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A Cultural History of a Complex Plant in the Atlantic World

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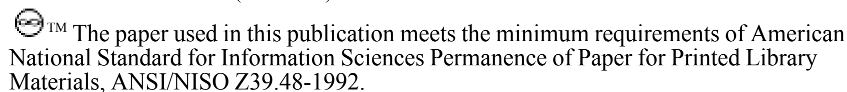
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Preface

Confusion about what cannabis really is and how it can be used has been around for a very long time. Recent policy changes and new scientific research has rendered obsolete much of what westerners thought they knew about it, but the confusion remains quite prevalent, if not greater. This book seeks to explain why by tracing the tangled histories of cannabis used for fiber, medicine, and mind alteration in a transatlantic context. It focuses on the dynamic interplay between these three main uses for the plant and demonstrates how they were connected through a complicated discourse that endowed it with new meaning over time. The research includes a wide range of sources from several disciplines, and it contains history encompassing a vast geographical landscape. My hope is that the book will stimulate historians to ask further questions about the way we conceptualize Atlantic history as a field of study, but it is also a cultural history of a multifaceted commodity that tells us something about how societies come to invest meaning into the things they use.

This project could not have been completed without the generous help and excellent guidance of many people. Thomas Adam was instrumental in helping me formulate the project in its early stages. Dennis Reinhartz could not seem to get rid of me even after his retirement, which was very helpful because he is a walking historical dictionary. Christopher Morris stepped in at a time when I thought all was lost to steer me back onto the right path, and I am so thankful for his guidance. Imre Demhardt and Alusine Jalloh also helped by providing excellent feedback on specific topics that really improved the manuscript. James Klotter, Richard Francaviglia, Beatriz Acevedo, Claire Gherini, Al Howard, and Cyrus Ala'i were all kind enough to hold conversations with me over email throughout the course of my research that provided excellent direction. Also, a couple of phone conversations with

Isaac Campos were very thought-provoking and insightful. Alfred Crosby and Frances Karttunen shocked me with their generosity when they mailed me a box of microfilm. They have both been more of an inspiration to me than they could possibly imagine, and I am so thankful for our conversations and for Crosby's influence on my perspective of history. Chris Duvall, Stephen Maizlish, Bob Beach, and Adam Rathge have also spent time either conversing with me about the manuscript or specific sources within it, and their words have improved the final product tremendously. My friend and colleague, Greg Kosc, has also been instrumental toward the completion of this project by spending countless hours discussing and debating cannabis history with me. And finally, my sister-in-law, Britany Finley, has been so generous with her time by agreeing to read, comment, edit, and re-read the manuscript. I am so grateful to have her in my life.

A Global Research Fellowship through the University of Texas at Arlington (UTA) allowed me to conduct research at the British Library, where East India Company archivist Richard Morel provided his expertise and taught me how to use and track down important company records. The financial support I received from Dean Beth Wright, the UTA History Department, and the Atlantic History Research Grant from Harvard University helped with research at the Widener Library and the Julio Mario Santo Domingo Collection at the Houghton Library. The archivists at Houghton are still in the process of cataloging their vast collection pertaining to a variety of topics on sex and drugs. They were immensely helpful, and I look forward to working with them again in the future when more of the sources have been cataloged. I also want to thank Charlie from the Hash, Marihuana, and Hemp Museum in Amsterdam for having a couple of highly informative and insightful conversations with me on the museum's collection and the general nature of what we agreed to call the Atlantic Drug War. These people and institutions deserve far more credit than they realize in helping me bring this project to fruition.

Finally, I want to thank my son Aiden, daughter Meadow, and wife Brandi for giving me the time I needed to finish this long and tedious project. Their love and support has been crucial at every step of the way.

Introduction

Constructed Cannabis Cultures

In the historic center of Amsterdam, there is a rectangular-shaped cluster of streets known as Dam Square. It is filled with historical relics and has a port history dating back centuries. In the Northeast corner, there is a body of water known as Oosterdok, where Scheepvaartmuseum stands with ships from the 15th century docked in its harbor. These ships, along with thousands of others that entered the harbor from across the Atlantic over the centuries, carried cargoes of various commodities, one of which was cannabis. Not only that, but the ships were rigged with tons of material made from this plant. The rope, sail cloth, and caulking that waterproofed the wood holding them together were all constructed from its durable fiber. Some of the massive hawser lines that were used to transport the ships are still visible at the museum today. These visual vestiges of the past are representations of the knowledge culture that Europeans developed about cannabis, which was considered a practical plant with many industrial uses, but most importantly an important strategic commodity for naval stores.

Travel a little further west, past the "red-light district," and an entirely different story of the plant emerges. Here one can find "coffee shops" by the dozens, operating somewhat discreetly due to the political currents of what some might call the Transatlantic Drug War. Travel through the canals and streets in this direction, and one might encounter medical advocates suggesting the use of cannabinoids for patients in need of relief, marijuana aficionados breaking down the nuanced distinctions between various recreational strains, or religious devotees preaching the gospel of ganja. Of course, these names and the various others being used around here refer to a different part of the plant. Pot, Hash, Charras, Weed, Mary Jane, Dank, Herb, Killa', Cake,

Dro, Chronic, and the countless other slang terms used to describe drugs derived from this plant refer to preparations of the female flower that grows on a genetically specific version of cannabis.[1] Historically rooted in Asia, the plant was used in a number of industries there as well, but the high concentration of mind-altering chemicals found in these varieties led to much different knowledge cultures about cannabis developing in the east than in the west.

Despite this genetic variability, though, there are no reproductive barriers between different cannabis species, which creates significant botanical diversity in the plant's chemistry. This can make it somewhat difficult for the untrained eye to distinguish between different species based solely on phenotypical characteristics. In other words, the same image of a cannabis leaf that smokers and hippies used as a symbol of their countercultural movement in the 1960s, for example, is what industrial hemp farmers and health food advocates use today to promote their uses for the plant. It was also the same leaf that the British recognized during the 18th and 19th centuries when they encountered it being cultivated in India for much different purposes than was customary in England. Their interpretations of these different social uses set off a clash between cannabis cultures that spread across the Atlantic and into the United States, where a form of Orientalist thought helped shape and reshape perceptions of the plant during the 19th and 20th centuries. All societies construct cultural lenses through which to interpret the world, so when they encounter uses for commodities that differ from their own cultural understandings of them, a struggle for meaning ensues. For cannabis, this struggle began in earnest during the 19th century, and it is still playing out today, with opposing cultural forces battling each other over the right to define its place in societies throughout the Atlantic world.

All the strikingly different cultural uses for cannabis are on display simultaneously at the Hash, Marihuana, and Hemp Museum in Amsterdam, where visitors will find a trove of sources pertaining to the plant's commodification over time and across various cultures. However, since the museum is located on the side of town that caters more to the drug-cannabis tourism industry, it is something of a hidden treasure. In fact, many people get there by accident while searching for a place to alter their state of consciousness, so the employee behind the counter spends a portion of each shift informing would-be customers that they are in the wrong place. "They have no idea about the complexity behind the plant and its important history," one employee informed me with enthusiasm after finding someone who seemed interested in the rich history the museum had to offer. That complexity stands out immediately upon entering the first exhibit room, where the visitor is confronted with a collage of contrasting images of the human experience with cannabis throughout history. Replicas of ancient texts are scattered on display amid large chunks of rope, pipes, and tools that cultivators and manufactures used

to transform the sturdy stocks into various grades or qualities of fiber. Tincture bottles, Reefer Madness memorabilia, and material culture relating to all kinds of uses from across the world are all under one roof. Although the Dutch do not figure prominently in this book, the history within the museum itself does. With its vast display of contrasting images of cannabis cultures throughout history, the collection encourages us to consider the historical intersection between them, as well as the role that this intersectionality played in shaping the plant's transformations over time.

Considered an important strategic commodity for Europeans during the Age of Exploration, in the 19th century cannabis transformed into both a popular scientific medicine and a dangerous intoxicant. However, these transformations did not fit so neatly into separate periods, nor were their meanings ever detached from one another. Instead, their histories have overlapped and intertwined over the course of the last two centuries. As a result, the different meanings for the plant were in constant contestation, with several transgressive subcultures eventually forming around its psychoactive uses by marginalized communities to spark a culture war with profound ramifications. In fact, this war is still being waged today, which—despite having destroyed the lives of countless people and families for over half a century now—has ironically transformed cannabis once again, this time into a legitimate medicine and respectable recreational drug of high society. The history of this centuries-long process—as well as the fluidity by which this genetically diverse plant has transformed multiple times in the Atlantic world—reflects how cultural constructions influence the commodities that societies choose to accept and delegitimize.

Studies that combine the three main histories of cannabis use and analyze them for an academic audience are minimal. To be sure, there have been countless studies of cannabis that attempt to provide such an interpretation, but most of them lack a critical engagement with primary source materials.[2] Robert Clarke and Mark Merlin's book *Cannabis: Evolution and Ethnobotany* is the most comprehensive publication on the plant from a botanical perspective, but it doesn't touch on the transatlantic discourse between British India, England, France, and the United States that shaped the cultural history of the plant in the Atlantic world. James H. Mills's *Cannabis Britannica* and his follow-up work, *Cannabis Nation*, are vital contributions to cannabis history as well, but they are primarily concerned with drug preparations and focus mainly on the British imperial connection to India. Isaac Campos's award-winning book *Home Grown* is perhaps the closest published source that approaches the plant the same way as *Commodifying Cannabis* does, but its focus is on Latin America instead of the English-speaking Atlantic world. From a global perspective, the best study of the plant is Chris Duvall's *Cannabis*, but it is primarily focused on Africa and does not analyze Russia's connection to the Atlantic. On the contrary, Nadra Hashim's *Hemp*

and the Global Economy provides some useful insight into the Russian connection, but it is more narrowly focused on industrial cannabis cultures.

Commodifying Cannabis does build on the important work that Hashim examines regarding the connection between cannabis, Russia, and U.S. slavery, though, which has gone largely unrecognized since James Hopkins's outdated book, *A History of Hemp in Kentucky*. The labor realities of industrial cannabis cultivation and production were associated with all types of lower-class laborers—prisoners, slaves, and sharecroppers, to name a few. Recognizing this point serves to invert the standard narrative that states coerced the production of cannabis fiber because it was so valuable. On the contrary, states coerced production because the crop was unprofitable to farmers who attempted to grow it specifically for use as naval stores. In fact, for the longest time, the only reliable labor supply for naval store cannabis was coerced labor, which provided little motivation for getting involved with the type of processing needed to procure the high-grade fiber that Russia exported so frequently. This caused both the UK and the United States to become increasingly reliant on imports from countries with different cannabis histories, which contributed to the plant's demise as a fiber commodity. This is a point that many cannabis activists, who have largely dominated the discourse over the last few decades, fail to recognize. Finally, *Commodifying Cannabis* also builds on the excellent work of Alfred Crosby, whose dissertation and first book, *America, Russia, Hemp, and Napoleon*, is a pioneering text in the field of cannabis history. However, it is also very outdated and reflects a more traditional top-down approach to studying the past.

The chapters of this book are arranged to accentuate the overall themes of culture, cannabis use, and the structure of the Atlantic world. The first chapter, titled "The Cultural Botany of Cannabis," analyzes the connection between culture and the type of knowledge that Europeans constructed about the plant. The debates over whether there is more than one species are treated in the context of the social imaginaries that Westerners constructed about cultures from eastern regions they referred to monolithically as the Orient, which established cannabis use as an eastern trope and paved the way for its transformation into a banned intoxicant.[3] Chapter 2, "Cannabis in History: A Triple Purpose Plant," breaks the plant down into its component parts and investigates some of the different cultural relationships that people have developed with it across the globe. It provides a historical overview of the main industrial, medicinal, and recreational uses for cannabis throughout time to demonstrate how encounters and interactions between people from different cannabis cultures helped transform the plant's meaning in the Atlantic world.

Chapter 3, "The Ties That Bind: Cannabis Fiber and the Atlantic World," is concerned with answering two fundamental questions. First, what role did cannabis play in this world, and what impact did its meaning have on Great

Britain and the Americas both before and after the United States' Declaration of Independence? This is the primary focal point of the chapter, but there is another important question it addresses: where did the bulk of this cannabis come from, and what does this tell us about the nature of the Atlantic world? The answer requires a brief historical excursion into the trade networks developed by the Hanseatic League during the 12th century, which allowed the higher-quality product made in Russia to enter Europe and the Atlantic world through the Baltic Sea. Both U.S. Americans and the British historically had a difficult time producing enough cannabis fiber to satisfy their consumption needs, so they had to import much of it from Russia. Anxiety over relying so heavily on a foreign power for such an important strategic commodity drove the British to promote their cultivation within the so-called periphery of the empire, while trade-minded U.S. Americans felt confident after declaring independence that Russia would serve as their main supplier of the raw fiber used to make naval stores. Both would be disappointed in their expectations, however, which played an important role in the transformations the plant endured after knowledge of its other uses began circulating across the Atlantic more frequently.

"Reorienting Empire and Transforming Perceptions of Cannabis in the Atlantic World" is the title of chapter 4, which picks up with the British imperial reorientation toward the east. Although the justification and image of empire drastically changed over the second half of the 18th century, many of the goals remained the same, which is why the British attempted to grow cannabis for fiber production in India the same way they had in the Americas. However, they encountered Indians growing the plant for much different purposes and had a difficult time getting them to abandon their cultural uses. To be sure, the British were vaguely aware of these so-called "Oriental" uses before the late 18th and early 19th centuries, but they were confused about what the drug substances were or where they came from. As they exerted more control over India, though, imperial agents started encountering these preparations more frequently, leading some to experiment with the so-called "degenerative substances" to see if the plant could be appropriated into something useful for the empire. The medicines that East India Company employees concocted transferred to London and then across the Atlantic, where Americans also adopted them into their materia medica by the mid-19th century. However, the lack of consistency in the preparations, along with Western associations with Oriental degeneracy, had an impact on the way they were received.

Interestingly, the distinctions between cannabis as a recreational and medicinal drug were never very well defined; in fact, the lines were blurred from the start. As chapter 5, "'At Once a Curse and a Blessing': The Transatlantic Transformations of 'Oriental' Cannabis," demonstrates, the two were never fully separable, and the growing discourse on intoxication as a social

menace gradually invested the plant with more of one meaning at the expense of the other, less reliable medical one. This, coupled with the fact that the fiber industry had always been wrought with cannabis problems, explains how the plant began to fall out of favor. The chapter also emphasizes the importance of power and discourse in contributing to our understanding of how people interpreted the psychoactive effects of cannabis drugs. I use the term "Atlantic Orientalism" here to describe perceptions of the Orient that traveled from the British Empire and Europe to the United States, developing into a complex fetish that both attracted and repulsed Westerners. This helps explain the complicated love/hate relationship that the British and U.S. Americans developed with cannabis drugs. Ultimately, through culture and ideology, these Western powers developed certain ways of thinking about the plant and its eastern uses that later helped fuel support for the so-called "War on Drugs."

Chapter 6, titled "From Rope to Dope: The Indian Hemp Drug Commission and Its Transatlantic Aftermath," begins with an analysis of the Indian Hemp Drug Commission (IHDC) and the transatlantic discourse on cannabis at the end of the 19th century. Although the report did not reach a wide audience until much later, the witness testimonies it contains reflect how strong the association between "Indian hemp," deviancy, and Oriental degeneracy was within the British Empire. At the same time, transatlantic networks of knowledge exchange continued to invest the plant with new meaning into the 20th century, where sources published in English started describing marijuana/marihuana as a noxious Mexican version of cannabis that derived from the Orient before the League of Nations decided to focus on the plant as a dangerous drug. The final chapter, "Shifting Cultural Consumption Patterns of Cannabis in 20th-Century U.S. Transatlantic History," analyzes the origins and repercussions of the so-called "War on Drugs" in the United States after marijuana transmogrified into a cultural commodity symbolizing an authentic, anti-establishment identity against law enforcement institutions of the state. The transgressive subcultures that emerged around the plant helped fuel support for its criminalization in mainstream society, which forced users to cultivate cannabis indoors by means of the new advancements in the hydroponics industry. In response, the plant transformed yet again, this time into a legitimate medicine and respectable recreational drug of high society. The transformation has yet to be completed, however, so a short conclusion titled "Refashioning Meaning" wraps up with some commentary on culture and the possibilities of what lies ahead for cannabis in the near future, bringing the reader back full circle to the Amsterdam scene at the start of this introduction.

The book should not be read solely as a history of cannabis, but rather as a history of the relationships that different cultures have developed with it—as well as the consequences of the clash between these cultures. Unlike

traditional approaches to studying commodities that tend to place the product being investigated at the center of the discussion and trace its economic history and diffusion into areas across the globe, this study employs what I call a post-commodity approach. Post-commodity studies are concerned primarily with analyzing the cultural legacy of commodities in societies by focusing on the cultural constructions that develop around them. They also pay particular attention to the cultural transfer of knowledge about commodities from one society to another, revealing the historical interconnectedness of human social development.[4] Indeed, investigating the cultural history of a commodity can tell us just as much about the nature of cultural developments and intercultural transfers as it can about the commodity under investigation, thereby providing a more nuanced understanding of culture and of the relationship between the things we use and the social meanings they acquire over time.

