

In this essay I will endeavor to explore the rather sticky issue of trauma. As with the other essays on this website my primary aim in this essay is to provide the reader with some useful information on a topic that is frequently important in my work with clients and students alike. In the particular case of this essay and my focus on a topic that will strike to the quick for some readers, I want to say at the outset that although this topic may be personally painful to some, it should be of interest to all. I can think of at least two reasons for this bold assertion. One, that all people have a limbic system, and thus all people need to understand how that limbic system works. Two, trauma is at epidemic proportions in the United States. Trauma impacts a huge segment of our society, costs billions of dollars per year in extra medical costs and lost productivity, and is obviously a tragedy that any normally compassionate person should hope to see end entirely (a quick Google search will bring up information from the CDC that can get you started if you want to read more). We will never eradicate the random chances of life that sometimes lead to traumatic situations such as car accidents, but we may very well and I believe absolutely should curtail the kind of situations that lead to child abuse and neglect.

For those who are touched personally by these issues, please read this essay with caution. One of the main goals for working with trauma is to improve resilience first, to give the person enough of a sense of their health and wholeness that they feel able to turn to the hurt places. If you are early in your journey you need to be careful. The nature of trauma is that the traumatized person has lost much of their capacity to flex with the ups and downs of life and becomes overwhelmed more easily than they did or would have previous to the trauma. The overwhelm can easily slide into hypervigilance, a state that the traumatized person is all too familiar with but from which they can not easily escape. Once in hypervigilance the person may slide further into a state known as dissociation, a state in which they can literally lose all sense of themselves for extended periods of time. Although both states, hypervigilance and dissociation, are defenses for us, they are meant to be used only in rare circumstances. Repeated shifting in and out of these states is very costly, both metabolically and psychologically, and can become cyclic and out of control, leading to what we call PTSD in clinical terms, or misery in everyday terms. If you are such a person then be aware that although I do not intend to use any clinical examples in this essay, the

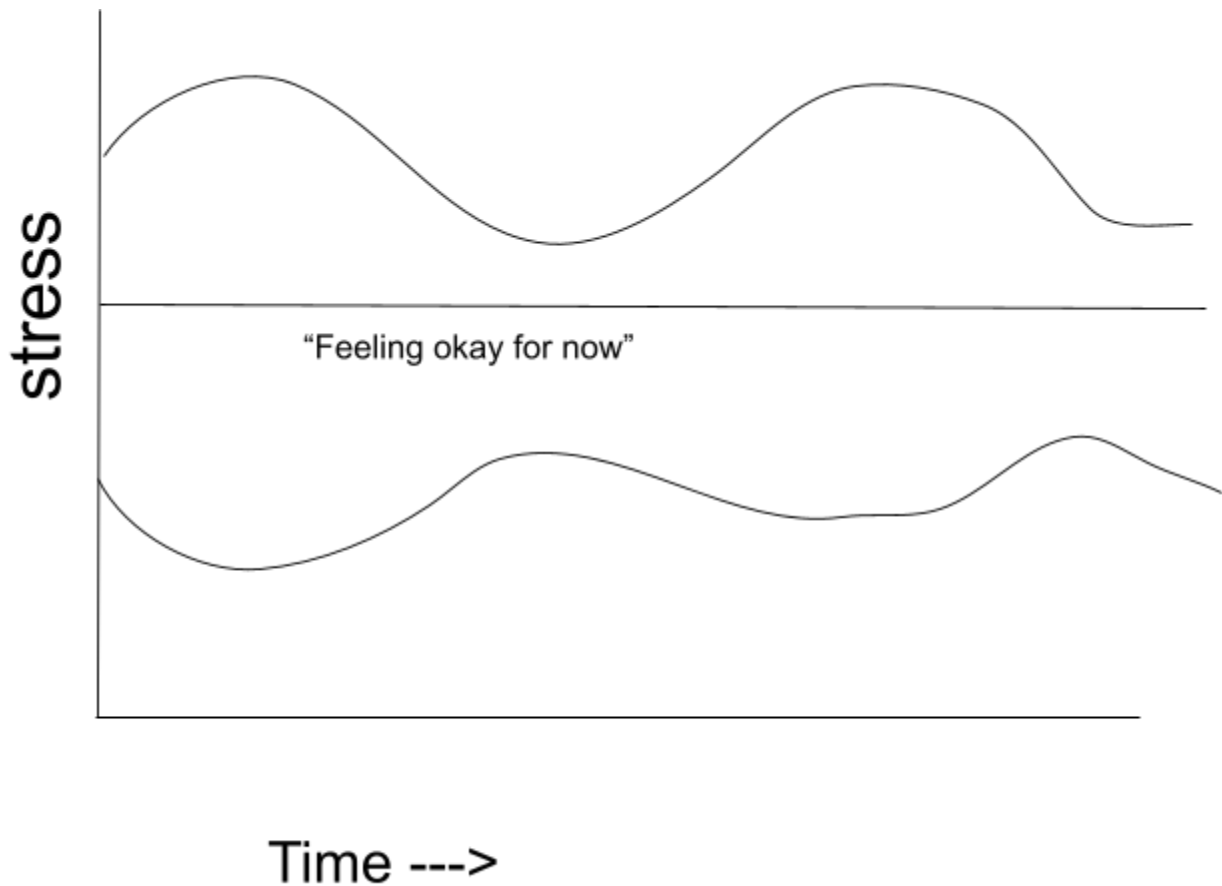
stories are too upsetting to share, even talking about trauma in the abstract and general terms I will use here can still be upsetting. One of your main pathways to healing will be to develop the capacity to monitor yourself, your state of arousal in particular, and to choose habits, practices and relationships that help you settle when you are overstimulated. These same habits, practices and people then also become your refuge during times when you feel ready to explore and process the hard stuff. Resource, explore. Resource, explore. Left foot, right foot. Left foot, right foot. We get there one step at a time in cycles of resting and storing up internal and external resources, working by leaning into our traumatically tinged experience, then taking the time to process, and then we resource again.

