visceral organs than the reverse. In fact, in many instances it makes more sense to say the body leads the brain.

## The Skin

- Skin conductance is used as a proxy for emotional arousal in the lab. Scientists from a wide range of disciplines measure subtle changes in the skin’s dampness—and therefore its ability to conduct electrical signals—to indicate changes in emotional state. This coarse but widely used measure is rooted in the vital skin-brain connection.<sup>18</sup>
- The skin and the brain arise from the same layer of embryonic tissue. Three weeks following conception, a human embryo divides into three layers of cells. The outermost layer is called the ectoderm, and it goes on to form the spinal cord, the brain... and the skin.<sup>19</sup> In fact, scientists have recently discovered how to turn skin cells into brain cells in the lab.<sup>20</sup>
- From birth, we automatically know the difference between kind and aggressive touch.<sup>21</sup> This may be due to specialized nerve fibers that travel from the skin directly into the emotional brain.<sup>22</sup> These unique nerve fibers may also explain why children are more quickly soothed when kind words are coupled with kind touch.

## The Connective Tissue

- Fascia, or connective tissue, is the largest organ in the body.<sup>23</sup> It has more sensory nerve fibers than any other part of the body, including the retina, previously thought to be our richest information-gathering tissue.<sup>24</sup> Surrounding every organ and sheathing every muscle, fascia ranges from a viscous, fluid-like substance to a dense, fibrous one. If you're a meat eater, you will recognize fascia as the filmy white tissue that encases a chicken breast, or the gristle that attaches meat to bone. In a living body, it's what allows muscles, bones, and organs to slide by one another when you bend and move. It is also, along with the skeleton, what enables the body to maintain its shape.<sup>25</sup>
- Fascia is densely innervated by the autonomic nervous system, which manages automatic emotional reactions such as the fight or flight response.<sup>26</sup> Many fascial nerves connect to the insula, a part of the emotional brain involved in self-awareness.<sup>27</sup> This connection is one reason why spending an entire day making sad faces in the lab can leave you feeling blue, as Dr. Paul Ekman of UCSF discovered during his explorations of cross-cultural emotional expression.<sup>28</sup>

Interoception is as vital to our daily life as exteroception, and yet most of us operate completely unaware of it. That's partly by design, and partly by convention. Biologically, our interoceptive senses are designed to be on autopilot as much as possible. This frees up attention for other things: poetry, sports, science. It also allows our bodies to maintain a healthy homeostasis without our conscious involvement.

But conventionally, we don't put much stock in our interoceptive senses. We spend years—often decades—in school honing our skills of logic and reason. We spend virtually no time at all honing our capacity to wisely use our sensory intelligence. Just as it's possible to have faulty

reasoning, it's possible to have faulty interoception. It's possible for your heart to jump when there's no actual danger, or for your gut to be tied in knots over something that's really of no consequence. It's possible to hold your shoulders up around your ears for decades, creating an uninterrupted fascia-to-brain communication about your background state of anxiety. So just like developing good thinking skills, getting wise about this aspect of our intelligence takes training and time.

We also tend to dismiss our sensations, urges, hunches, and gut feelings as unimportant or unreliable. We treat our bodies as vehicles to get to the next meeting, objects to polish for the next party, or machines that we hire experts to fix. Rarely do we consider that our bodies might have wisdom worth listening for.

But, like it or not, interoception affects your actions every single day. If you've ever had an itch that you reached up to scratch without thinking about it, that's interoception at work. The below-conscious nature of these sensations will drive your actions without your conscious awareness.<sup>29</sup> This is how you wind up making impulsive, emotionally reactive choices that you later regret. Because your interoceptive senses are so closely tied to the emotional centers of your brain, sometimes you'll feel driven to "scratch that itch" before you even realize what you're doing.<sup>30</sup>

In everyday life that might look like a tightening in your gut that, before you know it, has you shouting at your child. It might look like a palpable sense of yearning that drives you to compulsively call that special someone over and over until regrettably, you push them away. It might look like a blush as you shrink in embarrassment, dismissing some highly public praise at work. It might look like an email that languishes for weeks in your inbox, because every time you look at it you feel squeamish. Or, as in Brian's case, it might look like an eager-to-please forward lean that had him caretaking at any cost.

