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Awakened Heart, Embodied Mind School of Yoga

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Yoga, Meditation, Dance, and Art: Finding An Authentic Voice for Creative Expression

The ambition to teach yoga is still only a small flower, barely visible on the delicate ground cover of my life. To say that I am a late-bloomer as a person is probably an understatement. In fact, in some way, it feels like my life force is still bundled into a tight bud, and even at the ripe age of thirty-four, I couldn't say if or when it will ever bloom. So cultivating patience has, without doubt, been the biggest life lesson of the last decade, and two small children continue to play their part in teaching me this. The fact that it has taken me two years to finally sit down and write this paper is also evidence that "things take time" in my life, though I hope this also reflects the ability to prioritize, and still follow through, for the reality for me is that other things have simply taken precedence.

In all that time, and also extending twelve years before my teacher training back to the age of nineteen, my personal yoga practice has always been a priority, and I can say truthfully that it has been one of the great dimensions of my life, ever deepening, creating space for reflection, shifting through pregnancies and motherhood, changing tack now and again with different teachers, but essentially supporting me in everything else that I do and vitally helpful in processing the stress and emotional experience of life, including personal trauma from my youth. All of this is to say that if I do teach, my foundation is made from years of consistent personal practice and in-depth experience, in addition to the 200 hour training I've had. In essence, I love yoga the way a bee loves honey; each return to my mat gives me the same sweet anticipation.

Beyond my simple full-body love for asana, there are other aspects of yoga that I have set out to discuss in this paper, and which will hopefully translate into a vision of the kind of teacher

I wish to become. To begin, I feel I should say something about my understanding of Patanjali's yoga sutras. They contain, after all, the historical philosophical teachings behind the yoga tradition, although most of us come to practice in our culture with little knowledge of this, and I will argue that knowledge of these sutras is not at all necessary for deriving benefit from yoga practice. In fact, I think there is much to be gained by actually letting go of some of the ideas that the sutras contain, and releasing ourselves from reverence towards the material. Then I will spend some time discussing the importance of critical thinking and self-inquiry, as well as the bounty that comes with grace and humility. I'll touch on my work with Jack Kornfield's book, *A Path with Heart*, as this was an important part of my studies in my training and provided me with some valuable tools in furthering my meditation practice and self-understanding. At this point, I'll also present a couple of the caveats of spiritual practice. I will then give a brief discussion of the perspective of Neuroscience on mindfulness and the effects of yoga and meditation on the nervous systems of the body. And lastly, I will elaborate on my own passionate vision: the possibility of using yoga, meditation, and ecstatic dance to generate inner fuel for authentic creative expression.

I'd like to call Patanjali an old friend, but the truth is that I don't know whether he and I have all that much in common beyond our love for practice. He is not one of the ancient masters towards which I feel much fondness, perhaps owing mostly to the authoritative tone and lack of humor in his writing, though we also part ways on our opinion about the nature of reality. My education and culture, indeed my entire life journey into American womanhood are wildly different from his, and I think that yoga has come to mean something very different for most of us than what is laid out in his sutras. Of course, the eight limbs of yoga are outlined in this text and it is beyond the scope of this paper to elaborate on all the merits and demerits of his formulations. Regarding the fundamental difficulties of being human, suffice to say that he made some astute observations about the problems that often arise in the human mind, such as doubt, fatigue, lack of self-awareness, and overindulgence, and he also suggested many attitudes that seem genuinely therapeutic as remedies for the obstructions and distractions that he catalogued. For instance, in sutra 1.33, he suggests that we be happy for others, compassionate, and undisturbed by others' shortcomings (Desikachar, 159). This is timeless, good advice! He advocated yoga as a means towards clear thinking and inner serenity, and no yogi will argue with

that. Notwithstanding these often immediate, lush fruits of practice, his whole text is founded on a dualist view of the Universe, in which awareness of God is the end goal and detachment from many of our human impulses is the Way. The sutras are, in fact, littered with lofty claims of clairvoyance and cryptic postulations about obtaining knowledge and understanding about absolutely anything and everything, at every level of perception. In this day and age, that simply doesn't fly. With the advent of the scientific method, humans have come to appreciate that obtaining knowledge about reality is a collective, evolving, and painstaking endeavor, and that our path towards understanding is necessarily riddled with mistakes. Indeed, a worldview that values the contributions of science is a far cry from the "state of yoga" that Patanjali describes.