Finally, I have done my best not to make any value judgments about the plant and have steered entirely clear of oversimplified debates on whether it is good or bad. However, *Commodifying Cannabis* does illuminate the historical and cultural conditions under which perceptions of the plant as a social problem were constructed, and in this regard can serve as a reference for contemporary drug researchers attempting to make sense of the racialized history behind the so-called "War on Drugs." I also hope that it raises theoretical questions about the nature of the Atlantic world, suggesting how a wider historical lens could be used without undermining the conceptual framework of that world. No culture exists in a vacuum, so historians must be wary of the categories we construct to help make sense of the past. This does not mean that categories are useless, but rather that we must be flexible in the way we interpret them geographically. After all, important ideas and perceptions that were constructed in regions far beyond the ocean's shores often entered the Atlantic world to help navigate its historical development. The cultural history of cannabis illuminates this point. The historical journey will be a long one, spanning across the Atlantic and including centuries of history, eventually bringing us back to the present day, where this multidimensional, triple-purpose plant is, yet again, being transformed in use and meaning.

NOTES

1. For an exhaustive list of terms used to describe cannabis, see Beatriz Acevedo, "Understanding Cannabis Reclassification in the United Kingdom: 2002–2005" (PhD diss., University of Hull, 2007).

2. For a couple of examples, see Martin A. Lee, *Smoke Signals*: *A Social History of Marijuana—Medical, Recreational, and Scientific* (New York: Simon and Schuster, 2012); Jack Herer. *The Emperor Wears No Clothes: Hemp & the Marijuana Conspiracy* (Van Nuys: Queen of Clubs Publishing, 1992).

3. For an analysis of the concept of social imaginaries, see Charles Taylor, *Modern Social Imaginaries* (Durham: Duke University Press, 2004).

4. For more on the concept of intercultural transfer, see Thomas Adam, *Intercultural Transfers and the Making of the Modern World: Sources and Context* (New York: Palgrave, 2012).

Chapter One

The Cultural Botany of Cannabis

The usage and perception of plants by human cultures have been connected to each other since the dawn of human/plant relationships. It wasn't until the Enlightenment, though, that knowledge of plants in Europe became standardized into what one scholar called "abstracted universalized methods of [classification] based on imbedded notions of gendered power-relations."[1] He was referring to the emphasis on visual observation and sexual orientation in the binomial nomenclature system that developed in the 18th century, but the point also applies to the historical process by which Europeans and U.S. Americans came to develop negative perceptions about cannabis after encountering psychoactive varieties of it in Asia and turning them into medicines during the 19th century. Sources indicate that discussions over how to categorize the plant were culturally loaded with reflections on power relations between east and west, which gradually invested cannabis with new meanings over time. These meanings transferred from British India to the Atlantic world, where transatlantic representations of the Orient helped transform the plant into a banned intoxicant by the mid-20th century. Investigating the knowledge culture that developed about cannabis during this time helps make sense of this transformation by illuminating what academic Michel Serres called "the link between intellectual formation and historical circumstances."[2] Anthropologist Sidney Mintz put it well when he proclaimed, "I don't think meanings inhere in substances naturally or inevitably. Rather, I believe that meaning arises out of use, as people use substances in social relationships."[3] In other words, societies commodify substances that are available to them for specific purposes, which endows the substances with meaning and normalizes their use in specific social contexts. Encountering new uses disrupts this normalization by exposing societies to new meanings that its members often interpret through their own cultural lenses. For

cannabis, these new meanings were framed within the cultural lens of Orientalism, which shaped western understandings of the plant's botany. The history of this cultural botany provides a useful historical foundation upon which to build a more verdant understanding of the myriad transformations this multidimensional commodity has endured (and is still enduring) in the Atlantic world.

SIGNIFYING CANNABIS

The versatility of cannabis as a commodity has been well noted in the academic literature of many disciplines. The ethnobotanist Richard E. Schultes called it "a triple-purpose economic plant" because it "has served man long and well as a source of fibre from its stem; of an oil from its seeds; [and] of a narcotic drug from its resin."[4] Decades later, psychologist Mitch Earleywine reiterated this point when he noted that "[t]he stalks help produce fiber; the seeds provide food and oil. The flowers, leaves, and resin appear in medical and intoxicating preparations."[5] And in his widely cited book that has become one of the most popular (and misleading) sources of information on cannabis over the last quarter century or so, physician Ernest Abel claimed that "[m]arihuana is undoubtedly an herb that has been many things to many people. Armies and navies have used it to make war, men and women to make love. . . . Obstetricians have eased the pain of child birth with its leaves. Farmers have crushed its seeds and used the oil. . . . Hunters and fishermen have snared the most ferocious creatures . . . in its herculean weave."[6] Although his use of the term "marihuana" to describe these commodities is inaccurate and anachronistic, the quote highlights the widely acknowledged notion that cannabis is a multipurpose plant.

Anachronism isn't the only issue with Abel's work, though, for it also reflects the tendency among cannabis enthusiasts to lump the three main uses for the plant into a single narrative with activist purposes.[7] The problem with this is that it diminishes the historical context of the unique cultural meanings for these uses and blinds us to the importance of the historical clash between them. Earleywine hinted at the cultural significance of each meaning when he wrote: "Each day, smiling teens buy hemp shirts. Retailers sell snacks made from the seed. Glaucoma patients puff cannabis cigarettes in hopes of saving their sight, and many people worldwide inhale marijuana smoke in an effort to alter consciousness."[8] Notice the distinct cultural connotations between his use of the words "hemp," "cannabis," and "marijuana"? Each one carries a much different meaning yet is a reference to the same plant. "Cannabis," for example, is used scientifically to signify a medicine, whereas the word "hemp" evokes a more industrial meaning. Marijuana's association here is limited to recreational drug use, which differs markedly from Abel's

use of the word. Yet it is important to take note of the fact that these three different meanings do not fit nicely into separate categories, but rather are deeply intertwined and overlap each other.

Before the Age of Exploration, for example, Europeans considered cannabis a useful plant to make a variety of commodities, both medicinal and industrial. Genetic varieties in this part of the world lacked the psychoactive chemical compound known today as tetrahydrocannabinol (THC), but the plant's durable fiber and nutritious seeds were ubiquitous commodities. Stories and rumors about strange intoxicating concoctions from the so-called Orient would turn up every now and again, but in England the plant was mainly known as hemp, which for most people meant naval stores or a useful fiber for making linens and burlap, a seed used in a variety of industries, and/or an ingredient in medicinal concoctions under the humeral theory of medicine. As a fiber, though, the plant was so well known that it became common practice among the English to label all fiber-producing plants as hemp. Thomas Heriot thought he witnessed it growing wild in the region of North America that would soon be called Virginia, even though the plant had not yet been introduced to that part of the world.[9] Since then, phrases such as African hemp, New Zealand hemp, Sisal hemp, Sunn hemp, Bengal hemp, Bombay hemp, Nettle hemp, and Brown Indian hemp—among others—have all been used in reference to fibrous plants having no botanical relationship to cannabis.[10] This tendency also transferred into U.S. culture after the revolution, where it persisted well into the 20th century.[11]

Still, even though the linguistic association between hemp and fiber became deeply ingrained in English-speaking cultures across the Atlantic world, new connotations and meanings developed for the word as Europeans gained exposure to cannabis drugs. As early as 1689, one observer described an "eastern" plant called "Bangue" that was "so like Hemp, in all its Parts, both Seed, Leaves, Stalk and Flower, that it may be said to be only Indian Hemp." This is one of the earliest inverse examples of the tendency described above, for it seems the author felt that the epithet "Indian" was warranted because, unlike in Europe, this plant had "[intoxicating] [e]ffects [that] are very strange, and, at first hearing, frightful enough."[12] In other words, this time it wasn't the use of a different plant for fiber that the author mislabeled as hemp, but rather a plant that looked like the industrial one Europeans seemed to know all too well; only it was used for different purposes in the east. Over time—notwithstanding a few examples of early U.S. Americans using it to describe Native American fiber plants—the phrase "Indian hemp" became a strong signifier of uses for cannabis from the east, which added recreational drug to the meaning of the word "hemp."[13]

Granted, as Earleywine's quote from earlier reflects, the primary meaning evoked from the word "hemp" today still tends to revolve around industrial uses for cannabis; but there have been hundreds of sources since the 19th

century that employ it in reference to medicinal and psychoactive preparations of the plant. Many of them will be discussed or analyzed in subsequent chapters of this book, but for now it is worth mentioning that cannabis drugs still remain attached to the word "hemp" today. The paraphernalia store called Hempy's in central Arlington, Texas, is a prime example, or the lyrics to an Outkast song in which the rapper Big Boi references hemp to describe selling marijuana.[14] Dr. Dre also referenced marijuana when he penned the lyrics to a song that stated he was in a state where the best hemp is cultivated.[15] And I once had a conversation with an older friend in which she expressed apprehension about lighting a hemp candle that somebody gave her because she thought the fumes might make her "high." Historian James Mills has shown how prevalent this has been in the UK since the 20th century as well, reflecting how complex the meaning of the word "hemp" became in the Atlantic world after its industrial meanings were combined with its eastern, "intoxicating" ones.[16]

As for the term "cannabis," it has a long and complex history that spans over two millennia, with etymological roots as a fiber dating back to ancient Greece. Over time, the Greek word *kannabis* and the Arabic word *qinnab* were Latinized into the generic term "cannabis," which the Enlightenment knowledge system for plants lists as the name of a genus that belongs to a family of flowering plants called Cannabaceae. There are 11 genera and 170 species in the Cannabaceae family, including humulus—more commonly known as hops—which is an essential flavoring and bittering agent used in brewing beer. Like cannabis, humulus is a dioecious plant, which means that the males and females grow separately and that they are pollinated by the wind. For both genera, the male plants develop and produce pollen that travels to the females, which catch the microscopic dust-like substance in their resinous flowers to produce randomly sexed and genetically diverse seeds. This process creates an extreme amount of diversification and—as any beer connoisseur knows perfectly well—creates thousands of varieties of cross-bred plants with unique abilities to express significant genetic variation. Today, a similar pattern has developed within the consumer market of cannabis drugs that exists for beer. "At the top end of the market," writes journalist Michael Pollan, "this has led to a connoisseurship of cannabis—not just of its taste or aroma, but of the specific psychological texture of its high."[17] The publication *Cannabible* is a prime example, for it contains detailed images of various cannabis flowers with exotic names and detailed descriptions of the nuances between them.[18]

This genetic diversity has been the source of a linguistic conundrum in the west since the 18th century. When it came to categorizing labels and identifying differences between variations of cannabis, Europeans were ill-equipped to understand their distinctions until the 20th century. In his famous 1753 work *Species Plantarum*, the Swedish botanist Carl Linnaeus only

identified a single species, which he called *cannabis sativa*. This should come as no surprise given that most Europeans at the time were still unaware of the plant's psychoactive varieties. Exotic descriptions of an "Oriental" version began surfacing more frequently in the coming years, though, which provided French naturalist Jean-Baptiste Lamarck with enough evidence to officially establish what scientists would later refer to as the polytypic concept for cannabis.[19] When he identified a separate species called *cannabis indica*, Lamarck also referred to it as "Chanvre des Indes" (Indian hemp) and "Cannabis similis exotica" because it "grows in the Oriental Indies" and was cultivated for drug use. According to him, such cultivation practices "render[ed] it incapable of providing fiber." He also claimed that "its odor is strong and in some ways resembles that of Tobacco."[20]

Lamarck's observation that this "Oriental" version could not produce fiber is inaccurate. In fact, people in South Asia grew (and still grow) cannabis for more than just psychoactive drugs, including for fiber and oilseed; Europeans just failed to see them because they were too focused on the exotic.[21] However, there are in fact several differences between the two varieties, the eastern plant being smaller, bushier, more broad-leafed, and filled with the psychoactive molecule THC that induces altered states of consciousness. The former is taller, more narrow-leafed, produces fiber more efficiently, and has little to no mind-altering potential.[22] Scientists have found it difficult to agree on how to interpret these differences, though, for there are no reproductive barriers prohibiting cannabis plants from breeding with each other. Karl Hillig's research strongly suggests that there are at least two highly unique genetic variations that correspond to the *sativa* and *indica* distinctions mentioned above.[23] Some have identified a third species, *cannabis ruderalis*, but there is just as much disagreement on this issue as there is on the indica/sativa debate.[24] More important for purposes of this chapter, though, is the role that the perceptions of difference played in the discourse on cannabis in the 18th and 19th centuries.

To Lamarck and his supporters, for example, the differences were understood within the context of a theory known as acquired characteristics, which assumed that living organisms handed down acquired abilities to their offspring.[25] This theory developed at a time when European imperial perceptions of Asia suggested that nature had overprovided for the subcontinent by endowing it with an overly lush environmental landscape.[26] From such a perspective, everything grew lusher, bigger, and more vibrant there, so the people did not have to work as hard as Europeans to obtain nourishment from the land. This in turn made the "Orientals" lazy, which promoted the type of degenerate behavior among them that ultimately transformed Asian cannabis into a degenerate plant. Indeed, Lamarck emphasized the distinction he felt nature made between the west and the "Oriental Indies" by using the Latin epithet *indica* for their cannabis, which referred to a sort of "wild India" and

was in stark contrast to the European version known as *sativa*, which meant "cultivated." Though not everyone agreed with his notion of acquired characteristics, the work was part of a transatlantic discourse on the scientific nature of cannabis stimulated by western perceptions of the Orient as an untamed region of the world where civilization degenerated due to environmental abundance.[27] In other words, Lamarck's choice to designate a new cannabis species reveals a great deal about western perceptions of the east and the people and cultures living within this imagined monolith.

Indeed, there have been numerous sources published since the Enlightenment that associate drug-cannabis with an exotic eastern or "other" environment and mentality. Even those like French administrator and cannabis cultivator M. Marcandier, who assumed there was only one species of the plant, nonetheless distinguished different uses based on an "us" versus "them" dichotomy. In his 1755 publication, for example, he mentioned how "the Hottentots use a plant, named *Dakka*, instead of tobacco, or at least mix them together, when their provision of the latter is almost exhausted. This herb . . . is a kind of wild hemp."[28] Hottentots is a name that European colonizers used to refer to the Khoikhoi people they encountered in southern Africa during the mid-17th century. Jan van Riebeeck, the first governor of the Dutch settlement at the Cape of Good Hope, referred to the term *dakka* in 1658 as "a dry powder which the Hottentots eat and which makes them drunk."[29] Though the plant he described was most likely *leonotis leonurus*, Marcandier's mentioning of it as a "kind of wild hemp" reflects the belief that non-European cultures were somehow misusing the plant.

He also mentioned in the same book that the female flower was a "tender, sweet, and oily, white kernel, of a strong smell, that intoxicates when it is fresh," but that only "the Arabians make a sort of wine of it, which intoxicates [and] will make those who use it drunk, dull, and stupid."[30] The implication is that the plant, which he was writing about mainly to convince Europeans to cultivate for its immense value as a source of fiber, has intoxicating properties, but that people in parts of the world that Europeans considered primitive used it for such leisurely purposes. These types of descriptions increased in volume during the second half of the 18th century, and the cultural associations they embedded in the Anglo imagination contributed to and reinforced the establishment of what Duvall referred to as a "knowledge culture" or "set of socially transmitted ideas and behaviors" that contain "relevance only within specific socio-cultural contexts."[31] As we shall see, the sociocultural context in which ideas about cannabis were established in the British Empire and the United States perpetuated and exacerbated the distinction between east and west, "us" and "them," or "self" and "other" that the new British imperial paradigm reinforced.

CANNABIS KNOWLEDGE CULTURE

Knowledge cultures invest things with meaning. They are the "know-hows" of societies, the blueprints of how people within particular cultures come to see the world.[32] Take commodities, for example, which anthropologist Igor Kopytoff pointed out "must not only be produced materially as things, but also culturally marked as being a certain kind of thing."[33] The objective materiality of these things, in other words, is separate from the subjective meanings they acquire in a given society. The collective interaction between the two creates knowledge cultures, which serve as the mental building blocks that societies use to construct meaning about the things they have commodified. For cannabis, the knowledge culture that developed after the British started encountering preparations of the plant from the east more frequently paved the way for its myriad transformations over the course of the 19th century.

In 1779, an instructional booklet designed to familiarize interested Englishmen with the various drugs of Asia described a "species of opiate in much repute throughout the East for drowning care." Known as *Bangue*, the author claimed that it was made from "the leaf of a kind of wild hemp, little differing, as to leaf and seed, (except in size), from our hemp," but used by them to "confound the understanding, set the imagination loose and induce a kind of folly or forgetfulness."[34] Documentation suggests that this publication became a well-established field manual for colonial officers working abroad, which Joseph Huddart included in his well-circulated publication from 1801, *The Oriental Navigator*.[35] The publication was also reprinted in a similar booklet published across the Atlantic in the United States in 1800, which seems to have been designed to provide the peripatetic merchant with a trustworthy guide to rely upon when exchanging goods in the east. The trade routes of Asia had already become an important destination (especially China) for western traders by that time, so anyone perusing these volumes for descriptions of drugs or spices from Asia would have encountered this description of eastern cannabis differing little from the western variety, other than in the manner by which the "Orientals" used it.[36] In a way, the book had become an agent of cultural transfer, disseminating a knowledge culture that used representations of cannabis to bifurcate the east from the west.

