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## Cannabis Fear Deconditioning: An Autobiological Marijuana Memoir of a South Asian-Oklahoman Physician-Scientist

Sunil Kumar Aggarwal<sup>1</sup>

**Abstract.** Here I take up calls to engage in developing an “ethnobiology of us,” in which Western biota-cultural relations are centered. When Western-influenced scholars study extinct and extant cultures of cannabis cultivation, trade, and consumption in celebratory, reverential, or mundane contexts, it is crucial for appropriate self-reflective positionality to appreciate the power, persistence, and remarkable idiosyncrasy of the western socioecological worldview of cannabis. In human-cannabis relations, I argue this is essential, as the Western worldview carries profound hegemonic weight, influencing preconceptions of scholars and global societies. A prevailing Western notion is that close contact with cannabis is socially legitimate only for a privileged few and otherwise harshly criminalized and stigmatized. Constructed scarcity and inequitable accessibility of this traditional and widely cultivated species and its products are ubiquitous, including near-total invisibility of wild and cultivated plots.

Drawing upon my own memories and reflections navigating multiple cannabis-related cultural frames, spanning from disgust to fear and curiosity to reverence, I will chronicle the cannabis and the various cultural frames in which it was embedded, which I have passively or actively encountered throughout my life, including in my training and practice as a geographer and medical doctor. The thematic arc has been shifting from alienating to allying with cannabis, yet, at the same time, being ever-vigilant of the official marginality of that alliance and related structural violence. To adapt to that social marginalization, I have come to accept various logics that connect cannabis with the body, stretching from spiritual and cosmological, cultural-traditional, and pharmacological-biochemical.

**Keywords:** autobiography, human–cannabis relationship, prohibition, structural violence, embodiment

### Introduction

A special issue of the *Journal of Ethnobiology* dedicated to cannabis is welcome. In searching the text of its over 37-year collected works, using the digital archives Biodiversity Heritage Library (1981–2004) and BioOne (2005–2018), I discovered cannabis has been mentioned in 11 issues of the journal—only in three in the last 13 years. In contrast, “tobacco” and “alcohol” appear in 44 and 45 issues, respectively. Aside from prehistoric and rare historical diasporic ethnobiology, cannabis is mentioned only in passing with little depth, never in a title or article abstract, and predominantly in book reviews. Having surveyed, as a student, much of the avail-

able scholarship on cannabis, none of this surprises me. While cannabis is arguably the world’s most widely distributed cultivated plant (Clarke 1981:ix), its marginality in scholarship is a testament to the success of the widespread policy of cannabis prohibition. I believe this policy has helped construct a psychological barrier in the minds of scholars between cultural formations involving cannabis and those involving the vast array of other significant biotas with which groups utilize and culturally interconnect in their environs.

I believe this isolation of cannabis from cultural ecological scholarship is due to the longstanding obscurantism associated with cannabis-related topics. Any scholar

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who has spent formative years during the second half—especially last quarter—of the twentieth century in the U.S., or in places strongly influenced by U.S. law and custom, has been exposed to the social predisposition to keep cannabis cultural formations obscured and out of the purview of formal scholarly investigations and serious study.

In my view, the repeated and continuous imposition and ongoing threat of criminal and other formal sanctions on those engaged in prohibited cannabis-related domestication and trade behaviors have led to shame and secrecy, which deters serious cannabis ethnoscience scholarship (Gootenburg 2004; Grinspoon 2002a, 2002b; Lenson 1995; Marlatt 2002). Undertaking social scientific research involving close contact with cannabis in the field is still a significant challenge given legal and institutional barriers that current law and bureaucratic practices erect. To that end, a personal account is useful, as it provides empirical participant-observation and can be produced without need for cutting through a morass of red tape or endangering the legal status of others. One can probe deeply into how cannabis and cannabis-related social formations become embodied. Theoretically, such an approach can help broaden our understanding of cannabis culture to include behaviors, beliefs, and practices associated with cannabis utilization and its prohibition.

Wolverton et al. (2014) identify the need to incorporate in ethnobiology scholarship narratives from Western peoples regarding biota-cultural relations, referring to such approaches as *autobiology*, *ethnobiology of us*, or *auto-ethnobiology*. Memoir is an excellent method to excavate “subtle ecologies” (Wyndham 2009), which are essential to addressing contemporary environmental problems. Subtle ecologies are nuanced, slow, embedded, intrinsic, and “local in scale and represent[ing] direct human-environment

experiences and knowledge” (Wolverton et al. 2014:126). The most local position is one’s own internal locus and embodied experience, which autobiographical memoir singularly can elucidate. Embodiment is a process through which the world is orientated towards and encountered through the lived body. A phenomenological approach can help convey the subtle ways in which orientation towards and direct encounter with particular biotas are experienced at an embodied level (Abram 1996; Massumi 2002). Additionally, as human-cannabis relations continue to be deeply political and are an emerging area of nature/society scholarship, as laws and policies shift, speaking from a first-person vantagepoint allows for bearing witness to the human-cannabis relationship (Aggarwal et al. 2012; Bloomer 2009).

