CHAPTER 1

A REAL-WORLD UNDERSTANDING OF THE NERVOUS SYSTEM

A pregnant woman named Elsie starts having panic attacks. Hearing the baby's heartbeat for the first time isn't a magical experience. Routine experiences like catching a glimpse of her profile in the mirror, or visiting the doctor for an ultrasound—experiences that remind her there is a life growing inside her—are making her feel increasingly anxious. And yet, wasn't it just months before that she'd wanted so desperately to conceive?

Confused by her soaring anxiety at a time when she expected to be happy, Elsie decides to step up her self-care routine, which was already pretty robust. A longtime yoga practitioner, she takes a prenatal yoga class twice a week. She has always been careful about her nutrition—so she keeps that up, making her meals at home and adding a few new pills to her daily supplements. She returns to acupuncture, which in the past has helped her access a level of self-understanding she hadn't been able to reach in talk therapy or yoga.

Yet in spite of attending a class or appointment intended to support her health almost every day of the week, Elsie is experiencing

frequent panic attacks and having trouble sleeping. The anxiety and exhaustion are so debilitating that it becomes nearly impossible for her to go to work. She hires a doula, thinking that maybe getting more of the unknowns defined and having more support might soothe her nerves. Her doula suggests that she start doing relaxation and visualization breathing protocols, and to say out loud or write down affirmations like "I know I'm safe," "I know my baby loves me," or "When my baby kicks, it lets me know he's safe" as soon as she starts to feel herself moving in the direction of panic. Her therapist suggests that she needs to sit with the difficulty—that instead of trying to solve her problems or get rid of the anxiety, she needs to be with the hard feelings. The problem is her whole day is filled with those hard feelings, which seem to be getting worse, not better. In spite of all these tools, techniques, and attempts, she is feeling increasingly out of control and filled with dread about living like this, especially with a new baby coming.

We've all had experiences where there is a profound disconnect between our instinctual body and our rational mind. We think we should feel one way, but we just don't. Our mind has ideas about how we should feel, but those expectations and theories don't seem to be getting us closer to the way we want our bodies or our emotions to feel, let alone to lasting solutions. We may have talked to our close friends and family, consulted various professionals, tried all the things that are supposed to work. In spite of all our sincere and best efforts, we're not feeling better in a significant way. We're scrambling around eliminating this food, trying that meditation practice, finding a new therapist, and instead of feeling better, we feel worse! We're more frustrated, because although we've had a little relief here or there, now we've spent all this time and money, and we're not that far ahead of where we began. Maybe this is it. Maybe we won't

really ever solve our problem, maybe we are just going to have to learn to live with it and manage it as best as we can.

Every single one of us is carrying around some feeling of woundedness that is beyond our capacity to think our way through. We try to think our way out of it or meditate our way out of it or talk our way out of it. We poke at it, dissect it, strategize about it. But the truth is that we haven't been taught the deeper skills of how to listen and what to listen to, so that we can resolve it.

When Elsie called me for a consultation, she listed all the practitioners she had consulted with and all the treatments and protocols she was doing—yoga, acupuncture, nutritional supplements, talk therapy, breathing practices, and affirmations. It sounded exhausting. The schedule of appointments with no real time to integrate the support, not to mention working a full-time job, was anxiety-provoking in itself. I reflected back to how much Elsie was doing, all while pregnant, and expressed that I admired her attentiveness to her own well-being. Then I said, "You could keep doing all of these things to manage the anxiety, or you could just get rid of the anxiety."

In my life, I had also done yoga, meditation, and talk therapy, as well as chanting and mantras. All these practices helped me feel somewhat better. I loved most of them. What I didn't realize, until later, was that I had become dependent on them. I needed them to feel good. I was using them much like medication, to help me get somewhere my nervous system couldn't get to on its own. I also couldn't figure out why everyone else thought I was so calm and peaceful, while on the inside I was full of self-doubt and inner conflict. Deep down, I knew that I was a joyful person, and I was frustrated not to be able to access that joy more of the time. I had all the reasons to feel good—really good parents, a career I loved, a beautiful child, an excellent education, and everything that comes with White privilege. Oftentimes those

facts that I was well aware of made me feel worse. It wasn't until I experienced somatic work—*soma* means "body" in Greek—that I knew what it was like to feel good as a baseline. The better I felt, the more I recognized the depth of the disconnection that I had gotten used to living with before.

Through Somatic Experiencing, the trauma resolution work of Dr. Peter Levine, I learned what it really meant to listen to my body, rather than to try to master it or put it into different shapes and states. That process of careful listening is called *tracking*, like a hunter looking carefully for paw prints in the mud to lead them in the direction of an animal. Through that process of tracking and locating sensations in my inner terrain, I began to feel more resonance between my mind and body. My reactions made more sense because my instinctual body and rational mind were in coordination much more often—an experience that is called *coherence*. I began to experience relief that the way I felt on the inside matched what people said they felt from me from the outside. I began to easily connect with, enjoy, and savor simple pleasures. I was able to feel when my body was reacting to the past, and not the present, and I was able to return more quickly to a baseline of goodness. I felt more like my true self.

That true self is akin to a blueprint. Each of us has a blueprint unique to who we are. As we are born and go through life, we acquire imprints. We have relationships and experiences that influence and shape the expression of our blueprint. Some experiences that imprint enhance and potentiate our blueprint, while others occlude and distort its expression so that we can't seem to consistently relate to our original nature. As a result, we live with the feeling that there are parts of our creativity, expression, and vitality that we can't get to. Or we feel that our past has eclipsed our true self in a way that feels unrecoverable. Then, we

are constantly just managing the effect of these imprints, rather than being fueled by the generative energy available through living in alignment with our unique blueprint.