Writing in 1804, Robert Wissett expressed the same point about the type of cannabis he observed growing in Bengal, which he claimed was "no doubt, our own famous plant, now so common and useful in Europe." His description echoed Huddart's portrayal of the plant almost identically:

> I have, at different times, examined various figures and descriptions, as well as the plants reared from European-seed, comparing them with our Indian plant through various stages, and can discover no difference whatever, not even to

> found a variety on. . . . It is perfectly familiar to all the nations of India, I may say of the warmer parts of Asia; yet I cannot discover, that the fibres of the bark have ever been employed by them for any purpose. It is cultivated in small quantities everywhere (in India) on account of its narcotic qualities.[37]

As a clerk for the East India Company working in Bengal, Wissett understood why "hemp" was "so necessary in every respect" to the British Empire, which is why he sought to promote cannabis cultivation there for fiber production. His efforts were in vain, however, reportedly because the native population "cultivated it for the purpose of obtaining an intoxicating drug."[38] His juxtaposition of Indian uses for cannabis to those of the British speaks volumes about the imperial perception he and others had of the Bengali people, whom Wissett admonished for "misusing" a commodity designed for productive purposes. Another source published nearly a decade later reiterated this point, stressing that the plant "has been cultivated in Bengal from time immemorial for the purpose of intoxication; but is never used by the natives for cordage or cloth, as in Europe."[39]

Orientalist and moral reformer Whitelaw Ainslie's *Materia Indica* also mentioned the plant being used for its "intoxicating power" in the east: "Though some people have bestowed on the plant now under our notice, the botanical appellation of cannabis indica, . . . it does not appear, except in size, to differ at all from the cannabis sativa of Europe. . . . It would seem, however, to be applied to very different purposes in Eastern countries."[40] In Whitelaw's view, there was only one cannabis plant, but the "Asiatics" used it for much different purposes than Europeans. For him, the fault of such practices in India could be attributed to their primitive religious culture: "It is much to be lamented that it was ever found necessary to include the sciences, and arts, amongst those subjects which are treated of in the sacred writings of the Hindoos; a circumstance which has been hitherto an insurmountable obstacle to improvement; and is, no doubt, one of the causes why medicine in India is still sunk in a state of empirical darkness."[41] Many of these assumptions were also reiterated in an 1855 publication of a series of correspondences concerned with cannabis preparation and cultivation in India, suggesting that the dichotomy between eastern and western uses had become a defining characteristic of cannabis discourse by mid-century, with most writers assuming that the Indian version was a sort of "Asiatic condition" of the same plant used in Europe.[42]

Sources reflect how these assumptions about cannabis use and people on the subcontinent were rooted in what some scholars have called the stadial theory of human development.[43] The notion of an "Asiatic condition," for example, emerged most strikingly during a time when the British imperial project promoted the idea that the "degenerate" people of the subcontinent needed to be civilized. William Macintosh explained this perspective in 1786

when he wrote that, despite the "moral principles . . . , wisdom, and virtue" of ancient India, the people "have degenerated much from the purity of their ancestors."[44] Alexander Dow articulated the causes of this degeneration in terms that were familiar to many literary circles at the time: "[t]he languor occasioned by the hot climate of India, inclines the native to indolence and ease." Not only that, but "[o]ther motives of passive obedience join issue with the love of ease. The sun, which enervates his body, produces for him, in a manner spontaneously, the various fruits of the earth. He finds subsistence without much toil."[45] Macintosh also emphasized the "spontaneity" of India's land, reinforcing the notion that nature had "render[ed] the [Indians] opulent" as "[w]ealth accumulated" and stifled their desire for progress.[46] Since cannabis had more uses in the east than it did in the west, the plant seemed to offer imperialists compelling evidence for the degeneration of life on the subcontinent.

In other words, cannabis was the quintessential imperial plant, for it seemed to provide the British with living proof of the need for a "civilizing mission" on the subcontinent of their newly reoriented empire. The rhetoric they used to justify such a mission revolved around the concept of Oriental degeneracy, which suggested that the lush, exotic environment of the subcontinent caused human civilization to stagnate there. This cultural construction pervaded the British imperial imagination of Indian uses for cannabis, which they contrasted with their own associations of the plant as a productive, industrial commodity well suited for cultivating the protestant work ethic mentality. Although the discourse of Orientalism that underlined these perceptions brought condemnation for eastern cannabis, it also inspired some to experiment with its use as a western medicine. More than a few medical practitioners were calling it a wonder drug by the 1840s (see chapter 4), while others fetishized the plant as an exotic Asiatic intoxicant (chapter 5). By the end of the 19th century, a complicated medico-intoxicating discourse had developed about cannabis that connected British India to England, France, and the United States, strengthening negative perceptions of the plant and stimulating its transformation from an important strategic commodity to a social problem, and then a banned intoxicant, in the Atlantic world. Historical framing shapes historical meaning, and the frame of Orientalism was shaping a new meaning for cannabis.

Scholars have written extensively on images that Europeans and Americans have constructed about peoples and cultures from the east. Especially during the 18th century, when the Enlightenment urge to order the world and classify the peoples and cultures within it created what Michel Foucault referred to as a "taxonomic impulse" to categorize nature, Europeans postulated theories of historical development that reflected their belief in the stadial theory of progress described earlier.[47] This, according to historian Sudipta Sen, led to the apprehension of "the Orient as a serious object of

study in the comparative progress of humankind" and allowed Europeans to construct images of the east as primitive societies of indolent people who were on a lower stage of historical development.[48] Edward Said gained notoriety as a premiere academic with his writings on British perceptions of eastern cultures and the negative connotations they developed about the so-called Orient. In *Orientalism*, he suggests that the lands located to the east held a special place in the minds of many westerners, one that allowed them to construct images of the "Other" and define what it meant to be European. Serving as a vantage point by which westerners contrasted images, ideas, and experiences of themselves against the backdrop of stereotypical assumptions about others, the Orient became a place for them to dominate and control.[49]

His argument has been highly influential, but other scholars have developed more nuanced understandings of Orientalism. John MacKenzie is a case in point. Arguing that Said's narrow image of the Orient tends to neglect key aspects of the relationship between east and west, MacKenzie sees Orientalism as a complex colonial fetish, which includes both attraction and revulsion. On the one hand, there is a luring appeal for the exotic within western cultures that makes the east an enticing landscape worthy of exploring and imagining, but expressions of the Orient also serve to construct otherized monolithic categories of sexual deviancy and primitiveness to distinguish "us" versus "them."[50] The concept of Orientalist thought as a complex expression of the western imagination has been further developed by scholars such as Susan Nance, who argue that constructed notions of the Orient migrated across the Atlantic to become imagined adventurous spaces for U.S. Americans to construct their own identities.[51] When it comes to cannabis as a commodity and the perceptions that westerners constructed of its uses in the east, these theories help explain the overall shift in meaning the plant endured so many times within the Atlantic world.

The discursive dichotomy on cannabis as a representation of difference was not just a British phenomenon, but rather a transatlantic one. It took a little longer for this to fully develop in the United States, but as early as 1808, one source described "Bangue" as "an intoxicating preparation of the leaves of a kind of wild hemp (cannabis indica) in great estimation in the east."[52] These types of descriptions increased in volume over the course of the 19th century and continued into the 20th, when the American novelist James Allen published a story set in a Kentucky field that reflects an understanding of the same dichotomy. Contrasting eastern users of cannabis with the hard-working, patriotic Anglo-Saxons who pushed west to tame the wilderness of the frontier and create civilization out of primitiveness, he mentioned that after Americans prepared the crop for manufacture, they laid it on the ground to dry using a process called dew-retting. One part of the plant that decomposed during this process was the flowering top, which the author noted was "that part of the hemp which every year the *dreamy* millions of the Orient

still consume in quantities beyond human computation, and for the love of which the very history of this plant is lost in the antiquity of India and Persia, its home—*land of narcotics and desires and dreams*."[53]

Really, though, it was after the Civil War—when the production and manufacturing of cannabis diminished significantly—that negative perceptions and associations with eastern uses began to heavily overshadow the plant's other meanings as both a practical and important strategic commodity. Documents, travelogues, and reports such as the 1894 Indian Hemp Drug Commission (IHDC) traveled quickly across the Atlantic in the 19th century, and the knowledge culture they depict reflects just how widespread transatlantic associations between cannabis and Oriental degeneracy had become by then. On top of that, the transatlantic Progressive Era and Temperance Movement were picking up steam at the turn of the century, which also happened to be one of the most racially contentious periods in U.S. history.[54] It's as if the cultural conditions of the nation were ripe for a scapegoat of the kind cannabis drugs offered at the turn of the century, which culminated in the Reefer Madness campaign of the 1930s in the United States and was part of a larger discussion over drug control in the League of Nations. The details on how these historical points fit into the history of cannabis in the Atlantic world will be fleshed out more thoroughly in subsequent chapters, but they're worth mentioning briefly at this point to highlight the historical conditions under which the discourse on cannabis as an Oriental commodity developed.

The cultural botany of cannabis sheds light on the complicated discourse that developed about the plant in the Atlantic world over the course of the 18th and 19th centuries. Westerners associated their uses for it with diligence and hard work, whereas eastern ones were considered lazy and indulgent. This dichotomy reflected the degenerate nature of Oriental landscapes and the indolent people who transformed a productive commodity into an exotic intoxicant. The taxonomic impulse of the Enlightenment exacerbated these distinctions, leading some to postulate the existence of separate cannabis species. Although much debate followed, most agreed that the differences in the plant reflected a sort of "Asiatic" condition. These perceptions were prevalent and widespread, traveling across the Atlantic from Great Britain to influence the way U.S. Americans understood the plant as well. The knowledge culture that this discourse spawned relied heavily on cultural perceptions of the Orient as a separate, exotic, "Other" region of the world, even providing justification for an increased British presence in the subcontinent. In other words, Orientalist thought played an important role in shaping perceptions of cannabis, which reflects the cultural origins of scientific knowledge about it in the Atlantic world. This means that the plant's myriad transformations need to be situated within the historical context of the intersection

between its three main cultural uses. Doing so reveals the symbiotic relationship between use and meaning behind the myriad changes cannabis endured as a commodity over the course of the 19th and 20th centuries.

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Chapter Two

Cannabis in History

A Triple Purpose Plant

The origins of the cannabis plant are shrouded in mystery. So far, its accepted history of use goes back more than ten thousand years, most likely to a region of the Himalayan mountain ranges of Central Asia, where archaeologists have discovered traces of the plant buried with human remains. According to K. C. Chang, decorated clay pots made with cannabis fiber dating from 8000 B.C. have been discovered in Taiwan.[1] At some point, people carried the plant across Western Asia to Europe, where archaeological evidence of the seeds and stems in Greece date back at least to 400 B.C.E.[2] Until the mid-18th century, most Europeans were only familiar with the plant's fiber, seed, and oil, but the civilizations in what many westerners have called "the Orient" also valued its intoxicating properties for longer than Europeans used its fiber. Today, cannabis and all its properties are known and used by millions of people in hundreds of countries on all continents around the globe, making it one of the most valued cash crops in the world. However, various cultures have used the plant for different purposes, and the way cannabis transformed and transmogrified in meaning when these different cultural uses collided is the main subject of this work. But what exactly were these different cultural uses, and how did they shape the way the British and U.S. Americans thought about and understood cannabis as a whole? This chapter breaks down the plant into its component parts and presents different cultural relationships to each of them, revealing how cultural uses for cannabis traveled across the Atlantic and got woven into the webs of meaning that westerners spun for it over the centuries.

INDUSTRIAL CANNABIS—"HEMP"

Cannabis fiber is perhaps the most versatile of all the plant's properties, for it has been used to create commodities ranging from important naval stores to simple garments and paper. Rope, duck canvas, and sailcloth were essential commodities for strong naval powers, and properly processed cannabis was needed to manufacture them all. The sturdy fibers that can be extracted from the plant after it is dried and "heckled" (combed out) properly were regularly needed for transatlantic voyages. Besides the daily tasks for which rope was needed when sailing, massive hawser lines for towing ships were carried on board as well. On one of his voyages across the world, Ferdinand Magellan lowered what explorers in the 16th century referred to as a "hemp-line"—which consisted of cannabis fiber—into the ocean to a depth of 750 meters.[3] Even the caulking (oakum) used to repair the seams of wooden vessels came from this plant, and the leftover pulp was gathered to make paper. Before setting sail, a ship could have as much as one hundred tons of it aboard, which translated into a crop harvest ranging anywhere from eleven to twenty-seven acres of land.[4]

Especially after the onslaught of the Age of Exploration, when Europeans embarked upon a relentless campaign to map, chart, and essentially penetrate a body of water they imagined would connect them to the riches of Asia, cannabis became more and more important. Before it could be used on ships, though, large quantities needed to be cultivated, manufactured, and sent to the market. In effect, until the technological developments of the second industrial revolution allowed for more innovative means of travel to replace traditional shipping, cannabis was to the Atlantic world what uranium was to the interconnected world of the 20th century: a practical and strategic necessity for becoming a dominant power on a large scale. The earliest known attempt by Europeans to introduce cannabis to the New World occurred in 1545, when the Spanish Crown ordered its subjects to cultivate the plant in various areas of their colonial territories.[5] Although the plant grew and was cultivated in Spain, the amount they produced could not meet the consumption needs of the empire, so they continued to encourage its production in their colonies well into the 18th century.[6] Portuguese and French ropewalks and Dutch-made canvases from the early modern period confirm the plant's prevalence within their empires as well, but this chapter is more concerned with the English and U.S. histories of cannabis used for these (and other) purposes.[7]

Those stories begin with the early colonial period, when lawmakers in England were trying to figure out how to secure an in-house supply of well-processed cannabis fiber. It was one of the most important strategic commodities at the time, yet England could not make enough to keep up with their own demand. Since imperial conflict between rivals could cut off the supply

of naval stores, the situation posed a threat to England's colonial expansion. The American colonies seemed to offer a solution, so lawmakers instruct Jamestown colonists to cultivate cannabis in 1611.[8] By 1633, the Virginia Assembly enacted another law, forcing "every planter as soone as he may, provided seede of flaxe hempe and sowe the same."[9] Forty years later, the problem persisted, and legislatures passed a new law because "it much conduceth to the wellbeing of any country that the necessities thereof be supplyed from their owne industry within themselves, and that the lesse they have occasion for from abroad, the lesse wilbe their dependance on forreigne supplies whereof the calamity of warr and other accidents may prevent them." In effect, relying too heavily on foreign powers for such a strategic commodity could be disastrous, so they enacted a fine of "five thousand pounds of tobacco" for "the courts failing to procure one quart hempe seed to be distributed amongst the inhabitants."[10] By the end of the 17th century, colonial governments in Virginia, Maryland, Pennsylvania, and certain areas of New England had all heeded the call from their mother country to encourage cultivation.[11]

Again, the primary reason behind this drive to promote cannabis cultivation in the colonies was that the English could never produce enough of it at home to meet their consumption needs, which meant they relied heavily on imports. For one, transforming the raw material into usable fiber was an extremely arduous task. Although cannabis cultivation did not require as much attention in the fields as plantation crops such as sugar and cotton, the work one needed to put in was extremely grueling. The stocks had to be cut down at the base of the plant with a special knife, which was backbreaking work. Then the plants needed to be set aside while the fiber was separated from the outer bark and detached from the glutinous inner matter located within the stem (the stocks). Depending on how this was done, it could take weeks or even months to complete; but the most difficult task occurred after completing this retting process. Known as heckling or beating, it involved someone having to place the retted stalks onto a machine called a hemp break, then manually striking the stalks with a lever on the upper frame of the machine until the dried inner gum broke off into small pieces. To ensure proper technique, the fiber had to periodically be whipped against the brake so that the pieces of gum would fall out, slowly freeing the strands for combing in preparation for the marketplace. From a physical labor perspective, this process was incredibly demanding, even by 18th-century standards.

Indeed, sources ranging from at least the 17th century indicate that Europeans considered cannabis a difficult and arduous plant to manufacture. One complaint by a group of London hemp dressers against Dutch competition claimed that "many thousands have been set to work [on hemp] and have lived thereby very well with their hard labour." They also considered it "a means to set to work many thousands of idle and vagrant people that are by

authority sent into the hospitals and houses of correction in this kingdom according to the statute in that case provided."[12] William Bailey published *A Treatise on the Better Employment of the Poor in Workhouses* in the 1750s, and in it he promoted hemp manufacturing as a means for providing gainful employment for the poor as well. For him, the fact that "the growing and spinning of Flax and Hemp may, in a few Years, fall totally into the Hands of Foreigners" was enough to promote cultivation at home; but he also pointed out that "the Poor, when taken out of Habits of Idleness, and taught to know the Comforts of honest Industry, would rejoice to be employed in it."[13] In effect, providing these people with the opportunity to work on such a labor-intensive plant would benefit the empire and teach them how to be better subjects.