To understand how individuals and groups experience cannabis, whether materially encountered growing wildly or domestically, cut and packaged, loose, or symbolically encountered in name or representation, it will be necessary to appreciate how violence is experienced, given the reach, pervasiveness, and severity of cannabis prohibition law enforcement. Such violence, codified and unevenly socially distributed, is predominantly organized as *structural violence*. Structural violence is a term coined by Johan Galtung (1969), elucidated on as symbolic violence by Pierre Bourdieu (1979), and defined by Paul Farmer (2004:307–308) as:

violence exerted systematically—that is, indirectly—by everyone who belongs to a certain social order... roles [are] played by the erasure of historical memory and other forms of desocialization as enabling conditions of structures that are both “sinful” and ostensibly “nobody’s fault” ...adverse outcomes associated...—death, injury, illness, subjugation, stigmatization, and even psychological terror.

How is this structural violence experienced at the personal level? How does it foment interpersonal conflict, sow seeds of mistrust, and facilitate alienation or ostracization? In close encounters with contraband biota, how is structural violence present and what are the effects?

One way of conceiving of structural violence tied to engagement with a contraband biotic species is through the lens of geography. Exposure to violence is socially structured through a set of invisible boundary lines enclosing the tissues of all individual organism members of a contraband biotic species. These lines are sociopolitical and have been drawn at particular historical moments by forces of power, influence, and authority, which help to maintain them as well. When we encounter these boundary lines, depending on our social position, they effectively alienate us from freely associating with the biotic elements of nature enclosed behind them, leading to a feeling of exhilaration or fear when approaching or crossing such boundaries. In this way, structural violence for ethnobiology can help to characterize subtle and not-so-subtle political ecologies. Recall Robbins' (2004:213) excellent description of the analytic of political ecology as a hatchet for demystifying nature/society relations, revealing how: "powerful modern institutions and individuals...have gained undue and disproportionate power by explicitly attempting to divide and police the boundaries between human and non-human nature" and how, in response, "resistance emerges from traditional, alternative, and progressive human/non-human alliances marginalized by such efforts (usually along lines of gender, class, and race)."

Using my memoir, set in late twentieth and early twenty-first century United States, this article endeavors to contribute to autobiology (Nabhan 2013; Wolverton et al. 2014) by focusing on our conflictual *Cannabis sativa* culture. I discuss how

I have experienced violence, both structural and direct, as well as insight, relief, and pleasure, in the context of cannabis encounters. Mine is certainly only one perspective on cannabis and related social formations in the U.S. in the last four decades. Others have had radically different experiences given particular race, class, gender, and sociocultural predisposing factors. As a geographically rural racial minority and second-generation immigrant, I had the most peculiar experience of discovering and assigning value to a plant species entirely obscured by neglect or distortion for the first 20 years of my life. I have been exposed from within to a large array of cannabis-related cultural valuations, from disgust to indifference to reverence, and I have worked professionally in academic and organized medicine, social sciences, public health, and public policy institutional cultures to propose a beneficial cannabis-human relationship. The main thrust of the memoir will be to explore the ways in which I was sociopolitically and socioculturally conditioned to fear cannabis and how this conditioning intersected with other elements of my autobiography, starting from my childhood. I will then explore the ways that my fear conditioning was challenged through self-experimentation and inquiry, and how embodied experiences and social exposures helped me to assign new meanings to cannabis. Finally, I will describe the ways in which I experienced stigma and marginalization related to my professional openness regarding cannabis and how I adapted to threats of violence related to cannabis prohibition. In the discussion, I will explore how cannabis prohibition can be understood as structural violence and how my experiences might be illustrative of those of others. I will conclude by exploring what cannabis fear deconditioning entailed for me and what it might suggest for future research directions.

## Memoir

### Early Indoctrination in Cannabis Obscurantism

I was born in Autumn, 1979, in Muskogee, Oklahoma, a small rural city, population then and now of approximately 38,000 (Waits 2018) to a South Asian Indian immigrant, hetero-patriarchic married couple from Northwestern India (Punjab/Haryana). I was raised in the same city, the second of three children. Between the ages of three and eight years old, and particularly ages four to six years, U.S. President and First Lady Ronald and Nancy Reagan were at the height of their unprecedented mass political campaign to indoctrinate millions of youth with the alarmist message “Just Say No!” when the offer of “drugs” of any kind was raised. The First Lady traveled over 250,000 miles for the campaign and had many television appearances (Mozingo et al. 2016).

Over my years in primary school, the “Just Say No!” message became couched increasingly in war metaphors, as it became more heavily policed and militarized (Gray 1997:29–35). We had school presentations by police officers warning of the harms and criminal consequences of drug use, complete with “drug dog” visitations and premises searches, tours of the interior of a police cruiser, exhortations and literal verbal repetitions of the “Just Say No!” slogan, which we promised to utter if we were ever offered any kind of drugs. Once, in mid-elementary school, we were bussed to a large rally at the civic center, along with students from other area schools. There, a traveling band sang sappy rock music, gave us wristbands, and taught us a shallow, self-esteem boosting hand gesture. It was, I presume, a way to present a pseudo-feel-good self-affirmation to counterpoint the negative indoctrination of associating revulsion, disgust, fear, and aversion to “drugs”—what’s been called “drug hate” (Baggins 1998).