Imagine your true expression is like the smooth consistent grooves of a vinyl record, and the imprints are like the scratches that cause us to skip at the same places, over and over again. The imprints that we remember with our cognitive mind are examples of what is called *explicit* memory. Other imprints live in our body and our unconscious mind—those are called *implicit* memories. Most of us aren't familiar with implicit memory, and so it seems implausible and mysterious that our body might remember something that our mind doesn't. We spend our time trying to analyze and elaborate on our explicit memories, instead of accessing the wisdom that lies in the implicit memory.

The truth is that our minds are notoriously untrustworthy, our explicit memory incomplete: just recall your last couples therapy session or how differently each person you know remembers an event you all witnessed. Our bodies, however, don't rationalize, assess, or interpret, and as such, are a trustworthy record. So returning to the experience of anxiety—yours, mine, Elsie's—it is crucial to understand that the body is either responding to something upsetting that is taking place in the present moment, or responding to a cue in the present moment that has triggered an unpleasant memory or association of something from your past.

Elsie's doula suggested, after a long conversation, that perhaps a sexual violation from her past was to blame for her panic attacks. This was her narrative when we met—that pregnancy was bringing up this old trauma—and she was attempting to process this through therapy, and manage herself as a "survivor giving birth" with meditation, acupuncture, and yoga. But in our

sessions, much to her surprise, sexual violation never once came up. Instead, in our first session, after I'd helped her locate a safe place in her body—she said she felt it in her back body—and encouraged her to hold that feeling, toggling back to it whenever the panic arose, she cried a little, a sign of release. I asked her if any images arose, and she recalled the death of her grandfather, which left her mother like a zombie, and her as the oldest child with the simultaneous shock, helplessness, and feeling of responsibility for mothering her four younger siblings. As she described this, I noticed her hands coming up in front of her body as if pushing something away. I asked her to track that, slowing it down and really feeling the space her hands created, following the impulse to put her hands up and push from deep down in her belly all the way out. After giving this movement all the time it needed, we ended the session by returning to the sense of safety she had found in the back of her body. Shortly afterward, Elsie's panic attacks subsided. We realized that the panic of being thrust into a mother role when she was not ready had imprinted itself deeply in her body. When that skip in the record was smoothed over as a result of her body pushing the weight of responsibility that didn't belong to her up and out, differentiating between what was hers and what wasn't, and reclaiming the energetic space in front of her, the panic dissolved.

Elsie didn't need to explore every dark corner of her psyche and try to dredge up every imprint to experience very powerful change. On the contrary, this healing process isn't dependent on a narrative or explicit memory. Your body, right here and right now, contains everything you need to heal and to let go of those imprints. It may take certain conditions, and it may take being witnessed. You will have to become a master tracker of your own system. In the present moment your system is responding in a way that all those experiences have informed.

Once you realize that, you can—with the practices in this book, a partner, or a somatic professional—smooth over the scratches in the record so you can finally hear your own clear song.

COMMAND CENTER OR COMPASS?

We tend to think of our minds as the command center of our bodies and our beings. Neuroscience affirms the central role of the brain with scans and mapping, while psychology suggests all feeling and behavior originates in the mind. Sensation can only be perceived through the brain first, these disciplines say. Emotion is a series of signals your brain picks up and interprets. In a culture where rationality is prized, neurocentricity rules. From this perspective, we supposedly don't experience anything at all without the brain as an interpreter.

Not only is this paradigm inaccurate; it also doesn't get us any closer to healing. It does often, however, create added layers of self-judgment, criticism, self-loathing, and confusion when we inevitably don't understand why our body is not cooperating with how we think things should be, and why we're not getting better. And "getting better" in this context usually means being more productive, "solving" problems from our childhood through analytical processing, and having more control over our minds and, therefore, over our bodies. This top-down neurocentric approach often dovetails with the teachings of positive psychology and the New Age coaching environment, where willpower is viewed as central to our ability to be happy and healthy.

What's missing entirely in this approach is the wisdom and voice of the body. While we are focused on efficiency and discipline, cognitively working through any problem that arises, the body is speaking to us in myriad ways that we often ignore or dismiss. As the pioneers in the somatic movement have so aptly

spoken, the body does indeed keep the score. When we can learn how to listen to, work with, and fully inhabit our body, we can begin to heal. We can begin to act in accordance with our current reality rather than the past. The good news is that when we feel and perceive both our original blueprint and our imprints (the impact of past events), we can stop feeling that there is something wrong with us and start tuning in to the body's wisdom. We can respect our own physiology and make choices accordingly, instead of trying to cram ourselves into a model, diet, program, or method that seems to work for other people. We can witness and be witnessed in these fundamental patterns that have become the default ways we interact with the world, and then we can transform them.

Then, instead of "training your mind" or "eradicating negative thoughts," getting better might look like tolerating new environments, sleeping better at night, or forging better relationships. I realize these results may not seem glamorous. Sometimes positive shifts happen in subtle ways we don't immediately recognize. Often the absence of pain or relief from anxiety isn't highlighted as urgently in our awareness as the presence of them.

My goal is to teach you how to feel comfortable in your own skin, and feel at home in your self. To notice your body's cues and meet your mammalian needs. To be responsive to the present moment. You may be thinking, "Well that's a great idea but it's impossible most of the time. When I'm in a meeting there's no way I can get up and go to the bathroom;" or "There's no way I could interrupt someone and say, 'I need to go for a walk right now' or 'I'm overwhelmed and I need to be by myself.'" That's probably true—and it's more evidence that in every way our social conditioning tells us it isn't okay to take care of our most basic impulses. The result is that we keep getting these

wires crossed—misinterpreting signals like mistaking tiredness for hunger, or thinking that we are unproductive when we actually need movement or connection, or doubling down on focus or drinking a double espresso rather than allowing for a brief distraction, social connection, or rest. Are there any basic needs you could attend to right now, even if that means putting this book down for a moment? Notice what would make your experience of reading even more enjoyable—maybe a glass of water, a few push-ups, a forward bend, a more comfortable chair, a trip to the bathroom—and follow that impulse to completion.