Affect and the Window of Affect Tolerance

The limbic system is mostly what is out of whack in trauma and it is also the main system involved in relationality, one of the single most important areas of any human life. Thus, learning how to assess our own states and needs for purposes of trauma work is not fundamentally different from assessing and adjusting our states in day to day life, it is just that the range within which we have space to think and feel freely and adjust those states is much curtailed in trauma. One way to think about this is via a concept called the window of affect tolerance.

Below is a simple image of a window of affect tolerance. The top line represents a person's maximum level of tolerable stress, and the bottom line represents their minimum level. Right away many people are surprised to learn there is a minimum level, so let us pause there. Stress simply means anything that causes the organism to react, it is neither good nor bad in and of itself. Exercise is a stress, but if done properly adds to our health and resilience. Relationships are the same, though more complicated usually. So we like a certain amount of stress. The fact that the amount of stress a person tends to prefer is bimodal (when we graph it it has two humps) is what we mean by introversion and extroversion in psychology. Introverts, on average, have a lower level of optimal stress than extroverts, on average. That's all introversion and extroversion really means and it doesn't seem to matter much whether we are more introverted or extroverted as far as outcomes go, although our society does tend to

reward extroversion more than introversion on the whole, particularly in males.
Anyway, the salient point



here is that whatever your personal baseline is, it is in the approximate middle of a possible range of stress within which you, as a mammal, will react in predictable ways. If life begins to stress you, it doesn't ultimately matter what type of stress it is in general terms, you have some upper limit and some lower limit. Most people are familiar with this fact of life. Taking a parent for example, they can handle the whining and crying of one child and the low grade fever of the other, but throw in a partner who forgot to take out the trash, a reality that dawns just as the trash truck is heard rumbling by, throw in some financial stress or relational stress or medical stress in the background, and you have a minor freakout on your hands by some or all members of the family. Again, these are generalities for the present, each individual has a range of tolerance that we call resilience (they spring back to baseline after the stress passes), and each individual has an upper limit and a lower limit of what they can tolerate, and

that resilience shifts through the day with a wide variety of factors impinging on the person's state ranging from blood sugar to all the various circumstances which will be some combination of pleasing and stressful. When we get to the absolute upper limit of what we can tolerate, we shift into hypervigilance, and completely different neuronal pathways and systems take over from the usual ones.

