



The Routledge International Handbook of Psychoanalysis, Subjectivity, and Technology

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1 TOUCHING TRAUMA

Therapy, Technology, Recovery

Richard Kearney

Touch in the Age of Technology

It is clear today that more and more of our existence is being lived at a distance—through social media and digital communications, e-gaming, e-mailing, e-banking, e-schooling, e-dating, e-sporting, and e-hosting. Even global conflicts are now being waged vicariously through so-called "psych-ops" campaigns, online news flashes, and Tweets. Cyber-politics is the order of the day, with national leaders passing from TV shows to the highest seats of power. (Donald Trump and Volodymyr Zelensky were screen stars before becoming presidents.) And sex, the most intimate domain of touch, is increasingly mediated through online dating sites, sexting, and social media platforms, while pornography has become a \$4 billion a year industry in the United States, with porn sites receiving more visitors per month than Amazon, Netflix, and Twitter combined. Meanwhile, the gaming industry grossed over 150 billion dollars globally in 2020, fast becoming the most popular form of human entertainment on this planet. But all this should give us pause, for as cyber technologies progress, proximity is replaced by proxy. Our putatively materialistic world is becoming more immaterialized by the day with multi-touch screens serving as exits from touch itself. Indeed, it is ironic that the primary meaning of "digital" today refers not to our fingers but to cyber worlds—the virtualization of touch becoming a form of dactylectomy. Not to mention the fact that while Americans check their iPhones a billion times a day, one in every five US citizens suffers from a mental illness largely related to loneliness (Eadicicco, 2015). The more virtually connected we are the more solitary we become. We "see" brave new worlds but "feel" less and less in touch with them. Optical omnipresence trumps tactile contact. Cyber connection and human isolation can go hand in glove.

To cite one recent personal example: traveling to downtown Boston on a subway I was struck by the fact that almost everyone aboard (apart from the driver) was "wired" to iPhones or iPads, oblivious to their fellow travelers and all that was going on around them. One passenger appeared anxious by what he was viewing online, another amused by a podcast she was hearing—but no one seemed aware of anyone sitting beside them or the physical landscape flashing by. Technology overcomes distance but it does not always bring nearness.

Our digital age of excarnation is suffering from an "epidemic of loneliness." While we currently inhabit the most technologically connected age in history, rates of human solitude

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have doubled since the 1980s. In a recent survey, American Association of Retired Persons (AARP) estimated that 42.6 million American adults over age45 suffer from chronic loneliness; while a 2018 study by Cigna, the global health insurance company, revealed that each generation, oldest to youngest, is more socially isolated, with the Greatest Gen and boomers the least lonely and millennials and Gen Z the loneliest (see Louf, 2019). The more time we pass in front of screens the more susceptible we are to depression. At the same time, as social interactions become more virtual, there emerges another kind of isolation with serious ecological and climactic consequences—what nature writer Richard Louf (2019) calls species loneliness: "the gnawing fear that we are alone in the universe with a desperate hunger for connection with other life" (p. 16). Louf argues that we need more contact not only with fellow humans but also with other-than-human kin in the animal and natural kingdoms. In sum, in addition to medical prescriptions we need "nature prescriptions." And in this movement from the age of human exceptionalism to an age of holistic tactile communion, psychotherapy has a unique and important role to play. (It is worth remembering that Freud permitted his dog, Lün Yu, to sit in on sessions in the belief that the hound not only calmed his patients but also possessed the flair to signal peak moments with a wag of the tail.) But in order to return to our senses, to get back in touch with ourselves and with others, reinhabiting our skins, reclaiming our bodies and emotions, we must first understand why touch has been neglected and how essential it is to psychological wellbeing.

Diagnosing Our Digital Age

In Don DeLillo's novel White Noise (2009), one of the characters, Murray, presciently describes his experience of mass-media society:

I've come to understand that the medium is a primal force in the American home. Sealed-off, timeless, self-contained, self-referring. It's like a myth being born right there in our living room, like something we know in a dreamlike and preconscious way... You have to open yourself to the data. TV offers incredible amounts of psychic data... look at the wealth of data concealed in the grid, in the bright packaging, the jingles, the slice-of-life commercials, the products hurtling out of darkness, the coded messages and endless repetitions.