It may take a leap for you to imagine that a body-first, nervous system–focused approach to healing could work. I get it. It was a leap for me, too. We live in the age of biohacking, where our body has become something to master and optimize, and where everything from how we eat to how we move is aimed at living longer and "smarter." We worship at the altar of efficiency. We believe in many ways that technology is more reliable than nature, and that we can apply the laws and language of technology to the body.

The path I suggest doesn't have shortcuts, like it seems technology might offer. There is no guarantee it will take you to where you think you should go. Because the problem you have identified as being the one to fix might not be *the* problem, the one at the core of so many others, like Elsie who thought a past sexual assault was the cause of her anxiety. But it was her body that, under the right conditions, with attuned listening and curiosity, offered her a way to unwind the early associations and let go of that wiry energy that was keeping her on edge. Once she realized that "mothering" had been terrifying in the past, she could release that trauma in her body, freeing herself to the possibility of enjoying mothering in the present and future.

Just like Elsie, we're going to go through unexplored doorways

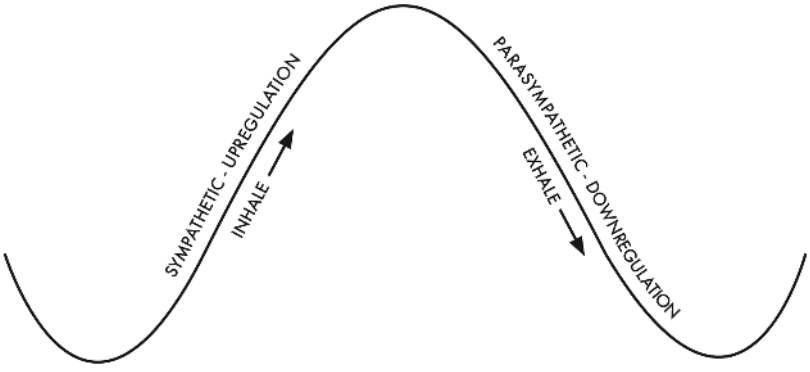
to find new ways into old stuff, and this will require some trust to bypass your mind and to entertain the thought that the narrative that you've spent a lifetime forming, and may have a lot invested in, might not be the narrative that ultimately offers you freedom. You may already have an inkling that you're outgrowing this narrative, or you might just be getting sick of the same old thoughts. A body-up approach to healing allows us to move away from this fixation on thoughts and follow the body's lead. When we get closer to our blueprint, our motivation comes from the inside out, generated from genuine desire. There is a deeper underlying organic intelligence more foundational than your mind—it resides in your body, which is often begging for your attention. That intelligence is the true compass.

NATURE AS THE MASTER REGULATOR

Developing a deeper relationship with your nervous system means learning to surf the waves it generates. These waves rise and fall within us, all day long. Innumerous cycles on both micro and macro levels occur in synchrony all the time, often outside of our conscious awareness. We can learn to bring these cycles into awareness, and by noticing the little waves, we can become more adept at surfing the bigger ones when they come.

For example, every inhale is sympathetic, every exhale is parasympathetic. The potential surge of energy on an inhale is called *upregulation*, and the potential relaxation on an exhale is called *downregulation*, as illustrated in the following image. Breath cycles are an example of *ultradian* rhythms, which happen within the span of a day. Every day we also have ninety-minute cycles of about seventy-five minutes of activity, of upregulation, and fifteen minutes of rest, downregulation. Our *infradian* rhythms are cycles that last longer than a day, like a menstrual cycle that

happens approximately every twenty-eight days. And we all live within some expression of seasonal cycles—the surge of spring, fruition of summer, withering of fall, and dormancy of winter. So there are infinite opportunities to live in synchronicity with the waves of upregulation and downregulation that our bodies and nature are always providing. Nature is the master regulator and lives within us as much as outside of us.



Riding the waves of upregulation and downregulation

When your nervous system is living in synchronicity with these waves, it becomes calibrated; you are awake in the day and asleep at night. You can easily digest and eliminate what you eat. Often you can even regulate your menstrual cycle. Your body is aroused when you feel aroused. You can close your eyes and rest in *savasana* at the end of a yoga class. You experience simple pleasures and have access to joy and awe. Occasionally you laugh really hard. You can easily shift your mental and physical states to your environment in the moment, and there is a grace in your movements. You have the energy you need to do what you need to do (not what you think you *should* do!). This kind of calibration is what gives us the sustained experience of—the magic of—living from a place of alignment with our true self, our blueprint.

But because we demand so much of ourselves, and we are afraid that if we stop we will collapse and not start again, we tend to override, or not even notice, when our body sends us a message to slow down. So, instead of resting for that fifteen-minute interval that we really need, we drink coffee, eat sugar, or just simply insist on staying on task. We tighten the lid of the pressure cooker. We ride up the sympathetic wave of the nervous system, but we don't ride back down the parasympathetic wave—we just lull at the peak and then ride up again. In this way, we don't give our systems a chance to rest and recharge, and then ride the next natural wave that comes—the next natural wave that comes from true energy, rather than jacked-up caffeine energy or forced energy. This constant state of upregulation impacts everything from our stress levels and ability to sleep well at night to the most basic biological functions like birth contractions and orgasm, which are also cyclical pulsing forces.

In our productivity-driven culture, most people have trained themselves out of recognizing the signals their bodies send them, considering them a nuisance rather than an elegant reminder to pause, so that they might change directions or resume. So we climb, climb, climb, and push through until we reach a state of collapse, burnout, or illness, or become accustomed to constant fatigue. Alternately, others of us don't seem to have access to the accelerator. We are in a constant state of downregulation, struggling to start our days or feel motivated, and defaulting to procrastination and sleep, as if the hand brake is always pulled.