My education in science has played a significant role in shaping my value for critical thinking about reality and a non-absolutist attitude towards what we regard as being true at any given time. This should not imply a leaning towards moral relativism, which turns discernment to mush, but simply a habit of asking questions about what's true, and being okay living without all the answers. Unfortunately, most well-marketed spiritual paths attempt to lay claim to "The Truth," including Patanjali, and weirdly that truth usually involves some kind of fantasy that should be accepted without question, whether the omnipotence of gurus, an imagined God or gods, or other-worldly planes of existence, such as heaven and hell. However, it is my own personal opinion that spirituality should be less concerned with unsubstantiated fantasy, and more concerned with real life on planet earth. I think we are more spiritual when we are fully human, that having a spiritual life means cultivating the most honest awareness we can of our inner life, our motivations and limitations, so that we can live as authentically as possible in the world. When Shakespeare said, "know thyself and to thine own self be true," he summed it up best. Self-inquiry is the doorway to an authentic life, and critical thinking, therefore, turns out to be an important key. Of course, sometimes the door has more than one lock! Self-care, intuition, the development of character; all of these things help. The reason I have highlighted critical thinking first is that it can be easily overlooked in the spiritual marketplace. It is often not valued the way it should be. But if we don't care about the foundations of our beliefs or how we arrive at our answers, we will certainly be duped. My own teacher had a sign at his door that said, "First, you must think for yourself."

So I'm a huge fan of reason; however, when I find myself, yet again, bound by the shackles of my own ego, it has been humility and a renewed openness to grace that has freed me. My point here is not that these values are exclusive. I think both my yoga training teachers, Julian and Hala, impressed clearly upon me the wisdom of living an integrated life, a very compelling prospect for someone like myself who had suffered in the past from a traumatic shattering of identity, and all the distortions of emotional experience that accompany a fragmented existence. My teacher training and the deepening of practice that it concurrently encouraged has certainly brought me to a whole new level of integrity and stability. But in the process of getting there, the role that grace has played has been huge. I will certainly claim ownership of the work I have done, but in the same breath I have to acknowledge that I have received much help, from people, and also what I consider magical circumstances, that has guided me through some of the most difficult issues and beyond the condition I was in: unstable, confused, irresponsible, and wedged in profound emotional pain. At that time, reason alone could do almost nothing for me. Indeed, it was the repeated act of emotional surrender that paved my way home. It was the admission that I didn't know what the Universe was up to that helped me find my place in it, and the deep and simple conviction that I fundamentally belong in the world was enough to begin to reorganize my experience in a positive way.

This brings me to Jack Kornfield. I think spiritual practice involves two main things: the adoption of specific attitudes and the application of tools to stay present with reality and to effect change. Always beginning where you are. Before I ever read *A Path with Heart*, I had spent years in the application of certain tools, including psychotherapy, 12 step work, shamanic drumming and dreaming rituals, formal and ecstatic dance, yoga practice, and art therapy, to name a few. The most significant attitude adjustments I needed to make in the early days of my professed spiritual life (which I mark by the end of my drug addiction) involved caring more about others, caring more about myself, accepting defeat, learning patience, getting honest, unleashing the power of gratitude, and persevering through, instead of away from, the discomfort of my feelings and circumstances, to also name only a few. I discovered sitting meditation through yoga and had applied it to strong effect for a few months at one stage of my life, but focused more on moving meditations, such as dance and asana, during the years prior to my yoga training. When we

began our teacher training, there was again an emphasis on sitting meditation and this is where Jack Kornfield really shines for me.