Let me be clear that I am not talking about an everyday freak out as described above now, but a true state-shift into what we commonly call "fight or flight." Either through the intensity or chronicity of the stress or combination of stressors that the person is under, they don't just have a crying jag or an angry yell, they really go somewhere else entirely. Now, I'm not trying to tell you how to feel about yourself, whatever the worst thing you've ever experienced is is your personal ten out of ten, but some people's tens are a f*** of a lot higher than others. So although it doesn't help to play the comparison game between people's subjective experiences, it is important to be aware of clinical differences. Even something as stressful as a full blown panic attack is not necessarily hypervigilance. In other words, you may be that person with the two sick kids and the late mortgage and the sick father-in-law you are worried about, and you may feel like you are at the end of your rope, but you're not, or you might not be, or you might be. You won't know until you experience hypervigilance, and I hope you never do, because it isn't really good for you. But what I am saying here is simply that many people have some version of life stressing them to the max, and they discover they are stronger than they believed possible of themselves. Others discover they have hit their true limit, and they shift into hypervigilance or hypovigilance, and that is something you only know if you've been there.

On our graph, the man or woman juggling the sick children and whatever else "freaks out" in the sense they get really upset, but they are only at, let us say, 88% of their true max at the moment. They cry for a while, or use some foul language, or go take some time alone, or whatever they do when they are very upset, but they are still thinking more or less, still in possession of themselves. They are still within their window of affect tolerance. Though they are certainly *not* happy, they do return to baseline over some amount of time. How well and how quickly they can return to

baseline of course varies widely with many factors and some people will want to consider learning better skills or habits, or will want to do a little introspection about childhood and come to some insight about their particular lives and personality, but they are not hypervigilant. Hypervigilance is truly an entirely different state.

Nature Videos

So those readers who have been there know what I am talking about but don't necessarily know how to talk about their experience, and those who haven't been there still aren't quite sure, so we need an example. Here's the one I usually use in my office.

Remember those nature videos you loved and probably still love? Remember the little gazelle grazing with its gazelle friends, while the cheetah or lion or what have you stalks in the background? Right? In the mood?

You're the gazelle. Happily munching in your herd you are at baseline on our graph above. You hear the grass rustle and alert, your ears perk, you sniff for sign, your little gazelle heart beats faster than usual just in case...you are at maybe 65%. No sign, no more rustle, back down goes the head to munch grass...back to baseline. Repeat for dramatic tension.

Now up goes the head again, this time the cheetah is just out of range in the high grass. Our little gazelle, that's you, *feels* there is something amiss, but cannot identify the danger -- a very uniquely uncomfortable state some of you will be familiar with as your personal baseline -- and then you know what happens.

There are a few possible scenarios we have all seen, but let us say it is the chase scenario. In the case that the cheetah goes for it and is not immediately successful because the gazelle are too far away to pounce on, then it's a race. But not a footrace in the usual sense, rather this is a hypervigilant, all or nothing, life or death, sprint. Our little gazelle, that's you, has without any thinking about it gone from baseline to hypervigilance in less than half a second and is running like mad, the cheetah in hot pursuit.

If the gazelle gets away, what happens? PTSD? No. Back to baseline. Back to grazing with the gazelle friends and no funeral for the one who didn't make it, just back to gazelle life. An important observation we will return to in a moment. But if the gazelle gets caught, that's dissociation. Have you seen this? If not, go and find a nature video where the predator has caught the prey and watch very carefully. The prey is not dead, it is alive, but it is somehow *not there*. There are even cases of predators catching prey, but not actually being hungry enough to finish the kill, and the prey springing back into hypervigilance and running again after a few minutes.

This is all vertebrate biology folks.

You are a mammal. A very smart mammal. But a mammal nonetheless.

The part of your brain that most people feel makes them them, is only a very small part of your brain. When shit hits the fan, the you that you are familiar with takes an automatic back seat to different parts of the brain that are hard wired to take over and not ask questions. Typically this is hypervigilance first followed by dissociation, but there are other potential pathways and every individual does have idiosyncracies, but as a rule of thumb, every vertebrate possesses some upper limit of stress tolerance that when they hit it, older, survival oriented parts of the brain take over. It is possible to shape a person's tolerance for stress through training and habituation, this is part of what the military obviously needs to do to keep soldiers ready for action despite placing them in life-or-death situations, but we still all have some upper limit, and when we hit it no amount of training, intelligence, will power, or whatever else you are telling yourself should work, works. A different part of the brain has taken over, and all we can do is try to soothe.

