

Emancipatory Healing:

Herbalism as a critical antidote to the
ecological crisis of Modern Medicine



| Introduction

“The degradation and exploitation of nature seem to be endemic to our culture”

John Michael Barnes, 2009

There is perhaps no greater truism than that everything must be secondary to a livable planet. In this light, there is a critical need for us to examine the long term sustainability of Modern, technological Medicine. Though Modern Medicine is responsible for a great many highly technical miracles, those same miracles are guilty of furthering a chasm between humans and the rest of the natural world. The result is a contribution to widespread ecological destruction, loss of biodiversity, accelerating toxification of our air and water and commercial ‘resource’ extraction on scales never seen before. Derrick Jensen laments that, each day, “over 200,000 acres of rainforest are destroyed. Thirteen million tons of toxic chemicals are released, and more than one hundred plant or animal species go extinct because of civilized humans” (2006:341). Modern Medicine contributes to all of these processes through its advocacy of highly chemical forms of interventionist Medicine and associated waste products. The normalisation of the ‘pharmaceutical silver bullet’ is embedding chemicals into our ecosystems at a frightening speed. I infer that it should not be too great an expectation of our dominant healing tradition that it not be complicit in recycling toxicity into other species and bodies. Medical discourse revolves around *health* and our healing industries must be committed to reproducing healthy environments for us to live in. To be clear, by Modern Medicine I refer to the principles and practices of Western dominated, technologised biomedicine that emerged out of the context of the Enlightenment and industrialization in Europe. This must be distinguished from other practices of healing taking place inside and outside of this context. Modern Medicine’s methodology is based on culturally specific understandings of ‘knowing’ (epistemology) and ‘being’ (ontology) which conceptualise humans as somehow separate from the wider biosphere. So long as Modern Medicine does not see the consequences of our current choices as having any effect on us in the long term, it may be doing more harm than good. We need to deconstruct the foundations of Modern Medicine, and reveal the underlying thought processes that have informed its current workings and methodologies. I cannot expand here into a history of Modern Medicine’s ontology and epistemology, so have demarcated four related categories to examine, which underlie the ecological destructiveness of technological medicine. They are: Separation from and Dominion over Nature, Reductionism, Mechanism, and Universalism. By understanding these and their impact on the natural environment, we can take the first step in forging new definitions of medicine and healing which support a mutually

beneficial, dialogical relationship with the natural world. We desperately require alternative healing traditions that work towards re-connecting us with the wider ecosystems of which we are all part. To elucidate this, I will first outline the impact of chemical, interventionist medicine on the air and water that we rely on for life. Then I will show how the four stated assumptions of Modern Medicine serve to encourage and legitimate this destruction, before proposing a philosophical basis for an alternative, ecological medicine.

| **The Wider Impact of Modern Medicine**

“While a healthy landbase is not the only thing that matters, it is undeniably true that without a healthy landbase, nothing else matters”

Derrick Jensen, 2006

In the West we have now had over half a century of hegemonised reliance on Modern Medicine, and it would be folly to embark on a diatribe against all of its achievements. Undoubtedly it has taken great leaps in alleviating acute human suffering. However, the question that we need to ask is whether the methodology of Modern Medicine supports successful human habitation of Earth? By methodology I refer to this familiar story: we visit doctors in white coats in their clean offices, we are examined with highly sterilised, disposable equipment, diagnosed on the spot if the problem fits simply into predetermined categories, or otherwise referred to more knowledgeable specialists. Then in almost all cases, we are offered a highly targeted chemical which we know nothing about to ingest into or apply onto our bodies, and for the most part we do so unquestioningly as it is ‘for our own good.’ We may need to engage in further medical procedures, depending on the physiological malfunction, which may require being heavily anaesthetised and then systematically cut apart (with more disposable tools) to repair or replace whichever of our parts is no longer functioning properly. The assumption is also that is *The* way to address illness and pain, and ‘alternative’ ways are simply naive ‘quackery’ practiced by idiots or the ‘primitive’. The patient in this scenario is understood as a highly complex interplay of chemicals, and so careful injection of specific chemicals into our bodies is the rational choice for fighting specific pathogens. Side effects of these chemicals are normalised. (An apposite parallel to this is the ‘rational act’ of adding chemical fertilizers to top soil which has a bountiful short term effect, but disastrous in the long run). In this Medical narrative, anti-biotics (‘anti-life’) and other pharmaceuticals are favoured in the fight against bacteria, as “other ways of dealing with social problems are replaced by the workings of the pharmaceutical magic bullet” (Petryna and Kleinman 2006:8). Accompanying this largely chemical methodology is a vast medical-industrial nexus with a fixation on profits and

commodifying everything from youth and well-being to our own bodies. Modern Medicine remains largely unwilling to question the wider impact of its methodologies.