In the same decade, a fictional tale was published that mentioned a group of innocent people who were "disturb'd out of their sleep very early, and committed without mercy to the correction house, as vagabonds and sturdy beggars." One of these poor souls happened to be "our young heroine: she had gone to bed a princess, and it was a dreadful fall indeed to wake to beat hemp."[14] William Hogarth depicted one of these "correction houses" in a copper plate engraving from 1732, which portrayed morally deficient harlots beating cannabis fiber as a punishment for their crimes. The tendency to force inmates housed at correctional facilities to beat cannabis indicates that it was considered a difficult and undesirable task.[15] This perception made its way across the Atlantic as well, where Edmund Quincy mentioned in his treatise how the "Hemp-brake is a laborious exercise, and consequently the labour is a great addition to the charge of preparing the Hemp for a market." He included an image of a copper plate engraving of a mill he designed in hopes of making the process easier.[16] A similar publication from the period claimed the plant "is more troublesome in the handling," while another mentioned how "hemp grows spontaneously [in Virginia,] with luxuriance I never met with anywhere," and that U.S. Americans would never realize the plant's full potential because of "the indolence of the people" who couldn't work with a plant that "affords much labor [during the] season of frolic and dissipation."[17]

White slave owners believed this kind of hard labor was better suited for the human beings they held in bondage. As colonists expanded into the Ohio River Valley, the human chattel they brought with them from the tidewater region helped clear the forests and transform the wilderness into farmland. Evidence exists dating at least as far back as 1751, when a man named Christopher Gist took a black "servant" with him to explore the territory bordering the Ohio River. Soon afterward, settlers flooded into the region today known as Kentucky, and one of the crops they cultivated was cannabis, which one historian pointed out "was the hardest, dirtiest, most laborious agricultural task performed by Kentucky field hands."[18] By the turn of the

century, one observer noted that the people in "the State of Kentucky . . . employ negro slaves in the cultivation of their grounds," which included "tobacco, hemp, maize, and wheat."[19]

Over time, the association between cannabis and slavery increased, with advertisements in newspapers indicating that black Americans in the region increasingly became the primary source of coerced labor. One of them read as follows: "Cash Given for Hemp, by Fisher & Sutten. Who Wish to Hire 16 Negro Boys from 12–16 Years Old, for a Term of Years."[20] By 1820, according to one source compiled by foreign travelers into the region, the cultivators of this difficult crop "were all slaves. No white man, to speak generally, ever thinks of settling a farm or improving it for himself, without Negroes; if he has none, he hires himself to some rich planter, till he can purchase for himself."[21] Twenty-six years later, another magazine article mentioned how the "persons who did the labor of raising hemp receive no benefit from their toil. I allude to slave labor."[22] By the end of the 19th century, according to historian James Hopkins, Americans in the South referred to "hemp as a 'nigger crop,' owing to a belief that no one understood its eccentricities as well or was an expert in handling it as the Negro."[23] Such racist assumptions undoubtedly stemmed from the tendency among slave owners to delegate hard and difficult labor to African Americans.

As far as cultivation is concerned, though, cannabis was not very hard to grow. It needed a suitable amount of sunlight each day and thrived in temperatures ranging from 60 to 90 degrees Fahrenheit. Indeed, the plant will thrive in many environments with little effort from the cultivator if the soil is fertile enough without becoming too waterlogged during the growing season and prolonged periods of drought do not occur. The seed needed to be sown thickly in well-tilled soil during the spring at a rate of fifty pounds per acre, with high levels of nitrogen and an appreciable amount of humus helping to increase overall yields. After that, the crop was left alone for the most part until it was ready to be harvested. There was no need to spend too much time in the field removing weeds because they did not survive in the dense growth of cannabis stalks, and the plant acted as a natural repellent to most pests, thereby minimizing precautions that farmers had to take throughout the plant's life cycle. The plant grows best in soils with a pH range of 6.0–7.0, which allows it to absorb and process nutrients more efficiently. If the climate of the region allowed for the seed to be sown in early spring, then the crop would be ready for harvest between mid-summer and early fall.

Why is it, then, that the English and Americans had so much trouble producing enough of the fiber to satisfy their home consumption needs? To be sure, cannabis cultivation had been a viable and sometimes thriving option for farmers in both Great Britain and the United States, but the manner by which they procured the fiber after cutting the plants down resulted in an inferior quality product that could not be used to produce naval stores. Their

method of allowing the stocks to dry (ret) in the fields for months, claimed the French magistrate of Bourges, M. Marcandier, caused problems because the "water, which falls upon the Hemp before it is dry, makes it of a blackish color, and full of spots."[24] Instead, if the stocks get submerged in water as soon as they are pulled, the gum that fills the core of the stem dissolves quicker, thus eliminating the molding that occurrs when they are left in the fields to dry. Marcandier also pointed out that, after allowing the bundled stocks to soak in a ditch for an allotted amount of time, it was necessary to "wash them in the current of the river, which will carry off all the gum and mud that would otherwise cleave to them." This technique produced a product that "is always the whitest, and of the best quality," and it significantly cut down on the labor difficulties and health hazards created by beating the raw material: "It will not be necessary to beat it so long as before. This work, formerly so hard on account of the strength it required, and so dangerous on account of the fatal dust the workman drew in with his breath, will be, henceforth, only a business moderately severe."[25]

Evidence indicates that at least some in both Great Britain and the United States understood that water-retting produced a superior quality fiber, but the prejudice against the technique persisted. Edmund Quincy pointed out how in "many parts of Europe, the Farmers are forbidden to water their hemp in rivers, as it has been found to poison their fish."[26] Nearly two centuries earlier, poet Thomas Tusser made this very same point about water-retting: "Now pluck up thy hempe [*sic*], and go beat out the seed, and afterward water it as ye se need; But not in the river where cattle should drinke [*sic*], for poisoning them and the people with stinke [*sic*]."[27] An 1857 edition of *The Farmer's Magazine* out of London pointed to the same problem, as did New York's *The Working Farmer* the following year.[28] Chris Duvall also mentions how often "slaves owners refused to send their slaves into retting ponds, and free workers refused themselves."[29] Evidently, the perception that water-retting produced more problems than it was worth has a long history in these cultures, and the concerns persist today.[30] In effect, the cost of processing cannabis fiber for the empire or nation did not outweigh the cost of processing it for those in need of a lesser-quality product, so the inferior method persisted, and the United States and Great Britain had to continue importing the higher-quality material from Russia.

Besides cultivating cannabis for fiber, another industrial use for the plant that traveled across the Atlantic and enjoyed some success came from the oil extracted from its seed. Commodities such as soap, a variety of oils, and paints were all once products in which cannabis seed figured prominently. According to Hopkins, "When pressed it yields from 30 to 35 percent of its weight a peculiar-smelling oil, mild in taste and in color a greenish yellow which turns to brownish yellow with age. After the liquid was extracted by crushing the seeds, the residual matter was employed as fertilizer or stock

food."[31] These uses were important enough that multiple treatises written about cannabis included specific instructions on how to cultivate it for seed production instead of fiber, which required different techniques that allowed the seed to reach its full potential on the flowering branches of the female plants. Marcandier's treatise provided instructions on how to cultivate the plant for seed production—as did the translated versions of it that were published in London and Boston, which described the plant as being "also employed, with great advantage, in the lamp, and in course painting . . . it [also] enters into the composition of black soap, the use of which is very common in the manufactures of stuffs and felts."[32] Several others ranging in dates from the late 18th to the early 20th century provide similar descriptions of how to properly cultivate the plant for the production of seed rather than fiber.[33]

Another industrial use for cannabis seeds that was common in the British Atlantic during the 18th century was as an important source of food for animals. In his *Natural History of English Song-Birds*, for example, Eleazar Albin mentioned the seed on multiple occasions as an essential food for attracting the "pretty and innocent" song birds to one's dwellings.[34] This work went through two editions and was published under a slightly different title three times after its initial 1738 date, and each edition has multiple references to the value of "hemp seed" as a food source for these birds. Ten years prior to the first edition, another publication mentioned the seed as a food for those trying to attract birds.[35] It went through five editions. Marcandier also mentioned that "it promotes fruitfulness in fowls, for which reason it is purposely given them in winter time, and is a good to which birds are accustomed." Besides feeding birds, he went on to say that "they give a paste made of it to hogs and horses, to fatten them."[36] Both of these descriptions made their way into the London and Boston translations also, and various other sources on both sides of the Atlantic included similar descriptions of cannabis seed being used for food, reflecting its widespread use for such purposes.

All of this reflects how cannabis played a major role in both British and American societies as an industrial commodity with multiple uses. It was not very difficult to cultivate, but it was hard to transform into the valuable fiber needed for naval stores, and it was labor-intensive to prepare for the market. Nevertheless, cannabis fiber needed to be obtained by any means necessary. Both the British and U.S. Americans demonstrated a strong desire to figure out how to best cultivate the plant for naval stores, but neither were able to end their reliance on Russia for such an important strategic commodity. Both grew it and were able to use the fiber and seed to manufacture various products, but the practice of dew retting made an inferior fiber that could not be trusted to rig ships sailing across oceans on long voyages. As such, once other fibers were discovered that could be used to replace cannabis, both the

British and U.S. Americans were interested in them. We will dive further into the commodification of cannabis fiber in the Atlantic world in the next chapter, but for now it suffices to say that the plant played an important role in the Atlantic world throughout the 18th and 19th centuries.

MEDICINAL CANNABIS

Cannabis seeds and the oil made from them possess no mind-altering properties, but they do contain about 25 percent protein and have all the necessary amino acids that are important for human health. Today, despite the culture of criminalization that has existed for several decades, many health food products with cannabis seeds in them are being marketed on both sides of the Atlantic as a healthy and environmentally friendly option for consumption. This is not a new trend, however, for their use for such purposes has a history that far precedes these more recent cultural uses. Like its industrial uses, cannabis as medicine developed historic roots in Asia much earlier than anywhere else. In fact, the plant developed into multiple varieties in Asia before it even made its way into Europe, so cannabis has been a multidimensional commodity for a long time there as well.[37] It also became an important food source in China over three thousand years ago, and "gradually entered Chinese medicine," according to Duvall, "between 500 and 1500 CE."[38] Cannabis became a multipurpose plant for Hindus around the same time.[39]

As for the English, they had many other uses for cannabis besides fiber that had a long history as well—just none that were psychoactive. One of the earliest examples comes from an Anglo-Saxon source written in Old English and Latin in the 11th century, known as the *Lacnunga* (remedies), which mentions a holy salve used to ward off the devil that includes "hemp" as an ingredient.[40] The book also includes a list of medicinal uses for cannabis seeds that credits Dioscorides, Galen, Pliny, Virgil, Homer, and Herodotus.[41] By the 1640s, an apothecary to King James I had produced one of the most comprehensive botanical studies of plants ever published in English before his time. Relying on these classical works but also adding knowledge to them, the author, John Parkinson, claimed that cannabis seed could be used "in treating dry cough, jaundice, fluxes (diarrhea), colic, gout, hard tumors, or knots of the joints, the 'paines and shrinking of sinews,' burns or scalds, and to stay bleeding, and to kill worms."[42] Twenty years earlier, the seed had already become a popular commodity for English medicine, as indicated by a poem titled *The Praise of Hemp-Seed*, which exclaimed:

> Apothecaries were not worth a pin, If Hempseed did not bring their commings [*sic*] in; Oyles [*sic*], Unguents, Sirrops [*sic*], Minerals, and Baulmes [*sic*], (All nature's treasures, and th'Almighties almes); Emplasters, Simples, Compounds, sundry drugs, With Necromanticke [*sic*] names like fearful Bugs;

> Fumes, Vomits, purges, that both cures, and kils, Extractions, conserves, preserves, potions, pils; Elixirs, simples, compounds, distillations, Gums in abundance, brought from foreign nations; And All or most of these forenamed things, Helpe [*sic*] health, preservatives, and riches brings.[43]

Although the concoction mentioned by Parkinson is not specifically listed in Taylor's poem, references to some of the same classical authors mentioned above are, as well as its use in curing gout. It is conceivable that such a concoction could have more links to peasant culture and that the classical authors were cited merely to evoke credibility and status; but regardless of the nature by which these medicines transferred into early Anglo-Saxon culture, sources indicate that the association became more prevalent in the 18th century.

One publication, for example, which was already in its seventh edition in the 1720s, reiterated the notion that cannabis seed "boil'd [*sic*] in Milk is good for Cough, and 5 to 6 ounces of it taken, cures Jaundice." The author went on to list a number of homeopathic remedies: "An Emulsion of the Seeds doth the same. The Juice of the Herb, and of the green Seed, cures Pain and Obstruction of the Ears; the Oil of the Seeds mixt with a little Wax, is excellent to take out the pain and fire in Burns."[44] These descriptions were obviously well known by the early 18th century, for Philip Miller's *Gardener's Dictionary* claimed in the 1730s that "the seeds afford an oyl [*sic*] which is used in medicine. The manner of propagating it is so well known that it would be needless to insert it in this place."[45] The celebrated Dutch Enlightenment scholar Herman Boerhaave also mentioned the plant in his *Materia Medica*, claiming that an emulsion of the "Seed of the common Hemp" is "excellent in Jaundices and other Diseases arising from Obstructions of the Viscera."[46] Marcandier's reference to the healing powers of the seed suggests that it was used for such purposes in France as well:

> The grain, which is called Hemp-seed, is no less useful for its peculiar qualities, than for those which it has in common with the whole plant. . . . The juice of it, squeezed out when it is green, draws insects to it, and brings out all the vermin that enter into the ears, and infest them. Taken in an emulsion, it is good against a cough and the jaundice, and also against the gonorrhea, its oil is recommended as an ingredient in pomatums for the small-pox; and it is laxative. Taken inwardly, or outwardly applied, it has not the dangerous qualities that are ascribed to the whole plant with its leaves.[47]

Clearly, cannabis was not only considered an important industrial commodity, but also a useful ingredient for a variety of medicines.

It is difficult to gauge the extent to which the use of cannabis seeds for medicinal purposes traveled into the British colonies across the ocean during the 18th century, but we know it did occur. Marcandier's treatise was of

course published in Boston, but we don't know how many people read it or even knew it existed. Moreover, his goal in writing the book was to demonstrate the value of cultivating cannabis for industrial purposes, so most people who read it likely did so with the intention of obtaining knowledge on the best way to produce the fiber. According to physician Ernest Abel, there was a source published in 1764 titled *The New England Dispensatory*, which mentioned the use of cannabis roots to treat inflamed skin, but he provides no citation and no library seems to have any record of it.[48] The goal of British colonial policy might explain the lack of published knowledge in the colonies about the use of cannabis for medicine. After all, one of the primary roles of the Americas for the British Empire was to free the metropole from being controlled by foreign powers. In the transactions and correspondences of the Royal Society of Arts with representatives from the American colonies, for example, the author of the microfilm observed:

> The professed objects of the Society in regard to the Colonies were therefore closely linked to official British policy, "Influenced by tenor and spirit of sundry acts of parliament subsiding for more than a century past," it was of opinion "that to encourage in the British colonies the culture and produce of such commodities as we must otherwise import from foreign nations, would be more advantageous to the navigation and commerce of this kingdom, than if the like things could be raised on the island of Great Britain."[49]

Further discussion on the society will be warranted in the next chapter, but it is worth noting here that, of all the mentions of cannabis in the microfilm collection, none pertain to its medicinal use.

In contrast to the scarcity of sources from the 18th century regarding the medical uses for cannabis in the colonies, such references abound after the American Revolution. A medical dictionary published in Philadelphia, for example, details some of the same medical uses that were published in the works mentioned above. Under the entry on cannabis, it mentions that "hemp-seeds, when fresh, afford a considerable quantity of oil. Decoctions and emulsions of them have been recommended against coughs, ardor urinae, &c."[50] Works of this nature increased in volume throughout the 19th century, but whether or not those who were responsible for publishing this kind of information experimented with these remedies themselves or simply reproduced materials they came across in references is difficult to ascertain. John Eberle's book *A Treatise on the Practice of Medicine* provides evidence for the latter. His entry on jaundice mentions that "hemp-seed, boiled in milk, is another remedy which has been said to possess very useful powers for the cure of this affection." However, he goes on to say that "it is not improbable that these and many other remedies that have been mentioned, may, under peculiar circumstances, be occasionally serviceable; but as are wholly with-

out any rational indications for their use, their employment is a kind of haphazard practice, which will be more likely to do mischief than good."[51]

Such skepticism toward the use of folk remedies was not uncommon in either the early U.S. republic or the British Empire. Especially at the height of the Enlightenment, the efficacy of traditional remedies and folk medicines was called into question. However, as historian Roy Porter put it, "it is a gross mistake to view folk medicine as a sack of bizarre beliefs and weird and wonderful remedies." He goes on to point out how "clear-cut distinctions have frequently been drawn between 'science' and 'superstition' but . . . in societies with both a popular and an elite tradition, there has always been complex two-way cultural traffic in knowledge, or more properly a continuum. While often aloof and dismissive, professional medicine has borrowed extensively from the folk tradition."[52] In fact, the roots of medicine are deeply connected to religion, magic, and social ritual, which relied on the use of herbal remedies developed from important plants.[53] Porter mentions that, in many cases, traditional medicines became popular because "the elements of nature signal their meaningful associations with the human body, well and sick." He uses colors as an example, claiming that "yellow plants such as saffron crocus (*Crocus sativus*) were chosen for jaundice."[54] Although today cannabis is primarily associated with green, the plant does in fact turn yellow toward the end of its life cycle, and the oil made from its seeds is of a yellowish tint. Such reasoning by analogy could explain its use in curing jaundice.