I took it all in as sacrosanct. I never understood why anyone would willingly wish to consume alcohol or drug substances, as I believed the message I was getting from adults that they would invariably toxify one’s brain. As a child of first-generation immigrants, my parents were constantly instilling the model minority mythos: keep your head down, listen to your teachers, don’t rock the boat, and you will be successful. Additionally, since my father viewed alcohol ambivalently, given his father drank heavily and died well before I was born, I had a tendency as a youth towards absolute teetotaling. Given that I was an academic overachiever, had no sports acumen, very few friends, and felt the sting of racial microaggression regularly, I put all my eggs in the academic basket as my ticket out of a life of banal drudgery and discrimination. I figured that, given the risks that drugs apparently posed to social upward mobility and academic achievement, “just say no” was just fine by me. I was at the right age, at the right time, and heard it repeated with sufficient quantity to thoroughly absorb the message and for it to have a psychologically-conditioned, long-lasting effect.

Geographically, I lived in a highly compliant place where the Reagans and their successors, the Bushes, enjoyed significant popularity and in which unquestioned patriotism and the general absence of dissent were seemingly commonplace. Though it was rural mid-America, the federal government played a significant and disproportionately large role in the lives of many in Muskogee throughout the twentieth century, including mine. In the early 1900s, due to the local work of the Dawes Commission to register the so-called Five Civilized Tribes in then-called Indian Territory, and due to the placement there of the Territory’s first federal district court, Muskogee was home to the second highest number of federal employees in the U.S., second only to the Washington, D.C. (Waits

2018). Starting in the late 1970s, my father became one of these federal employees as a physician at the local Veteran's Administration Hospital—which led to my family's settlement in Muskogee.

Outside of T.V., I recall very little exposure to informal drug indoctrination. When a middle school classmate explained to me during an after-school conversation that "marijuana" was also called "grass," I remember looking at the grass in my backyard, being very puzzled by how and why that term was used. In retrospect, I had no idea marijuana was a living plant material, and it is clear to me, upon reflection, that I had no rudimentary natural science knowledge regarding marijuana to even grasp alternate understandings about it from peers. In addition, even though educators encouraged reporting witnessed drug-related activity to relevant authorities, informally, on the school playground, there was a competing stigmatization of being labeled a "snitch" or "narc," who sought higher authority intervention to address peer disputes or personal matters.

Though I had a sense that any "brain damage" from the use of alcohol or drugs was maybe a tad exaggerated, the social consequences of law transgression were quite a deterrent. I was more inclined to stay in line because I felt, as a racial minority in a town with significant racist history and ongoing tensions, I would be a more visible target. As an attempted behavioral deterrent, even student organizations at Muskogee High School made sure to emphasize the most spear-tipped aspects of drug law enforcement when promoting "drug-free" lifestyles. For example, a student group at our school, whose mascot is "The Roughers," was called Roughers Against Illegal Drugs, or R.A.I.D. As a noteworthy aside, a subtle reference to The Roughers is hidden in a line of country-western singer Merle Haggard's 1970 hit song "Okie From Muskogee," which opens with "we don't smoke marijuana in Muskogee" and

calls for preserving traditionalist "square" culture in the face of encroaching, foreign, anti-establishment "hippie" culture, stating "and football is still the roughest thing on campus" (La Chapelle 2007).

R.A.I.D. was sponsored by my 10th-grade biology teacher-coach, who refused to teach evolution and also sponsored the student organization Teens for Christ. R.A.I.D. celebrated no-knock raids, the violent tactic police would use, with guns drawn, to take drug suspects by surprise. Scenes of raids were sensationalized on the extremely popular reality television program *Cops*, which went prime-time in 1991, when I was in seventh grade, becoming one of the longest running T.V. programs in the U.S. The opening song's reggae lyrics, "bad boys, bad boys / whatcha gonna do? / whatcha gonna do when they come for you?", became the veritable soundtrack glorifying police drug raids (Bacle 2018). Such programming helped to cement a fear and alarm association with any illicit drugs which simply layered over the prior indoctrination of revulsion and toxicity.

### Self-Experimentation

As an adolescent, I did experiment a few times with alcohol on New Year's Eve, thanks to older relatives. I only remember the thrill of the transgressions (once made moreso by the fact that the drink concocted for me was a "Sex on the Beach"). At age 17 or 18, I experienced the "buzz" of alcohol drinking with college dorm mates. I had, by then, relaxed my teetotaling stance and was willing to infrequently break underage alcohol laws, as it was commonplace, and I felt it did very little self-harm in exchange for conviviality and feeling adult.