We each have exquisite biointelligence, designed for us to live in harmony with these internal and external cycles. In order to learn how to listen to and follow our body's wisdom, it helps to have a more nuanced understanding of our nervous system—one that goes beyond what most of us learned in high school

biology. We need an every-day, on-the-ground, living, breathing, felt-sense understanding of our internal wiring.

OUR NERVOUS SYSTEM RELAYS OUR SENSE OF SAFETY

I like to think of the nervous system as the main switchboard of our body. While we can't live without any of the systems in our bodies—the circulatory system, the respiratory system, the digestive system, etc.—it's our nervous system that is the command center of all the other systems. From that command center, our nervous system acts as an electrochemical operating system, communicating to us through sensations, nerve activation, neurotransmitters, and other signals how we are in relationship to our environment. It gives us information about what to move toward and about what to move away from. The nervous system transmits, gauges, and relays our sense of safety, both internally, among the other systems of our own body, and externally, to other human nervous systems. It's also a bidirectional circuit, so we can use the functions under our control—like awareness, breathing, and movement—to influence our nervous system.

A lot of what you may have learned about the nervous system back in high school biology isn't entirely accurate. Most of us were taught that the autonomic nervous system is a twofold system—the sympathetic nervous system is the "fight-or-flight" response, and the parasympathetic nervous system is the "rest-and-digest" function. There are a few major pieces missing from this understanding that were brought to the foreground through the trailblazing work of renowned research psychologist Dr. Stephen Porges. His illuminating and complex polyvagal theory, first put forth in 1994, has changed our understanding of how the nervous system functions, with real and meaningful benefits when it comes to the healing process. Once I was grounded

in this new perspective, I was able to become a more accurate interpreter of my body's signals and exponentially deepen my effectiveness with clients. This layered information changed my life and can do the same for you.

Named for the many (*poly*) branches of the vagus nerve (*vagal*), the theory suggests that the vagus nerve—which runs from the brain, through the face, throat, heart, and all the way to the viscera in the abdomen—has a more central role in the nervous system than previously understood. One of the critical insights of polyvagal theory is that our old model of the sympathetic and parasympathetic functions of the autonomic nervous systems is inaccurate. Historically these two branches were not defined in an "apples to apples" manner but instead compared while in different states—one under threat and the other in safety. The sympathetic nervous system *under stress* has a fight-or-flight response. The parasympathetic nervous system *at ease* has a rest-and-digest response.

At ease, the sympathetic nervous system drives us to move and act. We need healthy sympathetic energy to wake up in the morning, to have the energy to go about our day, and to use our body in the ways that we want to. At ease, the parasympathetic system allows us to slow down, rest, digest, and sleep. You can think of the sympathetic system as the accelerator of a car. The sympathetic system takes us up the hill. You can think of the parasympathetic system as the brakes of a car. The parasympathetic system takes us down the hill.

The old model of the nervous system led us to believe that the sympathetic nervous system is generally "bad," a burdensome relic in our modern world (since we rarely have to run from wild animals these days), and the parasympathetic branch is "good." Most people think they just need to learn how to calm down or relax to feel better. "I'm in fight-or-flight" has made it into the

vernacular, and is too easily misunderstood. The truth is, both of these branches of the nervous system are imperative for our optimal functioning.

There is one more branch of the parasympathetic nervous system that polyvagal theory illuminated—our social nervous system. Our social nervous system governs many elements of our relationships, giving us essential information about the world around us and, crucially, the people in it. We look to and scan the people in our surroundings to determine whether or not we are safe. That assessment of safety will look and feel very different for every individual, as it is dependent on inward factors like your imprints, as well as outward factors like your gender and race, since as we know, safety in public spaces is not just perceptually different but actually different depending on these factors.

As you'll see over the next few pages, the inclusion of these missing pieces promises nothing short of a new worldview, with at least the possibility that connection is as adaptive or more adaptive than competition—not just from a spiritual or heart-centered perspective, but from a biological and evolutionary one. Knowing your own nervous system, and its predispositions, is also a game changer. When you understand how you are wired to react, you can respond to and compose a life that's compatible with your unique system.

YOUR RATIONAL MIND IS NOT IN CHARGE OF YOUR NERVOUS SYSTEM

When our system feels safe, without the perception or the memory of threat, we feel good, and our bodies can function optimally. When our system is under threat, however, our sympathetic nervous system is wired to either move toward or away from the

threat. Moving toward the threat and moving into interaction with the threat is called the "fight" response. Moving away or escaping the threat is called a "flight" response.

If for any reason a threat registers as beyond our capacity to escape, our parasympathetic nervous system will go into a low-level "freeze." Remember that the freeze response can manifest as an inability to speak, to move, or to act. We literally become the deer in the headlights. If the threat registers at a high level, one might collapse and shut down, which could look like the deer frozen in place, or fainting, dissociating, wetting your pants, or evacuating your bowels.

What's fascinating, and also incredibly important to know, is that the intensity that a threat registers in someone's nervous system is not necessarily proportional to the *actual* threat. What that means is that, from the outside, we can't accurately evaluate the size of the threat to the individual who is experiencing it. Where for one person, going to a hospital is no big deal, for another, the mere mention of a doctor makes their heart palpitate. For yet another person, the thought of walking into the hospital building drains the blood from their face. Likewise, an interpersonal conflict might be routine for one person, while someone else might dread such an exchange for weeks before the conversation even takes place. Another example is that the experience of a natural disaster or death can linger on for years in one person's system; others are able to move forward in a short amount of time. *Any* experience can register as a threat from the inside, no matter how it looks from the outside. Your nervous system's assessment of these situations is unique to you, and this has huge implications as you learn to listen to, translate, and not judge your body's reactions.