A Path with Heart is one of the most beautifully written manuals I have ever come across on meditation, and how to approach it skillfully. There are many forms of meditation, but one of the simplest and also the most widely practiced in the West is Vipassana meditation, commonly referred to as mindfulness meditation. Vipassana is based on the principles of sati and anapana, which can loosely be interpreted as awareness and breath, respectively; these principles combine to promote the cultivation of insight through an awareness *of* breath. This awareness is later extended beyond the breath to the myriad sensations of the physical body. (In my own training, the application of a Vipassana style of attention on the sensations was emphasized, during asana but also especially on the sensations that relate to the unwinding of thoughts and feelings. More on this later.) The beginner's instructions for Vipassana couldn't be simpler. Sit comfortably and bring your awareness to the inhalation and exhalation of each breath. When the mind wanders, which it most certainly will, bring the attention back to the breath. These directions are simple enough for anyone to begin to practice. Sooner or later, however, almost everyone will make the astute observation that the mind is an unruly beast. Good to know! The practitioner is likely to experience some tangible benefits through practice in calming the mind. However, also somewhat likely, the mind may not settle. In fact, we might become *more* agitated, restless, and critical, and consequently confused by these results, unless we are provided with further guidance. *A Path with Heart* is a tremendous resource for those who need and want this guidance. In the course of our training, we read selected chapters in the book; each concluded with a different variation on the classic Vipassana technique, delving deep into the kinds of phenomena that are likely to arise during meditation and always urging us towards a kinder and more loving attention, eloquently suggesting ways to make the most from all of our difficulties. Kornfield delivers a gem when he writes, there is a special kind of peace in "the heart that has rejected nothing" (Kornfield, 27). Through beautiful stories and thoughtful meditations, he shows us how to skillfully embrace it all.

One of the main reasons that additional guidance is so crucial in our culture is that mindfulness, as it is practiced in the East, is usually situated in some form of Buddhism, which provides an ethical framework with a synergistic set of values and attitudes that assist the

practice, notably compassion. This is not a promotion of Buddhism necessarily. Perhaps there is good reason, even necessity, for certain kinds of suffering, although the desirability of alleviating the root of most suffering, whenever possible, seems self-evident and life-affirming, and stands as one of Buddhism's main objectives. An in-depth look at practices in Eastern cultures is well beyond the scope of this paper, but I felt this should be mentioned because Jack Kornfield, who is clearly influenced by these philosophies, does a very good job of encapsulating Buddhist principles in a way that a Westerner can appreciate and understand. One of my favorite parts in his book is when he talks about the importance of healing and describes meditation as primarily a practice of grieving and letting go, with the understanding that buried underneath our irritations with life, there are usually feelings of sorrow, anger, denial or loss, that we have not been able to process effectively. He often quotes others, and he says Achaan Chah put it this way: "If you haven't cried a number of times, your meditation hasn't really begun" (Kornfield, 40). As we heal through meditation, our hearts break open to feel fully. To my mind, this level of intimacy with ourselves is revolutionary. And if someone just tells you to sit and watch your breath, you would be practically missing the point. There is also a fabulous chapter that deals with difficult problems and what he calls "insistent visitors." Meditation isn't about shutting the mind off, but rather lessening it's chatter so that we can attend to what's arising inside. He writes, "When any experience of body, heart, or mind keeps repeating in consciousness, it is a signal that this visitor is asking for a deeper and fuller attention" (Kornfield, 102). Indeed, in my experience, I have also discovered that my problems have been "the very place to discover wisdom and love," and when meditation is practiced in concert with a sincere desire to face reality and be the best person we can, it becomes one of the most practical tools for effecting this transformation (Kornfield, 71). Self-compassion is an indispensable piece in this process and one of my favorite poems by Antonio Machado describes the deep and moving power of forgiveness thusly:

Last night as I was sleeping,
I dreamt...
that I had a beehive
here inside my heart.
And the golden bees
were making white combs

and sweet honey
from my old failures.

Inner transformation couldn't be described any more beautifully than that.