(p. 51)

Delillo originally wanted to call his novel "Panasonic" until the eponymous corporation objected, recognizing the biting nature of his satire. The novel's academic characters, Murray and Jack, are obsessed with the flow of psychic data that flood their screens and feed their drug delusions; and at one point they seek out a simulated escape organization—SIMUVAC, short for "simulated evacuation"—to save them from a toxic pollutant invading their environment. But they soon realize that such simulating technologies cannot rescue them from their physical fate on the earth. They are forced to confront the clash between their disembodied addictions and their embodied reality. It is a fitting tale for our time.

While the baby-boomer generation was the first to experience cable television, and the Xennial generation was the first to use desktop computers, the Gen Alpha is growing up with iPhone and iPad in their hands—daily consuming new versions of the expanding digital industry. According to a 2018 Pew Research poll, 92% of American adults aged 18–49, possess some type of smartphone. While the *Time* article mentioned in my introduction, which ran with the headline "Americans check their phones a billion times per day," found

that persons aged 18–24 check their phones 74 times daily (Eadicicco, 2015). Clearly, the current generation is becoming increasingly dependent on electronic devices which connect them with virtual worlds while disconnecting them from their bodies. At the touch of a key we gain a digital universe but lose touch with ourselves. We create virtual profiles at the price of tactile experience. Omnipresent access at the cost of real presence.

Another recent study, NinjaOutreach, provides even more telling statistics. Investigating the growth of social media and digital marketing, it finds that in the United States 92% of teenagers are online everyday with 71% using more than one social media outlet. Another 85% of social media users—whose demographic is getting steadily younger—rely on their social media platforms for the news, thereby diminishing the need for public broadcast outlets. On a global platform the economic market for the deployment of social media stands at an estimated \$312 billion, suggesting that the more consumers consume, the more power is given to the corporations running the platforms (see Kearney, 2021, p. 118).

Social media, we were all aware, plays a decisive role in our live, but once again we were struck by the statistics. Facebook (first founded as a way of rating the hotness of Harvard students) has currently over 2 billion members on its platform, YouTube 1.5 billion, Snapchat 250 million, Instagram 88 million. Such programs invite users to post photos, write statuses, and share videos, all of which can be managed through filters, stickers, drawings, and other modes of editing. YouTube allows consumers to produce footage with easy software, while Instagram boasts of over a million postings per day, often selfies doctored with user-friendly editing features, removing the imperfections of real bodies in the construction of ideal ones. By denying incarnate presence we promote excarnate images. We collaborate in the proliferation of inflated personas that mask the reality of our tangible selves as acting-suffering beings.

None of this is meant to deny that social media can also play a very positive role in our lives—inviting us to empathize "imaginatively" with people in far flung corners of the globe. The issue is topical and complex. Think, for example, of how images of the drowned infant Ayla washed up on the Greek Island of Lesbos in September 2015 went viral within hours, igniting immediate international sympathy for all Syrian refugees. But even when social media encourages imaginative identification with victims, the question remains whether the impact of such images can outlast the initial sensation. Raising the possibility of carnal disconnect: becoming "spectators" of strangers who actually remain strangers—them there, us here—where the one-way *illusion* of presence replaces mutual lived experience. The challenge, surely, is to heed the dynamic of *double* sensation—not just to "view" pain through touchscreens but to be touched by pain, in turn. A vexed challenge and one which certain experiments in haptic AR technology are currently seeking to address.

But if empathy is a problematic passion for our digital age so also is *eros*. Pornography has become the second biggest entertainment industry in North America and the means by which many young people learn the facts of life, leading to various mimetic behavior patterns. While for some this is a symptom of post-60s sexual liberation—"make love not war"—for others it is a twin of puritanism (in cahoots with capitalism). Both pornography and puritanism display an alienation from flesh—puritanism replacing sex with the virtuous, pornography replacing it with the virtual. Each is out of touch with the body. Though the parallel is not without paradox: pornography promises pleasure of a surrogate kind while puritanism has its own perverse gratifications—which can include, as Freud reminds us, the cruelty of superego surveillance and punishment. Moreover, it is telling that most urban sex shops and red light districts are disappearing with the rise of the online sex industry where consumers now avail of streamed simulations or direct-order products at the tap of a screen.