When your system is under threat, your response is not voluntary—your rational mind is not doing the choosing. You

don't *decide* to fight, flee, freeze, or collapse. Your nervous system responds with the capacity it has in that moment, based on how it's been conditioned by past experiences, what was modeled to you as a child, what you've tried before that worked or didn't work, and where you have gotten stuck in a rut.

This is not a moral issue. Whatever your habitual response is to a situation doesn't mean you're weaker or stronger than someone else—it simply reflects what your system has been primed to do. If you just let that information in for a moment, yes, breathe it in, and "savor" it right now as you read this, you might feel the sweet relief of knowing that your nervous system is more consistent and reliable and intelligent than you ever knew. (And that there is nothing wrong with you!)

I once had a student who had been held up at gunpoint. The friend she was with fought back and tried to grab her purse from their attacker, while my student froze and wet her pants. The story she told herself was that she'd had an upbringing with very little adversity, and so she was "wimpy" as a result. In her mind, her friend was tough and she was weak and would fold under pressure.

Then she completed my course, learning to track and respond to her nervous system, the same way we'll do together in the chapters to come. She told me that one day shortly afterward, she was riding her bike across a bridge when a passing car almost clipped her. Instead of freezing, she found herself full of anger and ready to defend herself (she let the driver of the car know as much with her words and gestures). Her response startled her, but she realized that her instinctive reaction to danger had shifted, and she felt powerful and fierce. She had successfully repatterned her default stress response, and as a result her story about who she is changed as well. She also gained a deeper understanding of and compassion for her past freeze response.

Our systems may have become habituated, yes, and identifying our default responses is a first step. Then we begin restoring the most effective responses possible for any given situation, responses that are built in to our nervous system waiting to be ignited. We can live and thrive into a healthy nervous system. That's what this book will help you do.

MISSING PIECE: THE SOCIAL ENGAGEMENT SYSTEM

Our understanding of the social engagement system has only been in circulation since the development of polyvagal theory in 1994. Remember that polyvagal theory brought to the forefront the idea that our autonomic (the sympathetic and parasympathetic) nervous system is not an either/or, brake/accelerator system, as had previously been thought, and taught. Instead our autonomic nervous system is much more nuanced and actually works in a cascading fashion.

Our first level of detection of safety comes through the social nervous system. We look naturally to other people and go toward them to feel safe or to know if we are safe. Put in the simplest way, this means that we are always scanning people's facial expressions to determine if we are safe. This is one of the reasons why, during the COVID-19 crisis, many people have found it disconcerting to interact with masks on. More than half of people's facial expressions, that we innately rely on to decide if we are safe, were concealed.

It also means that under threat of a pandemic, our instinct would be to pull people closer to us. At a time when our body and nervous system would want proximity and support most, our mind knew that we needed to remain physically distant. Our instinctual physical impulse to come closer had to be continuously managed or thwarted. Even though our rational minds

understood the logic, that unfulfilled instinct lives on in our bodies as tension and, for many, trauma.

Our most basic instinct is not "to each their own"; our biological survival imperative is togetherness and physical proximity. If there's a loud noise in a movie theater, we jump toward the person next to us. If you were camping with a group of families and you heard a distant rumble in intensity sounding like a stampede was approaching (work with me here), you would get closer to each other, pile into one of your tents, or go to the person's vehicle that was the biggest. Instinctively you would do that even if you didn't know the other people, because that would be the safest option—to be together. You may be thinking, "Nope, not me, I would go it alone." That may be true for some people (and tendencies here may be rooted in attachment styles, which we will cover in chapter 8), but if your impulse is to go it alone all the time, then you are working against your social engagement system, which is designed to provide you with a sense of safety, protection, and belonging. Repair involves respecting your real-time needs as well as reestablishing a sense of trust and safety *with* people.

Our social nervous system is the newest branch of the autonomic nervous system *phylogenetically*, which means that evolutionarily it developed most recently. In fact, the social nervous system is specific to mammals (quick biology brush-up: what makes an animal a mammal is that it is warm-blooded, births live young, and lactates). This most modern nervous system was evolution's way of hardwiring a mother's loyalty, so that it wouldn't be left to chance if she would care for her young, who are totally dependent on her for their survival (unlike other species). The development of the social engagement system enabled maternal bonding and social cooperation by way of facial expressions. A mother's facial expressions and responsiveness to

her baby's needs is called accurate, or *attuned*, mirroring, and teaches a baby over time how to react to and interact with the world.

Thus the social nervous system is primed through encounters first with our primary caregiver, usually our mother or the person who fed us, and then through the rest of our family system and the other people who formed our communities, as well as all our friendships and relationships throughout our lives. This system holds our primary imprint of whether or not the world is safe, it tells us if we belong or don't belong, and it also signals a person's trustworthiness. It's why the bond through pregnancy with mother and baby and in the early nonverbal years is so critical to the development of the social nervous system. The social nervous system literally teaches us to bond, to interact, to read facial cues, to empathize, to play, to talk, and to be social beings. It also holds all our subsequent imprints of "fitting in" (or not), equally powerful imprints such as betrayal or belonging, and registers how we need to act or behave to get our needs met.

The social engagement system is our orienting apparatus and relates to our sensory organs—our eyes, mouth, ears, tongue, as well as our neck muscles that let us turn our head so that we can look around us and either confirm or deny the safety we've perceived in the environment through our senses. It's not just what we're feeling that gives us information, it's also being able to visually confirm whether or not we are safe, and to confirm where we are.