When you're flooded with uncomfortable interoceptive sensation, the intensity demands action. Usually, your immediate reaction is to say or do something to make the discomfort disappear. That's essentially the definition of a knee-jerk reaction—an irresistible compul-

sion to act in ways that you may later regret. These intense but often invisible interoceptive sensations drive much of our emotionally reactive behavior.<sup>31</sup>

In other words, your sensations often drive your actions. And because interoception is so automatic and so invisible, you're usually not even aware that's what's happening.

The good news is this oblivious state is not a life sentence. It is entirely possible to become more aware of your interoceptive sensations. When you do, you gain far more choice about your responses—a process we'll continue to explore throughout the rest of this book.

## Proprioception

Proprioception, a third class of sensory experience, encompasses your sense of balance and tells you where your body is in space.

*Get still for a moment. Without looking, do you know where your left hand is in relation to your left hip? Where your left foot is in relation to the floor? What direction your head is tilted?*

*As you're reading this, slump into your chair. Let your arms go slack. Let your chest collapse, maybe drop your head a bit. Think of the last time you felt really down about something. Let that memory take hold for a moment.*

*Now say out loud, with as much enthusiasm as you can muster, "I'm having a fantastic day!"*

*How was that? I'll bet your tone of voice is a dead giveaway about just exactly how "fantastic" you do (or don't) feel. When I do this exercise in groups, people often burst out laughing at the obvious and ridiculous incongruence.*

This is proprioception. It is the internal intelligence that signals the position of your body and it, too, affects your social life and mood.<sup>32</sup>

Actors and artists know this. They learn to convey subtle emotions through the slump of the shoulders just so, the jutted chin, the crossed legs, the tapping foot. Just as Dr. Paul Ekman did in his lab, actors can make themselves feel anxious or nauseated, delighted or surprised, simply by how they inhabit their bodies.

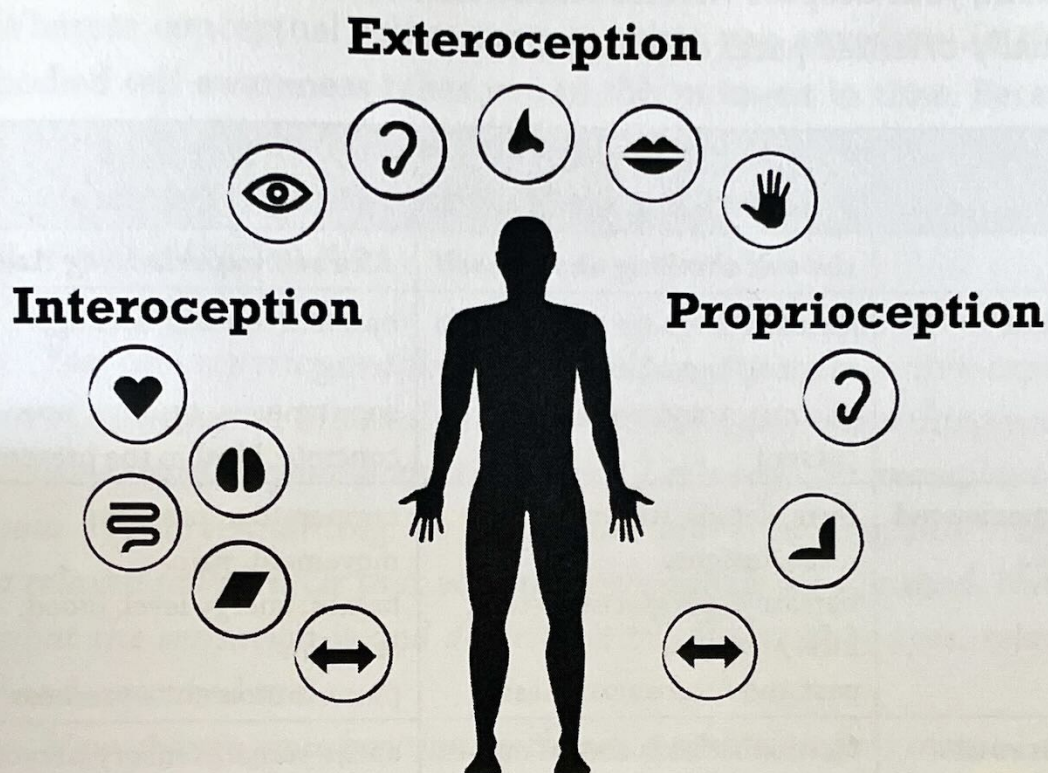
Athletes know it, too. Proprioception is the class of sensation that allows a player to collide with a fast-moving ball at just the right direction and velocity to score. It's how gymnasts flip on the balance beam and how the New York City Ballet delights awestruck audiences night after night. Athletes rely on far more than just fitness and strength to get the job done.