Just as Amazon is closing bookstores (where one browses shelves, handles covers, turns pages, and meets living authors), Pornhub is closing public venues of erotica (most adult movies today being consumed on private monitors rather than red light cinemas). And the same goes for romance. Couples making out in Montmartre or Central Park are becoming a thing of the past, as one seeks pleasure before the solitary screen.

The current flight of erotic-romantic behavior from shared communal rituals to private fantasies, coincides with a crisis of communication between the sexes. The rise of the #Me Too movement and Title IX harassment legislation—while a welcome protection from predation—is a reminder that we lack proper new codes of congress between the sexes (and those of fluid genders). Gone are the courtship rites of yesteryear—no bad thing regarding sexist privilege—as we await a new ethic of sexual pedagogy to replace them. Hence the tendency of many students in US college gyms today, for example, to segregate into male and female groups. And the number of harassment cases of the she said/he said variety grows daily. Unarticulated attitudes of suspicion, fear, and confusion make genuine erotic exchange more and more difficult; as the vicarious "safety" of Internet sex becomes more alluring. No longer able to read each other's bodies, we find ourselves in a communications limbo—and this, ironically, in the age of communications par excellence!

What is true of sex is true of all things—a la Freud. Commerce is increasingly a matter of online banking, e-credit transfers, market speculation and bit coinage, while communication is becoming daily more simplified by social media tweets, memes, acronyms and hash tags—"What's up?" being replaced by WhatsApp. Even the academy seems to be heading the way of excarnation, with more courses being offered online in "distance education" packages, and the Digital Humanities field converting physical libraries into virtual databases. How many of us, in the future, will still roam book stalls and archives, running our fingers along leather spines, in search of a particular volume and hitting upon another by surprise? Who really needs a book in the hand or a professor in class anymore? And just as education is becoming more tele-optical, thanks to Zoom or Google, so are the other senses following suit. Tele-pedagogy may one day be the new normal. Indeed certain cyber engineers are predicting that computers may soon migrate from outside devices to internal neural logarithms, with operational codes implanted in the brain—our cosmos becoming one giant neurological cyber script. A global matrix with each self a world unto itself. Maximum access and maximum autonomy at once. Hyper-connectivity and hyperisolation in one.

But if this is the future of human subjectivity—man and machine finally being fused such that the mind is the monitor and monitor mind—what then will become of clinical treatment? And, more importantly, how has the clinical in some way precipitated the disincarnate age in which we live? How has the devaluation—and even the fear—of touch in psychological spaces impacted our understandings of ourselves as carnal (or, perhaps disincarnal) creatures?

Psychoanalytic Beginnings

Sigmund Freud is generally recognized as the founder of trauma therapy. His first major insight on the subject came in *Beyond the Pleasure Principle* (1990), which he wrote while treating "shell shock" veterans returning from the trenches of World War I. His question was this: How are humans so wounded that they prefer to return to their pain compulsively than follow their normal "pleasure principle"? His answer was the existence of a death drive (thanatos) which accompanies our life drive (eros), and sometimes overwhelms

it. Curiously, the mature Freud played down the role of touch in healing, privileging the intellectual interpretation of words over more embodied approaches. And yet, Freud himself was a wounded healer in many respects. Not only did he suffer from his outsider status as a Jew in anti-Semitic Vienna but he also bore a more private suffering: his irremediable pain at the death of his daughter, Sophie. Indeed, it was arguably this personal trauma which enabled Freud to empathize with the pain of his own grandson, Ernst, at the "absence" of his (Ernst's) mother—the same Sophie—in a famous section of Beyond the Pleasure Principle. I am speaking of the much commented upon fort/da scene where little Ernst plays with a cotton spool in imitation of the coming (da) and going (fort) of his mother. Yet when Freud witnessed the cries of his grandson, he did not reach out and hold him. He sat and observed, recording the scene of suffering from a clinical distance. He even appears to have ignored the obvious fact that his anguished grandson responded to this missing mother not only with the words fort/da—"now she's here now she's gone"—but also with physical child-play: a game of bodily gestures. Freud does, of course, note that Ernst casts the toy back and forth, but his diagnostic eye focuses on the psychic compensation provided by the play of words rather than the play of hands. He opted for a model of psychoanalytics over a model of psychohaptics. Thus, Freud missed an opportunity to acknowledge the key role of tactility in therapy. He failed to see that talk therapy sometimes calls for body therapy. Little Ernst needed to handle the spool as well as speak the syllables: fort/da.