Soothing/Improving Resilience

Now, speaking of soothing, how do we do that and why wasn't that little gazelle who got away traumatized?

Gazelle, being mammals like us, utilize their social connections as one of their main pathways of regulation. In other words, like us, their internal state is partly dependent on internal cues like blood pressure, state of hunger, level of pain, etc., but also dependent on the states of the others around them.

Gazelle, unlike us, and I certainly don't mean any offense to them as a group, don't seem to be deep thinkers. To make a gazelle happy, for it to have internal cues that are pleasing in other words, we really only need a herd, some fresh grass, and some mating opportunity. That pretty much checks the boxes. Meanwhile, not big on stories gazelles. If it was a group of early humans that had encountered a predator and barely escaped on the other hand, you know Ug would tell the story a million times. He would tell how he felt the breeze of the claws as they whistled by just millimeters from his pelt. How he could feel the cheetah's hot breath on the nape of his neck. But you also know he would slowly become the hero of the story over the course of time and the unending seeming (to everyone else) repetitions, and eventually he would become firmly convinced he saved Grog's life. Ugette would eventually get so sick of the story that she finds herself wondering about what if Ughadn't gotten away, finds herself pining for Grog over there. But you know Grog is with Grogette and it's complicated ... so we know how that goes.

In other words humans have different ways of returning to baseline than gazelles. Like all mammals we need our mates, our herd or pack or band, but we need them differently than most other mammals need theirs. We need to feel understood, not just be in relative proximity to, but be understood by the others. And there is some significant complication in that realm for some people (see the essay on Relationality please). And some of us even manage to create our own complications somehow (see psychodynamic theory from Freud to whoever is popular now please). And then we have complex social structures like FEMA or the U.S. military, or just the complexities of modern social life period where there seems to be an astounding array of poorly founded opinion about everything, and a simultaneous requirement to be liked and

likeable at all times on social media...bizarre...and so PTSD happens to humans and not gazelles. See? Because if I am a twenty-two year old dude or dudette who just did a tour of duty in a foreign country where I was shot at, spat at, and cursed, but also possibly befriended, astounded and edified, then I might have some trouble relating to my peers upon reentry. Might be that though I was extremely well trained as a soldier, my training did not include effective preparation for culture shock and reverse culture shock. It could be that though my own band of brothers-in-arms get it, they do not live close to me and my old band of family and friends no longer feel like home base. Shit can get complicated for humans.

In situations where there is some form of abuse or neglect within a family unit then the band, the main source of potential soothing, is also the main source of terror and confusion. Situations arise where what is happening is unspoken and unspeakable. Interfamilial trauma generally leads to *very* significant complications.

As an aside, Sandor Ferenczi, in a beautifully written, very experience near paper entitled, "The Confusion of Tongues," talks about the unspeakability of sexual abuse within the family. This paper was written so long ago that it is in the public domain and so I would highly recommend it as being both insightful and available. Of historical note, the paper also frames how Freud went off the rails refusing to see trauma even though people like Ferenczi, a close associate, was clearly calling for a trauma centered theory.

Anyway, getting back to the main idea, the takeaway here is that if you can create good social bonds, then you should, because these are one of the main ways we mammals feel okay in the world. It is remarkably reinvigorating hanging out with people who we love and who love us. But the other takeaway is that we are the most complicated mammals on the planet (I mean supposedly anyway, I still suspect the whales are waiting to see if we are trustworthy enough to bother with), and because of the unintentional, organic consequences of modernization, global economics, technological innovation and whatnot, and because of the centrality of attachment needs that only get met or screwed up within the family, and because we grow into a

brain that has advanced cognitive capacities, we sometimes wind up traumatized and need to put a lot of thought and energy into soothing.

Other than relating to safe, sane, trustworthy others, most everything else pales in comparison. The everything else, which I will soon summarize, is also of vital importance, but there is no replacement for safe relationships.