Nevertheless, Porter's observation on the connection between plants, social rituals, and medicine is an important one, especially since cannabis seeds were also used ceremoniously in various European peasant cultures. In fact, anthropologist Sula Benet argues that the use of cannabis seeds for social ritual occupied an important space in Siberia before the practice migrated to Eastern Europe, where "the throwing of a handful of seeds into the fire as an offering to the dead during the harvesting of hemp" became a well-established tradition.[55] Other Eastern European rituals cited by Benet include sprinkling the seeds on brides after wedding ceremonies, casting magical spells with them on the eve of St. Andrew's to advance the date of marriage, and using them against persons suspected of witchcraft. Their ceremonial use in England on St. John's day has also been documented by Richard Folkard. In the 1884 edition of his book, *Plant Lore, Legends and Lyrics*, for example, he mentions how, "On this night, also, Hemp-seed is sown with certain mystic ceremonies."[56]

A source published in Edinburgh more than eighty years earlier indicates that the ceremonial sowing of cannabis seed was a widespread, transcultural phenomenon, for it included an interesting reference to the ritual in a poem written by Scottish poet Robert Burns. Titled "Halloween," it contains a

footnote explaining his use of the word "hemp" while describing a ceremony in one of the stanzas:

> Steal out, unperceived, and sow a handful of hemp-seed; harrowing it with anything you can conveniently draw after you. Repeat, now and then, "Hemp-seed I saw thee, Hemp-seed I saw thee; him (or her) that is to be my true love, come after me and pou thee." Look over your left shoulder, and you will see the appearance of the person invoked, in the attitude of pulling-hemp.[57]

Burns pointed out that there were several versions of the custom, which also suggests that it was widespread. His humble origins perhaps gave him the connection to the countryside necessary to become familiar with such ceremonies, but his lyrical style earned him the reputation of a popular Romanticist, whose writings were received by many audiences. In fact, a source published across the Atlantic in Philadelphia in 1806 included a letter written to the editor, which describes a version of the story that takes place on St. Valentine's Day, which the editor claimed, "no doubt but all true lovers most religiously performed." According to the writer of the letter, "The same night exactly at twelve o'clock, I sowed hemp-seed in our backyard, and said to myself, 'hemp-seed I sow, hemp-seed I hoe, and he that is my true love come after me and mow.'"[58]

It is of course possible that these are isolated examples of different social behaviors with nothing in common, or that the ritual itself was not even as prevalent a phenomenon as Burns's poem made it out to be. However, the prevalence of the ritual is here less relevant than the more important fact that it existed and was being written about on both sides of the Atlantic, which further embedded cannabis with competing cultural meanings in Great Britain and the United States at the turn of the century. For some, it was a fiber-yielding plant of practical value or strategic importance, while others considered it an ingredient in various medicines or culturally customized rituals. As a commodity, it had become so ubiquitous by the 18th century that the seed even became a literary unit of measure to explain the size of other things. *The Angler's Pocket-Book*, for example, advised fishermen to use anglers "in shape and size of a hemp-seed" to catch certain types of river fish, and the author of a two-volume work on medicine from the 1730s described a common tumor as being "of the Bigness of a Hemp-seed."[59] This tendency persisted for centuries and was also transatlantic in scope, for the *New York Medical Journal* published an article in 1901 that described "an eruption on the neck" as "the size of a hempseed."[60] Clearly, as a multidimensional commodity, cannabis occupied a great deal of cultural space in the British Empire and the United States. Knowledge of the plant's psychoactive properties added yet another dimension to the discourse, though, which—as we

shall see—further complicated its meaning and contributed significantly to transforming its place in the Atlantic world.

DRUG CANNABIS

For people living today in societies across the globe, the resinous properties of certain genetic versions of cannabis are common enough that somewhere between 200 and 300 million people have reported using them. Since cannabis drugs are illegal in most countries, these numbers may be higher, for even diligent researchers conducting surveys must rely on self-reports from random people whose fear might deter them from either participating or providing accurate information. Moreover, most of these surveys refer to the specific preparation known to many as marijuana, which leaves out a significant number of those who consume cannabis resin in different forms. In the United States, cannabis is still listed as a Schedule I substance, which means it has no beneficial qualities and is considered severely dangerous. Although the British considered reclassifying cannabis from the most dangerous class of poisons to a milder classification in the 1980s and then again in 2003, they remain illegal there today as well.[61] Even in countries such as Jamaica, where the plant is extensively tolerated for religious purposes, consuming cannabis drugs is illegal. Many advocates of cannabis legalization point to the fact that hundreds of thousands of people die each year from tobacco and alcohol products—which are legal in most countries across the globe—yet evidence suggests that the health impact of cannabis drugs is nowhere near comparable.[62]

How can this be the case? It is certainly a legitimate question, but the answers have largely been constructed with a selectively focused political lens by activists seeking to defend a plant they feel has become a victim of the preposterous nature of contemporary drug laws.[63] Although their point may very well be true, such an approach to the plant's history diverts our attention from some of the important transatlantic connections that allow us to deconstruct the meaningful transformations the plant endured over the course of the 19th century, from an important commodity to a banned intoxicant. Documenting the evolution of meaning for cannabis in the Atlantic world with more nuance exposes the transatlantic circuits of knowledge that traveled across national boundaries to influence the way medical practitioners, politicians, and eventually wider social audiences thought about the plant as a whole. We will explore these circuits of knowledge and their impact in more detail in subsequent chapters, but now a brief historical overview of the most commonly circulated drug preparations that were used and understood within the context of the Atlantic world is needed to provide context.

As mentioned earlier, the primary psychoactive chemical in cannabis is the cannabinoid that scientists refer to as THC, which is a compound that resides in the microscopic trichomes that grow on the flowering tops and smaller leaves of the female plant in certain genetic varieties. There are dozens of other cannabinoids residing in these glands as well, which work together with the cultural setting and the individual psychology of the user to create the experience of a "high."[64] Indeed, this is one of the most problematic aspects of cannabis consumption: the subjective nature of its effects on users. For example, some people describe the effects of the psychoactive chemical as beneficial. For them, the experience is one that promotes creativity, open-mindedness, euphoric ecstasy, pain relief, increased appetite, and prolonged surges of energy. Some claim that consumption can suppress hunger and help laborers endure longer shifts.[65] On the other hand, individuals who experience negative reactions describe feelings of dread, terror, paranoia, delayed reaction time, depth and perception disorientation, panic, lethargy, and memory loss.[66]

Earleywine put it well when he claimed that "some of these changes stem from the pharmacological properties of the cannabinoids. Others arise from the expectations of the user, the demands of the environment, or the attitudes of the culture where the drug is ingested."[67] Such criteria makes it difficult for scientific research to provide accurate and objective results on the effects that cannabis drugs have on the human mind and body, and the plant's genetic variability increases this difficulty by stimulating a different experience for the user with each strain he or she consumes. Notwithstanding developments within the last few decades or so, most consumers did not have a way of understanding these subtle differences, which could be one reason why, as we will see later, medical practitioners from the nineteenth century often reported mixed results from their experiments with the plant as a medicine. It is important to keep this in mind as we discuss the various ways cannabis drugs were consumed, for even the same preparations could have a different effect on two individuals, especially if they come from societies with different culturally prescribed norms for using the plant.

One of the earliest versions of the drug cannabis that Europeans associated with the Orient is hashish. It is a substance that is mainly smoked and prepared in a similar fashion as the Indian version known as *charas*. Basically, the resin glands that grow on the flowering tops of the female plant are isolated from the other parts by shaking, grinding, and then sieving the dried flowers with a screen so that the resin glands separate and form a fine powder or dust that is placed in a pipe for inhalation. There are as many ways to prepare hashish as there are cultures that use it, but they usually all tend to be considered the most potent form of cannabis drug.[68] Marco Polo's popular travelogue from the Middle Ages referred to intoxicated easterners committing political murder after being drugged by a powerful man who convinced

them that he had the key to the Prophet Mohammad's paradise.[69] His name was Hassan ibn Sabbah, and according to legend, he assassinated political figures to gain control of Persia from the Seljuk Turks in the 12th century.[70] The story circulated widely over the centuries, until the French Orientalist Silvestre de Sacy established the notion that there was a connection between the word "assassin" and *hashishin*. According to him, "the intoxication produced by the hashish [can lead to a] state of temporary insanity [such that] losing all knowledge of their debility [users] commit the most brutal actions, so as to disturb the public peace." Acknowledging that the plant from which hashish derived was no stranger to Europeans, he claimed that "it is not impossible that hemp, or some parts of that vegetable, mixed with other substances unknown to us, may have been sometimes employed to produce a state of frenzy and violence."[71]

As others have pointed out, Sacy's assumption that hashish induced a violent state in its users led him to conclude that the word "assassin" derived from the Arabic word *hashishin*, which he claimed signified a hired killer. To reach this conclusion, he relied on European travelers' accounts of "the assassins" from the Middle Ages, as well as secondary information from other Orientalists.[72] Some authors have argued that Napoleon's soldiers brought hashish back with them from their 1798 campaign in Egypt, which brought negative attention to the drug in French society; but most studies that mention this do not go into detail and offer no analysis of primary sources to support the argument, so more archival work needs to be done before this point can be used to explain the connection to Sacy's view.[73] However, the Orientalist did claim that "when the French army was in Egypt, the general-in-chief, Napoleon, was obliged to prohibit, under the severest penalties, the sale and use of these pernicious substances."[74] In all likelihood, the negative connotations that followed the story of the Old Man on the Mountain combined with notions of Oriental indulgences to create the association of hashish use with violence—more so than any type of scientific experimentation conducted by members of French society at the time.

Nevertheless, Sacy's etymological argument on the connection between hashish, *hashishins*, and assassin soon made its way into books published in London. In 1806, the wealthy British traveler William George Browne published an account of his travels into Egypt and the surrounding regions of North Africa, and in it he included a section dedicated to describing some of the plants he encountered. One of the entries is titled "Hemp, Cannabis vulgaris, *Hashish*," and it reads as follows: "an article of regular culture, being used in various ways as an aphrodisiac, and in different proportions as a narcotic. Hashish is a general name for green herbs," which he described as a noxious intoxicant that easterners "chewed in its crude state, inhaled by means of a pipe, or formed, with other ingredients, into an electuary, *maijun*."[75] Given the general tone of the book, which also addresses the various

articles of dress, food, and customs of the "savage" people the author supposedly encountered throughout his travels, the source represents the knowledge culture for cannabis that developed in connection to western perceptions of Orientalist thought in the Atlantic world. However, the author does not mention Sacy or the etymological argument he developed about hashish.

A discussion of it surfaced the following year in a journal published in Belfast, though, and a book by William Marsden from 1818 published in London quoted extensively from Sacy's essay.[76] The transatlantic circulation of this Orientalist thought on cannabis and assassination also surfaced in an article for *The Christian Journal* in New York two years later, mentioning Marsden's book, Sacy's essay, Polo's travels, and the "name of Haschisch" as a "preparation of hemp [used] throughout all of the East."[77] Around the same time, the German Orientalist Joseph von Hammer published a book on the history of the assassins that included a reprint of Sacy's essay.[78] It became widely popular, with several reviews, comments, and discussions of it surfacing all over the Atlantic in various publications, all of which mentioned Sacy and the etymological argument of the assassins and its connection to cannabis.[79] A full translation titled *The History of the Assassins* appeared in London in 1835, in which the author—Oswald Wood—attached the full copy of Sacy's original paper on the origins of the name "assassin," which he read to the Institute of France on July 7, 1809.

In an interesting footnote about a word that von Hammer used to describe the drug that Hassan Sabbah purportedly used to lure his victims, Wood corrected a claim that the men were being "intoxicated with henbane (*hashishe*)"; he noted that "this appears to be a mistake, as the *hashishe* is found to consist chiefly of hemp."[80] Interestingly, in the preface to his translated edition, Wood pointed out that he "deems it unnecessary to apologize for the notes which [I have] appended, believing that their curiosity will plead [my] case."[81] Out of the five such notes that he deemed necessary to include in the book, two of them pertain to the connection between cannabis, hashish, and the word "assassin." It's not clear why Wood felt this information on cannabis would be valuable to readers, but it is significant that he made the connection—which contributed to the growing discourse of difference between east and west that cannabis came to represent. The London botanist Gilbert Burnett explained this representation well when he claimed that alcohol was a "more civilized" drug, for the "narcotic power of [it] is slight; much less than that of hemp," which he pointed out the "Asiatics" used to "stupefy" instead of producing industrious commodities with it as in the west.[82] Cannabis symbolized a difference between east and west.

This transformation the plant endured for the British was connected to the interplay between empire and identity. As Nechtman points out, the "individuals who transported the material culture of Asia back and forth between Britain and India" eventually became viewed disparagingly as "harbingers of

a globalized and imperial sense of Britishness."[83] Cannabis, which the British used as a practical commodity, became a symbol to distinguish their own identity from those in the so-called periphery of the empire who used it for what seemed to many to be degenerative purposes. As the British Empire developed a civilizing mission in India to justify their increased presence on the subcontinent, though, imperial agents of the East India Company such as William Brooke O'Shaughnessy started experimenting with eastern cannabis to see if it had any medicinal (and therefore productive) value. His attempt to transform this exotic new variety into a useful imperial commodity will be treated in more depth in chapter 4, but the plant could not be easily divorced from its burgeoning meaning as a dangerous intoxicant, especially since those living in England were highly suspicious of the imprint that material culture from the empire was leaving on their sense of Britishness. This is the context in which the discourse on cannabis in the British Empire must be situated to make sense of the plant's evolution through its myriad transformations.

Another cannabis drug the British encountered in India was a liquid preparation known as *bhang*, but they considered this a milder form that did not pose as much of a threat to its users.[84] In stark contrast to this image was *ganja*, which refers to a preparation of the resin that generally resembles what has become known today as marijuana—meaning that it consists primarily of the dried flowering tops of the female plant. After the plants are cut down, these so-called "buds" are removed from the stems, set out to dry, and then sold for consumption. The more potent versions are prepared by removing all the male plants from the cultivation center during the pre-flowering stage so their pollen does not latch on to the flowers and induce germination. Mexican versions of the preparation that U.S. Americans consumed in large quantities throughout the 20th century tended not to go through this process, whereas *ganja* cultivated in India had a higher potency. The relationships between different ways of preparing this form of drug-cannabis are interesting subjects that could tell us a great deal about the cultural transfer of each into their respective spheres of empire, but this book is primarily focused on British perceptions of the plant, which indentured servants from Calcutta and Madras took with them to the British West Indies when they were shipped across the Atlantic to work after slavery was abolished within the empire.

From 1821 to 1920, over one million people of Asian descent joined the more than 10 million Africans shipped to the Americas, of which nearly half were East Indians.[85] Planters had a difficult time getting the newly freed population to accept low wages on the plantations they were previously enslaved on, so East Indians were imported to the island as replacements.[86] Soon, their presence in Jamaica became a source of contention, especially among missionaries and emancipationists who claimed to represent the interests of the newly freed population. For them, the shipment of East Asians to

the Caribbean as indentured servants was nothing less than a plot by the planters designed to worsen the conditions of their former slaves. As one missionary wrote: "Immigration is well-known to be a favorite scheme for humbling the negro race, who are taxed to bring people from the ends of the earth to compete with themselves." Exposing his Orientalist thought process regarding these people "from the ends of the earth," Philip Henry Cornford lamented the planters for flooding "the country with the scum and offscouring [*sic*] of every other clime. See the inrush of Mohammetans [*sic*] and idolators, with all their vices, and superstitions, and crimes!"[87]

Interestingly, although "ganja" is a word that is readily associated with Afro-Caribbean cultures in the Atlantic world today, members of the East Indian Diaspora were the ones who introduced it to the region when they crossed the Atlantic as indentured servants.[88] At some point, Afro-Caribbeans in British Jamaica who encountered these migrant workers adopted ganja for religious purposes and retained the Asian word for it, which has now become synonymous with the term "marijuana" in cultures across the Atlantic world.[89] Whether or not any of these users brought it back with them to Africa during the re-migration movements of the 19th century is unknown, but the cross-cultural fusions of cannabis use were already well established on the so-called "Dark Continent" by then.[90] In fact, Duvall suggests that drug cannabis initially made its way to the New World with enslaved Africans, who used it to help dull the monotonous labor regimes of the plantation system: "the italicized word *marihuana* is Central American Spanish, but originally a mispronunciation of *mariamba*, which is the plural of *riamba*, meaning 'cannabis' in several Central African languages."[91] When the word first surfaced in Mexico during the 1840s, it already contained negative associations with indigenous cultures there; it most likely traveled there centuries earlier when the Portuguese brought enslaved Africans to South America.[92] These connections and associations between drug cannabis and the downtrodden of the world added to its stigma over the centuries.

Available source material reflects how these associations were also connected to Orientalist constructions of the plant. Campos's description of the Orientalist roots of knowledge construction about drug varieties in Mexico confirms as much, and Duvall points out how "three centuries of botanical literature had established psychoactive cannabis *C. indica* as an Oriental object," which led Europeans to conclude that "African cannabis signified Oriental influence, a counterpoint to the civilizing influence of European colonialism."[93] Such perceptions shaped western attitudes toward cannabis and influenced its political economy in the Atlantic world; but they also inspired subcultural uses for it by marginalized communities, which added new layers of meaning to the plant that brought more transformations over time. By the end of the 20th century, even the most well-known industrial uses for cannabis began to reflect this new meaning, as indicated by the fact

that cannabis fiber had become the most important commodity for novelty smoking paper. Granted, this plant matter had always been an important part of the paper industry, but now its most popular industrial use was to produce rolling papers for ganja or marijuana cigarettes (also known as joints).[94] The growing popularity of cannabis as a drug reshaped its place as a commodity and helped marginalize its other uses.