To be fair, the early Freud did allow a limited role for the therapeutic laying on of hands when it came to recovering repressed memories—establishing a connection between the disremembered pathogenic scenes and the symptomatic residue traces of such events. He conceded in a letter to his colleague, Josef Breuer, that while verbal interpretation was primary, "reminiscence without affect almost invariably produces no results." But these initial concessions were overshadowed by the whole controversy of transference and countertransference between analyst and analysand—confirming Freud's disapproval of the boundaryfree experiments of disciples like Carl Jung, Sabina Spielrein, and Wilhelm Reich (see Orbach, 2000). Touch became the bête noir of the mainstream psychoanalytic movement. Cure was more about minds than bodies, as Freud felt it increasingly necessary to keep a distance from his patients, declining emotional or affective contact. The great fear of countertransference—namely, the overinvestment of the analyst's feelings in those of the patient.

The Freudian discretion regarding therapeutic touch was rigorously observed—with few exceptions—for several generations, reaching its hyper-linguistic extreme in Jacques Lacan's obsession with "floating signifiers" at the expense of suffering bodies. But things were to change with the emergence of a new era of trauma studies from the 1980s onward—a critical movement responding to the diagnosis of PTSD symptoms after the Vietnam War and the rise of Holocaust and post-colonial studies, with their focus on somatic questions of affect and material questions of race, gender, and class. The leading figures here were often women-retrieving the neglected work of Melanie Klein-and included pioneers like Judith Herman, Cathy Caruth, Juliet Mitchell, Françoise Davoine, and Helen Bamber. The last of these, Helen Bamber was one of the first therapists to enter Bergen-Belsen after the liberation and went on to work with Amnesty International where she treated torture victims in Argentina, Chile, and elsewhere. Bamber discovered that the best way to help sufferers of trauma was to be physically present to their pain. Not only to interpret, but to bear bodily witness. Not just to talk, but to receive and "hold" the suffering. To experience what she called a felt catharsis or "purging." In her book, The Good Listener, she describes sitting on bunks in concentration camps, holding the hands of inmates as they stammer and stumble through words and recall scenes of violation committed against them and their loved ones:

I would be sitting there in one of those chilly rooms, on a rough blanket on a bed, and the person beside me would suddenly try to tell me what it was like...and what was most important was to stay close to the survivor and listen and receive as if it were part of you and the act of taking and showing you were available was itself a healing act.

(Bamber, 1998, pp. 88-89)

Bamber points to the need for affective witness which goes deeper than the chronicling of facts (though that too is crucial). "We must," she says, "acknowledge the truth as well as having knowledge of it" (Bamber, 1998, p. 228). We must re-cognize the somatic symptoms of trauma as well as cognize the causes. This double duty of being both physically present to the sufferer and representing clinical evidence is, she believed, central to healing. Without some element of embodied testimony, the inmates of the camps could not rise from their beds and walk. They could not survive their own survival.

Flesh Keeps the Score

Skin is the largest organ of the body, a total wrap-around surface that goes deep. It covers over two square meters of flesh with millions of neural connections, connecting our inside to our outside. Skin has two sides, epidermal and endodermal, serving as a double cutaneous agent of tactility. The phrase "skin deep" actually means what it says. The physiological respose to touch goes like this:

Receptors in the skin detect pressure and temperature and movement, and these signals shoot up the spinal cord and into the brain, which adjusts its chemical output accordingly. That the emotional responses become physical in predictable patterns suggests that our bodies evolved to respond favorably to touch—or at least to miss out on benefits where we are physically isolated (Hamblin, 2019).

