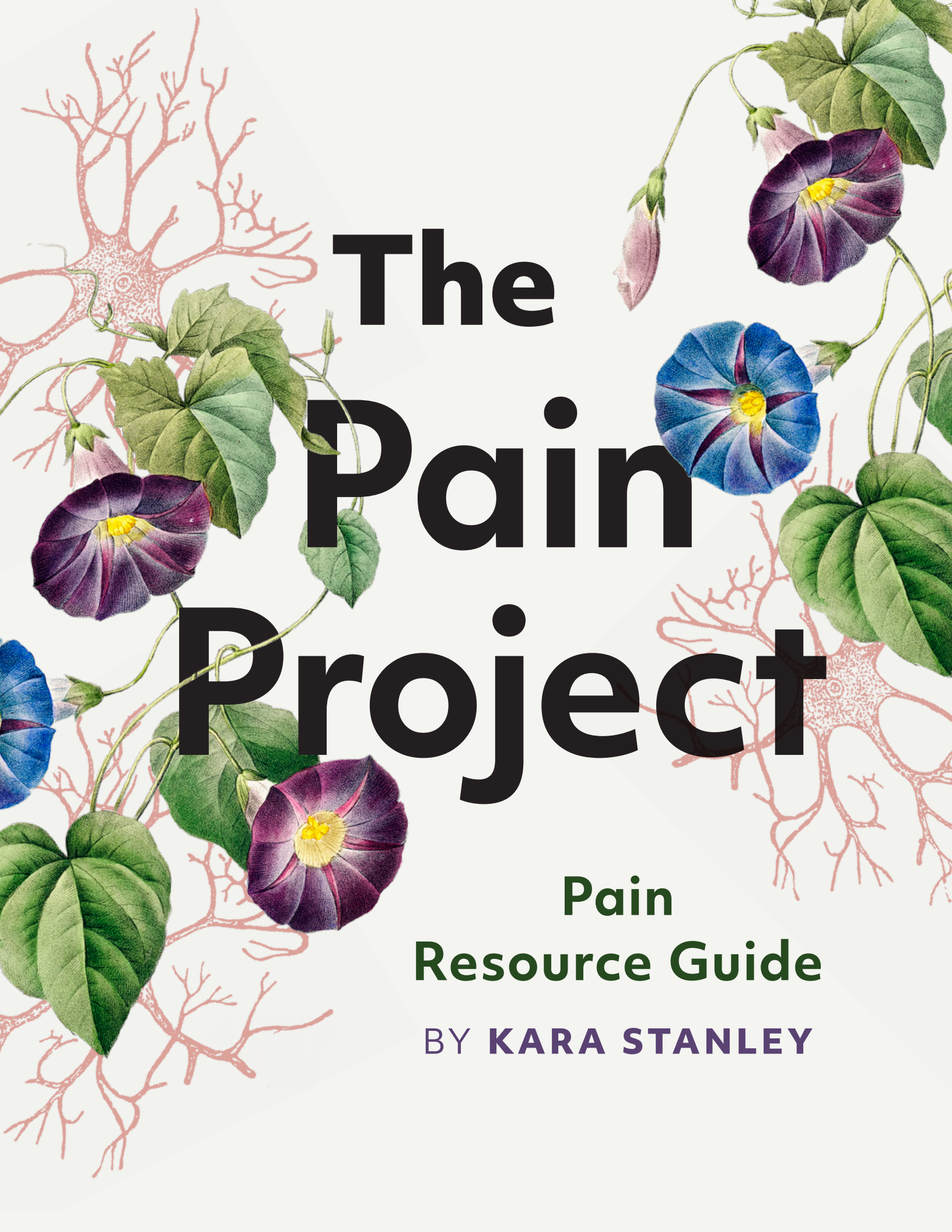

The Pain Project

Pain Resource Guide

BY **KARA STANLEY**

THIS RESOURCE GUIDE is a companion to the book *The Pain Project: A Couple's Story of Confronting Chronic Pain* (Greystone Books, 2024). It offers an expanded discussion on the topic of neuroplastic pain and on the importance of movement for the health of the nervous system, as well as an overview of different movement practices and the author's opinions of them based on personal experience. The author is not a medical professional. This guide is intended for informational purposes and is not intended as a substitute for consultation with a licensed practitioner. Please consult with your own physician or health care specialist regarding the suggestions and recommendations made in this guide. Greystone Books and the author accept no liability for any damages arising as a result of the direct or indirect application of any element of the contents of this guide.

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Pain Is Inevitable, Suffering Isn't—Really?!!!

IF YOU EXPERIENCE chronic pain, this unfortunate phrase will likely be familiar to you. Over the past fifteen years, my husband Simon and I have heard it repeated by various medical practitioners. Not once has it been uttered unkindly or callously, yet it has always been profoundly disheartening. This is because it is what people say when they have no idea of how to proceed. It is a last-gasp gesture at a solution that ultimately places the burden of relieving suffering on the person experiencing chronic pain.

It is very frustrating.

Because, as is the case with so many pain-related issues, the value of that aphorism hovers uncomfortably in a decidedly murky space between True and Not True.

NOT TRUE

SAYING *pain is inevitable, suffering isn't* doesn't acknowledge how complicated social issues might be factors contributing to pain and suffering. If you live with debilitating sciatica pain and you lose your job in the trades because you can't keep up a full-time week, you might not have a lot of spare energy—because you are too focused on trying to survive the present moment—to confront past or generational trauma. You might not have a lot of energy to fight systemic racism or cope with housing displacement due to a climate crisis issue, but any or all of those things might be factors that directly affect you, contributing to both pain and suffering.

Suffering is perhaps a little more optional if you own your own home, can afford to buy all-organic groceries at Whole Foods, do a monthly juice cleanse, and vacation in Costa Rica every winter. But no matter how mindfully you move through the world, no matter how deep your gratitude practice, no matter how great your intention of loving kindness—if you don't have access to safe housing, clean water, or food for a balanced diet, then at some point you are likely going to get sick and you are likely going to suffer.

So much of current pain literature focuses on how the person-in-pain must change: their attitudes, their beliefs, their expectations. While these changes are important, a singular focus on them has two key downsides. First, for the pain sufferer, it may reinforce the notion that there is something inherently wrong or damaged in their intrinsic sense of self. And second, it doesn't allow for the fact that, if persistent pain is a biopsychosocial problem, for true healing to occur there needs to be a concurrent shift in social attitudes, beliefs, and expectations about pain, and about what constitutes safety and wellness.

Simon's initial trauma occurred because of a fall. We could attribute it, ultimately, to something as indisputable as gravity, and somehow that made all the ongoing consequences—namely disability and pain—more tangible. There was, for us, a direct causal link. But what if the link were not so direct? There are, we have come to understand, more ways beyond a measurable physical injury to wind up and inflame the central nervous system. Ongoing research has clearly demonstrated that people who routinely experience some form of marginalization are more vulnerable to chronic pain.[1] Did it matter, Simon and I had to ask ourselves, if the precipitating events linked to a pain state were more diffuse in nature—whether genetic, environmental, political, historical, psychological, or social? Did that somehow make the pain less real?