Viewed in connection with each other, then, the three main cultural uses for cannabis help explain the historical transformation it endured from an important commodity to a banned intoxicant in the Atlantic world. The transformation was a complex process that overlapped with attempts by medical professionals to appropriate eastern varieties for medicinal purposes in the Atlantic world, which set off a struggle for meaning that inspired further transformations over time. The status of cannabis as a triple-purpose plant facilitated these transformations because different cultures were able to develop different meanings for it based on use. As an industrial commodity in Europe and the United States, it was considered a valuable plant with multiple uses, which stood in stark contrast to western perceptions of eastern uses. Failing to recognize its multidimensional meanings in the so-called Orient, the British focused solely on Indian uses for it as a drug, which they described as degenerative. This perception traveled across the Atlantic and into the United States, where Orientalist discourse influenced its meaning there as well. As these transatlantic networks of knowledge construction molded new meanings for the plant, a clash between eastern and western cannabis cultures emerged, sparking conflicts with lasting consequences. For Great Britain and the United States, these conflicts invested cannabis with even more meaning, reshaping its place in the Anglo-Atlantic yet again. Before we get to that part of the historical narrative, though, a more thorough investigation into each of the plant's three main associations is warranted to highlight the historical intersection between them, starting with the industrial ones.

NOTES

1. Kwang-chih Chang, *The Archeology of Ancient China* (New Haven: Yale University Press, 1968), 249.
2. Chris Duvall, *Cannabis* (London: Reaktion, 2014), 49.
3. John Noble Wilford, *The Mapmakers* (New York: Vintage Books, 1981), 327–32.
4. James Hopkins, *A History of the Hemp Industry in Kentucky* (Lexington: University Press of Kentucky, 1951), 6. For information pertaining to the amount of fiber yield in tonnage per acre, see Daryl T. Ehrensing, "Feasibility of Industrial Hemp Production in the United States Pacific Northwest," Oregon State University, 1998, accessed January 5, 2014, http://extension.oregonstate.edu/catalog/html/sb/sb681/.
5. Sanford A. Mosk, "Subsidized Hemp Production in Spanish California," *Agricultural History* 13, no. 4 (October 1943): 171. See also Jerry W. Cooney, "A Colonial Naval Industry: The 'Fabrica de Cables of Paraguay,'" *Revista de Historia de America* 87 (Spring 1979):

105–26. The most comprehensive account of hemp in Spanish America is Isaac Campos, *Home Grown: Marijuana and the Origins of Mexico's War on Drugs* (Chapel Hill: University of North Carolina Press, 2012), 1–3.

6. See Brian E. Coutts, "Flax and Hemp in Spanish Louisiana, 1777–1783," *Louisiana History: The Journal of the Louisiana Historical Association* 26, no. 2 (Spring 1985): 129–139.

7. See A. J. R. Russell-Wood, *The Portuguese Empire, 1415–1808* (Baltimore: Johns Hopkins University Press, 1998), 126–27. For an account of Dutch activity in the Atlantic world, see Jack P. Greene and Philip Morgan, *Atlantic History: A Critical Appraisal* (New York: Oxford University Press, 2009). For a general account of hemp use for rope by European empires during the Age of Exploration, see Chris Duvall, *Cannabis* (London: Reaktion, 2014), chapter 3.

8. Lewis C. Gray, *History of Agriculture in the Southern United States to 1860*, vol. 1 (Gloucester, Mass.: Peter Smith Press, 1958), 5–6.

9. William Waller Hening, *Hening's Statutes at Large: Being a Collection of All the Laws of Virginia from the First Session of the Legislature, in the Year 1619*, vol. 1 (Torrance: Freddie L. Spradlin, 2009), 218; the transcription of these laws can also be obtained at http://www.vagenweb.org/hening/. Spelling matches original publication.

10. Ibid., vol. 2, 306.

11. Hopkins, *A History of the Hemp Industry in Kentucky*, 6–9.

12. "The London Hempressers Complain of Dutch Competition, temp. Charles I," in *Seventeenth Century Economic Documents*, ed. Joan Thirsk and J. P. Cooper (Oxford: Clarendon Press, 1972), 254.

13. William Bailey, *A Treatise on the Better Employment, and More Comfortable Support, of the Poor in Workhouses* . . . (London: J. Dodsley, 1758), 50.

14. Mary Cooper, *The Adventures of Mr. Loveill, Intersper'd with Many Real Amours of the Modern Polite World*, vol. 1 (London: M. Cooper, 1750), 267.

15. Another source from this period mentioned "a house of correction for disorderly servants, vagrants, and strumpents who were made to beat hemp, and are kept at other hard labors." See Anonymous, *England Illustrated, or, a Compendium of the Natural History, Geography, Topography, and Antiquities Ecclesiastical and Civil, of England and Wales. With Maps of the Several Counties, and Engravings of Many Remains of Antiquity, Remarkable Buildings, and Principal Towns*, vol. 2 (London: J. Dodsley, 1764), 21.

16. Edmund Quincy, *A Treatise of Hemp-Husbandry* (Boston: Green & Russell, 1765), 19, 16.

17. Anonymous, *Selected Essays: On Raising and Dressing Flax and Hemp; and on Bleaching Linen-Cloth: With Valuable Dissertations on Other Useful Subjects* (Philadelphia: Robert Bel, 1777), 39; William Strickland, "Observations on the United States of America," March 8 1796, in *The Farmer's Register: A Monthly Publication Devoted to the Improvement of the Practice, and Support of the Interests of Agriculture*, vol. 3, ed. Edmund Ruffin (Petersburg: Edmund Ruffin, 1836), 267.

18. Marion B. Lucas, *A History of Blacks in Kentucky: From Slavery to Segregation, 1760–1891* (Lexington: University Press of Kentucky, 2003), 4, xi.

19. F. A. Michaux, *Travels to the Westward of the Allegany Mountains, in the States of Ohio, Kentucky, and Tennessee, in the Year 1802* (London: Barnard Sultzer, 1805), 74.

20. Advertisement, *Kentucky Gazette*, April 25, 1809, vol. XXII, no. 1226, http://kdl.kyvl.org/.

21. Anonymous, *A Geographical, Historical, and Commercial, and Agricultural View of the United States of America, Forming a Complete Emigrant's Directory through Every Part of the Republic* (London: Edwards & Knib, 1820), 488.

22. D. Newson, "Threshing Machines: Hemp," *Prairie Farmer* 6, no. 8 (Chicago 1846): 253.

23. Hopkins, *A History of the Hemp Industry in Kentucky*, 24. Hopkins's book is rather outdated, but it was one of the first academic historical accounts of industrial cannabis in Kentucky, which represented the largest fiber-producing state in the Union throughout the 19th century. He cites some important sources regarding the connection between hemp and slavery,

but a thorough monograph on the subject has yet to be explored. For a more contemporary account of slavery in Kentucky in general, see Lucas, *A History of Blacks in Kentucky*.

24. The actual quote from the French edition reads as follows: "*car outré qu-elle multiplie les foins & le travail, elle expose encore le Chanvre a bein des accidens, lorsque la saison est pluvieuse. L'eau, qui tombe sure le Chanvre, avant qu'il soit sec, le verrit, le tache, & le noircit*." M. Marcandier, *Traite du Chanvre* (Paris, 1758), 54.

25. Marcandier, *A Treatise on Hemp,* 65.

26. Quincy, *A Treatise of Hemp-Husbandry*, 17.

27. Thomas Tusser, *Five Hundred Points of Good Husbandrie* (London: 1580), ed. W. Payne and Sidney Herrtage (London: English Dialect Society, 1878), 41.

28. Anonymous, "Improvements in Treating Flax and Hemp," *The Farmer's Magazine*, vol. 11 (London: Rogerson & Tuxford, 1857), 384; Anonymous, "Flax, Hemp, etc.—Improvements in Their Treatment," *The Working Farmer*, vol. 11 (New York: Frederick McCready, 1858), 94.

29. Chris Duvall, *Cannabis* (London: Reaktion, 2014), 80.

30. Paolo Ranalli, ed., *Advances in Hemp Research* (New York: Haworth Press, 1999), 74.

31. Hopkins, *A History of the Hemp Industry*, 43.

32. Marcandier, *A Treatise on Hemp*, 18. For the translated versions, see *An Abstract of the Most Useful Parts of a Late Treatise on Hemp, Translated from the French of M. Marcandier, Magistrate of Bourges, and Inscribed by the Editor at London, to the Laudable Society for Promoting Arts, Manufactures, &c. Being Much Recommended to the Growers and Manufacturers of That Valuable Material, from Some Modern Discoveries and Experiments of a Method of Preparation, (Not Formerly in Practice) in Order to Its Various Applications for the Use of Mankind Together with Some Observations upon the Prospect of Singular Advantage Which May Be Derived to Great-Britain and Her Colonies from Their Early Adopting the Method Prescribed* (Boston: Edes & Gill, 1766); M. Marcandier, *A Treatise on Hemp in Two Parts. Containing I. Its History, with the Preparations and Uses Made of It by the Antients. II. The Methods of Cultivating, Dressing, and Manufacturing It, as Improved by the Experience of Modern Times* (London: T. Becket and P. A. de Hondt, 1764).

33. Many of them are included in Sidney Smith Boyce, *Hemp (Cannabis Sativa): A Practical Treatise on the Culture of Hemp for Seed and Fiber with a Sketch of the History and Nature of the Hemp Plant* (New York: Orange Judd Co., 1900).

34. Eleazar Albin, *A Natural History of English Song-Birds, and Such of the Foreign as Are Usually Brought Over and Esteemed for Their Singing. To Which Are Added, Figures of the Cock, Hen, and Egg of Each Species, Exactly Copied from Nature, by Mr. Eleazar Albin, and Curiously Engraven on Copper. Also a Particular Account of How to Order the Canary-Birds in Breeding; Likewise Their Diseases and Cure* (London: R. Ware Printing, 1742), 16, 26, 32–33, 48, 56, 65, 67, 72, 121–23.

35. Anonymous, *The Bird Fancier's Recreation: Being Curious Remarks on the Nature of Song-Birds, with Choice Instructions Concerning the Taking, Feeding, Breeding, and Teaching Them* (London: T. Ward, 1728), 29.

36. Marcandier, *Treatise on Hemp*, 19–23.

37. Duvall, *Cannabis*, 27.

38. Ibid., 35.

39. Ibid.

40. J. H. G. Grattan and Charles Singer, *Anglo-Saxon Magic and Medicine: Illustrated Specially from the Semi-Pagan Text 'Lacnunga'* (London: Oxford University Press, 1952), 123.

41. For more extensive information about these sources, see David T. Brown, ed., *Cannabis: The Genus Cannabis* (Amsterdam: Harwood Academic Publishers, 1998).

42. John Parkinson, *Theatre of Plants* (London, 1640). For a list of various sources published in 16th-century Europe that site classical works for the use of hempseed as medicine, see Michael Aldrich, "History of Therapeutic Cannabis," in *Cannabis in Medical Practice: A Legal, Historical, and Pharmacological Overview of the Therapeutic Use of Marijuana*, ed. Mary Lynn Mathre (London: McFarland Publishers, 1997), 42.

43. John Taylor, *The Praise of Hemp-Seed* (London: E. Wright, 1623), 7.

44. Steven Blankaart, *The Physical Dictionary* (London: John and Benj. Sprint, 1726), 65.

45. Philip Miller, *The Gardener's Dictionary, Containing the Methods of Cultivating and Improving the Kitchen, Fruit and Flower Garden as Also the Physic Garden, Wilderness, Conservatory and Vineyard* (Rivington: London, 1731), in Mills, *Cannabis Britannica*, 31–32.
46. Herman Boerhaave, *Herman Boerhaave's Materia Medica* (London, 1755), 68.
47. Marcandier, *Treatise on Hemp*, 23.
48. Ernest Abel, *Marihuana: The First Twelve Thousand Years* (New York: Plenum Press, 1973), 119.
49. Royal Society of Arts (Great Britain), *The American Correspondence and Transactions of the Royal Society of Arts, 1755–1840: Guard Books, 1755–70; and Loose Archives, 1755–1840* (East Ardsley, Wakefield, Yorkshire: Micro Methods Ltd., 1964), 10.
50. Robert Hooper, *A New Medical Dictionary* (Philadelphia: Griggs & Co. Printers, 1817), 163.
51. John Eberle, *A Treatise on the Practice of Medicine*, vol. 2 (Philadelphia: John Griggs, 1830), 294–95.
52. Roy Porter, *The Greatest Benefit to Mankind: A Medical History of Humanity* (New York: W. W. Norton & Company, 1997), 37, 39.
53. For one example, see Terence Mckenna, *Food of the Gods: The Search for the Original Tree of Knowledge, a Radical History of Plants, Drugs, NS Human Evolution* (New York: Bantham Press, 1993).
54. Ibid., 37.
55. Sula Benet, "Early Diffusion and Folk Uses of Hemp," in *Cannabis and Culture*, ed. Vera Rubin (The Hague: Mouton Publishers, 1975), 42.
56. Richard Folkard, Jr., *Plant Lore, Legends, and Lyrics: Embracing the Myths, Traditions, Superstitions, and Folklore of the Plant Kingdom* (London, 1884), 52.
57. J. Hamilton, ed., *Poems by Robert Burns: With His Life and Character,* Vol. 1 (Edinburgh: Oliver Press, 1801), 119.
58. Joseph Rakestraw, *The Evening Fire-Side, or Literary Miscellany*, vol. 2 (Philadelphia, 1806), 85.
59. *The Angler's Pocket-Book; Or, Complete English Angler: Containing Everything Necessary in That Art. To Which Is Prefixed, Nobbs's Celebrated Treatise on the Art of Trolling* (Norwich: J. Payne, 1800), 6; John Allen, *Dr. Allen's Synopsis Medicinae*, vol. 2 (London: J. Pemberton, 1730), 63.
60. Frank P. Foster, "Drug Rash after the Use of Phenocoll Hydrochloride," *The New York Medical Journal* 73 (June 1901): 1150.
61. Beatriz Acevedo, *Understanding Cannabis Reclassification in the United Kingdom, 2002–2005*. (PhD dissertation, University of Hull, United Kingdom, 2007).
62. See Earleywine, *Understanding Marijuana,* chapter 2.
63. For some examples of works that make uncritical claims for cannabis, see John Kaplan, *Marijuana: Report of the Indian Hemp Drugs Commission, 1893–1894* (Silver Spring: Thomas Jeferson Publishing, 1969); Abel, *Marihuana*; Jack Herer, *The Emperor Wears No Clothes*; Martin Booth, *Cannabis: A History* (New York: St. Martin's Press, 2003); Allen Ginsberg, "The Great Marijuana Hoax: First Manifesto to End the Bring Down," *The Atlantic Monthly* (November 1966): 107–112; Martin Lee, *Smoke Signals: A Social History of Marijuana—Medical, Recreational, and Scientific* (New York: Simon & Schuster, 2012).
64. Richard DeGrandpre, *The Cult of Pharmacology: How America Became the World's Most Troubled Drug Culture* (Durham: Duke University Press, 2006); Isaac Campos, *Home Grown: Marijuana and the Origins of Mexico's War on Drugs* (Chapel Hill: University of North Carolina Press, 2012); Thomas Szasz, *Ceremonial Chemistry: The Ritual Persecution of Drugs, Addicts, and Pushers*, revised edition (Syracuse: Syracuse University Press, 2003).
65. Duvall, *Cannabis*, 91–92.
66. Earleywine, *Understanding Marijuana*, chapter 5.
67. Ibid., 97.
68. For a somewhat sensationalized yet valuable source on hashish use and production in history, see Robert Connell Clarke, *Hashish!* (Los Angeles: Red Eye Press, 1998).
69. Marco Polo, *The Travels of Marco Polo*, trans. Ronald Latham (New York: Penguin Books, 1958), 70–73.

70. For more details on this legend and some explanation as to how it diffused into European society, see Charles E. Nowell, "The Old Man of the Mountain," *Speculum* 22, no. 4 (October 1947): 497–519; Juliette Wood, "The Old Man of the Mountain in Medieval Folklore," *Folklore* 99, no. 1 (1988): 78–87; W. B. Bartlett, *Assassins: The Story of Medieval Islam's Secret Sect* (Stroud: The History Press, 2001).

71. M. Silvestre de Sacy, "Memoir on the Dynasty of the Assassins, and On the Origin of Their Name," in Joseph von Hammer-Purgstall, *The History of the Assassins*, trans. Oswald Charles Wood (London: Smith and Elder, 1835), 235.

72. For a study of the relationship between Islamic rivalries and western knowledge of the story of the Old Man on the Mountain, see Michael-Ray Aldrich, "Cannabis Myth and Folklore" (PhD diss., State University of New York, Buffalo, 1971).

73. See Abel, *Marihuana*, 148–49. Also see Lester Grinspoon, *Marihuana Reconsidered* (Cambridge: Harvard University Press, 1971), 64.

74. Hammer-Purgstall, *History of the Assassins*, 233.

75. William George Browne, *Travels in Africa, Egypt, and Syria, from the Year 1792 to 1798*, 2nd Edition (London: 1806), 312.

76. M. Ginguene, "Report on the Proceedings of the Class of History and Ancient Literature, of the French Institute, Delivered at the Public Meeting," *The Belfast Monthly Magazine*, 4 (Belfast: Smyth & Lyons, 1810), 373–75. William Marsden, *The Travels of Marco Polo: A Venetian* (London: Cox and Baylis, 1818), 118.