I would like to move on from here to explore some of the developments in Neuroscience that promote meditation and help us to define the mind-body relationship, but before I do I feel that I should pause here and make one more comment about meditation practice in the West. Yoga practice is often described as simply a way to prepare the body for meditation; and I have hoped to convey that I feel the quality of meditative self-reflection that comes through an *embodied* awareness is vital to personal inner work. That physical piece is so important (we'll understand more later when we look at the mind-body relationship). However, I think it would be imprudent here not to mention that there are some tricky areas, not just in discerning which attitudes we adopt towards our internal life (which I suggested earlier), but especially with regard to how we integrate a meditation practice and our process of self-discovery with our lives as members of society. Most meditation techniques, in fact all of yoga as well, stem from the traditions of monks and nuns and yogis who practiced a renunciate life. Whether a renunciate life is healthy is the subject of another paper, but suffice to assume that at least *some* religious and ascetic groups serve a good purpose for humanity at large. The overwhelming rest of us are people that might be called householders, those whose life lessons are best met through interaction with the world rather than in seclusion. Author and meditation teacher Lorin Roche observes, "Householders live in the world and evolve through working and playing with it" (Roche). I think there are certainly appropriate times for householders to visit monasteries or to seclude themselves for purposes of healing, perhaps when handling issues that are too sensitive to be dealt with while engaged in modern daily life. Retreats are often set up to serve this purpose. Though as poet John Burnside notes, "To imagine that one can simply withdraw, and somehow achieve peace, or wisdom, or detachment, is a mistake. It is also, in most cases, inappropriate, selfish and even cowardly. With a few exceptions, the only valid withdrawal is a temporary one." So this is a pretty huge topic, but it can come into play even with a personal yoga or meditation practice, or any "spiritual" path for that matter. It's crucial to be honest with ourselves about why we are doing things, and it definitely happens that people misuse their practice, or some spiritual idea, as a

means of escape, rather than as a tool for developing an integrated life. Essentially, the point I am hoping to make is that we don't want a practice that fosters detachment or dissociation from ourselves or others. What we do want is a practice that connects us to our true feelings, whatever they may be, and gives us the courage to form relationships and to honor them.

I hope I have done my due diligence in giving a few words of caution. There is much more to be said about pitfalls and confusions surrounding this field of inquiry. To anyone seriously interested in any of this, I would suggest further study of the work of Jack Kornfield and Lorin Roche, who have both written extensively and intelligently on the many dangers of spiritual seeking. (I can also specifically recommend the book *Meditation Secrets for Women*, written by Roche and his wife, Camille Maurine, for anyone interested in a feminine perspective on practices which are historically dominated by the male narrative.) Regarding the asana of yoga, practicing without physical injury is clearly a good idea too, though this can be navigated somewhat easier if you listen to your body and choose teachers who are capable of delivering a safe class (not always easy to find!). This is one of the highest priorities for me as a teacher as well.

And now, without further ado, I would love to dive into the magic of the nervous system and explore some of the Neuroscience of the mind-body relationship. I graduated from UCLA with a degree in Neuroscience and I was thrilled that my Awakened Heart Embodied Mind training included further exploration of current research. My interest in the field was born in college from a desire to understand myself better, and especially to understand processes I was so familiar with surrounding addiction, trauma, altered perception, recovery and healing. I wanted to know how the reward system of the brain governs behavior, how it can be hijacked and sometimes restored to support healthy functioning again, how identity is formed and changed, the ways that perceptions and emotions connect or disconnect us from reality, how beneficial altered states differ from mental illness, how beauty and music and art and dance and even stillness stimulate us to feel more deeply, and how practices like yoga facilitate healing on a neurological level. In short, I wanted to know a lot. The degree was wonderful, and I certainly learned something about the reward system, the ways that neurons communicate, the structures of the brain associated with different functions, motor, sensory, language, memory, all the types of cells involved, research methodologies, and markedly, I was introduced to the concept of

neuroplasticity, which has to do with how the brain changes itself, sometimes in miraculous ways. So needless to say, when I started my yoga training a few years later, I was seriously excited that we would be exploring more of the concepts and research in Neuroscience, specifically as they relate to yoga.

This is a massive subject to discuss, so I'll only touch the tip of the iceberg, beginning with an overview of the main scientific findings of research on mindfulness; then I'll move on to review the sympathetic and parasympathetic nervous systems, the impact of trauma and chronic stress on these systems, the resolution of trauma (specifically how different brain regions are involved in this process), and the role of the brain's mirror neuron system in the development of empathy, a vital part of almost any healing process.