Of course not.

Often the person-in-pain enters health and social care systems at their most vulnerable and exhausted, unable to function normally, their ability to sleep and cognitive function impaired. They are likely profoundly afraid: for their health, and their ongoing ability to provide for themselves and their dependents. Pain, in the way it destabilizes one's most fundamental sense of self, is not just a biological disruption but an existential one. When health and social care systems—the very systems, we would hope, that exist to nurture, support, and inform our collective wellness—view a pain complaint as inherently suspicious or else hopeless, it is yet another threat to the person-in-pain's already faltering sense of well-being.

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1 Canadian Pain Task Force, *Chronic Pain in Canada: Laying a Foundation for Action* (Ottawa, ON: Health Canada, 2019), 9; Canadian Pain Task Force, *An Action Plan for Pain in Canada* (Ottawa, ON: Health Canada, 2021), 16–19.

Medical systems will offer a microcosm of the dominant society's attitudes, beliefs, and prejudices. If a society diminishes the agency and selfhood of women, children, the elderly, the unhoused, the incarcerated, or those with mental health, cognitive, or physical differences (all groupings of people who have had their pain devalued or outright denied), this will be reflected within the medical system. If racism, misogyny, fatphobia, homophobia, or transphobia is threaded through a culture, that too will impact medical care. If pushes to privatize elements of universal health care systems continue, and if the profit motive is allowed to dominate in insurance coverage, the gap between the quality of care for the wealthy and for the rest of us will widen. If the hard work of doctors, nurses, and technicians—especially those in remote areas—is neither valued nor supported adequately by our various levels of government, not only will the gap between the quality of care in urban and rural areas widen but, more and more, bright young people of upcoming generations will opt for alternate professions that provide a less stressful working environment. And finally, if as a culture we prioritize short-term quick fixes and easy answers to difficult questions over the long-term, often unsettling, incremental work required for sustained whole-person healing, we will remain vulnerable to the fraudulent claims and manipulations of free-market bad actors like Purdue Pharma or Insys Therapeutics.

Geographic, economic, political, and cultural forces are *always* at play, shaping an individual's pain and health care experiences. Current pain science demonstrates that the threat inherent in a system that diminishes, denies, or makes assumptions about a person's integrity or selfhood (sometimes even prior to investigating the state of their health) activates the very biological processes that contribute to ongoing pain. This is when care systems become both punitive and counterproductive. Like chronic pain, the system may be maladaptive, worsening the very problem it is meant to address.

TRUE

SIMON AND I undertook the "pain project" chronicled in our book for the simple reason that he had tried everything the medical system had to offer and nothing had really worked. Undertaking an investigation of his own daily habits, expectations, attitudes, and beliefs, and how these shaped his understanding of the deep meanings of his pain, was, simply, something he could *do.* If he approached pain in a radically different way, could he reduce his suffering? This question became a locus of self-agency, a place to start. A pebble thrown into the deep waters of a glacial lake. We didn't know how the ripples might extend throughout our life, but we maintained a (sometimes frantic) hope that this project might, at some unknowable point in the future, effect change for the better.

This doesn't mean that we gave up on medical science or that we haven't stayed in regular contact with Simon's medical team. We remain open to the notion that ongoing scientific investigations might one day produce interventions for him. Both of us love the notion of a cure as much as the next person. There is a grandness and euphoria to the medical narrative of restitution, in which the resilience of the patient and the skill of the doctor combine to draw a person back through death's (or pain's) metaphorical door. And, for the most part, our current medical system is exceptionally good at curing. Simon would not be here today without the fast-acting brilliance and ongoing commitment of a team of emergency, trauma, surgical, and intensive-care doctors and nurses. The gratitude I feel for those mostly anonymous people who returned him to me can be, still, at any given moment of any given day, suddenly and overwhelmingly intense, a gush of love and thankfulness that takes my breath away.

But due to this near superpowered ability of medicine to cure, more and more people are surviving injuries or illnesses that in previous generations would have killed them. Cures tend to be finite, absolute. They work, or they don't. Easing suffering, however, requires whole-person healing, and that is a lifelong, nonlinear, messy proposition that requires striving for dynamic balance in multiple domains. It requires self-awareness; it requires work. It is a kind of work, at a fundamental level, that is not compatible with a medical

system that parses out the body to increasingly refined specialties: heart, brain, blood, bones.

Chronic pain is not a failure of curing. If anything, it's the opposite; it is an ongoing crisis of caring. In the Western world, we place a high value on the cure. The medical personnel who routinely perform miraculous medical feats are rightfully rewarded, in terms of both economic and social status. *Caring* in a sustained and meaningful way is also difficult, draining work, but we don't value it. At all.

In fact, as a culture, we routinely *devalue* it.

This, our pain project taught us, is something that, individually and collectively, we need to change.

Understanding pain as a neuroplastic process means acknowledging that *care* is as important as *cure*; *healing* as critical as *fixing.* Below, dear reader, are some tools for understanding and recognizing neuroplastic pain, as well as self-care suggestions for nervous system regulation.

Is My Pain Neuroplastic?

THIS IS A potentially tricky question. It hinges on being able to determine whether the pain you are experiencing is an important symptom that requires immediate action to ensure your continued health and survival, or whether it is "just noise." Distinguishing this can be very hard to do—even for those who have a deep understanding of the unpredictable way pain behaves. Don't let anyone tell you otherwise. (Lorimer Moseley's TEDx talk "Why Things Hurt" provides an excellent example. He is a fabulous storyteller and manages to make the key tenets of pain science both accessible and entertaining.)

Our book *The Pain Project* began as a pushback against the way our culture insists on reducing the complex problem of pain into two tidy categories: either pain is biological, or it's psychological. It's physical, or it's emotional. Unfortunately, this discrete binary is still very much in play in the way we conceptualize pain. Many current articles on pain science are still founded in the assumption that all acute pain is reliable while all chronic pain is misleading and dysfunctional, and predominantly emotional or psychological in

nature. This is inaccurate. And when we insist on overly simplifying a complex problem, we run the risk of trivializing or even causing significant harm to a person-in-pain.

When pain persists for no known reason, there are two likely scenarios:

1. An underlying cause exists but has yet to be fully understood. For example, an undiagnosed infection, autoimmune disorder, or tumor growth may be a root source of pain.
2. The nervous system has been so overwhelmed that it becomes hypervigilant. This may be caused by physiological, psychological, or social factors, or a combination. The nervous system routinely perceives threat even where there is none, and the relationship between tissue injury and pain falls out of sync.

Number two is a more common scenario than number one. Additionally, if your pain persists for any length of time, for whatever reason, it will almost always involve the neuroplastic process of nervous system sensitization, so it's possible to end up with a combination of scenarios one *and* two. In this way, the question *Is my pain neuroplastic?* becomes much easier to address. If pain has persisted for more than three months, the answer is *Yes, almost certainly it has a neuroplastic component.*

So many different types of pain exist; it is the ultimate snowflake experience. Yet people in persistent pain almost universally share this state of nervous system sensitization. This is often ignored by patient and clinician alike. Neither our current medical system nor the way our culture thinks about pain are conducive to supporting the health of the nervous system.