77. Anonymous, "The Story of the Old Man of the Mountain," *The Christian Journal* 5, no. 9 (September 1821): 281.

78. Joseph von Hammer-Purgstall, *Die Geschichte der Assassinen, aus Morgenländischen Quellen* (Stuttgard un Tübingen, 1818).

79. Indeed, the numbers are too great to list in their entirety here, so here is a small selection: *The Foreign Review*, vol. 1 (London: Treuttel and Wurtz, 1827), 461; *Athenaeum: Journal of English and Foreign Literature, Science, and Fine Arts* (London: J. Francis, 1833), 644; *The Museum of Foreign Literature and Science*, vol. 13 (Philadelphia and New York: E. Littell and G. & C. Carvill, 1828), 6; Joseph Dennie and John Elihu Hall (eds.), *The Port Folio*, vol. 2 (Philadelphia: Harrison Hall, 1827), 361–71.

80. Oswald Charles Wood, *The History of the Assassins* (London, 1835), 137.

81. Ibid., v.

82. Gilbert T. Burnett, *Outlines of Botany: Including a General History of the Vegetable Kingdom*, vol. 2 (London: John Churchill, 1835), 560–1.

83. Nechtman, *Nabobs*, 11, 16.

84. The word is also used in India to describe the cannabis plant. For more detail on cultural uses for bhang, see Corinne Smith, "Chillum: Symbols, Society, and Sādhanā: Ascetic Ritual Intoxication in India" (MA Thesis, University of London, 2015).

85. Lomarsh Roopnarine, "East Indian Indentured Emigration to the Caribbean: Beyond the Push and Pull Model," *Caribbean Studies* 31, no. 2 (Fall 2003): 101.

86. For a discussion by an English planter in Jamaica on his experience with the problem of labor in the cane fields during the 1830s, see Benjamin M'Mahon, *Jamaica Plantership* (London: E. Wilson, 1839), 264–80. For documentary evidence of the struggle between planters and emancipated slaves for wages, see Ronald V. Sires, "Sir Henry Barkly and the Labor Problem in Jamaica, 1853–1856," *The Journal of Negro History* 25, no. 2 (April 1940): 217.

87. Philip Henry Cornford, *Missionary Reminiscence, or Jamaica Retraced* (Leeds: J. Heaton and Son, 1856), 93, 96.

88. Vera Rubin, "The 'Ganja-Vision' in Jamaica," in *Cannabis and Culture*, ed. Vera Rubin; James H. Mills, "Globalizing Ganja: The British Empire and International Cannabis Traffic c. 1834 to c. 1939," in *Consuming Habits: Global and Historical Perspectives on How Cultures Define Drugs*, 2nd edition, eds. Jordan Goodman, Paul E. Lovejoy, and Andrew Sherratt (New York: Routledge Press, 2007), 178–193; Duvall, *Cannabis*, chapter 4.

89. For a study of the Rastafarians and their ceremonial use of ganja, see Hamid Ansley, *The Ganja Complex: Rastafari and Marijuana* (Lanham: Lexington Books, 2002).

90. For an example of one such study of the African Diaspora in reverse, see Nemata Blyden, *West Indians in West Africa, 1808–1880: The African Diaspora in Reverse* (New York: University of Rochester Press, 2000).

91. Duvall, *Cannabis*, 15.

92. Campos, *Home Grown*, 75.

93. Chris S. Duvall, “Drug Laws, Bioprospecting and the Agricultural Heritage of Cannabis in Africa,” *Space and Polity* 20, no. 1 (2016): 10.

94. Ben Marks, “The Unfiltered History of Rolling Papers,” *Collectors Weekly*, May 29, 2013, accessed December 2017, https://www.collectorsweekly.com/articles/the-unfiltered-history-of-rolling-papers-plus-tommy-chong/.

Chapter Three

The Ties That Bind

Cannabis Fiber and the Atlantic World

"Whilst our properties, our lives, and (which ought to be more dear to us) the freedom and glory of our country, depend on the superiority of our navies," wrote Lord Somerville as he reflected on the state of the British Empire, "[the] subject [of hemp] should not for a day be neglected."[1] The date was March 2, 1808, just over five years after the Court of Directors of the East-India Company had been instructed by Britain's Privy Council for Trade and Foreign Plantations to encourage cannabis cultivation in India for fiber production.[2] The urgency expressed by Lord Somerville was not unwarranted; after all, Great Britain at the time was importing about £600,000 worth of the plant's durable fiber every year from Russia because they could not produce enough at home to satisfy their consumption needs. Moreover, the Napoleonic Wars were disrupting trade networks so much that Britain's source for this important strategic commodity was being dangerously cut off.[3] Ever since they decided to recognize the thirteen American colonies as an independent country, the British were scrambling to find a new colonial outlet through which to promote cannabis cultivation for naval stores to prevent such a crisis, and India seemed as good a location as any. In effect, history had taught them to be wary of relying too heavily on foreign countries for such an important strategic commodity.

Granted, these lessons had deep historical roots. As a commodity, cannabis fiber, known as hemp in English, held significant value among trade routes across the North Atlantic for centuries. By the 18th century, though, conflicts between empires over territorial dominance in the Atlantic world reached an all-time high, causing the British to react by placing bounties on the plant in the American colonies to encourage more of its cultivation.

Although parliamentary action did not stimulate the rise in hemp production the British needed, the perception that colonial territories could meet their demand never ceased. Especially during the period known as the Age of Revolutions (1750s–1840s), the use of cannabis as a commodity for rigging ships further solidified its meaning as an important plant for acquiring and maintaining imperial and/or national sovereignty, so it was constantly encouraged. This chapter chronicles the history of this meaning in the Atlantic world and analyzes its effects on the relationships between the British and their imperial colonies, as well as the United States and Russia. It also provides a more accurate scope through which to view the transatlantic forces at work in the Atlantic world, for most of the cannabis that was used there for naval stores came from Russia through trade networks carved out centuries earlier.

In other words, as historian Alfred Crosby put it, Russia was "inextricably knotted into the skein" of the Atlantic world through trade in cannabis, which exposes the limits of a geographical approach to Atlantic history by demonstrating how commodities originating from distances far beyond the ocean's shores oftentimes entered that world and navigated its historical trajectory.[4] When Atlantic history is framed through this wider historical lens as a methodological concept that focuses on the interconnectedness of human experiences in the Atlantic Ocean, then the transatlantic forces behind the use, cultivation, production, and consumption of cannabis come further into focus, revealing the cultural conditions under which the plant came to be understood as a commodity. Analyzing these conditions helps establish the foundation needed to explain how and why cannabis transformed so drastically after knowledge of its different uses in India traveled to the Atlantic world more frequently during the 19th century.

NETWORKS AND FOUNDATIONS

Cannabis fiber in the Atlantic world has a long and complex history. Most scholars point to the late 15th century and the Age of Exploration as the historical frame of reference for understanding the origins of Atlantic history, but the hemp that rigged ships navigating this vast body of water came from a network of trade developed in Northern Europe much earlier. Even before these Baltic trade routes were established, though, cannabis fiber occupied an important place in ancient societies. It is unknown exactly when and how the plant first came to Europe from Asia, but Herodotus, Homer, and Plutarch all mentioned the fact that the Greeks considered it a relatively useful plant, especially for rope and cloth.[5] Rome has also been cited, where Dioscorides, Galen, and Pliny the Elder tell us that it was an important fiber mainly imported from Babylonia, and that the oil from its seeds had some kind of

perceived medicinal value.[6] Though an analysis of cannabis in the ancient world is beyond the scope of this study, these historical references do provide some valuable insight. For one, the Roman Empire extended its tentacles well into the European continent a few hundred years or so before and after the birth of Christ, so it's reasonable to assume that knowledge of the plant's use as a fiber traveled with them. It also points to the fact that cannabis was considered a multipurpose plant in various regions of Europe early in the historical record, for the same sources mention that the seed was used in medicinal preparations and ritualistic social contexts as well.[7] Moreover, we also learn that Rome imported the plant, which ensured that trade networks for cannabis existed from a very early period.

By the 12th century, bands of merchants living in cities along the North European and Baltic coasts formed an association known as the Hanseatic League, which came to dominate commerce in the region for hundreds of years. Trade in Medieval Europe could be a dangerous and risky business, but this Germanic commercial guild developed such a reliable reputation that its merchants were granted trading privileges stretching as far northeast as Novgorod.[8] At the time, the city represented the northernmost boundary of the Kievan Rus, which was a loosely organized state extending as far south as the Dnieper River. Still, an elaborate port system stitched the region together into a network of trade that allowed such bulky goods as timber, iron, and cannabis fiber to make it into Europe. The roads were too unfit to support travel over such long distances at the time, so merchants relied on the river systems, dragging ships stocked with these commodities from ports (*voloki*) across the land bridges that connected them all into an elaborate maze of waterways.[9] Not only was this system vital toward ensuring that Russian goods made their way to Europe, but it also served as an important source of agriculture for the entire Novgorod region, where the soil and climate were a stark contrast to the fertile central black-earth region.

This early Russian state was highly fragmented, which made it difficult for the various leaders to establish central authority over the region for very long.[10] As a result, the Mongols were able to sweep through in 1240 and take the city of Kiev. Only Novgorod maintained some semblance of independence, with the so-called Golden Horde agreeing to protect Baltic and Volga River trade routes into the city, so long as its leaders paid tribute. As historian Charles J. Halperin noted, "Not only did the Mongols not cut off Novgorod from her western trading partners in the German Hanseatic League, but they gave tax exemptions to Hanseatic merchants entering Russia through Novgorod . . . [which became] the entrepot for nearly all Baltic trade entering and leaving Russia."[11] These circumstances allowed cannabis cultivated in Russia for high-quality fiber to continue its journey from the south to the Baltic Sea, where it entered internationally renowned commercial cities like

Bergen and Luebeck, then got re-exported to the Atlantic Island trading partners, which included English merchants.[12]

Eventually, *Gospodin Veliki Novgorod* (Novgorod the Great) faced fierce competition from the rising power out of Lithuania. By the late 15th century, Moscow had become the most important principality in the land of Rus, and Ivan III eliminated the century's long monopoly on trade enjoyed by merchants of the Hanseatic League in 1492. War with Livonia in the Baltic region quickly followed, and Russia lost. For a while, the White Sea replaced the Baltic Sea as the next outlet through which to pump Russian-cultivated cannabis fiber into Europe and the Atlantic Islands, with Archangel becoming the chief port city. Among the goods exported to the Atlantic during the 16th century from here were flax, timber, tallow, and various grades of reliably sorted fibers.[13] However, the voyage from Archangel to the North Sea was more difficult to make, for the port remained frozen a good portion of the year, thereby limiting the amount of trade that could take place annually. The need for Russian naval stores continued, though, and therefore so did the long and arduous journey to Archangel by Dutch and English merchants. In fact, the English Muscovy Company that was established in the 16th century held great privileges in this trade, including the right to manufacture cannabis fiber into rope in the region.[14] Many of the company records were destroyed in the London fire of 1666, but surviving sources indicate that the company bought over £10,000 worth of hemp cordage per year from Russia at the turn of the century.[15]

By the time of Peter the Great, the vast network of cities that connected the Hansa merchants to Russian trade via the Baltic had been destroyed, but the legacy of trade within the region remained intact. Indeed, Peter eventually revitalized the traditional path by which Russian fiber made its way into Atlantic waters, but the vast continental frontier to the east posed a significant problem and needed to be addressed before it took place. Conquering the dense forests, mountainous terrain, and indigenous communities of Siberia was a daunting task, but the Muscovite princes and early Romanov tsar successfully solidified a Russo-Chinese border along the Amur River in 1689 with the Treaty of Nerchinsk, which was the first treaty between Russia and China that defined each of their territories. The desire for protection against "Eastern Hordes" contributed significantly to this expansion for Russia, but the thirst for riches and geographical interest in a new and distant realm were also important.[16] Most of this expansion went eastward, across Siberia and into the Pacific Ocean, where Vitus Bering's expedition opened the door in 1728 for a Russian Age of Exploration. Crossing what became known as the Bering Strait, Russia established settlements in Alaska and eventually ventured as far south as California, where they established Fort Ross and attempted to cultivate cannabis, among other endeavors.[17]

However, Bering's expedition and the subsequent exploration that followed in the Pacific must be placed within the context of Russia's perception of the Atlantic world, for much of this exploratory drive also came from a desire to keep up with and obtain recognition from the west. After consolidating his rule in 1696 and gaining international recognition of his title as Peter the Great, for example, he sought to transform Russia into a major European power. Revealingly, he is recorded as saying, "By our deeds in war we have emerged from darkness into the light of the world, and those whom we did not know in the light now respect us."[18] Invoking images of darkness before recognition by the west hints at the extent to which he and his noblemen's Atlantic imaginings contributed to Russia's historical development.[19] He traveled extensively through European countries in disguise and attempted to impose western culture upon the Russian aristocracy, including taxing the nobility who refused to dress and wear their facial hair in European fashion, or ordering factories of foreign merchants to be constructed in his city, St. Petersburg. Along with the establishment of western-style navigational schools and cartographic influences from Europe, all of this suggests that the Atlantic loomed large in the imaginations of the Russian elite.[20]

By the mid-18th century, these imaginings turned into reality, for Russia became intrinsically connected to the Atlantic world. The Baltic ports were reclaimed through conflict with Poland and Lithuania, and St. Petersburg transformed into an Atlantic gateway. As one scholar has pointed out, these ports were full of western merchants, with those from Great Britain outnumbering all others by accounting for "over two thirds of exported Russian hemp and half its exports of flax."[21] Since high-quality naval stores were considered essential commodities for the British, much of this trade worked overwhelmingly in Russia's favor.[22] It also introduced several Atlantic commodities into the cultural fabric of Russian high society, some of which historian Alfred Crosby demonstrates came to be regarded by the nobility as essential components to their daily lives. "The Russian noble wore English woolens, drank coffee from South America sweetened with sugar from Jamaica, dyed his kerchiefs with indigo from South Carolina, savored his meals with spices from Batavia and wines from France, and read Voltaire and Rousseau in the original."[23]

Indeed, as another scholar recently put it, Russian nobles were not just able to satisfy their indulgence for the material culture of the Atlantic world with this trade, but in fact "constructed and maintained their fiefdoms, based in no small part, on their success with hemp production."[24] In other words, a lot of peasants across the countryside were busy producing the medium of exchange that kept the British coming back for more commerce. However, this trade soon became a source of alarm for the British Empire. As colonial wars gave way to the Age of Revolutions, fears of relying too heavily on a foreign power for such an important commodity stimulated a transatlantic

dialogue over the need for more hemp production within the British Empire. Analyzing the discourse on cannabis during this period furthers our understanding of the colonial crisis that sprang up between Great Britain and the Thirteen Colonies, but it also provides a foundation upon which to build an understanding of the transformation the plant would later endure from an important strategic commodity to a medicine, and then again into a banned intoxicant.

PERCEPTIONS AND CONNECTIONS

In 1758, a member of the Royal Society for Promoting Arts and Commerce published a treatise on the necessities and advantages of increasing the linen trade in England. The document is rather long, and it is mainly concerned with figuring out a better way to employ the poor people of England. Hemp served this purpose well, the author thought, so various sections of the treatise are dedicated to promoting cannabis cultivation. Only the growth of flax is mentioned in the title, but the author makes it clear that, since these two crops are used and cultivated in a similar manner, a discussion on methods of improving the one also applies to the other.

The point William Bailey tried to make on the importance of these two plants for the British Empire, though, was that increasing their cultivation in the metropole would decrease the "vast Quantities we still take from foreign Nations."[25] The potential "danger" that could arise from allowing hemp supplies to "fall totally into the Hands of Foreigners" led him to conclude that "nothing can be of greater Consequence than to revive, support, and encourage [it] among ourselves." What if the "foreign Dealers," as he called them, decided to "raise the Price of Yarn . . . or perhaps refuse to supply us with [hemp] at any Rate[?]"[26] The results would be disastrous, he thought, because "our naval Strength . . . arises from our national Trade."[27] The reason England's naval strength was connected to their national trade was because high-quality cannabis fiber from Russia was, as economist John Hutchins pointed out, "of primary importance."[28] As such, Bailey hoped that the "utmost Efforts will be made to promote and establish [hemp production] throughout the Kingdom."[29] For his part, he included several diagrams of technological innovations designed to improve the quality of cannabis fiber farmers could produce.