The social engagement system helps us to understand human behaviors that can be confusing at first glance. A classic example of this is when a woman returns to a relationship that is unhealthy and possibly dangerous. It might seem illogical that she is continuing to stay close to a threat, but from the "point of

view'' of the social engagement system, when a threat is closer, it's more predictable; it's a known factor. So if our system is not sure that we can survive a confrontation, then it's ''safer'' to keep the threat/person close enough to monitor. There's a kind of ''intelligence'' here, even if we are not truly safe. Once more, this is not a moral issue!

In trauma studies, we have tended to regard the nervous system as sex and gender neutral. However, I believe that because women, on average, have far more estrogen than most men do, women are disproportionately impacted by the social nervous system, both its strengths and weaknesses. Estrogen is a bonding hormone that primes us to be perceptive and attuned to other people's experiences. This awareness of and care for social bonds is crucial for the survival of our species and is an extraordinary gift. It evolved so that we would take exquisite care of our young.

That said, there are downsides to our bonding superpowers. We are more susceptible to the social nervous system reactions under stress—both fitting in and fawning. Women are often more prone to social comparison, concerned about how our actions are or will be perceived, and hung up on friendship and relationship problems. We can minimize our perspectives, opinions, intelligence, and aspirations to keep the peace or maintain the status quo of our relationships, family, or work life. These concerns about belonging can become deafening and keep us in unhealthy situations—whether they're dates or jobs or marriages—way longer than we might like or might be good for us, because we are afraid to break connection, to not be liked, to be labeled a tease, demanding, selfish, or bitchy. We are hardwired to care more about connection and be more socially invested in our relationships than men are. A better understanding of the impact of hormones could also help us understand

some of these behaviors. In the meantime, we can also develop considerable agency when we examine our relationship to social norms, which may be operating to create some level of primal safety but may not be serving our best interests and our true, long-term safety and well-being. In chapter 7, we will dive deeply into how we can strengthen our relational superpowers while disarming the parts of the social nervous system that hold us back and keep us small.

This is critical to understand. Women are confused as to why they went along with their doctor's recommendation when it didn't feel right, or stayed with an abusive partner, or had sex again with someone who violated them. Yes, our conditioning to be "good," "nice," and not disruptive comes into play here, but so does our internal sense of survival, which tells us that we may not survive separation or conflict. Many women have gone back to their abusers, back into situations where abuse was likely to continue, or simply remained in dangerous environments even though they knew it was unhealthy. It makes no logical sense; why would we do that to ourselves? But the social nervous system sometimes compels us to pull threats closer, and we feel "safer" with proximity to a known threat than with one that is lurking somewhere out in the world.

Have you ever felt like you just couldn't have a difficult conversation, even with someone you loved and trusted? You waited and waited, because that interpersonal conflict seemed like such a big deal you could barely handle it? Beneath the fear of confrontation or conflict might also be a fear of losing that connection, and depending on your past history of belonging and attachment, it can feel incredibly scary and difficult to end a relationship. Similarly, consider a more extreme situation in which a woman finds herself afraid for her physical safety,

where someone has power over her. Her desire to please and remain socially connected can override her deeper impulses and instincts, and ultimately that can lead to a lot of shame and blame. She will ask herself questions like "Why didn't I speak up? Protect myself? Get away? Fight?" Once again, it is essential that we women remember this is not a moral issue; we need to learn about, respect, and have compassion for the survival mechanisms of this complex social nervous system of ours. The more we understand, the more power, more choices, and more true safety is available to us.

Being attuned to our social environment is important. Can you imagine if no one paid attention to how their actions impacted others? We'd all be terrible neighbors. That's not a world we want to live in. However, many women err on the side of taking up less space, remaining quiet, becoming invisible, swallowing their needs so as not to create waves or conflict. We unconsciously choose these behaviors, which become habits, and personality styles, because conflict can threaten the intactness of our social nervous system that is critical to our survival.

I hope that understanding your nervous system in this social context lifts a layer of confusion or shame for you, as it has for many of my students. I hope understanding this system gives you a ticket out of self-criticism and recrimination and allows you to have more forgiveness, understanding, and self-compassion. With a foundation of compassion, it's easier to approach the completion—the resolution and healing—of these earlier patterns.

And with this more up-to-date, real-world understanding of your nervous system, you can begin to sync up your desired responses with your present moment capabilities, which is the work we will do together in this book.

EMOTIONAL SIGNPOSTS ALONG THE WAY

In order to sync up to our desired nervous system responses, we first need to become aware of the emotional cues our nervous system offers when we become alarmed. The words we use and emotions we feel give us signposts about what our nervous system state is and the degree of alarm our body perceives, even if our mind has another story. If you have ever been mystified by your feelings—like feeling too much or not enough—or if you have ever wondered why you feel some emotions, like sadness, and not others, like anger or joy, your nervous system has clues for you. The physiological responses of your nervous system under threat—"fit in," "fawn," "fight," "flight," and "freeze"—have corresponding emotions and behaviors that can help you decode what's underneath your state.