Physicians might feel that addressing nervous system health lies outside their purview, or that the types of interventions required will be too much to ask of their patients, who would prefer a quick fix. Patients, under siege by pain or illness, are understandably also going to want the fastest available treatment. They might resist embracing nervous system interventions if they feel the proposed solutions imply that their pain is emotional, psychological, or (that dreaded word!) psychosomatic in nature. Stigma is so perniciously attached to that word, but *psychosomatic* does not mean "fake," "illusory," or "made up." It means, literally, "mindbody." And what, in our human existence, isn't a mindbody experience?

My hope is that in some small way, the journey Simon and I documented in *The Pain Project* may contribute to diminishing that stigma. Addressing the health of the nervous system can have huge benefits and has no downside. If you are one of the rare few who experience persistent pain caused by an as-yet unidentified tissue injury or illness, then interventions meant to support nervous system health will aid you in navigating a challenging experience. If you are experiencing chronic pain in the absence of a true ongoing causal factor in your bodily tissues, then committing to a course of action designed to heal the nervous system is your best, most risk-free path to arriving at a day where you are stronger in your capacity to self-manage your pain—or, even more wondrously, where you are free of pain.

A caveat: neuroplastic pain is a chameleon. It mimics the type of pain felt from an injury. You *feel* it in your body in very specific ways. I wrote above that many people experience chronic pain "in the absence of a *true* ongoing causal factor." This is tricky, because X-rays and scans often turn up some anomaly in the tissues of the body, but whether these results are the normal abnormalities of a natural aging process or *true* causal factors for pain is often up for debate.

Here's an example. A recent X-ray of my lumbar back revealed an unexpected finding: I have Bertolotti syndrome, a congenital condition that means my lowest lumbar vertebra is partially fused to my sacrum. It is reportedly a commonly overlooked cause of disabling low back pain. "How's your pain level?" my doctor asked. He was surprised to learn it was nonexistent. "Given these findings, and your age, I'd expect to see a lot more pain," he said. "So… I guess just keep doing what you're doing."

In this case an X-ray turned up what would be assumed to be a true causal factor for persistent pain. If I had been given these results earlier in my life, at a time when I *did* experience a troubling amount of low back pain, I might have assumed that was to be my lot in life. Now I do have critical knowledge, though: Bertolotti syndrome is a potential contributing factor to low back pain. It is important for me to prioritize certain movement, exercise, and relaxation techniques to prevent my back from going out of whack.

Research findings on low back pain underscore my personal experience. The disc bulges and pinched nerves so often picked up on scans and X-rays

do not correlate accurately with the experience of felt pain. In a 1990 study, orthopedic surgeon Scott Boden ran scans on sixty-seven people who did not have back pain. The results were shocking: 90 percent had degenerated or bulging discs, while 33 percent had herniated discs. A 2014 study at the Mayo Clinic reinforced these findings, demonstrating that disc degeneration was present for asymptomatic people of all ages. Subjects in their twenties had a more than 33 percent chance of having some type of disc anomaly; in the over-forty category, it was roughly 50 percent. Over sixty, that number went up to 90 percent. But all these test subjects were pain-free. These studies provide strong evidence that changes to discs and bony structures are a predictable part of the aging process and do not necessarily result in pain or require medical intervention.[2]

As Simon and I know first-hand, it's hard to know what information to trust when you are in a position of not fully being able to trust your own body. The thing a person-in-pain most wants to know is, *why? Why is this happening?* The "normal abnormalities" that routinely turn up on scans offer an answer (however illusory) to this question, providing a narrative that makes sense of suffering and a blueprint for action. For some, having this answer (however illusory) and a recovery plan is enough to move them through to the next stage of healing. But for others, the results from these scans can lead them down a route of invasive procedures that often worsen the condition they were meant to address. Cathryn Jakobson Ramin's exhaustively researched book *Crooked: Outwitting the Back Pain Industry and Getting on the Road to Recovery* is an excellent resource on this topic.

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2 See, for example, M. Jensen, "Magnetic Resonance Imaging of the Lumbar Spine in People With Low Back Pain," *New England Journal of Medicine* 331 (1994): 69-73, cited in G. Lorimer Moseley and David Butler, *Explain Pain* (Adelaide, Australia: Noigroup, 2013), 14, 60–61; S. D. Boden et al., "Abnormal Magnetic-Resonance Scans of the Lumbar Spine in Asymptomatic Subjects: A Prospective Investigation," *Journal of Bone and Joint Surgery* 72, no. 3 (March 1990): 403–8; D. G. Borenstein et al., "The Value of Magnetic Resonance Imaging of the Lumbar Spine to Predict Low-Back Pain in Asymptomatic Subjects: A Seven-Year Follow-Up Study," *Journal of Bone and Joint Surgery, American Volume* 83, no. 9 (September 2001): 1306–11; W. Brinjikji et al., "Systematic Literature Review of Imaging Features of Spinal Degeneration in Asymptomatic Populations," *American Journal of Neuroradiology* 36, no. 4 (April 2015): 811–16, all cited in Cathryn Jakobson Ramin, *Crooked: Outwitting the Back Pain Industry and Getting on the Road to Recovery* (New York: Harper Collins, 2017), 46, 52–53.

Pain is not the only thing that disrupts our nervous system. Some would argue that human evolution has been outpaced by our cultural and technological advances. Our nervous systems are hardwired to focus on threats in our environment, an adaptive trait that may have served us well in the past, but that now clashes with the constant stimulation of our fast-paced but often sedentary days. Modern life is overwhelming for our nervous systems.

It is almost impossible to make difficult decisions, to learn anything new, or to make changes when you are utterly—physically and emotionally—overwhelmed. When we attempt to disrupt the vicious cycle of ongoing chronic pain, I believe the first step is to recognize—without shame or stigma—that the overall health of the nervous system has an enormous influence on how we move, think, and feel. Nervous systems can heal, but that healing almost always requires practical adjustments in how you operate on a daily basis.

Clues That Your Pain Might Be (in Part or Totally) Neuroplastic in Nature

Are your symptoms temporally inconsistent? For example, is there a time of day when they are worse? Or better? A time of the week? A time of the month? Or of the year? Are there situations or activities that tend to aggravate the symptoms? When you're doing certain activities, do the symptoms mysteriously disappear?

Have your symptoms spread to encompass more and more parts of the body? Does the pain ever migrate, say, from the right low back to the left? Has the pain, over time, become more symmetrical? For example, is the pain you feel in your right knee now mirrored in your left?

Did the pain occur suddenly, with no known cause or specific injury? Or, as is the case for Simon and many others with a spinal cord injury, did the pain begin only after the tissue damage of an injury had mostly healed?

Do you experience delayed pain? For example, are you pain-free for an afternoon stroll with your best friend, but an hour later experiencing a dramatic spike in pain?