While superhuman proprioception is an essential skill for athletes, actors, and artists, every one of us relies on it every day. Without proprioception, you couldn't pilot a car around a curve, ride a bicycle, drink water without spilling, or get a spoon to your mouth. Clumsy? Blame your proprioceptive sense (or lack thereof).

Proprioception relies on the vestibular system in your inner ear, which guides your sense of balance.<sup>33</sup> It also encompasses the nerves in fascia, as well as specialized nerve cells in your muscles known as spindle cells.<sup>34</sup> Combined, all of these inputs tell you where your body is in space, without your having to so much as think about it. Well, perhaps as a toddler you concentrated more intently as you discovered your limbs and learned how to use them. But as you learned how to crawl, walk, and run; how to reach and receive; how to place objects where you mean to; your sense of balance and movement became automatic.

You just experienced for yourself how shifting your body, even in minor and contrived ways, can influence mood. Biologists have long known that across species, open postures tend to signal and grant access to power and resources, whereas closed postures do the reverse. Dr. Amy Cuddy's popular research at Harvard Business School suggests that not only does this axiom apply to humans, but also that we can deliberately change our own internal sense of power—as well as others' perception of us—simply by changing our posture.<sup>35</sup> In Chapter 8 we'll take a closer look at what her controversial research

has to say about how proprioception affects real outcomes in real life—important ones such as whether we get the job, the date, or the cooperation we've been asking for.



Three classes of embodied perception:

Exteroception includes sight, sound, smell, taste, touch.

Interoception involves the heart, lungs, gut, skin, and fascia.

Proprioception involves the inner ear, specialized muscle cells, and fascia.

## Embodied Self-Awareness

Dr. Alan Fogel, in his excellent book *The Psychophysiology of Self-Awareness*,<sup>36</sup> lays out a model for two different kinds of self-awareness. Conceptual self-awareness is what you use to remember your address and construct your personal history. It relies on the body

and brain areas for speech and language, including the muscles in your face.

Embodied self-awareness, on the other hand, encompasses all of interoception, exteroception, and proprioception. It is a whole-body sensory process that involves your entire extended neuromuscular system, your deepest visceral sensations, and some of the most emotionally-oriented parts of your brain.

	<b>Conceptual Self-Awareness</b>	<b>Embodied Self-Awareness</b>
	<b>the self thinking about itself</b>	<b>the self experiencing itself</b>
<b>Basis</b>	based in language and symbols rational, logical, explanatory abstract, transcends the present	based in sensing, feeling, acting spontaneous, creative, open concrete, lived in the present
<b>Experienced As...</b>	facts, details, information, ideas, insights narrative, perspective, story, interpretation past and future awareness	temperature, pressure, movement, pain breath, energy level, mood, emotion present-moment awareness
<b>Nervous System</b>	facial muscles & cranial nerves speech & language centers of the brain	entire somatosensory nervous system sensory-motor cortex, insula, ventromedial prefrontal cortex

adapted from Dr. Alan Fogel

These two types of self-awareness are both crucial for daily living. The gift of conceptual self-awareness is that it can take you anywhere in time. You can learn from your past and project inspired visions into the future. You can organize your self-understanding into a coherent story that helps you make sense of your life and make better choices as a result.