Its myopic understanding of the ecological processes in which all organisms are involved circumscribes Modern Medicine from thinking about the long term implications of its technologies on the global atmosphere and other species. Isolating for a moment just one facet of Modern Medicine: the creation of a new pharmaceutical drug, alone involves hundreds of individual, complex and high energy processes. These include research, commercial production and transportation of natural 'resources', chemical extraction and synthesization, licensing and patenting, animal testing, clinical trials on humans, production and manufacture of plastic, cardboard and paper packagings, shipping, and waste disposal. Each of these processes is highly technologised and high in energy consumption; their effects cannot easily be isolated or measured in real terms. All of them involve the exploitation of natural 'resources' and communities, and contribute to large scale pollution of the environment. Further to this, in the name of conquering disease (and conveniently boosting profits) millions of products are manufactured by the Medical industry yearly including pharmaceutical drugs, radio-pharmaceuticals, chemotherapy drugs, pharmaceutical delivery and medical practice products like hypodermic needles, latex gloves and thermometers, and personal care products (PCPs) like sunscreen, antibiotic soap, shampoos and antibacterial detergents. All of this ends up in the environment, and every chemical drug ingested or applied continues into the biosphere through excretion, washing, hospital waste streams and landfill dumping of expired drugs. The human body often excretes drugs chemically unchanged or unmetabolised. Many drugs are not biodegradable but continue producing chemical effects that are poorly understood, especially when mixed with countless other chemicals excreted from other drugs in other bodies. Already a decade ago, Americans filled 2.8billion prescriptions covering more than 66 classes of pharmaceuticals in one year alone (Rx List 2000, cited in Buhner 2002:86). This exemplifies the potential for the exponential growth of chemicals interacting in the wild. Testing carried out on the safety of drugs examines their short term impacts on presentable symptoms in 'average' humans, not their long term interaction with other life forms in the wider world. Fagin and Lavelle write that, for this reason "the same qualities that make synthetic chemicals so valuable - their potency and durability for instance, also make them dangerous" (cited in Buhner 2002:86). There is no shortage of examples of irregular, unregulated and invisible chemical presences in the natural world. In 1992 German researchers looking for pollution in ground water were surprised to find high levels of clofibric acid in the water from a drug used to lower cholesterol. The same

chemical was found in high quantities in the North Sea, Danube and Po rivers, Berlin tap water and Swiss lakes. The fact that Switzerland doesn't even manufacture this drug (Buhner 2002:91) exemplifies the dynamic flows of water and air cycles, and also how blind Modern Medicine is to the interconnections of these cycles. A good example of the co-relation between humans and other species in ecological processes is the impact that increasing amounts of oestrogen in the atmosphere is having on both fish and humans, as this chemical is excreted in the urine of women taking birth control medication. Unprecedented levels of female hormones have been 'feminizing' male fish which have been changing sex. Relatedly, we are seeing reduced sperm counts and slower sperm mobility in men, and the average age of female puberty continues to drop (Buhner 2002:96). Oestrogen is an example of a drug whose effects are more readily known and researched, but what will be the impact of the PCPs, pharmaceuticals and caffeine that are showing up in much of the US's drinking water now? (Jensen 2008:159) These examples refer to chemicals being ingested or applied to our bodies, but the same logic applies to our waste products. Everything that we produce has an ecological impact. By incinerating PVC medical devices used to administer toxic chemotherapeutic drugs and re-releasing the toxic effluent into the environment we are creating other people's diseases. This is not a dystopian fantasy but already happens. One example is the disposal of mercury thermometers, where the mercury is then deposited via rivers and flows of water into fish and marine plants. Chemicals travel up the food chain and amass in carnivores so it is little surprise that we are giving ourselves brain damage, tumours, cancers and creating resistance to anti-biotics which many of us also ingest daily through consumption of factory farmed animals (Buhner 2002:115). Internalization of the very real interconnection of all life forms and ecosystems is missing from biomedicine, with its short term, chemical focus on destroying that which is counter to (human) life.