One of my favorite neuroscientists, Dr. Dan Siegel, defines mindfulness as any practice of “intentionally focusing on the present moment without judgment,” such as mindfulness meditation, though he includes movement practices such as yoga, tai chi, and qigong (Siegel, “Science of Mindfulness”). There is gobs of research on the effects of mindfulness practice, especially the Buddhist-inspired program of Mindfulness-Based Stress Reduction (MBSR) created by Jon Kabat-Zinn in the late 1970s. MBSR is a secularized version of Vipassana meditation which has been studied extensively and is now applied widely in the medical community to help treat a range of chronic disorders, including depression, ADHD, chronic pain, obsessive compulsive disorder, drug addiction, and even HIV and cancer (Siegel, “Science of Mindfulness”). Including MBSR in certain disease treatments has shown positive effects on immune system function, but for now, I would like to focus on the impact on mental health. When subjects with a range of mental health disorders went through an eight-week MBSR program, Siegel states that they were “able to alter their brain function in a way that confirmed they could distinguish the ‘narrative chatter’ of their baseline states from the ongoing sensory flow of here-and-now experience.” He says, “this ability to develop discernment—to differentiate our unique streams of awareness—may be a crucial step for disentangling our minds from ruminative thoughts, repetitive destructive emotions, and impulsive and addictive behaviors” (Siegel, “Science of Mindfulness”). He uses the term “mindsight” to describe this acquired capacity for self-observation without judgment.

The scientific literature is conclusive on the benefits of practice towards mental and emotional well-being. Mindfulness meditation leads to enhanced attentional capacity, focus, boosts to working memory, and cognitive flexibility, as well as improvements in emotional regulation, less emotional reactivity, less impulsivity, fear modulation, and stress reduction. Quite the winning jackpot!

So what exactly happens to the brain as mindsight is developed and all these additional subtle, subjective changes occur? It turns out that mindfulness practice enhances neuroplasticity in key brain regions, making these truly mind-altering changes possible, and some scientists speculate, potentially opening the door for cascades of other changes in areas where we might be consciously working, or learning, concurrently with our meditation practice. (Once neuroplasticity is “on,” we may be able to harness it!) The physical changes that have already been documented include increased cortical thickness in the prefrontal cortex and right anterior insula, regions associated with attention, interception, emotional regulation and sensory processing (Lazar et al.). Research has also shown an increase in the white matter density, or myelin, the sheathing that surrounds the axons of neurons, and facilitates neuronal communication, in as little as four weeks of meditation (Yi-Yuan et al.). Lastly, of note, researchers have found a reduction in activity in the amygdala among meditators, both during and outside meditative states. The amygdala is involved in processing emotional stimuli, and the results suggest that improved emotional regulation is a benefit that endures even beyond the period of practice (McGreevey). Indeed, Dan Siegel explains it this way, “with repetition, an intentionally created state can become an enduring trait of the individual as reflected in long-term changes in brain function and structure” (Siegel, “Science of Mindfulness”).

Now let’s take a look at what goes on during yoga and meditation through our understanding of the sympathetic and the parasympathetic nervous systems. These systems, together with the enteric nervous system, form the three main branches of the autonomic nervous system, which serves to regulate and control the visceral functions of the body, largely below consciousness, such as heart rate, respiratory rate, salivation, perspiration, et cetera, everything that can and usually does carry on involuntarily. In the brain, the systems are regulated in the lower brainstem, but the sympathetic and parasympathetic branches “talk” to

the body through the spinal cord, and have their cell bodies in specific sections of the spinal column, innervating the organs, smooth muscle, and glands. The two branches “perform integrated and usually opposed actions to achieve their mutual ends: harmony and synergy of visceral functions” (Diamond, Scheibel, and Elson, 8-1). The sympathetic branch is more active during states of arousal, such as emotional excitement, physical exercise, and even simply waking up from sleep, and is also responsible for the “fight-or-flight” response during times of stress, when the body surges with adrenaline and cortisol. In contrast, the parasympathetic system is responsible for the “rest-and-digest” response, and helps with functions that typically take place at rest, including digestion, relaxation, glycogen synthesis, sexual arousal, as well as cell repair. In other words, the sympathetic system expends energy, while the parasympathetic system conserves energy, and while there is ideally a gentle play between the systems to achieve balance, these systems can get more than a little out of wack when we are under stress. Simply put, the wonderful thing about yoga and meditation is that they can help bring the parasympathetic system back online, so that we can achieve the deep rest and relaxation that we need to reach homeostasis.