James Hamblin offers this basic account of tactile functioning in an Atlantic article based on his book, If Bodies could Talk, a study which charts a therapeutic map for the healing of the human body. In the book, he cites evidence of MRI scans showing how physical touch activates areas of the cerebral cortex, and rehearses numerous studies demonstrating how touch lowers heart rate, blood pressure, and levels of the stress-related hormone cortisol. He also demonstrates how deep tissue massage therapy has proven effective for depression, stimulating neurotransmitters that modulate and decrease pain. But this is only half the story. For if the tactile body possesses extraordinary powers of healing it is also the barometer of past hurts. The body carries traces of our shame, guilt, childhood conditioning, repressed desires, and deepest fears. Hence the need for a highly sensitive approach to touch in the treatment of trauma victims in therapy. This involves delicate discernment regarding the classic too close/too distant question. While touch can, in certain circumstances, retrigger trauma, it can, in other circumstances, help establish a sense of trust and containment—areas crucial to trauma sufferers, in whom insecure and disorganized attachment and childhood abuse are often central to their histories. Reaffirming trust levels (a prerequisite to good therapy) can release energies that have been frozen in the body by traumas too overwhelming to be registered in purely verbal-conceptual accounts. As Redmond O'Hanlon notes (2014), "Touch can bypass cognitive resistance, releasing dark

repressed memories that talk therapies cannot reach, since there are far more memories stored in the body than in the brain."

In a ground-breaking study, *The Body Keeps the Score: Brain, Mind and Body in the Healing of Trauma* (2015), Bessel Van der Kolk presents cogent evidence for a therapeutics of touch. Confirming the basic thesis of "physioneurosis"—that our primary traumas are lodged in our bodies—the author argues that "talking cures" need to be grounded in bodily cures. Words are not enough to address the carnal "imprint" that a traumatic event leaves in our memory (p. 27). Only some kind of incarnate gesture can recover the original wounding and help us realize that the danger is gone and we can live in the present: "Healing depends on experiential knowledge. You can be fully in charge of your life only if you can acknowledge the reality of your body, in all its visceral dimensions" (Van der Kolk, 2015, pp. 246–247). But in much of contemporary Western medicine, the brain disease model has taken control out of our hands, leaving one in ten Americans taking antidepressants and Medicaid spending more on antipsychotics than any other form of medication (Van der Kolk, 2015, p. 37). Non-drug treatments barely get a look and are usually labeled as "alternative." Mainstream medicine, writes Van der Kolk,

is firmly committed to a better life through chemistry, and the fact that we can actually change our own physiology and inner equilibrium by means other than drugs, (that is) by such basic activities as breathing, moving and touching... is rarely considered.

(2015, p. 38)

As Peter Levine (2010) famously put it: "I grew up in a profession where it was deemed unethical to touch a client. I await the day when it will be unethical not to."

Such an ethic of tactile therapy endorses a model of "somatic dialogue" whose benefits in the form of affirmative mutual mirroring between therapist and patient are associated with non-verbal formative processes. These processes are accessed through the therapist's psycho-bodily sense of their patients, since they register them via voice, gestures and touch still largely ignored in standard therapy. Good trauma therapists, attentive to projective identifications, will often feel in their bodies an intuitive sensing of the patients' primal family world, their pre-linguistic lived being and mode of relating. And this indeed is a dramatic presence, for we are first of all incarnate actors, performing with tactile bodies on the stage of the world.

Faced with trauma, the mind often goes into denial and proceeds as if nothing happened. Meanwhile stress hormones continue sending signals to the muscles and tissues of the body resulting in certain forms of somatic illness. Drugs, alcohol, or other addictive behaviors can temporarily delay unbearable feelings, but the body keeps the score. And no matter how much understanding the rational brain provides, it cannot "talk away" the pain. For real healing to happen, sufferers need to re-integrate the event into their felt lives: they have to move from "there" (where the trauma occurred) to "here" where they can be present to experience now. This doesn't mean that talk therapy and medication are not necessary, only that they are not sufficient. More is needed.