Intermission

Now, right about here I'm supposed to say something hopeful like, "but you know the most important relationship is the one with yourself." Or some such. And of course the relationship with yourself is of vital importance, but it is also super complicated because the relationship you have with yourself is a complicated matrix that emerged out of the even more complicated matrix of interrelationality and intersubjectivity we call an upbringing by adults. You were a baby, far out notions of souls choosing families or karmic fate aside, you didn't have a choice. Whoever was there on a regular basis when you came into the world is who you attached to. Mom? Obviously. Dad? Hopefully (or then again in some situations hopefully not). Grandparents? In some situations. Older siblings? Almost inevitably. Dog? Yep. But not big talkers dogs, so yes to interspecies attachment sequences, but no to full on relational dynamics with Fido unless you happen to have been raised by wolves. Got it?

Birth leads to attachment (otherwise the baby dies), attachment leads to rudimentary personality constructs (otherwise severe pathology and institutionalization have likely occurred), the rudimentary constructs become foundational for the personality, and problematic aspects of the foundation become the sources for the individual's suffering. Plenty of other stuff can happen along the way too, obviously development doesn't end at age 3 (seems more like approximately 35 for men and 28 for women to me), but the truly foundational stuff is all between inception and age 3 to 5, so one of our deepest sources of resilience comes from this time of our life over which we had almost zero control. If that time of our life was problematic (I have worked with children from Romanian orphanages who fit the criteria for Reactive Attachment Disorder, for example) then we have some serious foundational work to do. If our

caregivers turned out to be abusers and the abuse started in childhood as so much sexual abuse does, then we may have firm foundations but the house on top is whacky. To continue with the metaphor, if we had adequate attachment, and then good enough childhoods with the usual combination of good stuff and hard stuff until, say, our parents had a messy divorce, or a parent died of cancer, or there was a severe economic downturn for the family fortunes and dad committed suicide, then we have a firm foundation and a firm structure, but there is a serious remodel necessary. Etc.

The Most Important Thing Really is the Relationship With Yourself

Look, we start where we are. Cliches are stupid when we are talking about something as serious as trauma, but it's true, you also have to start with yourself. Take everything I wrote about relationships as a source of resilience, but then also add to that that you are existentially alone in the world, and really must locate that which is beyond the little you, and form some form of relationship with that. If you are into AA, then that is the higher power step. If you are religiously minded, then you turn to your god or a member of the pantheon appropriate for what you are trying to connect to. If you are “spiritual but not religious” then you turn to awareness itself, or some version of it (I prefer the notion of turning more and more subtly inward until inside and outside become one, but the results of inquiry carried forward continuously and mindfulness carried forward continuously are essentially the same as far as I can tell).

This is your goldmine. This is your ultimate home. This is the final refuge. The peace that passeth all understanding. Nirvana. Christ-consciousness. Whatever term or metaphor you prefer. It is (probably necessarily) part of your healing. Again, don't get all squirly on me if you are a rationalist/materialist/agnostic type. This isn't religious sentimentalism dressed up, this is reality. To paraphrase the Buddha, “don't believe me, just try it for yourself and see.” To paraphrase a veteran I worked with who got a lot out of Dr. Richard Miller's iRest program, “you have to learn what is right, before you can fix what is wrong.” Looking deep within, if we are still alive, we find life. That life essence, however we prefer to relate to it, is another main source of healing. Please attend carefully to these words.

Soothing (trustworthy and understanding) relationships with others, a soothing relationship with ourselves. We find a soothing relationship with ourselves by tapping into that which is undeniably present and yet undeniably beyond words to fully describe.

Here's one way:

Find your seat. By which I mean find a way of sitting that is comfortable, mostly upright but not rigid, which you can maintain for up to 20 minutes. Though you are not likely to start with 20 minutes you should always find your seat as if you will sit for a long period. Simply sit comfortably, and simply notice your breath come and go, noticing that when you breathe in you are breathing in and that when you breathe out you are breathing out. It is the breath coming and going without your conscious intent that you are paying attention to. Just experience the breath. Each full breath. A few times. And let your whole body breathe.