We need to ask ourselves how our most hegemonic form of 'healing' could have come to understand life and health so narrowly? There is an urgent need to look critically at the underlying ontological and epistemological assumptions of Modern Medicine to understand how it sees the world in which we live. Before we can evaluate its long term impacts, we must first deconstruct its historical basis to understand how we got here. There isn't room to expand into a genealogy of Modern Medical science, though fortunately many have already done so (see White Jr. 1967, Gordon 1988, Merchant 1989, Keller 2009, Edwards et al 2010). For the sake of lucidity and brevity I have drafted four by no means exhaustive categories of the often unseen and unquestioned assumptions of biomedicine. They are: Separation from and Dominion over Nature, Reductionism,

Mechanism, and Universalism. I will first elucidate what is meant by these, before outlining an alternative philosophical basis for an emancipatory healing tradition based on medicines from plants.

| Biomedicine's Hidden Values

“If you see the world around you as made up of objects for you to manipulate and exploit, it is inevitable that you will destroy the world by attempting to control it”

Vine Deloria, 2008

Separation from and Dominion over Nature

Right at the heart of Modern Medicine's ecological shortsightedness is its inherent conception of humans as somehow outside of, above, and exempt from the consequences of 'nature.' This common way of thinking has its roots in the formative relationship of Western Science (or previously 'Natural Theology'), with early European Christian thought. The pursuit of knowledge was then an attempt to “know God's mind by discovering how his creation operates” which was (and for many still is) believed to have been *given* to Man (sic) for him (sic) to enjoy. In Genesis of the Bible it states, “And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the Earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the Earth” (cited in Jensen 2006:118). Christian dogma preached “man's transcendence of, and rightful mastery over, nature” (Merchant 1989:164), as opposed to earlier historical understandings of the Earth as sacred and intelligent. This understanding that Man (sic) was set apart from and above nature, legitimised the idea of taking 'nature' apart to understand how she worked. In practical terms this meant isolating, objectifying and clinically dissecting humans and nonhumans including mammals, invertebrates, birds and plants of all varieties. By the 15th Century, scientific texts were showing images of organisms as separable into constituent parts that could be labelled, categorised and hierarchised according to a new universalisable scientific logic. Industrialisation and technological 'progress' intensified this thinking, spurred on by one of the 'founding fathers' of Modern Science, Francis Bacon. Bacon, a strict Protestant, was very clear about the appropriate relationship for enlightened civilization to have with nature. He wrote, “technological discoveries.. help us to think about the secrets still locked in nature's bosom. They do not, like the old, merely exert a gentle guidance over nature's course; they have the power to conquer and subdue her, to shake her to her foundations” (cited in Merchant 1989:172). For Bacon, humanity's goal was to “endeavour to establish and extend the power and dominion of the human race itself over the

universe” (ibid). His influence went far towards the instrumentalisation of nature. We need only look to the widespread and unquestioned use of the word ‘resources’ to describe living organisms such as trees, fish and plants, reconceptualised for their worth *to* humans and not in of themselves. The dichotomy that this creates between ‘rational humans’ and ‘savage nature’ embeds the view that humans are the most important species and animals, plants, bacteria and stones are insignificant. This not only creates a chasm between us and that which sustains life, but also justifies doing intense harm to animals, plants, bacteria and stones in the name of ‘human progress’. Keller writes that, “the instrumentalisation of nature, justified by the fallacy of a human/nonhuman divide flirts precariously with ecocide” (2009:15).