The fact is, in our over-stimulated society, most of us live our daily lives in a state of hyper-stress, so the experience of an overactive sympathetic nervous system is more-or-less the norm. Most of us are well-accustomed to anxiety. Unfortunately, this can lead to a multitude of health problems, from low immunity to digestive problems, chronic inflammation, hypoglycemia, and weight gain, and to even more emotional and psychological problems. There are a number of reasons for the stress in our lives. When it is brought on by external circumstances, sometimes it is best remedied through a change of circumstance, but just as often, the source of our stress is internal. In some cases, our stress is also amplified or caused by unresolved trauma. This is something that I’d like to elaborate on, and it will be useful to consider Peter Levine’s definition of trauma in this discussion. He describes it as the “debilitating symptoms that many people suffer from in the aftermath of *perceived* life-threatening or overwhelming experiences,” clearly differentiating it from everyday stressful occurrences that some people call “traumatic” (Levine, 7). While it’s true that stress and trauma affect the body in similar ways, through over-activation of the sympathetic nervous system, trauma also makes other impressions on the brain and nervous system. The sympathetic nervous system responds to a perceived threat with an all-out

“fight-or-flight” response. What happens in the aftermath of that response is what determines whether the traumatic event is resolved or not.

In his book, *Healing Trauma*, Peter Levine looks at the way that animals in the wild deal with life-threatening situations to gain insight into the human experience. He also better describes the “flight-or-flight” response as a “fight-flight-or-freeze” response. In the last case, when animals immobilize themselves to avoid danger, the same energy that was generated to fight or flee is present in their bodies. The amazing thing that he observes is that when an animal is then out of danger, it will expend that energy, visibly shake its body and limbs in a dramatic and unabashed fashion, before it moves on as if nothing had happened. The difference between animals and humans is essentially that while animals in the wild will do this spontaneously and instinctively, human beings, with our rational minds, “are often frightened by the intensity of our own energy and latent aggression, and [so] we brace ourselves against the power of the sensations” (Levine, 30). One of the main points that Levine is getting at is that trauma is primarily a physiological condition, so awareness of the body becomes very important in healing, and finding ways to discharge the instinctive survival energy that remains in the nervous system is crucial (Levine, 31). This can happen for people in a number of ways, in therapeutic settings, on a yoga mat, through ecstatic dance, also through skillful forms of massage or bodywork. Sometimes it is purely the energetic release that’s necessary and other times, there may be thoughts and memories that accompany the unwinding. Healing trauma is the subject for a book, so I can do little more than make a few generalizations here.

Let me just move on to a few key brain structures involved in holding and — hopefully! — resolving trauma, which is obviously a very complex process. While Levine explains that trauma can often be resolved through a discharge of energy, in the book I reference, he also presents a 12 phase how-to guide grounded in somatic psychology to help people process trauma. When trauma has been held for a long time, it can effect our minds and emotions in even more complicated ways. The aspect that I’d like to talk about is in the way that the memory of traumatic experience is stored and accessed in the brain.

I like to use the model of the triune brain for the purpose of this discussion, which divides the brain into three layers: the reptilian complex, the limbic system, and the neocortex, which correspond very roughly with the instinctive, emotional, and reasoning functions of human beings. The reptilian complex houses the machinery for the “fight-or-flight” response. The limbic system includes two brain regions of interest, the amygdala, which stores *implicit* memories, the most primal and impressionistic kind, unattached to time or place, and the hippocampus, which stores *explicit* memories, memories which are integrated with information about setting, time, sense of self, and emotional nuance (Khouri and Walker). In the neocortex, memories are then situated in the context of our life story and relate to more sophisticated aspects of our identity and views about the world. These are called *narrative* memories. Essentially, what happens during overwhelming stress or trauma is that the hippocampus shuts down and the memory of the event is not integrated at the level of the hippocampus or neocortex, and only partially or completely in the amygdala. My yoga teacher, Julian, explains that when the memory is then “triggered” by an association or stimulus, “we are vulnerable to being flooded by the primal energies and feelings of this experience, but we often don’t recognize this as a memory, because it has no time and place content” (Khouri and Walker). There is also the sense that the implicit memory is happening right now. The nervous system activates the “fight-or-flight” response all over again and we are thrown back into event, distorting our perceptions of the present, and often reacting in ways that are out of proportion to what’s happening in the moment. Julian points out that this “often comes up most powerfully in our closest relationships, because these trigger our unconscious implicit memories of family dynamics and childhood trauma” (Khouri and Walker). However, when something triggers us, it also may be one of the best opportunities we have to begin to resolve the underlying trauma, by recognizing the trigger, staying present with it, and eventually allowing the integration process to level-up through the hippocampus and the neocortex. This sometimes leads to “insights about the time and place of the memory as well as the sense of self and emotional nuances that were present” (Khouri and Walker). As a yoga teacher, I think it is really important to recognize that people bring this full spectrum of experience into the room. Trauma is part of every human life, and whether we acknowledge it or not, it’s there under the surface. All the feelings which make us uniquely human are there. We bring grief, shame, fear, and pain, wherever we go, as well as our enthusiasm and our joy. Yoga class is not always going to be the best place to process certain aspects of our lives, but the yoga