Embodied self-awareness also offers many gifts, which we'll continue to explore in the coming chapters. When people begin to build stronger embodied self-awareness, they start spontaneously saying

things like “I hear the birds now—I never noticed them before,” or, “I’m more aware of the warmth of the sun on my skin,” or, “I don’t know why, but I feel more connected to my friends and family now.” More than one client has told me that the grass actually looks greener following a coaching session—and unlike Brian, those clients weren’t color blind to begin with.

Whereas conceptual self-awareness takes you anywhere in time, embodied self-awareness takes you to *this* moment in time. Because sensation can only be experienced in the present moment, embodied self-awareness brings you home to the only moment you ever have for sure, which is right ... *now*.

*You can experience this for yourself by trying a simple experiment. Choose an internal sensation to focus on—something you’re experiencing in your body right now. Let’s say, for example, that your eyes are squinting. Or that your hand is holding this book in a relaxed fashion. Or that your toe feels a little bit squished. Notice what the sensation is and describe it briefly: squinty eyes, relaxed hand, squished toe.*

*Now change your position so that the sensation goes away. I was sitting on my foot, so I just moved my leg and wiggled my toes.*

*When you do this, notice that once you adjust your position, you can no longer feel that same sensation. You may feel the residual effects of it—instead of feeling pressure, my toe is now a little tingly. Using conceptual self-awareness, you can think about how your toe or hand or eyes felt a moment ago. But you can’t actually feel the same squished sensation unless you sit on your foot again.*

*In other words, you can only experience any given sensation in the present moment.*

While this may sound obvious, it’s actually quite profound. The implication is that your moment-to-moment sensations are a powerful and always-available means to bring you present. And when you are more present—when you can feel yourself more—all manner of benefits

accrue. In upcoming chapters we'll explore just what those benefits are and how embodied practice gives rise to them.

Recall that we are biologically designed to filter out a great deal of sensory input, and nowhere more so than with those smaller, slower interoceptive nerves. In fact, interoception only reaches conscious awareness when it crosses a certain threshold of emotional significance. Before that, it simply drives your actions without your conscious involvement—you'll "scratch that itch" without even realizing what you're doing.

But as you become more aware of your sensations, you introduce the possibility of *choosing* your response. Which is why strengthening your capacity for embodied self-awareness is a first step toward developing more courage, compassion, composure, and all manner of personal qualities that support your success and satisfaction. These may be bold claims, but they're rooted directly in our biology.

### **Embodied Learning and Change: The Power of Neuroplasticity**

If you want to develop those qualities, your best bet is to follow the original process of biobehavioral learning. And that process is, as we now know, inherently embodied.

Although we automatically tune out much of our sensory experience—especially our interoceptive experience—it is absolutely possible to train the body and brain to make those signals stronger. The science of neuroplasticity reveals the hopeful news that it's far more possible to change your brain than biologists once believed. As little as two or three decades ago, many doctors still thought the brain changed very little in adulthood, if at all. With the advent of new technologies that let us peer inside the living brain, we now know that's not true. While the pace of change slows as we age, our bodies are always in a state of becoming.<sup>37</sup>

We tend to think of the body as solid, fixed, and immutable, but nothing could be further from the truth. Our bodies undergo constant

change from the day we're born until the day we die... and beyond. We've all heard stories of people who have made radical changes to their level of health, fitness, and weight. And every few years all of the cells in your body are replaced with completely new materials as cells die off and are replaced.<sup>38</sup>

With all this change, we ought to think of the body more like a river than a rock. Like a river, the body is constantly exchanging new for old, renewing and replenishing tissues and cells. This is why wounds heal. It's also how the food you eat becomes your flesh and bone.

Given this, our capacity for change is often vastly underestimated. With enough practice, stroke victims have been able to regain the use of their semi-paralyzed limbs.<sup>39</sup> By training their attention, people suffering from obsessive-compulsive disorder have rewired their brains... and vastly reduced their symptoms.<sup>40</sup> **With the right kinds of interventions, we can change our brains—as well as those stubborn neuromuscular patterns that have created biobehavioral blind spots.**

Several elements of neuroplasticity play a central role in psychological learning both early in life and later on.