Reductionism: a unitary ontology

Reductionism, the idea that parts are independent of and primordial to the whole (Gordon 1988:26) is fundamental to Modern Medicine. This is elucidated by simply deconstructing the etymology of Medicine’s progenitor and close bedfellow, ‘science’. The word science comes from the Latin scire: ‘to know’, equating science with knowledge, or the pursuit of truths. More telling is that ‘scire’ takes its meaning from ‘scindere’ - to cut or divide, and so specifically means to acquire knowledge by separating one thing from another, or ‘distinguishing’. More illuminating still is that this comes from the Greek skhizein ‘to split, rend, or cleave’ (www.etymonline.com 20/07/11). This *cuts* right to the heart of the dominant assumptions of Modern scientific inquiry (and its associated problems): the view that science=knowledge=truth=dominion over the natural world, and that truth is most efficiently *exposed* by breaking phenomena down into smaller and smaller parts to more properly know them. In technological Medicine, reductionism is also routinely applied to the human body, which is broken down into its organs and systems. They are then reified and looked at as automata in isolation, assuming they have any function at all when detached from the whole. Detachment becomes necessary to and engrained in Medical practice in this way, where the expectation is that the *purser* the science, the more detached and unemotional the scientist/doctor will be from the object being examined (Edwards et al 2010:5). The result is the elimination of human experience and feeling from an increasingly clinical, sanitized and plasticized practice involving medical *objects* and not individuals. This amazing notion that the scientist can be separate from the object studied, even if the ‘object’ is a human has led many commentators to assert that we have created a Medicine in which, ironically, “we ourselves, along with our entire human experience, have no place” (Barnes 2009:14-15). This tendency to understand our world from a detached place apparently *outside* of it is a cause of great ecological destruction, dehumanisation and

detachment from our own bodies. It is revealing that our most advanced instantiation of Medical science concentrates on smaller and smaller entities of the body: genes and molecular studies, but does not include an approach in the opposite direction, conceiving of our dependence on social, cultural and ecological fields of relations. Medicine must understand humans as part of the dynamic interrelationship of all species with each other. Rather than understanding parts in isolation, we need a healing tradition that sees processes as a “dialectical relation between part and whole” (Merchant 1989:293).

Mechanism: the Death of Nature

An intimately related consequence of reducing whole, co-created phenomena into sterile and dead parts is the development of conceptualising such parts as simply mechanistic cogs-in-a-machine. Keller describes the scientific view of the universe as an “elaborate and exquisite machine ticking on inexorably and indefatigably by the deterministic laws of physics” (Keller 2009:2). This view applies also to the Modern Medical understanding of the body, which having been clinically taken apart and examined, piece by piece, was already understood in the 17th Century as “a kind of machine equipped with and made up of bones, nerves, muscles, veins, blood and skin in such a way that even if there were no mind in it, it would still perform all the same movements it does now” (Descartes cited in Keller 2009:8). It is little surprise that our Medicine is dislocated from wider systems in nature when machines form our ordering philosophical principle. Machines have become the dominant model in Western Medicine’s ontology and epistemology; symbols of life itself. The implication then is that interventionist medicine can simply exchange a “fresh heart for a worn-out, diseased one” as the ‘technological fix mends an ecological malfunction” (Merchant 1989:193). The attendant consequence of our Medical practitioners being bona fide “specialist body mechanics” (Mills 1993:21), is that it ignores the ecological repercussions of the technological processes and chemicals that they use to repair our ailing machinery. It is imperative that we consider the effect of internalising the universe-as-machine ontology on the ability of humans to flourish on a living planet.

Universalism: timeless Truth

Finally, universalism is paramount to the abstract ahistoricism of Modern Medicine. The idea of universalism is that it is possible to make value-free, objective and fundamentally *true* statements which are valid regardless of culture, time and space. This is readily seen in Modern science’s claim to “see everywhere from nowhere” (Haraway cited in Edwards et al. 2010:10), instead of contextualising claims in light of the author’s individual subjectivity, culture and experience. The eminent danger of this belief is that it gives

apparent total legitimacy to the first three values I have outlined while simultaneously silencing any value systems or cultures that operate against them. The discipline of Medicine needs to be more reflective of the fact that “the language of medicine is hardly a simple mirror of the empirical world. It is a rich cultural language, linked to a highly specialized version of reality and system of social relations” (Good 1994:5), specifically those of early Christian, Western Europe. Our medicine is not ‘natural’, ‘inevitable’ or ‘universal’, but a very specific presentation of a set of embedded cultural understandings and power relations that have manifested themselves in Western, technologised biomedicine. Despite this, the entire discipline of Medicine is disturbingly reluctant to be self-critical of its own assumptions. “Science really is a remarkable human invention. But in all the excitement of its usefulness the fact that it *is* an invention is often forgotten” (Buhner 2002:46). It cannot be decontextualized and reified as *The Medicine*. Doing so furthers the claim that it is ‘natural’ and ‘inevitable’ to pollute our air and water, and decimate other species in the name of the limited chemical ‘healing’ of our species. It also adds to Modern Medicine’s delegitimation of other beliefs about health, illness and living in the natural world. Western Medicine’s claims to universal truth about these issues prevent indigenous knowledges being endorsed and respected equally. As Buhner outlines, “the image is of a toothless, badly trained granny pulling out of her pocket some plant leaves or root and insisting it will heal being contrasted with the young modern medical practitioner in his starched white coat with dangling stethoscope” (2002:80). Universalism adds to a culture of believing that more and more technological ‘advance’ can be justified in the name of progressive, yet unsustainable Modern Medicine.