While answering yes to any of these questions does not definitively prove that your pain has a neuroplastic component, it is a strong indicator. This is important information to have, because your treatment priorities should reflect whether your current pain is caused more by neuroplastic processes than by nociceptive (or structural) ones.

Other questions to ask: Did your pain originate during a time of extreme stress? Are you a survivor of trauma? As a child, did you repeatedly experience feeling unsafe? Do you feel unsafe now? If your pain corresponded with an injury, did that original injury significantly increase your sense of vulnerability in the world? Do you currently experience social marginalization, or institutional violence? Do the restrictions imposed by pain create intense feelings of worry and fear for your future?

There is a stereotypical profile of a chronic pain sufferer, and I do not want to repeat or reinforce it. Anyone—under the perfect storm of conditions—may experience chronic pain. Stereotypes, along with binary thinking, diminish our capacity to understand and have compassion for the pain experience. Having said that, there are certain personality traits that amp up a person's stress level, leaving them more vulnerable. If you identify as being self-critical, highly anxious, self-conscious, a people-pleaser, or a demanding perfectionist, it may be beneficial to have a serious conversation with yourself about how well those personality traits are serving you. While I don't currently suffer from chronic pain, Simon's journey, our journey together, has provided me with the opportunity to have this conversation with myself—to my overall benefit.

What Can I Do to Heal?

ONLY YOU CAN answer that question fully. But a good place to start is by acknowledging, and bringing awareness to, the current state of your nervous

system. Stop and listen to the busy thoughts that dart through your head. Give yourself enough time to reflect on these thoughts, not simply react to them. Identify the major stressors in your life. Some of these will be externally imposed, but some might be self-generated. Ask yourself in which ways you might be contributing to an increase in your own allostatic load. Is there a way that some of these stressors can reasonably be reduced? Stress is not always harmful, and often it is unavoidable, but being vigilant in limiting unnecessary stressors is important while you heal.

Be kind to yourself; kind and caring, in the way that you would be to a beloved friend who was struggling. Too often we deny ourselves the same compassion that we willingly extend to others.

Extreme pain radically jeopardizes your sense of both safety and pleasure. Remind yourself what it is like to feel safe. Remind yourself what it is like to feel pleasure. Doing this might not be easy for many reasons: it might not feel worthwhile or valuable or productive. Or possible. But it is important to recognize that achieving these states—even for a brief moment—is not a frivolous or selfish pursuit, but one that is critical to your overall health. Acting on this recognition might require support from friends or family. Choose to be with people who are kind to you and who actively promote an overall sense of safety, pleasure, and well-being.

Honor your body. Your nervous system is doing its best in challenging circumstances. Understand that the central sensitization of pain does not belong to a singular biological structure that can be "fixed." The nervous system is an ongoing process involved in creating your moment-by-moment experience of being alive. As such, there is nothing to fix. But it does change; it is, in fact, always changing, right up until the moment of our final breath. While it's not particularly *easy*, the work ahead, Simon and I have discovered, is pretty straightforward: try, as best you can, to make that change for the better.

How you do that is up to you. Our pain project touched on many possible interventions that benefit the health of the nervous system: ACT (acceptance and commitment therapy); the Safe and Sound Protocol; expressive writing; committing to a Mindfulness-Based Stress Reduction practice. Some people might benefit more from highly organized interventions, like having regular

sessions with a therapist or a support group. Talk therapy might work better for some; others might prefer some type of expressive art therapy. Others still might prefer less formal interventions: studying Buddhism; joining a choir; apprenticing as a beekeeper; returning to a childhood passion for drawing. For all of us, whether we are currently in pain or not, it's a challenge to stay connected and grounded in a fragmented modern world. The sense of threat—if we allow it—can become omnipresent. It is essential, in these circumstances, to find restorative spaces of safety, pleasure, and connection in our lives.

This journey has always led Simon back to music. For me, it has always been about stories. And movement. It is, in the end, all about movement.

How a person habitually moves their body is a significant contributing factor to either a sense of ease, or dis-ease, in their environment. Inefficient movement patterns and postural distortions will strain certain muscle groups and joints in a way that, if unrelieved, will result in stressed, inflamed, injury-prone tissue—a perfect recipe for ongoing musculoskeletal pain. Movement practices that help a person identify troublesome habitual movement patterns and then provide functional alternatives can be transformative. And this is one of the most cost-efficient and risk-free ways to create lasting change in the nervous system.

Movement Resource Guide

AS MOSHE FELDENKRAIS famously said, movement is life. It is the primary, precognitive, pre-analytical skill we all learn prior to speech, our one-year-old selves becoming movement experts the moment we totter onto our chubby legs and conquer the pressing riddle of gravity: how to balance our big heads and torso over our narrow, tiny feet. Movement is so important to the health of the nervous system that it should always be an essential component of whatever healing path you choose. For instance, you could follow David S. Butler and G. Lorimer Moseley's Explain Pain education series plus movement; talk therapy plus movement; or art or music therapy plus movement. For those with mobility issues, such an intense focus on movement

might initially be alienating. But there are many ways to move: some may be big and demonstrative; others are subtle and barely visible to the eye. In all cases, though, a sense of movement nourishes and informs the body. Breath is movement, and it is always a good place to start.

When we hurt, we tend to restrict our movements. This makes sense if you are, say, healing from a broken bone, but it is a strategy that quickly becomes counterproductive when navigating a state of chronic pain. It is critical to keep moving in whatever way you can.

We humans are embodied creatures. And pain, no matter how much we come to understand it as a product of the brain, is something we *feel* in our bodies. We can write expressively about our emotions, we can educate ourselves on all the current science, we can assiduously challenge our own beliefs and expectations in an attempt to tackle the problem of pain, and we can fight for social justice—this, really, is the work of a lifetime. But all it takes is a single moment of moving with ease for you to immediately *feel* better. If you keep adding to those moments, a dynamic cumulative effect can occur: movements transition from safe to pleasurable to empowering. You *experience* your own capacity for resilience and adaptability.

For many people, **physical therapy** will be the first treatment option a doctor will suggest. Physical therapists have wide-ranging diagnostic and clinical skills, and evidence suggests that the earlier patients start physiotherapy, the better their outcomes. Physical therapists use passive manipulation techniques (such as massage, intramuscular stimulation, or ultrasound) as well as prescribing exercises to improve strength, balance, and range of motion. This was the kind of intense work Simon did with his physical therapist in the aftermath of his initial injury and subsequent surgeries, and it profoundly aided him in regaining his independence. This is where physiotherapy is invaluable—as a modality to rebuild strength in the aftermath of injury, illness, or surgery.

However, as a first-line intervention in addressing chronic pain, physiotherapy has some shortcomings. Its primary focus on building strength through various targeted exercises does not necessarily account for the chronic muscle tension and full-body movement patterns that may be both caused by and contributing to a persistent state of pain. A traditional

physiotherapy rehabilitation practice exists very much in a biomedical domain. Your doctor, for example, is much more likely to recommend a half-dozen physiotherapy sessions than to suggest you join, say, a Feldenkrais or qigong class. The problem with this is, within the biomedical domain, pain is still largely viewed as a structural issue. Yet research continues to underscore the fact that when pain persists, it is often not solely (as the pain experts like to say) an "issue of the tissues."