Just notice how your whole body feels as the breath naturally comes and goes. There is something happening even in your toe as you breathe, a slight difference in blood pressure perhaps, try to feel it from the inside out in your whole body at once, as you breathe. Here again, you are not likely to be able to do this on your first try, but rather you must slowly extend your ability to be aware, perhaps as in some Vipassana schools of meditation by starting with the sensations at the tip of the nose and working outward. However you do it is fine, but there is always a bit more subtlety so never think there isn't more. Both Dogen and Ramana Maharshi taught this truth, so I think we should take them seriously. They seemed to go deeper than most.

Now, and a deep bow to Judith Blackstone and her Realization Process here as I borrow from her synthesis, let go of the breathing and just be in the interior of the body. The fancy word is interoception. All mammals can interocept. We can feel the body from the inside. Do this. Be inside your hands, from the inside out to the skin. Be inside your feet. From the inside out to the skin, making sure that you are between every toe. Be inside your legs, your knees, your hips, your torso, your chest, arms,

everywhere...as with the other suggestions so far, this will likely take some practice. I do recommend the Realization Process as one of the better forms of meditation and therapy I have ever encountered, but again, whatever calls to you most is likely the best place to start. Or, at least, the place you will most likely start anyway, so go ahead and start there.

But just notice, if you will, the aliveness. It is right there is it not? I am so sure of this that I will make a bet with you. If you follow the above instructions faithfully for six weeks, and get no benefit, then please present yourself. I will either teach you the right way to do it, free of charge, so you can feel some aliveness; or I will certify that you are dead, as you perhaps suspected. Also free of charge.

In thirteen years of doing this I have not yet met a dead person, though I have met many who feel dead inside in various ways. When they learn to feel the inside of their body they begin to notice the inherent aliveness and they can then use that aliveness as a home base when times get tough.

At least theoretically.

Now, we also find a lot of feelings when we look inside our bodies (feelings are felt), and sometimes the feelings we find are hard to bear or get shoved aside in some automatic way. We may also discover specific areas that seem to be somatically tied to complexes of emotion and episodic memory, some of which may be disturbing, although some of which may be pockets of positive emotion and memory as well. In complex cases we may find powerfully opposite impressions of the same person, feelings of terror split off from feelings of joy and integrating such opposites can take time. So don't mistake me to be suggesting that you just need to learn a few techniques and all will be well if you have lived through trauma. Far from it, healing from trauma is a hell of a long, confusing road for many people, and most people benefit from some kind of structured, reliable relationship at times. That can be in a group of like minded others, or it can be with a therapist, or even with certain friends or family members, but having some assistance in co-soothing, limbic system to limbic system, is of great help to many. The naturally alternate perspective of others also

gives us the opportunity to gain insight. In interacting with others in general we are always confronted with an alternate subjective perspective from which we can learn something new. However, in truth, most of us have highly unconscious relational patterns (in that the patterns exist in procedural memory rather than episodic memory), and we often fall into one or some aspect of patterning in the implicit unconscious when we relate to close others. In other words, we often seem to repeat certain frustrations in certain relationships rather than learn something new. Working in a more structured interpersonal environment of some kind makes it more likely that one's automatic patterns may be noticed and brought into attention and working memory where they can be somewhat reshaped. Again, I'm not sure that it really matters exactly what the structure is in that, AA, or yoga, or psychotherapy, or a church bible study group all offer structured approaches of one sort or another, but in all possible formats it is critical that we feel we can trust the other or others we are relating to, or can trust the method or process on the whole, because only then are we able to take in new information and see our own personal contributions to our dissatisfactions. This new information can be anything from literal information or knowledge we simply hadn't known before, to deep feeling insights into one's own unconscious patterning, but in all cases we can only assimilate the new information if we are open to it, and we are only open to it if we trust the source. Ideally, at least in the way I try to conduct therapy, the person trusts the source because they realize the source is them and that the therapist is simply facilitating their own process of self-healing.