Van der Kolk cites current neuro-scientific research showing the existence of a specifically "emotional brain" in direct touch with the body. This middle brain operates at a different level than the rational brain, located in the prefrontal neo-cortex, and combines both the reptilian brain and the mammalian brain (known as the limbic system). It serves as a neurological center of operations and is deeply informed by our earliest relations with others, beginning at birth and forming our basic instincts for negotiating what is nurturing,

Richard Kearney

pleasurable or dangerous. This emotional space is the first theater of "carnal hermeneutics" (see Kearney and Treanor, 2015), serving as a base camp for what neuroscientists call "mirror neuron" activity: a sensorium where we first respond to others in terms of bodily imitation and empathy—thereby prefiguring the onset of language. The emotional brain records our first steps in life, when mind and body are synchronous, and continues to keep us in touch with others' feelings—positive and negative—making us angry or vulnerable, calm or anxious (Van der Kolk, 2015, pp. 56–58). Respondeo ergo cogito. Contemporary neuroscience clearly confirms the claim of both phenomenology and clinical therapy that "we do not truly know ourselves unless we can feel and interpret our physical sensations" (Van der Kolk, 2015, p. 274). Our most fundamental sense of ourselves is our body.

Reintegrating Trauma

When it comes to healing trauma, the body is the bridge. Flesh harbors places not easily accessed by our rational, linguistic consciousness—however necessary the latter is before and after the process of "tactful" engagement. Van der Kolk calls such tactful perception "interoception" which he sums up as follows:

We can get past the slipperiness of words by engaging the self-observing body-based self system, which speaks through sensations, tone of voice and body tension. Being able to perceive visceral sensations is the very foundation of emotional awareness. If a patient tells me that he was eight when his father deserted the family, I am likely to stop and ask him to check in with himself. What happens inside when he tells me about that boy who never saw his father again? Where is it registered in his body? When you activate your gut feelings and listen to your heartbreak—when you follow the interoceptive paths to your innermost recesses—things begin to change.

(2015, p. 240)

In other words, getting in touch with the deep pain-self involves a visceral perception which only later translates into verbal-conceptual thinking.

The primary work of transmission is located in the amygdala: two small almond-shaped structures that reside within the limbic brain. The amygdala serves as a "smoke detector," interpreting whether incoming sensory data from skin, ears, eyes, and nose (registered by the thalamus) are relevant for our well-being or survival (Van der Kolk, 2015, p. 60). It tells us what is safe and unsafe. If it senses pain, it summons various stress hormones (cortisone and adrenaline) and our automatic nervous system to organize a full bodily response, putting us into flight or fight mode. For this reason, it is important that our somatic alarm system responds to others' behavior with tact and savvy lest we overreact or underreact to what is happening. And here the amygdala calls for supervisory expertise from the "watchtower"—the medial cortex situated in the prefrontal brain area which offers rational "objective" guidance in our behavior. A sane response to danger requires collaboration between the upper watchtower and the lower smoke detector, lest we "take leave of our senses"—by either flying off the handle (too much emotional brain) or withdrawing into a denial of feeling (too much rational brain). Our cerebral and carnal cartographies need to be calibrated for the appropriate reaction.

Using touch, breath and movement, trauma therapy can work carnally from below while also inviting top-down adjudication. By contrast, when our two brains, rational and emotional, are out of sync a tug of war ensues: a battle largely played out in "the theater of

visceral experience"—heart, throat, belly, and lungs—leading to "physical discomfort and psychological misery" (Van der Kolk, 2015, p. 65). PTSD is symptomatic of a blanking-out of pain where sufferers opt to replace the original wounding with numbness (alcohol, drugs, escape, fantasy). In such cases a sense of carnal re-anchoring in current bodily feelings is needed to provide a proper distinction between where I am *now* in the present and where I was *then* in the past. The ultimate goal of trauma therapy, Van Der Kolk holds, is to get us back in touch with our injured selves so we can be more fully grounded in the present.