Healing persistent pain generally requires more than strengthening certain key muscles; it requires the nervous system to change. Making change is tricky business, and it usually happens in one of two ways. The first is through willpower. We set an exercise goal and we force ourselves to take the necessary steps to achieve it. We push ourselves to do more repetitions, straining the body in order to strengthen it. This is, in certain situations, an excellent strategy. A certain amount of discipline is, of course, a good thing. (As one friend said, without discipline, we might all just stay home in our underwear eating potato chips.) But exercising willpower alone is an insufficient, and potentially counterproductive, way of addressing chronic pain. Think about how your body responds when you consider rallying your willpower to get something (you might not want to do) done. Think about the words we all use: *gear up*; *buckle down; put your shoulder to the wheel.* We tend to tense up and narrow our focus to achieve difficult things. This might be good if you are training to climb Mount Everest, but for the person struggling with chronic pain, a state in which the demands of their life often overwhelm their resources to cope, adding one more tough thing to the to-do list is not always ideal.

The success of physiotherapy programs relies heavily on the person-in-pain exercising the discipline to get through their ten or twenty minutes of rote exercises a day. The alternative, however, to change-through-willpower is change-through-learning. Various somatic modalities are designed specifically to create this type of change-through-learning. These movement practices are varied but share similar foundations, the most important of which is the understanding that the nervous system is not a biological system that you can impose your will upon in the same way you can, say, commit to toning your abdominals or strengthening your triceps. The nervous system is,

instead, a moment-by-moment biological process that communicates an overall state of being. These movement practices work to tune the nervous system by providing opportunities to increase somatic sensitivity, awareness, self-regulation, circulation, coordination, and balance. Much of this nervous system tuning occurs through the relatively simple act of consciously coordinating breath with movement.

Think of it this way: physiotherapy is likely to improve your biomechanics, whereas somatic education will improve your biointelligence.

It is, however, unlikely that a doctor will recommend any movement practices beyond physiotherapy. This is in part because the domain of somatic education is not easily measured or quantified and is therefore often dismissed by a biomechanical world that draws conclusions and makes recommendations based on group statistics and mean averages. For good reason, doctors cannot ethically recommend something that isn't backed by this type of evidence-based research. Because of this, the benefits of somatic education exist in a kind of therapeutic/research blind spot. The greatest strength of various movement practices is the focus on the individual and their specific needs, something that is difficult to measure in a research paper, where the individual is just one more dot on a graph. Progress occurs over years and not always in a linear fashion. Most importantly, positive movement experiences are incredibly powerful in creating positive mindsets, and for many, committing to a movement practice is a transformative process that has ongoing (but difficult to truly measure) physical, emotional, social, and potentially even spiritual benefits. For the person-in-pain, the right movement practice can be an excellent complementary addition to any traditional physiotherapy program.

IF YOU LIVE in an urban area, you will likely have far greater options both in available types of movement practices and in choosing a teacher than those living in rural or remote areas. Adopting a movement practice is a long-term commitment, not a quick-fix solution, and the changes can often be subtle over time. The best way to gauge whether an intervention is working for you is not that you are completely pain-free. Rather, it's that over time, the intensity of pain is lessening, and you feel increasingly better equipped with the internal resources to navigate flare-ups, so that they trouble you only briefly

and generally have less of an impact in your life. If this isn't happening, then it might be time to find either another teacher or a different way of moving.

My background in movement began in childhood when I studied ballet. During my twenties and into my thirties I maintained a committed yoga and dance practice before studying, then eventually teaching, Classical Pilates. Although there is a lot of crossover between the worlds of yoga and Pilates, as movement techniques they are not all that similar. Even within each modality there is a wide range of variation—for example, Ashtanga yoga, Iyengar yoga, or Restorative yoga; Classical Pilates, Stotts Pilates, or Clinical Pilates—and the values of each of these styles are often hotly debated. The variation within these fields is partly due to the fact that neither "Pilates" nor "yoga" can be attributed to any single person, style of teaching, or organization. For yoga, this has been the case for centuries, but it's a far more recent development for Pilates. In 2000, a Manhattan federal district court ruled that Pilates is an exercise technique, in the same way as yoga, and that the name belongs in the public domain. There are many positive benefits of keeping both Pilates and yoga in the public domain, but the key downside, especially for the consumer, is that literally anyone can claim that their classes, videos, or books provide teachings in either the Pilates or yoga method, regardless of the instructors' training.

Training can vary wildly. For example, I did my certification through the Pilates Center in Boulder, Colorado, under the guidance of sisters Amy Taylor Alpers and Rachel Taylor Segel. Long considered one of the premier teacher training programs, it required 950 apprentice hours, included detailed instruction in anatomy and physiology, and took almost two years to complete. On the other end of the spectrum, some exercise instructors start teaching Pilates after attending a weekend workshop. Certification is not required to teach yoga, but most studios require that instructors have completed a 200-hour Registered Yoga Teacher program. Given the scope of this variance, it is advisable for a consumer to inquire into the training and experience of any potential instructor.

The exercise world—and this includes some yoga and Pilates, as well as commercial workout gyms—is rife with coaches, teachers, gurus, or influencers boasting to offer a method superior to all others. My advice is to remain

highly skeptical of anyone making such claims. We all must find the right method and the right teacher for ourselves. What is suitable for one person may not be suitable for another—and that's okay. And what was suitable during a certain period in your life may no longer be suitable now. Additionally, the choices we are able to make will be determined by what is available wherever we live. The adage that *the best exercise to do is the one you'll stick with* contains a good dose of common sense.

With a caveat: *The best exercise to do is the one you'll stick with* makes sense—but only up to a point. Sometimes—to our detriment—we stick with a routine simply because of familiarity without ever questioning how well it is serving us.

Although comfort and safety should be a key priority for the person-in-pain, remaining in your comfort zone might not always be helping you to transition out of pain. We all have exercises or activities we like to do. For me, through my twenties and thirties, it was yoga. I studied at an advanced level, with an excellent teacher who taught me a great deal, particularly in learning how to breathe better. As a hyper-flexible person, I felt yoga was something I was *good* at, and the deep stretches provided temporary relief for low back pain. But the pain, over time, became increasingly significant. It took stepping away from yoga—my comfort zone—into Pilates to realize that my hyper-flexibility was contributing to, not alleviating, ongoing pain.

Now that I am a teacher, I see my own story repeated in students who believe they can stretch themselves out of any ache, but I also see how the reverse is true. Athletes who embrace intense training programs, boot camps, biking, swimming, weight lifting, or running regimes will arrive at the Pilates studio stiff and in pain, often lacking flexibility or range of motion in certain joints. While they rely heavily on their exercise practices—their comfort zone—to maintain good mental and physical health, over time their pain increases. What I love about the Pilates method is its variability and the way it can accommodate a wide range of fitness needs. In both the very common instances above, Pilates is helpful in decreasing pain through its focus on creating suppleness (i.e., strong muscles and mobile joints) in the body. In this way, it's designed to support the student in returning safely to whatever activity is important to them—whether that's getting out on the golf course or being able to garden once again or competing in a triathlon. This is why

Joseph Pilates dubbed his method "a return to life." But for many people of all ages, backgrounds, body types, genders, and exercise experiences, simply entering a Pilates studio is a big step out of their comfort zone. That's okay. Sometimes it's good—and necessary—to shake things up.