Ultimately, the conflation of these hidden values and principles have left us with a dominant understanding of healing that conspicuously defines itself as separate from nature, universal in its reach, and eminently ‘progressive’ in its aspirations. However the practical manifestation of this is an era of detachment and terrible ecological violence which only serves to recycle disease and suffering. Simon Mills infers that “it should have been expected that technological progress would be at the expense of the ecosystem; that pollution, the break-up of community and an increasing sense of personal alienation would follow from denying that the whole of nature is as important as the bit you are concentrating on” (1993:15). It is clear that to fight this dominant philosophy, we must emancipate ourselves with different tools for understanding the world, our place in it and how to help our landbase flourish so it can sustain all life.

|Towards an Emancipatory, Relational Herbalism

“A radical revisioning of human’s relationships with the rest of nature has the potential to deeply re-orient Western ways of knowing”

Priscilla Stuckey, 2010

We are in great need of a different healing approach, one which is self-reflexive, critical of furthering violence and destruction, and which practices sustainability at its very core. It ought to be simply given that a healing tradition understands the need for a livable planet and works towards lessening and not recreating suffering and pain *for all life forms*. Following Buhner, medicine needs to be re-examined in light of what we know to be true: that the Earth is a “complex, multidimensional, intricately interconnected, synergistic, living organism” not a mere collection of parts (2002:viii). I posit that localised botanical medicines based on relational ‘knowing’ can provide the emancipatory framework we so require. A healing tradition which works with plants, alongside the cycles of nature, understanding itself as intimately bound up in the wider world and not exempt from the environmental consequences of its actions would lessen a huge amount of the destruction we currently reproduce with our unhealthy technologized medicine. Crucially this cannot be a co-option of botanical medicine by the dominant Medical industry. Moving the technological fix into the botanical realm will still retain the basic principles of mechanism and reductionism that force a separation and hierarchy between humans and the natural world. Furthermore, it would be equally reductionist and dualistic to simply suggest a utopian ‘other’ to hegemonic Modern Medicine. We don’t have to ignore the achievements of Medicine, “rather we need a different way of organising our knowledge, to bring it in line with ancient truths, and strive for a grand synthesis of the new and the old, a hybrid that vigorously does justice to both” (Mills 1993:11). I am not suggesting ridding our medicine of all pharmaceuticals, chemicals and technology, but rather minimizing these to a sustainable level, and making use of plant medicines where appropriate. Thus we must open ourselves up to a plurality of healing approaches, understandings and ways of being that do not rely on claims to Universal Truths, but are context specific. There isn’t room here to outline a practical agenda for such medicine(s), but this too might not be desirable. An alternative approach to medicine that truly understands the consequences of its actions would have to be geographically and culturally specific, and open to re-inventing itself as its local ecosystem warranted. Instead I will outline proposals for the general commitments of such medicines, which would at their heart be based upon relational epistemologies and ontologies.