Most of our primary responses to others are felt in the gut, not the mind. In trauma this is particularly so, wounds being registered less by the rational brain accessible to narrative memory, than by the emotional brain expressing itself in physical responses: "gut-wrenching sensations, heart-pounding, breathing becoming fast and shallow, feelings of heartbreak, speaking with an uptight and reedy voice, and the characteristic body movements that signal collapse, rigidity, rage or defensiveness" (Van der Kolk, 2015, pp. 206–207). Purely logical explanations—why you feel this way or that—do not change your experience. Radical healing calls for a deeper somatic transformation, following the old adage: the hair of the dog that bit you. Where the disease is, the cure is. Recovery requires reconnection. And to help us redraft our somatic maps, we need to open revolving doors between the disjoined territories of reason and feeling. The aim of trauma therapy is to put the mind into tactful contact with the body. How many of our mental health issues, from self-injury to drug addiction, begin as efforts to deal with the intolerable pain of our emotions? "Until recently," observes Van der Kolk,

the bidirectional communication between body and mind was largely ignored by Western science, even as it had been central to the traditional healing practices in many other parts of the world, notably in India and China. Today it is transforming our understanding of trauma and recovery.

(p. 76)

So the ultimate aim is to turn visceral *reactions* into felt *responses*—responses which we can then translate into new forms of narrative discourse. To see better what this means just think of our colloquial expressions, "My heart sank," "my stomach churned," "my skin crawled," "I was scared stiff," "I choked up," and so on. We first respond to pain as "humanimals" and it is at this level that we find primary release. Most of our psychological illnesses are registered in terms of "dissociation," or what William James called "sensory *insensibility*"—the collapse of connection between our mental and somatic components; so it makes sense that our psychic wellness takes the form of a return to sensory *sensibility*. Neurotic or traumatized people feel notoriously unsafe inside their own bodies, the past gnawing away at the nerves and sinews. But where the harm is there is the healing. We need to re-own our tactile experience because, where all else fails, our bodies keep count. As Van der Kolk notes,

If the memory of trauma is encoded in the viscera, in heartbreaking and gut-wrenching emotions, in autoimmune disorders and skeletal/muscular problems, and if mind/brain/visceral communication is the royal road to emotion regulation, this demands a radical shift in our therapeutic assumptions.

(p. 88)

What is more, as the work of Hartmut Rosa (2019) suggests, if we lose touch with ourselves, we lose touch with the world. No tactile connection, no resonance between self and other.

Concluding Thoughts

Recognizing the importance of the body in the therapeutic dynamic brings us to our ultimate question: can digital culture, used critically, address the question of "touch" for a new generation of clinicians? Can certain forms of technology, creatively deployed, particularly in clinical settings, serve as antidotes and alternatives to our simulation crisis by engaging directly with our contemporary medium of communication? (We await a definitive philosophy of both the toxic and therapeutic powers of digital technology but can take inspiration from the pioneering critical explorations of the phenomenon of simulation by the likes of Jean Baudrillard, Ray Kurzweil, Sherry Turtle, and Yuk Hui.) Like the hair of the dog-might the most ready response to digital abuse be digital re-use? Namely digital technology putting itself in question and re-opening spaces where we might invent new ways to re-inhabit our world? I am thinking especially of how cutting-edge projects here in Boston such as digital storytelling and VR technology at the MIT Open Doc Lab and Public VR Lab might be deployed in a therapeutic context. The latter, for instance, hosts a participatory storytelling project, "Arrival VR," where participants are invited to enter virtual worlds where they empathize with immigrants and interact in common collaborative spaces—galleries, classrooms, town halls, museums, art labs, community centers—exploring encounters with others in their life-world.

Such projects in "empathy" are partly inspired by recent experiments with the amplification of touch by digital technology—notably the 2019 Tree experiment with haptic vests enabling participants to "feel" what it is like to be a tree growing and expanding; or the use of haptic prostheses to "feel" the embrace of fellow humans removed in space or time. These ventures in hapto-technology are still embryonic, to be sure, but I believe they portend productive possibilities of collusion between virtual and embodied experience—ways in which our real and simulated worlds may cooperate rather than compete, avoiding rigid dualisms of artificial and tactile intelligence. The challenge is surely to find new modalities of accommodation between our digital and lived bodies, acknowledging their differences while exploring modes of mutually enhancing symbiosis, allowing us to touch and be touched physically, emotionally, psychology, humanly.

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