community and especially yoga teachers should be mindful to provide some support and guidance in these issues since yoga can be so therapeutic when practiced in concert with inner work.

The last topic that I am excited to write about is the mirror neuron system of the brain and its role in the human capacity to experience empathy and compassion. Empathy is the essential basis for compassion and it turns out that our ability to empathize with other people is largely governed by groups of motor cells in the brain called mirror neurons, which activate when we observe someone do something *and* when we are performing the action ourselves. So, for example, when I watch you pick up a cup of coffee, the same neurons fire as when I am picking up a cup of coffee myself. Furthermore, there are cells that fire to simulate the emotional states of others in our own brains. As I talk to you, and you smile, I literally begin to resonate with your facial expression and may spontaneously crack a smile myself. This happens without deliberation. According to Marco Iacoboni, lead researcher in the field, the mirror neuron system is what enables us to get “easily into the minds of other people” (Iacoboni). It appears to play a fundamental role in theory of mind, our ability to speculate about what other people are thinking or about to do, as well as in learning through imitation, and empathizing, finding resonance with other people’s feelings.

During development, children learn about empathy by example. In an interview with Edwin Rutsch, Dan Siegel remarks that “when kids are able to watch an interaction that’s empathic, empathy isn’t just being taught; it’s being demonstrated” (Siegel, “Dialogs”). He further explains that, “when we attune with others we allow our own internal state to shift, to come to resonate with the inner world of another. This resonance is at the heart of the important sense of ‘feeling felt’ that emerges in close relationships. Children need attunement to feel secure and to develop well, and throughout our lives we need attunement to feel close and connected” (Siegel, “Dialogs”). In psychology, this phenomenon is called “mirroring.” In dysfunctional or alcoholic families, people often experience the opposite. Kids that are neglected or ignored, who do not have their perceptions and feelings routinely acknowledged and validated, never learn to trust themselves and become disoriented when they approach the world. It turns out that “feeling felt” is one of the most vital pieces we need for healthy development.

Receiving empathy is also essential when it comes time to heal. And there is an interesting place for some healing within the walls of a yoga class. As we emulate the postures of the teacher and synchronize our movements with our fellow students,

...this creates a shared experience of breath and posture that powerfully engages not only a tribal sense of belonging, but also a shared experience via the mirror neuron system... We ride the wave together of warming up, working hard, having peak moments, and cooling down into rest and meditation. This energetic arc may also include space for compassion toward one another, especially if the space is held in a way that permits deep feeling. In a culture that is often uncomfortable with (or judgmental toward) vulnerability and emotional open-ness, the communal sacred space of yoga can foster permission to trust our emotional intelligence and feel the connection that comes from being empathic toward our fellow yogis (Khoury and Walker).

It's quite fitting to transition to my conclusion with the above quote from my teachers Hala Khoury and Julian Walker. Hala is exceptional, and Julian, who I have taken more classes with, is one of my favorite yoga teachers of all time because of this remarkable ability as a teacher to conduct classes that permit such deep feeling. I have routinely been in his classes when people are crying and laughing and groaning, and even moaning in ecstasy. This may sound strange, and believe me, it is. But it also feels safe. It is certainly not everyone's cup of tea, but it is definitely the kind of yoga that I have the greatest appetite for. I get that not everyone is inclined towards this level of intimacy with a community, and I suspect that it probably has a lot to do with being an artist that I feel drawn towards environments where I can be authentic in the full spectrum of who I am. For myself, it is simply inadequate to chat with a friend or write in a journal to process stuff; though I love chatting and writing, I also need to move, to dance, to shake, to paint, to scream with my body and words, and to collapse in a heap on the floor when I feel desperation — which naturally brings me to my other life-long loves, ecstatic dance and art.