At college, I underwent mild culture shock leaving conservative Oklahoma for liberal Berkeley. Having been a fan of dystopic novels such as Orwell's *Nineteen Eighty-Four* (1994) and Huxley's *Brave New World* (1989), I picked up a copy

of Huxley's *Doors of Perception* (1970), drawn by its provocative title and brevity. I was amazed at the philosophical insights into the "Platonic realms" Huxley gleaned after imbibing mescaline, the hallucinogenic/entheogenic chemical found in *Lophophora williamsii* (peyote). This piqued my curiosity. I thought that, one day, I, too, may wish to try that, or something like it, to further my understanding of the nature of reality.

While no opportunities arose to try mescaline, I did eventually, after starting junior year in college, experiment with taking cannabis. In retrospect, what led to this was going through the breakup of a three-year-old romantic relationship, which catalyzed seismic shifts in my thinking and theretofore-accepted attitudes, including early ones (Brook et al. 2008). I had had marijuana entreats from members of the Undergraduate Philosophy Club, whose meetings and informal gatherings I had begun attending. I did not really feel open to trying it until I saw, and was deeply moved by, the Sam Mendes film *American Beauty* in the movie theater. It depicted Lester Burnham (Kevin Spacey) breaking away from a life of inane drudgery through a series of vivid dreams and through his consumption of marijuana, both alone while working out in his garage and together with another, younger actor in the film, who appreciated beauty in small details. I thought that cannabis cannot be all that bad if these characters are able to use it and still perform in some ways I considered to be heroic. I allowed a new mythos about marijuana to form in my psyche. The next time opportunity knocked, I answered.

A few months later, in early November of 1999, I found myself sitting next to Strawberry Creek, on the Berkeley campus, listening to the sounds of running water. Having taken a few draws of cannabis smoke for the first time with my Philosophy Club friends and having wandered away from the group to sit in repose in a place of natural beauty, I felt a profound sense of

inner stillness and peace, devoid of tension and any feelings of excessive worry related to unattended obligations. I was alert, awake, and at the same time relaxed and attuned to everything around me. In that moment, I realized that this was the state that the meditation books I'd read in my youth had been describing.

This experience of anxiolytic inner peace was radically transformative. My intellectual curiosity into the how and why of what had happened to me was piqued; I felt a desire to share this with others. In subsequent experiences, I found taking cannabis enhanced the quality of my life by fostering psychological balance, making me a better student and a more well-rounded person. Over time, I explored cannabis in various forms and settings, read up on its history and pharmacology, and socialized with its aficionados and devotees. Thus, I began the process of reconciling my first-hand experiences of cannabis with my fear-conditioned upbringing.

### Meaning-making Through Embodiment

It is nearly impossible to capture with words the supreme bliss, or *ananda* in Sanskrit, that I've felt when under the effects of cannabis. It can best be categorized as spiritual and holistic healing and growth. In these moments of influence, I experience a full gamut of direct, embodied experiences, including laughter, joy, playfulness, new appreciation of sensual pleasure like music, food, and the natural environment, easing of physical and psychological tension, and bursts of creativity and inspiration. My mind, body, and persona are changed and stretched. I became quite enthralled with the biotic natural history of cannabis, which, had it come to me in a different ethnobiological context, might have been seen as a socially mediated urban foraging of a locally domesticated medicinal plant.

Jason Silva, Michael Pollan, and Andrew Weil are three writers/communicators whose descriptions of cannabis-occasioned experiences resonate most profoundly with

my own. In a Big Think *YouTube* video (2015), prolific mind science communicator Jason Silva describes the impact of cannabis on generating awe, drawing from the writings of David Lenson and Richard Doyle. Cannabis-occasioned subjective psychological experience, he explains, is context dependent and produces a “dialectal pattern of reconcilable estrangement” with the world of perceptions. It starts with an alienation from the world of ordinary perceptions, so things become perceived as “novel, new, interesting, and strange.” Then, there is a witnessing of that transformation and a reconciliation with that estrangement. This reconciliation with the world of objects is such that the thing that is seen is seen as if for the first time, and “can be regarded, can be revered, via a state of sacred or archetypical consciousness.” This change in perspective can hopefully result in some kind of transformation: “heightened appreciation, increased compassion, increased well-being, and increased creativity.” In this context, it is easy to see how this plant that can occasion reverence in those who partake of it can itself become meaningfully valued and revered.

UC Berkeley Journalism Professor Michael Pollan’s (2001) widely acclaimed book *Botany of Desire: A Plant’s-Eye View of the World*, describes the brain’s built-in forgetting faculty, which is critical to normal functioning. He notes, “our mental health depends on a mechanism for editing the moment-by-moment ocean of sensory data flowing into our consciousness down to a manageable trickle of the noticed and remembered” (Pollan 2001:161). He invokes the endocannabinoid molecular signaling network when describing how marijuana, working mechanistically through this network, may “overstimulate the brain’s built-in forgetting faculty” and posits that this effect is primarily responsible for the “texture” of consciousness under its influence. Stimulation of the forgetting faculty allows for a feeling of novelty to infuse experiences, a sharpening of sensory

perceptions to occur as habitual modes are disrupted, and a bathing of the “most ordinary insights” with an “aura of profundity” to arise. It also contributes to the feeling of subjective time dilation: “the sense that time has slowed or even stopped.” Pollan poetically observes how important this is for those, like me, who have struggled with anxious states of mind. “For it is only by forgetting that we ever really drop the thread of time and approach the experience of living in the present moment, so elusive in ordinary hours” (Pollan 2001:162).