There is a small but growing body of research indicating that movement practices such as yoga and Pilates can be beneficial to a person-in-persistent-pain. It is, however, as far as research goes, not overwhelmingly compelling. But, as I mentioned earlier, the format of these studies often does not do justice to the true benefits. Most research projects look at these movement interventions over the course of six weeks. Or maybe three months, at the most. The benefits in adopting a movement practice are often seen over a much longer time span. For me, I began Pilates with a significant amount of low back pain. I stuck with it because, right from the very first class, it made me feel better. But creating lasting change in my low back pain took a long time, almost three years.

Part of what kept me motivated during this period was receiving the communal support found in the environment of my local studio, Kalijo Pilates. Within a biomedical format that relies heavily on provable research, this social aspect of biopsychosocial healing—of being a valued member (not an isolated and medicalized patient) in a like-minded community that offers an oasis of education, playful exploration, support, motivation, and respite from the demands of daily life—is often undervalued. It's tough to prove its value in a concrete manner because building community and making interpersonal connections is not a hard science. It doesn't happen instantaneously or in a linear fashion, and a research study that looks at a six-week, or even three-month, program of Pilates (or yoga or tai chi) is likely going to miss out on the beneficial social aspects that develop over a longer time.[3]

Clearly I do have a strong bias when it comes to movement modalities. Pilates is *my* thing. It's what worked best for me, and I do believe that Pilates offers one of the most well-rounded and student-centered approaches to creating resilient bodies. But, putting my bias aside, we'll take an objective look

3 There is a small amount of research demonstrating the benefits of belonging to groups. See, for example, Jolanda Jetten et al., "Having a Lot of a Good Thing: Multiple Important Group Memberships as a Source of Self-Esteem," *PLOS ONE* 10, no. 5 (2015): e0124609, doi: 10.1371/journal.pone.0124609.

below at some of the more widely available "alternative" movement practices—yoga, Pilates, Feldenkrais, qigong and tai chi, and Alexander Technique—with an eye to their accessibility, affordability, strengths, and possible limitations.

YOGA

Rooted in Indian philosophy, yoga originated as a spiritual practice thousands of years ago. It has evolved into our current cultural context to combine a meditative practice with a physical one. Its key benefits are that it is a widely available and affordable means of promoting physical and mental well-being. There is an incredible diversity of yoga classes offered within many communities, but most classes will contain, to varying degrees, three distinct elements: physical postures (asanas), breathing techniques (pranayama), and meditation (dyana). With a focus on wellness and balance, yoga studios tend to cultivate a social context that supports the journey of a student looking to manage stress and promote better mindbody health, diet, and sleep patterns.

For the person-in-pain, there are, however, a few potential downsides. Most classes consist of large groups, and while groups may provide beneficial social aspects, in some instances a person-in-pain might be served better in a more personalized or specialized setting. Group classes often include students of varying abilities, and while keeping up with peers might (in the best-case scenario) provide an extra splash of motivation, it can also induce a person-in-pain to push too hard, too fast. There is an intensity to both the physical poses and the meditative practice. While the aim of both is to promote balance and mindbody health, if a student pushes too hard or too fast, they might find that physical tension or anxiety actually increases.

Neil Pearson is an experienced physical therapist and a global leader in pain management and education. He is also a yoga therapist and creator of the Overcome Pain Gentle Yoga retreat, which combines pain science education with the experiential learning related to a yoga practice. When we spoke, he agreed that it is important for a person-in-pain to be a good consumer when looking for an appropriate class. "Yoga, like all things, can be medicine, or can be poison," he said. "As instructors we worry a great deal, and

rightfully so, about students harming themselves. So often this means that if a student experiences a painful sensation, they are immediately cued to stop moving and assume a rest pose. But what is potentially harmful in this cue is the reinforcing of the message that movement is fundamentally unsafe, or that the student is incapable of performing it, or of moving through their pain."

To create more robust awareness in yoga teachers (and other health care professionals), Neil has developed a Pain Care Yoga training program and a series of Overcome Pain Gentle Yoga videos. A directory of the many pain-science-informed yoga practitioners who have completed this training can be found on his website. As a past director of Pain BC, Neil has also created a free online Gentle Movement & Relaxation course to better equip physiotherapists and other therapeutic movement professionals with practical knowledge to promote pain recovery for their clients.

KARA'S HOT TAKE: I have benefited greatly from the breathing techniques I learned through yoga. I prefer the more physically active yoga classes over ones that have strong meditative or spiritual elements. For many, the incorporation of a spiritual element is one of yoga's best attributes, but it has not always worked for me. Certainly there is a wealth of wisdom embedded in this ancient practice, but how this message is understood and delivered can vary widely from teacher to teacher.

If you are a person-in-pain, look for smaller, specialized classes, ideally with an instructor who has practical knowledge rooted in current pain science.

PILATES

Before I took my first Pilates class, I had no concept of what it entailed. Pop culture stereotypes indicated Pilates was the preferred exercise regime of vain and bored housewives, cheating husbands, spoiled movie stars, and prima ballerinas. I imagined it as a kind of upgraded 1980s-style Jane Fonda workout, complete with headbands and leg warmers.

It's not like that at all.

Over the past decade, I have trained and taught at Kalijo Pilates, on the Sunshine Coast in British Columbia. There, it is a central maxim that Pilates is for everyone and everyone can benefit from doing Pilates. Joseph Pilates's overarching goal in creating his vast repertoire of movement patterns and exercises was to create bodies that "were fully capable of naturally, easily, and satisfactorily performing our many and varied daily tasks with spontaneous zest and pleasure."

Pilates equipment includes Reformers, Towers, and Chairs. Each of these offers a unique form of resistance training as well as an incredible amount of adjustability that allows teacher and student to address a wide range of body types, physical abilities, and fitness goals with innovative solutions. When I was a teacher-trainee, it was drilled into me that I needed to teach the body—the person!—before me. There was no one-size-fits-all approach.

The Pilates Mat class is the most familiar, affordable, and accessible option, and so it is often assumed to be the ideal place for a beginner to start. This is not necessarily true, as the classical Pilates Mat repertoire requires precision and strength to execute safely. It is where the most advanced application of Pilates principles is found.