If I could do anything as a teacher, I would want to bring these healing art forms together. Authentic movement, meditation, and art; in other words, yoga and dance that nurture

honesty, and a quietude beneath creative expression that actually connects with and presents the depths of our psychic material.

I haven't said much about dance, or defined ecstatic dance yet, and I have to look to Gabrielle Roth as one of the pioneers of this practice in modern times, though it is truly as old as humanity. African dance is certainly a form of ecstatic expression that people may be somewhat more familiar with, and I have had a love affair with it, too. The practice that Gabrielle Roth developed she called 5Rhythms. Roth was based in New York and I never had the good fortune of meeting her as she passed away a couple of years ago, but her approach to movement had substantial roots in Los Angeles where I attended college. I spent every weekend dancing the way she taught. The 5Rhythms is non-choreographed and focuses on five body rhythms: flow, staccato, chaos, lyrical, and stillness, to move the person into a state of freedom, beyond any shyness and inhibition, to a place of open, creative, primal expression. This is not exactly what goes on in dance clubs, not to diss the nightclub experience, but simply to differentiate this as a practice which is meant to encourage greater inner awareness and respect for others in the room, rather than simply a catharsis, a numbing, or a hunt for sex. Of course, the power of our sexuality and sensuality may be present, but those aspects are mixed with a wide range of other qualities. Our playfulness and curiosity extends into every other corner of who we are.

I should also speak about art. I have always been an artist and I am largely self-taught. The one teacher who I can credit with the most influence has been E.J. Gold, who is both artist and shaman. His instruction for me was not so much technical but rather an orientation towards art as a process of self-discovery, seeing with a holistic focus, and bringing beauty and insight into expression. I'm sure not all of my art reflects this, but some of it does and perhaps different pieces do so in different ways. It is a constant reaffirmation to create along these lines and I think I have many years ahead of me to bring more to fruition that conveys this inner longing. In the meantime, if I could pass on some of the incredible gifts that have already been given to me by my own teachers, that gives me more than enough to start teaching. Over time, I am sure I will have something unique to add.

I hope I've given a decent summary of why embodied practices and self-expression matter so much to me, and what excites me on my own journey. With gratitude, I look forward to sharing it with others.

Works Cited

Desikachar, T. K. V. *The Heart of Yōga: Developing a Personal Practice*. Rochester: Inner Traditions International, 1995. Print.

Diamond, M.C., A.B. Scheibel, and L.M. Elson. *The Human Brain Coloring Book*. New York: Harper Collins, 1985. Print.

Iacoboni, Marco. Interview by Edwin Rutsch. *Dialogs on How to Build a Culture of Empathy*. Center for Building a Culture of Empathy, 2012. Web. January 26, 2012.

Khouri, Hala and Julian Walker. *Awakened Heart, Embodied Mind: Contemporary Training in Mind-Body Yōga*. n. pag. 2012. Retrieved from the authors.

Kornfield, Jack. *A Path with Heart: A Guide Through the Perils and Promises of Spiritual Life*. New York: Bantam Books, 1993. Print.

Lazar, Sara W, et al. (2005). Meditation experience is associated with increased cortical thickness. *Neuroreport*. Nov 28, 2005; 16(17): 1893–1897.

McGreevey, Sue. *Meditation's positive residual effects*. Harvard Gazette. n. pag. Nov 13, 2012. Retrieved online August 1, 2014 from <http://news.harvard.edu/gazette/story/2012/11/meditations-positive-residual-effects/>

Roche, Lorin. *Dangers of Meditation; A Tale of Two Paths: The Renunciate and the Householder*. n. pag. n. d. Retrieved online June 30, 2014 from <http://www.lorinroche.com/dangers/dangers/2paths.html>

Siegel, Daniel. Interview by Edwin Rutsch. *Dialogs on How to Build a Culture of Empathy*. Center for Building a Culture of Empathy, 2012. Web. October 15, 2012.

Siegel, Daniel. *The Science of Mindfulness*. n. pag. n. d. Retrieved online July 22, 2014 from <http://www.mindful.org/the-science/medicine/the-science-of-mindfulness>

Tang, Yi-Yuan, et al. (2012). Mechanisms of white matter changes induced by meditation. *PNAS*. May 9, 2012; 10.1073/pnas.1207817109.

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