Finally, integrative medicine pioneer Dr. Andrew Weil, in *The Marriage of the Sun and the Moon* (1998), originally published in 1981, prior to the discovery of the neural endocannabinoid molecular network, makes excellent points about how the aforementioned effects of cannabis are not simply transient thrills and curiosities; rather, like many highs, such as those that can come from music, dance, sex, and meditation, they actually have the potential to transform and unlock potentials in one’s nervous system and foster overall health and well-being. He observes in the chapter “Marijuana Reconsidered” that:

High states of consciousness show us the potentials of our nervous system... help us integrate mind and body... promote health...feel good...being high on marijuana is a learned association between an experience that is always on tap within the nervous system and a change in feeling caused by the drug. (Weil 1998:87–88)

My embodied phytocannabinoid-aided modes of being/feeling/experiencing were not simply time-limited by the pharmacokinetic duration of the cannabis resin in my body; rather, they led to a widening of my nervous system and ordinary consciousness. Accessing new vistas and ways of being did not invariably require the presence of an external “drug”; they were new parts of myself discovered through my relationship with cannabis’s resin-



ous pistillate inflorescences. To devalue or deny these parts of myself would be self-negating. While I also had negative experiences (coughing due to inhaling soot-laden smoke and also panic/paranoia), I found these could be mitigated through consumption of cannabis with increased percentage of the non-inebriating cannabidiol (CBD), consuming less, employment of non-smoked delivery methods, psychotherapeutic exploration, and progressive fear deconditioning through studying the sociopolitical history of cannabis laws and taking steps urging repeal of prohibition.

### Coming Out as a Cannabis Researcher

I mostly kept my cannabis interests out of institutional, professional, and formal circles for five years. Then, during my final year in college, in September 2001, I interviewed at the University of Pittsburgh's National Institute of Health (NIH)-supported Medical Scientist Training Program (MSTP), a funded program conferring M.D. and Ph.D. degrees. At the end of a day of interviews, I cavalierly chose to reveal to a neuroscience student interviewer my interests in cannabis and cannabinoid science. He invited me to his home and then offered me cannabis to smoke before taking me to the applicant dinner, where alcohol was served. The next morning, while touring the anatomy class, amongst cadavers, a little after 9:00 a.m. on September 11, we received news about the events happening at the World Trade Center. Interviews were canceled. While we all were in a state of shock and bewilderment, I returned the next day to interview with medical faculty and stayed several days due to the grounding of all flights. A few weeks after I finally made it home, I received news that I had been accepted to the medical school but not the MSTP. Many peers surmised—perhaps rightly—that I had not gotten in because I had discussed my interest in cannabis and taken up my student interviewer's invitation to smoke some. The fact that many people were seeing this as a plausible cause

shows the level of uncomfortableness and ambiguity surrounding cannabis and the partaking of it in such settings.

Two months later, as I was returning home from the UCSF chemical neurobiology lab, where I worked in at the time, I came upon a symposium underway in the main auditorium of Berkeley's life sciences building put on by a student group, Students for Sensible Drug Policy, titled "Marijuana: What D.A.R.E. Didn't Teach You." Neurobiology professor Dr. David Presti was giving a talk. He sketched on the chalkboard chemical structures of the cannabinoid compounds in cannabis and described the recent discovery of the endocannabinoid signaling system, highlighting its unique mode of *retrograde signaling* between neurons. I found it fascinating, as it implied a built-in feedback system. I grasped more clearly that day the putative mechanism of action underpinning claims about cannabis' utility in conditions such as pain, nausea, and vomiting. For me, the chemistry connected.

That the symposium took place in the very auditorium where I had attended many biochemistry course lectures added to my sense of confidence in the bioscience and lessened my prior tendency to discretion. I remember even voicing "show us!" when presenter Jeffrey Jones, of the Oakland Cannabis Buyers' Cooperative, who had gone before the Supreme Court seven months earlier to argue for a patient's right to cannabis as a medical necessity, said he told the press in D.C. he does not "smoke marijuana" but instead vaporizes it. He opened his silver briefcase and demonstrated the heat gun vaporization technology of the time to inhale cannabis vapor without generating smoke or combustion byproducts.

Not long after, I discovered that the lab of Dr. Roger Nicoll was just a few floors up from where I worked. It was in Nicoll's lab at UCSF that the *discovery* of the retrograde nature of endocannabinoid signaling was made through molecular electrophys-

iology experiments, published earlier that year in *Nature* (Wilson and Nicholl 2001). I eagerly went to meet Dr. Nicoll to discuss his discoveries and the field overall. I remember him smiling coyly about the implications of his work for cannabis understanding.