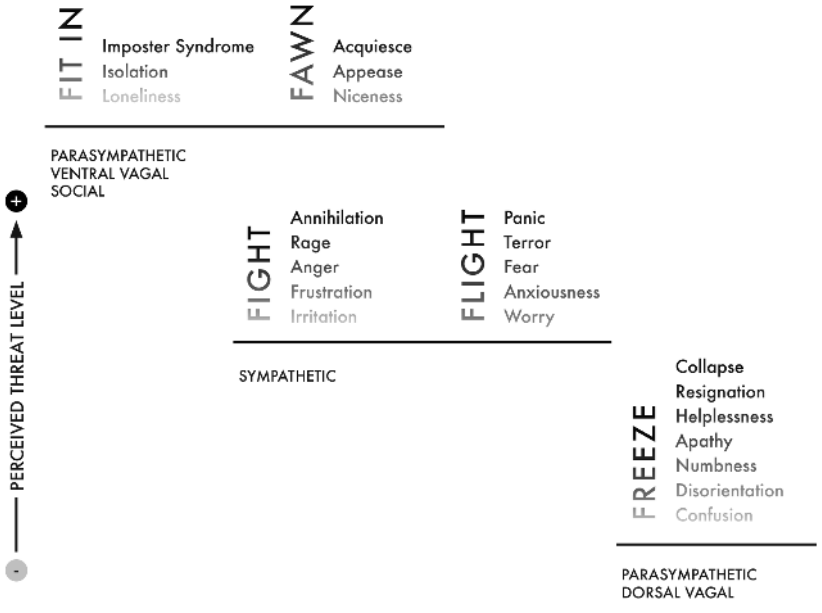
On the sympathetic side, as you can see in the following image, the emotional "fight" response begins with irritation, moves to frustration, then to anger, and then to rage, as the threat or perceived threat escalates. So if you are feeling frustrated, that is an emotional signpost that is giving you a clue to this reality: you are having a low-level fight response, or we would say that your sympathetic nervous system is *activated* at a low level. Or if you are feeling rage, that signpost shows you that your sympathetic system is ramped up, acting (or activated) as if it is under extreme danger.

Similarly, the emotional "flight" response has its own continuum. The flight response begins with the emotional signpost of worry or concern, then moves to anxiety, then to fear, and then to panic. If you find yourself using phrases like "I'm so worried," or someone else tells you, "You seem worried," you can learn to recognize that you are having a low-level flight response.

On the parasympathetic dorsal side under threat, where the "freeze" response lives, the emotional signals begin with confu-

sion, and move on a continuum to disorientation, then to numbness, and on to apathy, helplessness, and resignation.

As mentioned previously, when the parasympathetic ventral branch (also called the social nervous system) is under threat, our response is to fit in or fawn. The fitting-in response is analogous to camouflaging. If you show yourself less and blend in, then you have less possibility of being found or eaten. At a low level of threat, the emotional and behavioral signposts begin with loneliness, move on to isolation, and at the highest level of threat escalate to impostor syndrome.



Emotional signposts of nervous system states under stress

If any of these emotions or behaviors feel really familiar to you, then you already have a clue about your default responses; and they can become as obvious as guideposts along the road of your unique journey. Some of them are key elements of who we are, how we live, and how we love. They serve us well in some

situations and leave us hamstrung in others. This evolving perception of the sequences and patterns of your default responses will become a hugely important resource as a way to actually move them from unconscious (default) habits to conscious tools. Consciousness gives us agency in our bodies and nervous systems.

A *default response* is the common path your nervous system travels. If you are easily irritated, you may need help safely expressing your anger—your fight response—to earlier life experiences. If you lose things a lot, are indecisive, or procrastinate, you may need support to move out of freeze so that you can access healthy sympathetic responses that help you feel grounded, connected, and driven. If you have a hard time taking a stand for what you think, believe, or care about, you can use the support and strategies in this book to circumvent your default social nervous system patterns, and create new and vitally attuned patterns that are consistent with your voice and values.

YOUR TISSUE ALSO SPEAKS ITS MIND

Each of us has a genetic and biological predisposition toward sympathetic or parasympathetic tendencies, based on the composition of our connective tissue. Connective tissue, or fascia, is an interconnected web of tissue that weaves throughout our entire body, through and surrounding bones, organs, muscles, and skin. Connective tissue is living substance through which our nerves—what make up our nervous system—travel. Connective tissue is made of elastin and collagen fibers. We all have a unique mixture of the two in our tissue and lie somewhere on a spectrum between highly collagenous and highly elastinous; that is, some of us have connective tissue that is like a rubber bouncy ball while others of us have tissue like hot taffy. This composition, our connective tissue density, contributes to our default nervous system orientation.

People who have more collagenous connective tissue tend to be sympathetic dominant. People who have more elastinous connective tissue tend to be parasympathetic dominant. What that means is that if you have more collagenous connective tissue, you are more likely to default to a fight response. Your tissue is literally denser, your perception of your own boundaries more obvious. Maybe you like hot yoga because it warms things up so that you can finally stretch them out. You may have a tendency toward bursts of anger and your natural pace is fast. You're quick to rise in the morning, a doer, and your digestion is regular. You tend to have a hard time connecting to the abstract or spiritual—you're rooted in the material world. It's hard for you to let your guard down or relax.

If you have more elastic connective tissue, you are more likely to default to a disorientation or freeze response. Your tissue is more permeable, and so are your boundaries. You have a tendency toward low blood pressure—your venous walls actually operate more slowly because there is less density to them and the fibers have to travel more territory to contract, and create pressure to move blood. Your tissue has more space and give; you have a slower natural rhythm. You are sensitive and perceptive because of these less distinct boundaries—the literal space in your tissue for conductivity. Hot yoga is probably intolerable for you—you may end up feeling like you are going to faint or way overstretch without knowing it. Your joints are likely to be hypermobile. You are slow to get going in the morning, and your digestion may be slow. You may have very little wiggle room in what you put in your body—like coffee and alcohol. Walking down an aisle of detergents might be enough to send you into an allergy attack. It's easier for you to connect to the universal, and you have ambivalence about the material world. It's harder for you to compose and organize yourself.

Most likely you will find that some of these qualities and attributes listed above apply to you and fit a pattern and some don't. That's because we are all unique combinations of the genetic material we are born with—our native connective tissue density being a part of that—as well as all the experiences we've had and the ways that we've moved through the world. We can influence our connective tissue composition with what we eat, how we move, and the ways we engage and attend to our nervous system.