Most beginners benefit from a course of four to eight one-on-one sessions that will gradually introduce the student to the various pieces of equipment as well as the movement fundamentals required to safely progress into the (financially more sustainable) group classes. This is especially true if you are a beginner who is recovering from an injury, hoping to make changes to long-established movement patterns, or experiencing persistent pain. An individualized, no-one-size-fits-all approach to teaching is one of the greatest strengths of Pilates. It is also one of its key downsides. Individual sessions cost about half the price of a physiotherapy session. While us Pilates converts will argue vehemently that private sessions are worth the investment, it is an unfortunate truth that they are prohibitively expensive for many who would benefit from individualized attention. If private sessions are not financially available to you, make sure to be clear about your safety needs when signing up to a group class. Mat and equipment classes designed for beginners, or for people experiencing ongoing challenges, do exist, and these can be an excellent alternative to private sessions.

Whole-body Pilates workouts changed how I approached moving my spine. The deep bends and twists I had routinely done in dance and yoga were big movements that primarily used one or two joints. But by doing this "one big movement originating from a single place" I was unknowingly placing strain on certain vertebrae and surrounding tissues. In my Pilates class, I was guided instead to experiment with flexing, extending, bending, and twisting with a greater focus on engaging the whole length of my spine, from the base of the skull to the tailbone. This meant initially that my range of motion was reduced, and I felt like a klutzy beginner all over again. But, with practice, an amazing thing happened. This "small movements from many places" approach dramatically decreased the strain in my low back. My pain faded away and over time, my range of motion in all directions increased.

Joseph Pilates designed his repertoire of movements to merge key aspects of Western and Eastern concepts of health, with an aim to foster greater mindbody harmony. When this harmony was achieved, Pilates believed it was inevitable that spiritual benefits would follow. But the precise spiritual benefits were something he chose not to articulate, arguing instead that it was preferable for everyone to define that for themselves and manifest it within their own lives.

KARA'S HOT TAKE: I love Pilates! A commitment to consistent safe and pleasurable Pilates therapeutic movement was how, in the aftermath of Simon's accident, I deepened my own personal resources of physical, mental, emotional, and spiritual strength. Pilates, at its best, is a process-oriented method that contains an endless series of potential progressions. In my experience, this possibility of progression is motivating, and even as my fitness needs have evolved, the method continues to both support and challenge me. I have now reached a point in my own progress where my workouts more intensely promote strength building and cardio fitness. This has been incredibly empowering. It brings me joy, especially as I age, to feel stronger than I did twenty years ago and to be able to accomplish more and more complex movements with a sense of comfort and ease.

Amy Taylor Alpers and Rachel Taylor Segel's *The Everything Pilates Book* provides a detailed explanation of the history, goals, and principles of Pilates,

an overview of a core body of exercises, and tons of practical advice on how to choose a reputable studio and what to expect from a class. It was published in 2001, so some of the information regarding class pricing is a little out of date, but it remains an excellent resource.

FELDENKRAIS

There are many reasons I believe that Feldenkrais (rhymes with *paradise*) is one of the best options for a person-in-pain, perhaps *the* best. Moshe Feldenkrais was a very interesting man. In the 1930s he studied engineering in Paris and worked in Frédéric Joliot-Curie's laboratory doing pioneering work in nuclear research. It was here, too, that Feldenkrais earned a black belt in judo, opening the first judo club in Paris. After World War II, Feldenkrais immersed himself in theories of physiology, psychology, and neuroscience, combining his insights into a learning-based method aimed at improving overall health. Feldenkrais's stated goal was to teach students "to move with minimum effort and maximum efficiency, not through muscular effort, but through increased consciousness of how movement works." His method is currently taught in two ways: **Awareness Through Movement (ATM)** lessons and **Functional Integration (FI)** sessions.

In an **ATM** session, the teacher verbally guides a group class. Generally, ATM teachers do not demonstrate movements nor use any hands-on touch. There is no "right" way to execute a movement, and it is the student's comfort level that dictates how much or how little they will do. Instead, ATM classes cultivate a sense of curiosity and playfulness around movement exploration. These classes take it as a guiding principle that when we do exercises in a rote manner, or perform them for a teacher, or worry about getting it "right," we distance ourselves from the moment-by-moment somatic experience. ATM teachers guide students through a series of subtle movements, asking the student to bring awareness to what each gesture feels like. Feldenkrais is all about "you learning to learn from you," and it aims to increase a student's sensitivity, coordination, and balance. In this way, it is beneficial not just to those hoping to transition out of chronic pain but to a wide-range of people seeking to enhance the efficiency of their day-to-day movements: athletes,

musicians, performing artists, elders, children, and people recovering from injuries or living with disease or disability.

As a fortunate by-product of the COVID-19 pandemic, many Feldenkrais resources were made available digitally. ATM classes are particularly well suited to a digital format, and there is a wealth of live and recorded sessions now available online, making these classes one of the safest, most accessible, most affordable, and most sophisticated options for a person-in-pain. My favorite site is Nick Strauss Klein's The Feldenkrais Project, a donor-supported site that offers free lessons. Other fabulous sites that offer online course material include Cynthia Allen's FutureLifeNow and Marek Wyszynski's Physical Therapy & Feldenkrais NYC.

Functional Integration (FI) sessions are one-on-one classes that involve the teacher cuing a student's movement with a gentle non-invasive touch. The Feldenkrais Guild of North America offers a resource of guild-certified teachers. This option requires in-person attendance, making it both less accessible and less affordable than ATM classes. However, for a person-in-pain (or anyone dealing with a challenging health crisis), the one-on-one class format is often invaluable because the class will be tailored to your specific needs. This type of personal attention can be helpful in transitioning a student out of a crisis state, at which time they might choose to participate in the more sustainably affordable ATM classes.

KARA'S HOT TAKE: I love Feldenkrais! It is a wonderful antidote when I am feeling overwhelmed, rushed, anxious, or overly goal-oriented. An hour-long Feldenkrais session is a somatic exploration undertaken with kindness and curiosity; for me, this works like an almost magical reset for my nervous system. It doesn't (and doesn't claim to) provide any cardio or strength training, so it is a good method to pair with other, more active forms of exercise. For a person-in-pain, it is an affordable, accessible, and safe method that ideally can support you in expanding your movement repertoire and returning you to more active forms of exercise.

QIGONG AND TAI CHI

Qigong and tai chi are centuries-old forms of movement meditation undertaken for their physical and spiritual health benefits and as a form of martial arts training. Slow, flowing movements and deep, rhythmic breathing are designed to create mindbody harmony, with an ultimate purpose of cultivating greater inner life energy, or what is known in Eastern traditions as *qi.*

While it is not impossible, or even unusual, for Feldenkrais, yoga, or Pilates to be hugely beneficial for people—like Simon—with more extreme mobility issues, Simon and I have both found that the extra effort required to constantly modify and adapt movement sequences in Awareness Through Movement (ATM) classes or the Pilates repertoire was a barrier (especially when our combined energy reserves were low) to consistent exercise.

However, qigong was instantly available to Simon in his wheelchair, and he enjoyed moving through the lyrical sequence of gestures. Some of the new movement patterns initially sparked brief flare-ups of pain, but he quickly worked through them by making his movements smaller at first and then gradually extending his range of motion. In short order, he could execute the movement sequence safely, independently, and, even on the toughest days, regularly. In this way, it opened a doorway to an increased level of activity for him.