Several months later, when I interviewed for the University of Washington MSTP, I was asked to provide a list of faculty I would like to meet. Dr. Nephi Stella was on the faculty. His area of work was cannabinoid signaling to study neurological diseases and treatments. He was one of two faculty with a focus on cannabinoids, the other being Ken Mackie, M.D. I decided to offer their names and ended up interviewing with Dr. Stella. He seemed favorable to my scientific interests in cannabinoid science and impressed I had met other scientists in the field. Ultimately, I was offered admission, which I accepted and completed over eight years. I received a Ph.D. in 2008, writing a dissertation titled: "The Medical Geography of Cannabinoid Botanicals in Washington State: Access, Delivery, and Distress" (Aggarwal 2008) and an M.D. in 2010.

During my first year, I did a preceptorship through the Department of Family Medicine and asked to be assigned to a physician practicing integrative, or what was called then "complementary and alternative," medicine. Once, while working with physician Peter Grote, we had a patient, a man in his forties or fifties, who told us about his asthma and attempts at cannabis smoking to help alleviate some of his respiratory symptoms but being challenged by smoke irritating his air passages. With no sense of fear or discomfort in bringing up such a topic, I asked the patient if he had ever tried a vaporizer. Both the patient and Dr. Grote were very interested in this, and it led to further exploration. In my second year, I was able to confide in my pharmacology professor, Frank Vincenzi, about my interests in this topic and that I had applied to be a member of Seattle's

Marijuana Policy Review Panel, formed when the citizens passed an initiative to make marijuana the lowest law enforcement priority. Eventually, I found additional interested and supportive faculty.

### **Embodying Violence: Threat of Contraband Exposure**

Going into my third year, in September 2004, as I shifted into geography graduate school, I had a traumatic breach of trust that gave me insight into cannabis law-related distress. What started as an amicable relationship with an older man, whom I had casually hired to fix a few things in my apartment, ended abruptly with a threatening letter left on my kitchen table after I refused to take part in an interstate cannabis trade deal with some of his friends in Montana. In it, the man threatened to report my cannabis use, with my vaporizer with "fingerprints" as proof, and jeopardize my academic standing, freedom, and ostensibly clean criminal record. He referenced a .50 caliber gun which he would "show... to me" and had stolen some cannabis flower and paraphernalia from my home. I became concerned that he might have taken some of my personal home videos, which portrayed me and others consuming cannabis and having all manner of philosophical and mystical discussions, which I did not want being made public, as they could have been considered compromising to the wrong people. I later discovered that none of these tapes were missing.

In retrospect, I should have been more forthcoming about paying him for his labors. We had never come to any formal arrangement for payment, as he had always been reluctant to do so, and perhaps it appeared I was "stiffing" him, and his anger over this may have percolated after I refused to help him bring in cannabis from Montana. The trauma heightened my paranoia and sense of lack of internal locus of control. I sometimes believed I saw his red truck driving by and would try to take cover. I worried there was some kind

of malicious messages sent to me in spam emails. I was concerned acts of vandalism of our building's basement windows and keybox were somehow connected to my predicament. I had the lock on my apartment door changed. I had the misfortune of being randomly selected to participate in the annual National Crime Victimization Survey. I felt, yet again, the helplessness of not having any legal recourse because I knew that the crimes against me could not be reported on a government survey because they could end up incriminating me. I had more than a few very negative "trip" experiences with high dose cannabis, where I felt I was being followed, and even one time that an outside force was psychologically torturing me! These types of experiences truly seemed to border madness.

Upon reflection, I thought more about the violence people inflict upon each other in general and I pursued this as a research topic. Eventually, on New Year's Day 2005, when taking a flight with my sister, I had an epiphany: the violence I could study in my doctoral work is that related to the drug wars, later focusing in on cannabis. I resolved to have some modicum of control by making strides to question and ultimately challenge this social framework in which I felt trapped (Valentine 1998).

### **Embodying Cannabis's Sociolegal Impurity**

I began attending cannabis law reform national conferences in 2005. One such conference is held annually by the National Organization for the Reform of Marijuana Laws (NORML), the oldest continuing organization of its kind founded shortly after the Nixon Administration decided, in the early 1970s, to place cannabis in the most restrictive category of Schedule I, against the expressed advice of Congressionally and Administratively paneled experts. At a 2006 conference, I met UC Berkeley student Joen Madonna (2006), who wrote a cultural geography honor's thesis on cannabis and visibility. She recounted

an experiment she did in one of her large, undergraduate classes, when she took to the podium to present her work. She surprised everyone by pulling out of her bag a plastic baggie with a substantial amount of green, flowery herb, announcing, "here I happen to have brought some marijuana to show to you as a demonstration." She received hushed half-sighs, expressions of shock and surprise, and spontaneous *woahs* and *wows*. She then revealed to her audience she merely was holding a bag of the ordinary kitchen herb oregano (*Origanum vulgare*), and that what they had just experienced, at a visceral and embodied level, was the unadulterated stigma socioculturally attached to cannabis. The story made an impression on me.