Further Thoughts on Resourcing

Not to oversimplify, but I would say that the rest of our options really boil down to various techniques that can be learned individually or as packets of information. People like Peter Levine or Patricia Ogden have created their own methods and schools of thought on how to heal from or help others heal from trauma. I have not personally done a deep dive with either of those individuals, but I have had clients come to me, who having already been influenced by those methods and wishing to continue with those methods, caused me to buy the relevant books and attempted to employ the methods described therein. I found both methods very powerful but not

substantially different from other ideas I had learned in my training from other schools of thought, so I personally do not use their particular systems because I find them redundant with my other training, but Levine and Ogden can both be rightfully acknowledged as trailblazers critical to the development of traumatology and so naturally many are seeking therapists with training specific to their schools. Ogden's work is particularly accessible to non-professionals, because she has gone to the trouble of creating a workbook-like format, combined with very helpful educational material in between the worksheets, that essentially present a complete trauma therapy with all of the sorts of skills and knowledge I would expect one of my own clients to have gained in the course of our work together. The difference, I hope obviously by now, being that one of my own clients receives all of the information and skills in a relational context that I work very hard to make beneficial. Relationships again, and I really do not think I can emphasize this enough, being the main source of either healing or stress in most people's lives.

In any case, let's take a few examples of other ways of soothing that are not covered by our general categories of relational soothing and self-relational soothing as already described above. In no particular order: singing, cardiovascular exercise, Tai Chi, Yoga, chanting, walking in nature, gardening, building something or working with a small engine...but not, as was popular in past therapies, screaming into pillows, hitting pillows, breaking eggs, tearing up phone books, exercising excessively...

What we want is to breathe deeply, but not too deeply. To be in touch with our bodies and to be able to exert ourselves, in some special instances very intensely even, but not overexert ourselves. To be able to concentrate in such a fashion as to, "leave ourselves behind for awhile," but by resting and resourcing in aliveness, not dissociating. Whatever method we can achieve such a balance with is a good method.

The autonomic nervous system is the part of us that regulates, and it is directly tied to our breathing. If we tend to be on the anxious/hyper-vigilant end of the continuum, then emphasizing the out-breath is a great way to calm ourselves physiologically. Singing and chanting, the attentive reader may have already noticed, would sort of force us to breathe out in a very careful way, would it not? If we tend to go towards

the hypo-vigilant end of the continuum, then emphasizing the in-breath is what will naturally make us more on point, more focussed, and not so spacey. Working with tools is another easy way or natural way to do this, because you are automatically given feedback when you get spacey. Unlike meditation, which in many forms can actually result in a reinforcement of spaciness, or mindlessness, trying to screw a very small screw into a very small aperture inside of a casing, really gives you some objective feedback on how focused you are. Swordplay is similar but more dangerous and therefore not recommended for beginners.

America

Okay, that's the end of the lecture. I have certainly not covered anything in great detail, but that is frankly impossible. I am giving you actionable clues either in terms of practices you can take up, or people that you can read, or both. You should do, you should think, you should learn. Your aim is to create a good balance of meaningful work, loving communication with trusted others, and a skill set that you can rely on at need. There are people like me, all over the world, who have taken the time to gain the skills and knowledge necessary to work with complex trauma. You might seek out such a person if it seems like a good idea to you. This is your life, good luck.

Turning to the larger picture however, the context in which we are living, I would like to speak to you as a fellow citizen for a few moments. Not a member of a political party, a citizen. I have clients who are liberal, and I have clients who are conservative, and they all seem like very decent people who want to be fairly treated, want the children in their community to be well cared for, love their mothers, etc. Yet, the average person in America has hardly any savings, is very likely in debt (especially for a college education which does not seem to provide much of a return on investment any longer in many cases), is more likely than not to have been raised in a complex household affected by serious financial strain, medical strain, and/or divorce, has very possibly been affected by the high prevalence of alcohol and opioid abuse, and/or the high levels of domestic violence across many subgroups...and this is still white males I'm talking about...so then let's add in the potential effects of gender bias, racial bias, class bias, and ingroup/outgroup biases and all the nastiness that comes with all that

bias...and voila...Trauma. Because voila, we have all of the necessary ingredients to screw up your average big brained bipedal mammal, that's you, because what we do not have is basic needs met.

Here in America, we have what I like to call the Myth of Meritocracy. Unlike a true myth, which is often worth reading for deep archetypal lessons, this myth is basically a story made up to justify vast inequalities in opportunity. Rather than see systemic inequalities we are taught to understand our success or failure as having to do with personal effort. And of course personal effort is critically important for any sort of achievement, but it seems fairly incontrovertible that individuals are beginning the race of life from radically different starting points, so it really doesn't make much sense to ignore the highly variable degrees of opportunity that different individuals are afforded based on uncontrollable factors like geography, gender, race, or class.