Both qigong and tai chi have spiritual roots in Taoism and intentionally seek spiritual and physical harmony with nature inside and outside of ourselves. Classes are usually available within even small communities and are relatively inexpensive. While there are many social benefits of joining an in-person class, there are also many online tutorials where the curious can experience a sampling of these movement techniques. My favorite site is Dr. Paul Lam's Tai Chi for Health Institute. It offers a wealth of information, including many peer-reviewed medical studies showcasing the benefits of tai chi. For a small fee, Dr. Lam offers a diverse range of programs (for example, tai chi for energy; for diabetes; for arthritis and fall prevention; for beginners; for rehabilitation… the list goes on). For a low-cost, at-home program, it is an excellent resource.

KARA'S HOT TAKE: While I have not yet committed time to a dedicated tai chi or qigong practice, I would like to in the future. Even in my limited

experience, the restorative, energizing movement sequences are both pleasurable and profound. And they rate highly as a safe, affordable, and accessible option for a person-in-pain to explore.

ALEXANDER TECHNIQUE

Frederick Mathias Alexander was the great-grandfather of somatic education, and he was one of the first to articulate the ways in which less-than-optimal movement patterns could contribute to a wide range of health problems. His focus was on improving a student's dynamic posture (most specifically the alignment and coordination between head, neck, and back) with a learning-based method designed to increase somatic awareness and release excessive muscular tension. Today, Alexander Technique practitioners complete an intensive three-year program requiring 1,600 training hours to achieve certification.

Although group classes are possible, Alexander Technique is almost always done one-on-one, with the teacher providing clear direction on ways to inhibit or undo unhelpful movement patterns. In a controlled manner, teachers move students through a series of everyday actions (bending, walking, standing, reaching, sitting at a desk), with an aim to executing these functional activities with an overall decrease in muscle tension. The in-person, hands-on aspect is critical to Alexander Technique, and teachers tend to emphasize that it is not a method for self-taught learning or exploration. Thus, online resources are limited. Virtual sessions are possible, but it is generally agreed that this is a less-than-optimal way to experience a class.

Like Feldenkrais, Alexander Technique doesn't include any cardio or strength training, so it's best to pair it with other, more active forms of exercise. A 2008 article in the *British Medical Journal* concluded that compared to standard treatment of low back pain (i.e., physical therapy, medication, or massage), a combination of six lessons in Alexander Technique followed by a doctor's prescription for a home-based exercise program was more effective and cost efficient for long-term reduction in chronic or reoccurring pain.[4] However, access to an Alexander teacher may be limited, especially if you live

4 Sandra Hollinghurst et al., "Randomized Controlled Trial of Alexander Technique Lessons, Exercise, and Massage (ATEAM)," *British Medical Journal* 337 (December 2008): a2656.

in a rural area. Sessions are usually forty-five minutes long and cost approximately seventy-five to one hundred dollars, so it's also limited in affordability.

Further information can be found at Alexander Technique Canada. This is a governing organization that upholds professional conduct and training of Alexander teachers and is affiliated with twenty other national member societies worldwide. A competing governing body—Alexander Technique International—also exists, and their website offers a listing of teachers globally.

KARA'S HOT TAKE: The world of somatic education owes a great deal to the inspired work of F. M. Alexander. Alexander Technique is a safe and gentle way of gaining insight into many of our automatic daily movement patterns and helps to provide alternatives. Feldenkrais is a related modality that evolved in part from F. M. Alexander's teachings. If Alexander Technique is not available to you, Feldenkrais—with its greater accessibility, affordability, and emphasis on self-agency—might be a better option.

HOW TO CHOOSE A TEACHER AND METHOD THAT WORKS FOR *YOU.*

ONCE YOU HAVE sorted out issues like availability, accessibility, and personal preference, there are still a few things to consider when choosing the right teacher and practice for you. A good movement practice should contain four fundamental components.

The first? **Breath**. Always breath, the most basic way in which we nourish and cleanse our bodies. Although an innate function of the body, it is also a muscular action of the diaphragm that, with attention and regular practice, can be strengthened and improved. Joseph Pilates, for example, designed a complex choreography of movement patterns with the overarching goal of improving the capacity to breathe. Most movement modalities will focus on this act of coordinating breath with movement as a means to cultivating a more harmonious mindbody relationship.

Second fundamental: **reduce resting level of muscle tension**. As a Pilates teacher, I discovered that many people feel like they're not fit enough to tackle

a Pilates class. ("That's about as reasonable," one of my colleagues remarked, "as saying you're too dirty to take a bath.") These people usually enter a studio with the belief that they need to get stronger. Others, the uber-athletes, predict a Pilates program will not be challenging enough. ("I always thought Pilates was a bunch of ladies rolling around on exercise balls," one client, an almost-pro hockey player, told me.) These athletes generally book a session with the belief that they need help stretching tight muscles. A less athletic person might arrive at the studio with weak, tight muscles; an athlete with strong, tight muscles. In both instances, there is a high degree of resting muscle tension. If this state goes unrelieved, the likely result will be the same for the couch potato and the fitness fanatic alike: the resiliency of their muscles will become diminished, making them more prone to injuries. It is this resting level of muscle tension that is critical to address—not necessarily notions of strength or flexibility.

The third fundamental is **means, not ends.** F. M. Alexander termed this "the means whereby," by which he meant that to make change, one had to focus on the process, not the end result. Alexander's great insight was that when we adopt a goal-oriented approach, we tend to resort to our most deeply ingrained, reactionary, or habitual patterns. Exercise fanatics who insist—despite increasing back, shoulder, or hip pain—on cramming muscle-wrenching workouts into their weekly schedule have fallen prey to this type of tension-building, goal-oriented approach to "fitness." But, Alexander suggested, when we slow down and pay close attention to the precision of the movement and the internal sensations evoked, we can reduce muscle tension. A focus on quality over quantity creates more opportunity for lasting change.

The fourth fundamental is so important it likely should be the first: in a good movement teacher–client relationship, there are **two experts.** Unlike in most medical contexts, within a somatic practice, where one of the goals is to re-educate the nervous system, the first-person account is of primary importance, because it is only the student who can bring awareness to their internal sensations and report back on the experience of their moving body. A good movement teacher is therefore, first and foremost, a good listener. They are also a guide, whose primary role is not to "fix" the body in front of them but to take the lead in safe and playful movement exploration, with

an aim to increase the resources in a client's self-care toolbox, thus providing people-in-pain with a greater measure of self-agency and independence. Partnering together, student and teacher focus on restoring functional movement—that is, the strength and mobility required to perform the day-to-day tasks important to the student. These goals will be different, say, for the professional stuntman than for the seventy-five-year-old grandmother recovering from shoulder surgery, but a good movement practice should be able to accommodate both.

REMEMBER: safety and consistency are of utmost importance when getting moving after a long period of inactivity. Pleasure too. My fervent wish for you, dear reader, is that (whatever challenges, barriers, or dead-ends encountered in your life) you will continue to find good teachers, good people, good trouble, and good fun as you move forward.

Onward!