I have been stigmatized multiple times in my professional life because of my affiliation with cannabis. For instance, it took nearly a year to get approval from the IRB to start my dissertation project involving interview, surveys, and medical chart reviews. During my residency in Physical Medicine and Rehabilitation at NYU, the chair of my department asked my program director to consider putting a "black mark" in my record, as I was quoted too often in the press regarding cannabis policy or science with my affiliation to NYU. I had to default, in the media, to saying, "a large, academic medical center in New York." During my 2014-2015 Clinical Fellowship in Hospice and Palliative Medicine at the NIH-Clinical Center, the world's largest research hospital, I was asked to cancel a coffee meeting on the ethics of cannabis in medicine with the Deputy Director of Science, Ethics, and Policy. When I was invited by the Congressional Black Caucus to speak at the Health Braintrust Conference on Cannabis for Chronic Pain, I had to seek permission from the NIH; it went two levels up before the invitation was declined "on my behalf" by an office in Health and Human Services. I was eventually allowed, after nearly a year of waiting, to be an Editorial Advisory Board Member for an online document on

cannabis and cannabinoids maintained by the National Cancer Institute.

In the early 2000s, I began to reconsider the official demonization of marijuana, as I delved into its history, and the science about it seemed to make sense of my experiences and those of my friends. I wondered if the pull into a world in which marijuana is seen as useful and beneficial, in which I express a positive valence and fondness for it, is simply the alluring chokehold of addiction and the subtle descent into distorted and drug-crazed pathological lines of thinking that the diligent educators of my youth long warned me about. The “marijuana law loyalty oath,” in which I was disciplined into at a young age, was strong enough to lead me to question the veracity of my own primary experience. Through my studies, I discovered the plant’s longstanding and cross-cultural socially integrated and revered usage, including as a significant part of my South Asian heritage tradition. As I reflected on my experiences of marginalization and the legacy of my grandparents’ and earlier generations’ experiences of British colonialism, I came to see what I was experiencing, in my own consciousness, was a manifestation of structural violence. The violence was a true, felt sense of violation and shame that flowed from the criminalization of cannabis contact behaviors. It demanded that I bear the stigma of an impure and shameful underclass, especially when I had material elements of cannabis within me, on my person, or in my immediate social environment.

## Discussion

### The Structural Violence of Cannabis Prohibition

When the threat of exposing my past contraband consumption practices was used to terrorize me, I feared arrest, loss of funding, disqualification for professional licensure, expulsion from collegiate and professional training schools, and that my

loved ones might be indirectly harmed. It heightened my sense of mistrust, given the extensive use of informants in drug law enforcement, a tactic to plant the seeds of paranoia. In traumatology research, betrayal is recognized as a feature that increases risk of post-traumatic stress disorders and severity of the emotional impact of trauma (Boals et al. 2013; Kelley et al. 2012). Experiencing this, coupled with my study of the history of structural violence, has heightened my understanding of the subtle ways that violence is experienced as racist-classist-colonialist discrimination by those who are targets of the low intensity, deadly conflict of the drug war (Gray 1997). The contraband “drugs” in question are a seemingly arbitrary, yet historically and hegemonically contingent, grouping of psychoactive substances that exempt tobacco, alcohol, caffeine, sugar, cacao, and others. One scholar has called this “psychopharmacological McCarthyism” (Grinspoon 1973); another has compared it to witch-hunting (Manderson 2005).

Even in states where cannabis use has been legalized, harsh criminal penalties persist related to “exposing youth” to minute amounts and particles of cannabis and taking cannabis in public view (Leafly 2016). These prohibitions imprint on one’s cannabis-contacting body that there is a part of you that is shameful, impure, and sufficiently socially dangerous to necessitate criminalization. Cannabis is an enclosed biotic species arbitrarily “carved out” by the law of the biospheric “web of life,” surveilled, policed, and counted, microgram by microgram. The drug law enforcement apparatus weights and measures used to quantify amounts of cannabis used, grown, possessed, biometabolized, or sold are in my view a way of inflicting violence through forcing remembrance of exactly how much plant matter one has consumed or has in reserves, including bodily ones. The lead up to the Neolithic agrarian revolution, as evidenced by the initial domestication of medicinal,

hallucinatory, and “exotic” plants in Mesoamerica (Hastorf 1998:774), was dependent on cultivation of such plants and the sharing and trading of surplus—exactly the kinds of domestication practices that cannabis prohibition most harshly punishes.

My experiences of violence are ordinary experience in the drug wars: threats of arrest, snitching, and shaming via public exposure. I have seen much worse befall others. During my medical and graduate school education, I had an opportunity to work with an intrepid Seattle-based defense attorney, Douglas Hiatt, who brought me face-to-face with human rights violations of chronically ill, self-identified patients caught up in federal-state conflict and official reluctance to implement medical cannabis law. I met people living with advanced rheumatoid arthritis, HIV/AIDS, liver failure, spinal cord injury, cancers, and post-traumatic chronic pain who literally had been terrorized and tortured by arrest, incarceration, removal from organ transplantation recipient lists, or otherwise forcibly denied access to therapeutic and palliative cannabis consumption or other medical treatment. I even met people who were facing or had faced life sentences for their cannabis cultivation practices—even when used for medical purposes—and others who faced grave legal consequences, such as lengthy incarceration or its threat related to their possession and consumption of other biotic psychoactive substances, such as psilocybin-containing fungi. As a medical professional, I treated patients in clinical scenarios who might have benefited from medicinal use of contraband biotas with potential therapeutic utility and shared their frustration at being unable to try these options due to legal and institutional barriers (Aggarwal et al. 2012).