What is meant by a relational epistemology? According to Nurit Bird-David, a relational way of knowing is about “developing one’s skills of being-in-the-world with other things, making one’s awareness of one’s environment and one’s self finer, broader, deeper, richer” (1999:78). It is about internalising the knowledge of inter-being, in which everything is connected to everything else (Hwa Yol Jung cited in Dallmayr 2004:252). Opening up our thought processes to our *relatedness* to the land that sustains our lives is a pre-requisite for re-harmonizing humans with the rest of the natural world. It speaks directly to the idea that human beings are part of the web of life, not separate and superior. David Abram eloquently sums up the need for Medicine to take a relational standpoint: “We’re obviously utterly dependent upon this world, our nervous systems co-evolved in delicate interaction with all these other beings and shapes and textures.. our sciences (need) to study the world from our experienced place within this world,” and become motivated by a sense of wonder rather than a will to control (cited in Jensen 2008:216-7). This relational viewpoint already functions in other contexts outside of the dominant Western one. In this light we could learn a lot from our herbal ancestral past or other plant-based modes of healing such as Ayurvedic, Tibetan, American Indian, Shamanism, African pastoral traditions and actually, the *majority* of people in the world whose indigenous systems of healing work inter-relationally with nature. (Regrettably there isn’t room to expand into the efficacy of plant medicines here. For studies see Mills 1993, Buhner 2002, Thompson 2003, Lazar and Johannessen 2005, Schneider 2009, Little 2009) Plant based medicine is now, and has historically always been the most common and sustainable mode of healing. They were no doubt the first form of medicine, and remain readily available to everyone, growing in deserts, forests, inner cities, mountain tops and jungles. Simon Mills, an esteemed medical herbalist writes that “it is not surprising to find that all but the most technological of societies have an immense wealth of knowledge about the plants in their vicinity” (1993:148). A relational, botanical medicine could begin to re-empower individuals to feel more responsible for their own health and the health of their natural medicine-chest-locality, while minimizing the need for harmful chemicals.

If we were to practice herbal medicine with an internalised relational epistemology, it would have a profound effect both on our processes of healing and our long term relationship with the biosphere. Carolyn Raffensperger is an American activist proponent of what she terms ‘ecological medicine.’ She asserts the need for us to “rethink medicine with the understanding that you *are* the air and water”, to “understand that health itself is an ecological process” (cited in Jensen 2008:157, emphasis mine). Once we begin to see ourselves *as* air and water, we are forced to think about the long term consequences of our

current form of highly toxic, short sighted medicine. An ecological medicine would “live within the cycles of nature, as opposed to the exploitative, linear, mentality of forward progress” (Merchant 1989:xxi). Another benefit of relational thinking and being would be that we could forge new understandings of our own bodies, which are ecosystems too. By no longer viewing disease as simply a physical presentation of a material symptom, we wouldn't have to isolate specific physical symptoms and dehumanize ‘consumers’ of medicine, but could consider the *whole* person's *whole* experience of illness and wellness.

| Conclusion

“Our epitaph (as a species) may well read:

‘They died of a peculiar strain of reductionism, complicated by a sudden attack of elitism,
even though there were ready natural cures close at hand”

Gary Paul Nabhan, 1998

Ultimately, our Modern Medicine is in great need of a re-examination in light of the wider destructiveness of its toxic approach to precisely targeting pathogens. This form of Medicine remains highly circumscribed by its values inherited from early Christian theology and rationalist ways of understanding the world. In light of increasing toxification of the global landbase which sustains all life, this is a critical time for an emancipatory healing tradition. We need an approach that doesn't rely on understanding humans as separate from nature or the world as reducible to cogs-in-a-machine. There are pre-existing traditions which already embrace a relational way of knowing and being-in-the-world based on plant medicines. We don't need to discard all that Modern Medicine has to offer, but rather it ought to be contextualised and historicised to its proper place, and not be allowed to claim Universal validity through silencing other forms of healing. We can learn a lot from Modern Medicine, but must leave behind its toxic, interventionist methods through coming to an understanding that polluting the air and the water is inevitably polluting *our* lungs and *our* cells in ways we may not yet understand. (Just this morning, a study was published attributing the deaths of 4,000 children in London a year to air pollution www.theecologist.org 28th July 2011). Though these environmental disasters are also heavily bound up in many other less valuable industries, Medicine still deserves criticism for the huge number of technological processes it relies on to create its pharmaceuticals and other products. It is primarily focused on *health* and the elimination of barriers to human wellness and so cannot escape the consequences of its choices about how to confront these problems. A localised, relational, herbalism, with internalised knowledge of the interconnection of everything to everything else could provide an

emancipatory platform for a sustainable, ecological medicine. It could create the possibility for us to re-harmonise our medicine and ourselves with the landbase in each of our localities. Ecological medicine could de-objectify us as medical 'consumers' and instead empower individuals to engage in a more dialogical relationship with their own experiences and the world around them. Faced with greater toxification and destruction each day, there has been no more urgent time to tackle this than now.

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