If we, as a society, do the things that we know create resilience, then obviously we will have more resilient citizens. On the other hand if we do the things to people that we know are stressful and even traumatizing, then obviously we will have more traumatized citizens. The scope of the economic impact of trauma is far beyond this paper's intent to cover, and beyond my areas of expertise, but I easily find papers by experts who can do the calculations, and the numbers are huge. I think a little back of the envelope logic makes it fairly obvious as well, that just considering the clear correlation between traumatic experience and mental and physical health complaints of all sorts, the amount of money spent on intervention that could have been avoided and the amount of lost productivity of all sorts, not just economic, amount to huge costs.

Thinking about it from a normal human perspective, if I'm a little baby, and I'm hungry all the time, I'm stressed. If I'm a little child, and my parents are screaming all the time because they're stressed, well that's stress too. If my neighbor got shot last night, rightly or wrongly, that stresses me too. If my school is underfunded or overcrowded then there again we have various stressors. Well, if I'm stressed, I'm probably distracted, and if I happen to be a child then I probably will not be able to learn as effectively. If I can't learn very effectively, I might miss educational

opportunities, act out or get depressed, etc. If I have limited opportunities and/or limited ability to make use of opportunities then I wind up less likely to find ways of contributing and more likely to need services.

Let's say we start a baby off with a single mother who lives in a shelter because, quite luckily compared to many, she was able to get away from an abusive husband. This, the general populace should be horrified to learn, is quite a bit more difficult than common sense would dictate, but she managed it (but the father still has parental rights you know, think about how that must feel to her as she turns her kid over). This accomplishment already sets her apart as a legit bad-ass, but let's look at what she has earned by her probably horrific travail in getting away from her abuser. Now, thanks to the laws and customs of her society, she has a limited window of opportunity to somehow find a job, generate income, take care of a baby, buy and prepare food, put aside money so that she has first and last month's rent, etc.

How much stress is that compared to your life right now? How do you think the baby is doing?

How fair does this seem to the mother? The baby?

What sort of investment would you say we have made in this family as a society and what would you say we deserve to expect as a return on our investment?

Look, again, no advanced degrees in political theory or economics here, so I am not speaking from a place of expertise on this matter so much as a place of confusion. I look out at this society, both America and the world at large, and I ask, what is the social contract here? How are we supposed to rely on each other when we have created so many walking wounded?

What if we based social contracts on social science and tried to maximize human health? We could use all that fancy face recognition software being developed to identify people that might need more help. We could program the software to look for telltale signs of sadness and then send gift baskets, or street performers, or, more

realistically and in all seriousness, a nudge to local community members to say hello to neighbors. We don't need to invade anyone's privacy, there doesn't even need to be a human operator involved as the only problem with a false positive in this case is that someone might be more likely to drop by for a conversation...

In all seriousness. At our current level of technology we could create an Eden. The same technologies we use for domination, control, warfare, and extraction, could be used for nudging towards social good, protecting basic inalienable rights, promoting health and wellness, and extracting resources sensibly...like stewards rather than warlords or toddlers...We could build systems to promote resilience and reap the rewards as a society instead of ignoring trauma and thereby creating huge impediments to human and economic potential.

So, Trauma. We can any one of us be traumatized. It is simply a matter of exceeding our capacity to tolerate stress, and every single one of us has normal human limitations there. If we as a society start a large percentage of people off under high stress conditions then we as a society are choosing trauma over resilience. Trauma leads to chaotic conditions and further stress and retraumatization. Resilience leads towards health, creativity and happiness. Think about it. This is not a political matter, there will still be plenty of details to debate and enjoy taking sides over. This is basic morality and it is time to recognize the obvious fact that we are one species that has taken control of a single planet in a sea of as yet uncrossable and inhospitable space. Can we please try acting that way and see where we get?

All right, that's all for now. Do your best.

Ezra Maurer, 06/06/2020, Iron Hill, Quebec, facing East on a humid morning