In the U.S., despite increasing liberalization, the penalty for cannabis possession can be as severe as one year in federal prison for possession of any amount and up to five years for growing one plant. The

death penalty is routinely used abroad and available to prosecutors in some cases in the U.S.; multi-decadal mandatory prison sentences are routinely meted out to drug offenders, and other violations of drug offenders’ privacy and family integrity are normalized. In a survey I conducted in 2009–2010, I tallied 119 separate drug law enforcement tactics in total that 37 Washington state medical cannabis patients reported exposure to, including searches, surveillance, raids, confidential informant placement, arrest, incarceration, child removal, job loss, home eviction, asset forfeiture, financial aid suspension, and others (Aggarwal et al. 2013).

In sharp contrast to this mess of violence, I have witnessed others whose close contact with cannabis came with no apparent distress or barrier. I have met the grower who has produced cannabis under U.S. government contract for decades and sells that cannabis to pharmaceutical companies. I have publicly debated with the senior legal counsel for GW Pharmaceuticals, a British pharmaceutical company privileged with licensed growing and selling of cannabis, whose stock is traded on the NASDAQ exchange, and who is in partnership with multibillion-dollar firms like Bayer (Aggarwal 2010). I have met three of the four remaining chronically ill American patients who, as a result of a landmark lawsuit which forced the federal health authority’s hand, are exclusively supplied cannabis through a now-closed program because their physicians attested to its therapeutic value for them (Aggarwal et al. 2007). I have also met chronically ill patients in Canada who have been granted amnesty to produce and consume cannabis, and I have attended local hempfests and visited geographically distant zones of amnesty, such as in the Netherlands, where people freely enter beautiful shops, buying dried cannabis flowers and products or psilocybin-containing mushrooms, and consume them openly.

In the end, the ordinary individual is being told that he or she too can have an unimpeded and unbegrudged close encounter with cannabis, as long as he or she has the right social, economic, and political capital. This inequity in cannabis prohibition-enforcement is characteristic of structural violence and is experienced culturally, interpersonally, and at the embodied level.

It is worth noting that, while cannabis prohibition is a unique sociopolitical formation, originally globally promulgated by elite Western powers and predicated on the devaluation of the traditional human-cannabis relationship (Aggarwal 2013), it is part of a more generalized class of human-environment interactions that warrant further exploration. Other biotas with diverse chemistries, places of origin, and traditional uses include: *Papaver somniferum*, *Erythroxylum coca*, *Lophophora williamsii*, multiple psilocybine fungi species, *Catha edulis*, *Tabernanthe iboga*, *Banisteriopsis caapi*, and *Psychotria viridis* (commonly known as opium, coca, peyote, mushrooms, *khat*, *iboga*, and *ayahuasca*) (Aggarwal et al. 2012).

### Conclusion

An assertion of benefit from close contact with the contraband plant cannabis necessitates social adaptation to stigma. Professionally, I pivoted from the trope of cannabis as an “idle and illicit pursuit” to a legitimate “herbal tool” in medico-scientific research, public health, and healthcare. I cognitively adapted to my stigmatized cannabis relationship by advancing a reframing of close contact with cannabis from the illicit, foreign, and dangerous to the homeostasis-inducing, by mobilizing an endogenous biomolecular mechanistic view. I emotionally adapted, through mustering the courage, to formally affirm cannabis, in spite of my conditioned fear response to not do so, bolstered by a growing social movement of which I felt a part.

My autobiographical memoir, chronicling my relationship with cannabis, including its presence in my youth in an obscured form, demonstrates various orientations towards cannabis: from biotic target of draconian prohibition enforcement to valuable medicament, treasured entheogen, and well-being enhancer. While singular, it offers a detailed subtle ecology perspective on the ethnobiology and political ecology of cannabis in the West. As a member of the South Asian diaspora, I have a heritage connection to a traditional cultural relationship to cannabis integrated into longstanding spiritual, convivial, and medicine traditions. This places my narrative in the company of other minority perspectives in the West, including Latinx, African-, Caribbean-, and Asian-American—groups who also have alternative social and cultural histories related to cannabis. As a racial minority, I share some of the heightened apprehension related to the racial and privilege disparity in drug law enforcement targeting. My autobiography also shows the influence of the newly emerging bio-scientific narrative that developed in the late twentieth century about the ways that the molecular components of cannabis flower resin make meaningful, specific chemical bonds of contact with our bodies—a paradigm that has helped to strengthen the natural ecological linkage between humans and biotas—further marginalizing the formal status quo of contrabanding. To better integrate cannabis, fear deconditioning of its contraband status will be necessary, and more focused ethnobiology will help in our understanding of this transformation.

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