- **Relationship:** Experience-dependent brain development occurs embedded in social environments. Our emotional brain—including the distributed part of our brain that reacts to intensely emotional moments with a blush, a shudder, or a sigh—takes shape in relationship with important others, including caregivers, teachers, coaches, and peers. As Lewis et al. put it in *A General Theory of Love*, “It takes a limbic system to rewire a limbic system.”<sup>41</sup> **When you want to develop new actions and habits, you need close relationships with others—clergy, counselors, coaches, friends, or a learning community—to support that change.**
- **Emotional Engagement:** Learning only happens, says neuroscientist Michael Merzenich, **when the behavior is important to the organism.**<sup>42</sup> Strong emotions support the neurobiological

conditions for learning. Joy, anger, and fear release certain neurotransmitters—dopamine, norepinephrine, and more—that play a key role in learning and memory formation by strengthening neural connections.<sup>43</sup>

- **Attention:** Experienced meditators have a thicker prefrontal cortex than non-meditators.<sup>44</sup> And I've already mentioned how stroke patients and OCD patients have changed their brains. In another experiment, participants wore blindfolds for a week. Within a few days the brain had already linked hearing to the visual cortex, associating certain sounds with previously familiar sights.<sup>45</sup> **Our brains take shape based on where we repeatedly rest our attention.** So you would be wise to pay attention to, well... what you're doing with your attention.
- **Practice:** When your brain learns, neurons throughout your entire distributed nervous system undergo structural and chemical changes that make them more likely to fire.<sup>46</sup> This learning happens through intensely emotional events as well as **as through repetition over time.**<sup>47</sup> Whatever language you were immersed in while growing up, your brain wired your speech and hearing to match its native sounds. If your brother sits on your left at the dinner table and strikes you most evenings, you may wire in a left-sided tension that's easily triggered by future mealtime disagreements.
- **Movement:** The cerebellum, a part of the brain involved in physical balance, is tightly tied to the emotional brain.<sup>48</sup> This may explain why habitual movements that become part of our physical structure can influence how we see the world. (Recall that your body is both a lens of perception and an instrument of action.) Right-handers tend to associate a rightward direction with "goodness," whereas lefties usually see the opposite. But they both agree that up is good and down, bad. This and

many similar studies show that how you habitually move, sit, and stand affects your perspective on the world.<sup>49</sup>

These five elements of neuroplasticity contribute to our learning early in life, but for new learning in adulthood you need more things:

- **Disruption:** I've talked about de-arming—the disruptive process of unlearning that is so necessary to adult development. This deliberate interruption of tightly wired behavioral patterns that have been on autopilot for years—sometimes decades—is what Brian achieved when he beat the bolster. But de-arming is rarely so dramatic. It's possible to disrupt long-held patterns through certain forms of emotionally engaged bodywork, for example—a quieter process, by far. Although it's less common, it's also possible to disrupt armoring through conversations that reveal incontrovertible disconfirming evidence of old beliefs and assumptions.<sup>50</sup> Often, when we berate ourselves for being unable to change, it's because we haven't done the necessary embodied unlearning. Disruption is a vital part of learning and change in adulthood.<sup>51</sup>

The bottom line: Psychobiological learning is an inherently *experiential* process. Your best shot at gaining the many benefits of increased embodied self-awareness is to follow this original process of biobehavioral learning.

### What Becomes Possible

Because of the way our sensory perception is tied to the emotional and social parts of our brain, strengthening embodied self-awareness has a wide range of benefits. Training to increase embodied self-awareness can help you align with a sense of purpose and meaning, make a bigger contribution, experience more satisfying connections with

others, find the courage and composure to face down challenges, and step into more powerful and authentic leadership. In short, you can come to embody the kind of social and emotional intelligence that is critical for success in life and leadership.

Thanks to Daniel Goleman's groundbreaking work popularizing emotional intelligence, it is now common knowledge that your EQ has a far greater impact on your success in professional and personal life than your IQ.<sup>52</sup> And that's good news, because your EQ—which encompasses both emotional and social intelligence—can absolutely be developed. That's what the rest of this book is all about.