APPRECIATING THE ORGANIC INTELLIGENCE OF YOUR BODY

Throughout this book, you will be provided skillful ways to address some of this circuitry, not so that you become perfectly zen all the time—on the contrary, so that you have access to the full range of emotions, from overwhelming joy to devastating grief. That might not sound like great news if you've found a range that feels safe to you. But if you're having a hard time managing stress, or feel too exhausted to have courageous conversations, or haven't been to the doctor in years, it's likely there's some support your system could use to complete old default responses so that you can and will be available for new patterns your body and soul are aching to create.

A more nuanced understanding of your nervous system ultimately means a deeper understanding of the nervous systems around you. This knowledge won't make difficult emotions go away, but it will help you get out of frustrating ruts and repetitive loops. It will help you identify deeper level causes—and solutions—to moving out of destructive patterns that can't be overcome by willpower and drive alone. Because you have the ability to regulate your own responses, you will become a regulator of those around you, and you will be able to perceive and

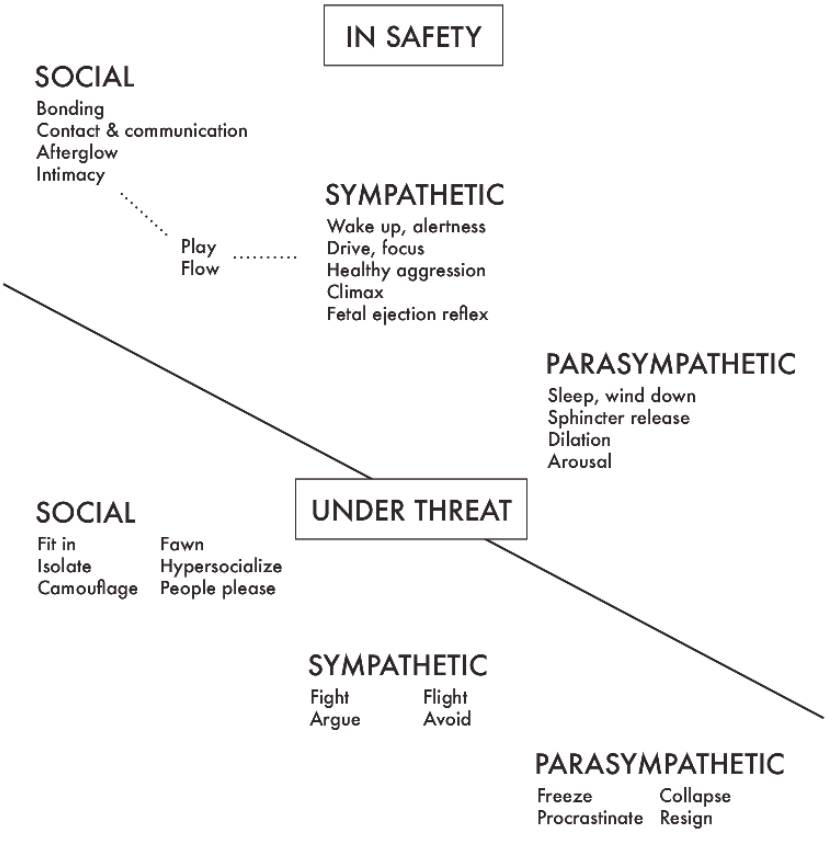
respond to the physiology of the reactions of others rather than personalizing them.

Most somatic practitioners agree that there's a hierarchical nature to how our nervous systems respond to threat, real or perceived. When a new threat appears, we first respond via the social nervous system. So that would be to try to befriend, communicate, or seek comfort. If that doesn't work, or if it hasn't worked in the past, or if the level of threat overwhelms this response, our next line of defense is our sympathetic nervous system—fighting or fleeing. If those responses are impossible (because we are outnumbered, or much smaller, or confined in some way) so it won't work to fight or escape, or if they haven't worked to protect us in the past (we have been trapped, cornered, or helpless) and therefore we don't have the habit of activating those responses, then we go to the oldest system phylogenetically (the one that evolved first), which is our parasympathetic nervous system (confusion, freeze, and collapse). The parasympathetic system is the most "primitive" system, meaning that even single-celled organisms have it.

If you read about these systems in most of the existing literature, this implicit hierarchy is what you will find. The order makes it seem as though our more recently evolved social nervous system is somehow *better* than the sympathetic, which is better than the parasympathetic. It seems like we are in constant pursuit of a regulated social nervous system and minimizing the impact of the other branches under stress. What I really want you to know is that whatever responses you have had to your life, including threatening situations, you have had for very good reasons. I would call them all adaptive, because they have kept you alive. We need the functioning of all these branches, under stress and at ease. We will never achieve self-regulation or co-regulation all the time. We need the clues that our emotions and physicality give us, about what is actually happening with

our nervous systems moment to moment, not an idealization of how we want them to be. Your predispositions, in your connective tissue, your behavior, and your emotions are all tremendous clues on a way forward.

The truth is your past responses under stress have been highly functional and exactly what you needed. Whether or not they're functional (effective) *now* is another question. If they aren't—if you are feeling some level of dissociation between your mind and body, or if you find yourself stuck, repeating behaviors and patterns that aren't serving you—well, that may be why you were drawn to read this book. What follows is the cascade of nervous



Autonomic Nervous System behaviors & states

system reactions when you are safe and at ease and when you are under threat.

At some point in your life, your system did what it could to help you survive. I hope that you can develop a continued and ongoing profound appreciation for the organic intelligence of your body, its past, and even present, choices. That radically loving acceptance of where we are now, and where we've come from, is the foundation of this work. Your job now is to start to address some of the places where your system seems out of sync with present moment situations—where the past is infringing on the present.

You now have a real-world understanding of your nervous system. As you bring the past to consciousness, through listening to the organic intelligence of your body, you will sync up with your true, unadulterated, and vibrant self. You can live unapologetically in your own skin.