Of course, he was not alone in his concerns. John Rutherfurd, esquire of North Carolina, was also distressed by the fact that the British "cannot subsist as a maritime power without importing materials from manufactures, such as hemp."[30] According to him, in the year 1759 alone, about twenty-five thousand tons of cannabis fiber entered the British Empire from Russia, costing over £450,000 sterling.[31] Something desperately needed to be done

about this, he declared, for cannabis fiber had become a commodity that, "in our present situation as a maritime power, we must have, cost what it will."[32] Unless they addressed this dependency issue with "all imaginable care," as he put it, then Great Britain would experience another crisis like the one that occurred decades earlier, when Sweden "refused to let us have [naval commodities] for our ready money, otherwise than in their bottoms, at their own prices, and in such quantities as they pleased."[33] In other words, Rutherfurd suggested that historical memory "put us on our guard against a like necessity, which, if it should happen, would be of infinite prejudice to us."[34]

Joseph Gee made his position clear from the start of his treatise on the nature of hemp and flax production: "It is an Observation supported and confirmed by all History both Antient [*sic*] and Modern that the Prosperity of a Nation either rises or falls, in proportion to the Improvements made in it's [*sic*] Trade or the Declension of it's [*sic*] Commerce."[35] He pointed out that England imported more than ten thousand tons of hemp each year from "Nations where the Balance of Trade with us, Turns in their own Favour."[36] The document he published seemed to be quite popular at the time, for even though the 1765 edition does not mention it, a 1764 copy of the same work was listed as the second edition, which suggests that more than a few people were interested in reading what he had to say about the "Evils and Inconveniences arising from the Importation of Hemp and Flax from Foreign Countrys [*sic*]."[37] Gee continued to concern himself with this issue by publishing another article in 1767, in which he reiterated the seriousness of "Our Trade with Russia," which "carries a great deal of Money out of the Kingdom, and subjects our Navy to their Mercy in the important Articles of Cordage and Canvas."[38] At the time, Great Britain's national debt had been worse than ever before, which made it even more problematic that so much money was leaving the empire for Russia.

Anxiety over Britain's inability to satisfy its imperial needs for cannabis from within the empire coincided with a growing interest in Enlightenment notions of scientific progress and national improvement, which drove many noblemen and successful merchants to form a series of learned societies. Historian Max Kent describes them as being "formed by the British virtuosi, who were imbued with the spirit of improvement, during the high noon of the British Enlightenment and the dawn of the Industrial Revolution."[39] One of the societies, known as the Royal Society for the Encouragement of Arts, Manufactures, and Commerce (RSA), was founded in London in 1754 with the professed purpose of promoting "such productions, inventions, or improvements, as shall tend to the Employing of the Poor, to the Increase of Trade, and to the Riches and Honour of the Kingdom."[40] One of their main agendas was to encourage agricultural improvements and production within the empire by granting monetary rewards (premiums) and honorable medals to individuals who excelled in cultivating crops the British imported from

foreigner counties. The reputation of the RSA was such that, within the first five years of its existence, the number of contributing members steadily increased.[41]

One of the founders, William Shipley, used his transatlantic connections to advance their agenda within the North American colonies. In a letter from the series of Guard Books that members created in the late 18th century, for example, he wrote to an acquaintance in South Carolina with information on how to "open a new scene for Improvements in the Province." Pointing out that "hemp and flax both grow very well here, but especially hemp, might not the raising of Quantities be of vast desire to the province and of very considerable use to Britain." Shipley went on to explain how he had "procured some Hempseed from my Acquaintances at New York which they are now to plant and I hope the Success will Encourage them to go on with so usefull [*sic*] a Commodity." After including important details on how to cultivate cannabis well, he ended with a "hope that to a gentleman of your Publick [*sic*] Spirit this Account will be __ with the utmost Respect.[42]

As the letter suggests, the society was interested in developing a solution to the problem of the empire's vulnerable hemp supply, and Shipley intended to use his transatlantic connections to get this done. Born into a culture that imagined the other side of the Atlantic as an unspoiled Eden with soil unrivaled in its fertility, he considered South Carolina a "very agreeable" region for cannabis cultivation. In fact, the only reason he could find that it hadn't already become a well-established crash crop had to do with the "ignorance, neglect, and non-encouragement" of colonial farmers.[43] In other words, the colonists were to blame for the lack of quality hemp production, not the environment; so it was up to the enlightened members of British "virtuosi" to provide them with the necessary incentives and instructions on how to cultivate the plant and process its fiber. This sentiment surfaced in another letter written a decade later, in which society member Edward Bridgen claimed that "such encouragement is the more necessary on account of the ignorance and obstinacy of these lower sort of people who must be enticed into Measures even for their own Advantage."[44]

These comments expose some of the tensions surfacing within the British empire, but the society continued to correspond and collaborate with its transatlantic affiliates nonetheless. Known as nonsubscribing "corresponding" members, they were responsible for sharing information about their location and assisting merchants and manufacturers in adopting the latest improvements. Bridgen revealed how important these transatlantic connections were to the society when he wrote that a "very sensible letter from M Edm Quincey [*sic*] of __ was read to you last Wednesday."[45] Edmund Quincy lived in Boston, and the letter Bridgen referred to was written in 1765 with the professed purpose of "promot[ing] a mutual intercourse of communication from the various parts of the British Dominions, and those of America in

particular."[46] In it, he instructed readers on how best to cultivate cannabis for fiber production, and then articulated some familiar reasons why Great Britain needed to adopt them: "The like attention [on cannabis cultivation] may be requisite [for Britain] to render her self [*sic*] absolutely independent of every other power, for the Materials of her Naval Strength."[47]

Quincy's reflections on cannabis production in America seem to have induced Bridgen to support his recommendation that the society continue offering "the premium on Hemp in some of our North American Colonies."[48] During the same year, Quincy published a booklet in Boston with an appendix that includes a series of transatlantic correspondences concerning best practices and horticultural techniques. Titled *A Treatise of Hemp-Husbandry . . .*, it begins with an advertisement that uses some revealing language:

> The Publisher of the following sheets assumes little more to himself, than being a collector of the best experiments and observations he could meet with, from Europe, and in America, relative to the growth and management of Hemp; which he at first proposed to convey to the Public, through the channel of a news-paper: but at the desire of some of the honorable Members of the General Assembly, [I] was induced to publish [the treatise] in the present form, [so] that a number of copies might, at the public expence [*sic*], and under it's [*sic*] sanction, be dispersed into the several towns and districts of this province; by which means, it is hoped, they may be preserved from the like measure of neglect, which the subject itself, and that of husbandry in general, has been too long under, to the great disadvantage of these otherwise happy Colonies.[49]

He claimed that hemp production was of the utmost importance not only because cannabis "is the most extensively useful [crop] of any which can be so easily and generally produced in North-America," but because Great Britain had "always been, and continue[s] to be, at a vast annual expence [*sic*], chiefly in Cash, to procure from Foreigners in order to provide linnens [*sic*] for their own Consumption, and Export, and cordage and canvass for the Royal Navy."[50] Echoing the sentiments of some of the members back in London, Quincy claimed it was a "matter of reproach, to the Farmers in most of the Colonies . . . that the importation of Hemp into America, has not already annually decreased," for if done properly, farmers could "produce Hemp with profit . . . at more than seven times the price it costs at the place of its growth in *Russia*." Not to mention the fact that Russian hemp "is justly estimated in general inferior to what may be produced in all or most of these colonies."[51] Taking up "Hemp husbandry," then, was not only "of great use and importance to ourselves," but it also promoted "the interest of our mother country."[52] This view is also confirmed in a letter Joseph Blaney and Samuel Barton wrote to Quincy, stating that "the raising of Hemp within this prov-

ince [of Salem] is a matter of such consequence, as to demand the attention of every one that has the real interest of the province at heart."[53]

So, what are historians to make of Quincy's words? After all, it seems to have been rather well known by then that Russia produced the most superior quality hemp. Was it a legacy of the unspoiled Eden perception that produced such delusions of grandeur, or did he have empirical evidence to support these claims? He mentioned the "various happy Climates" and "fruitful Soils" of the American colonies as reasons for why cannabis cultivation in New England would result in profits "much *greater* [than] may be expected," and also wrote: "Through the fertility of their Lands, and the abundance of the adjacent Seas and Rivers, the said Colonies have (by the Blessing of Providence) been enabled to furnish themselves with the internal supports of life."[54] Other than sensationalized rhetoric regarding colonial abundance, though, Quincy provides no agricultural evidence to substantiate his claims that Americans could make it far better than the Russians. He went into the shipping business with his brother in the 1740s, when Russian cannabis accounted for the bulk of the British Empire's fiber imports, so he must have understood the value of the superior quality product.[55] However, he also declared bankruptcy in 1757 and retired to the family estate in Braintree, where he wrote the treatise.[56] These facts, coupled with the general tone of his letter, suggest that he exaggerated the advertisement for self-advancement. Hoping to make good on his promise to members of the society that, in matters pertaining to this important commodity, "a reform in our American husbandry seems to be making very encouraging advances," Quincy ended the letter with the following remarks: "If any thing [*sic*] which I have offered in this Letter may tend to promote the generous and extensive design of your undertaking, it will afford me future encouragement to furnish you with some further hints referring to the growth and productions of these Colonies, with other interesting Circumstances."[57]

Exaggeration or not, no less than a few people were concerned with what Quincy had to say about the "two important materials which the Inhabitants of these Colonies should be principally encouraged in the growth of, [which] are Flax and Hemp." A year after his publication, an abridged version of the widely circulated treatise on cannabis cultivation by Marcandier in France surfaced in Boston, which included an advertisement exclaiming how the "well adapted soils" of the American colonies could "furnish Great-Britain yearly with a respectable quantity of both Hemp and Flax, which may save an equal value of cash or exchange, usually remitted to foreigners for the same."[58] No editors were listed on the document, but the publishing company Edes & Gill also printed the *Boston Gazette* and served as an outlet for revolutionary activity during the War for Independence.[59] A full translation of the French treatise was published in London two years earlier, which the company seems to have pulled "the Most Useful Parts" from for the benefit

of the British Empire, including a chart listing the amount of money the crown lost each year from the hemp trade.[60]

The purpose of these documents seems to have been to convince colonists of the need to invest more in cultivating cannabis for fiber production, which the Boston publication also stressed would help restore "the harmony" between "Britain and her American colonies."[61] Despite such efforts, however, and the efforts of parliament mentioned earlier, colonial production never amounted to anything near what the British Empire consumed for naval stores. None of the premiums offered by the RSA between 1760 and 1766 were ever rewarded, either, which indicates that farmers in British colonial America had a difficult time living up to Quincy's expectations.[62] This is not to say they didn't cultivate the plant at all, however, for as historian Melvin Herndon pointed out, it became "one of a number of crops supplementing tobacco" toward the end of the colonial period.[63] Instead, as pointed out in the previous chapter, the problem had more to do with the manner by which colonists processed the raw materials—called "dew-retting," as opposed to the higher-quality "water-retted" fiber from Russia. In other words, the difference in cultural practices for processing cannabis stocks was the determining factor for whether a particular grade could be used as a commodity for naval stores, and the British produced the wrong kind.[64]

Ultimately, then, the transatlantic dialogue regarding concerns over the cultivation and production of cannabis fiber failed to stimulate change in the British imperial hemp supply. And yet, by the time their first imperial system in the Atlantic world began to unravel, properly processed cannabis fiber was even more of an indispensable commodity for maritime cultures. Many top-down policy approaches were implemented to remedy the dangerous imperial handicap of relying so heavily on Russian imports, but all proved to no avail. Nevertheless, the cultural legacy the British left behind did, however, influence the relationship that the burgeoning United States of America tried to establish with Catherine the Great during the War for Independence.

NATIONS AND EMPIRES

Such were the circumstances and perceptions regarding cannabis fiber in the Atlantic world on the eve of the Age of Revolutions, with decades of discourse on its importance for the independence and security of the empire leaving a cultural mark on the colonies after thirteen of them decided to form their own state. Nowhere is this legacy more revealing than in the rope-making culture that developed in some of them during the colonial period. Indeed, the British might have had difficulties processing and preparing enough high-quality hemp for naval stores, but they certainly never had any trouble spinning it into rope. In fact, English merchants from the Muscovy

Company were among the first to manufacture Russian hemp into rope, with one scholar claiming that "the first ropeworks [in Russia] were founded by the English at Kholmorgy (near Archangel)."[65] The trading privileges that the company merchants enjoyed in Russia ensured that these factories were well supplied with enough high-quality hemp to remain in business.[66]

The situation was little different in France, which by then had also become an important player in the Atlantic hemp trade. As the famous ropewalk built by Louis XIV at Rochefort indicates, the French were just as concerned as the English with turning cannabis fiber into rope for their Royal Navy. Between the years 1666 and 1669, the King had the Corderie Royale constructed just north of the 45°N line in the Bay of Biscay to ensure that an adequate amount of cordage was manufactured and readily available to the French navy. For a while, it was the largest building in Europe, and rope-making continued there well into the 19th century.[67] Although France had an easier time producing naval-quality fiber than the British did, the Bourbon monarchs imported a lot from Russia as well.[68] A detailed study of rope-making in the Atlantic world in general, and France in particular, is still lacking in Atlantic historiography, but there must have been a number of peasants living on the royal land who cultivated cannabis for the crown. Diderot's *Encyclopedia* mentions "hemp" (*chanvre*) on several occasions, with one of the commissioned authors stating that at least an eighth of the land in the entire kingdom was used by peasants to grow the plant.[69] Also, in his treatise referenced earlier, Marcandier mentions specifically that the regions of "Guyenne, Lanquedoc, Provence, Dauphiny, Auvergne, Burgundy, and Berry produce as good Hemp as can be wished."[70]

Still, the English developed a culture of rope-making across the Atlantic even earlier. Historian Melvin Herndon mentioned that "there were at least six ropewalks [in Virginia alone] prior to the Revolution and more than a dozen new ones built during the war."[71] The first ropewalk surfaced in New England in 1630, and several of them were in operation in Philadelphia by 1698.[72] Along with rope-making, shipbuilding was also important to the cultural fabric of the early Atlantic world. Initially, the English built ships in America to replace the ones they wrecked, but it wasn't long before companies began building them on a larger scale for local use. As early as 1622, for example, the London Company sent Capt. Thomas Barwick to Virginia to open a shipbuilding business there, with similar plans developed in New England shortly thereafter.[73] In the last decade of the 17th century alone, the Massachusetts Bay colonies built over twenty-five thousand tons worth of ships. A good portion of this tonnage consisted of hempen rope manufactured in ropewalks on both sides of the Atlantic Ocean.[74]

Manufacturing cannabis fiber into rope involved three steps: spinning, tarring, and laying the commodity out to dry. As Robert T. Kennedy explained, "Although all of these were eventually performed in a structure

called a 'ropewalk,' the name was derived from the spinning process when the fibers were literally walked through the length of a structure and simultaneously twisted together."[75] After retting the stocks so that the fiber would separate from the stems, the material had to be combed and twisted, then stretched out and combined into strands of various widths. Depending on the intended use of the rope and the thickness needed, the process could be done by hand or by using various machines. Regardless, though, it then had to be submerged into large buckets of tar and heated to above 220 degrees Fahrenheit. Next, it had to be laid out to dry for several hours and then coiled up and left alone for a few days to harden. After that, the strands were placed in the ropewalks and twisted together by a machine into various sizes of cordage.[76] Many innovations like the one Bailey included in his book were developed over the years to increase the productivity and quality of cordage production, but the basic principles have remained the same since the early colonial period.

By the time of the Declaration of Independence in 1776, rope-making and shipbuilding had both become integral parts of the burgeoning national life. The Boston Tea Party was planned at a ropewalk, and many of the participants were ropemakers by trade.[77] However, most of the cannabis they were using to manufacture rope for rigging ships came from Britain, whose merchants re-exported cannabis fiber into the colonies from Russia. The problematic nature of this trade had already been exposed nearly a decade earlier when colonists were forced to include "hemp" in the fine print of the 1768 Non-Importation Act with other important commodities that they could not afford to boycott.[78] Now, with colonial conflict spiraling into revolutionary independence, the newly formed Continental Congress stressed to its members that "Hemp [is] to be encouraged" in as many states as possible.[79] John Adams headed the call by writing "to the several Assemblies, Conventions, Councils of Safety and Committees of Correspondence and Inspection, that they use their utmost Endeavours [*sic*]. . . to promote the Culture of Flax, Hemp, Cotton and the Growth of Wool in these United Colonies."[80]

As the fighting intensified, congressional delegates began corresponding with ropemakers in hopes of securing a more stable supply of hemp for the burgeoning nation.[81] One letter by a New Hampshire delegate reveals how much the colonial era influenced the perception that U.S. Americans had of cannabis during the Early National Period:

> I suppose by this time there is not a remaining doubt but America will support her independency, is it not time therefore to pay some attention to the means of protection, from future invations [*sic*]? This from our situation must be done by a Powerfull [*sic*] Navy which must be furnish'd [*sic*] by the Eastern States where all the materials may be procured if proper means are use'd, [*sic*] what I have particularly in view is Hemp, & Iron, the former is as profitable an article to the farmer as any [*sic*]thing he can raise.[82]

Echoing sentiments that were embedded in the transatlantic discourse on cannabis in the Atlantic world, early U.S. Americans considered the plant a vital commodity and expressed anxiety over the need to produce more. They also understood that Russia produced the best quality hemp, so the Continental Congress viewed it as a golden opportunity when the empress of Russia, Catherine II, declared support for neutral shipping rights in 1780. After France entered the war and recognized American independence, the British reacted by capturing French ships and confiscating the cargo—a good portion of which belonged to Russia. Catherine responded in 1780 by spearheading the League of Armed Neutrality with Denmark, the United Provinces, and Sweden to defend the rights of neutral trade.[83] U.S. Americans were excited about this diplomatic turn of events and considered it an important move toward securing their freedom from Great Britain. In a letter to the president of Congress, for example, Benjamin Franklin lauded the treaty as a "great stroke against England," which no longer had any "friends on this side of the water." He went on to say that "no other nation wishes it success in its present war, but rather desires to see it effectually humbled; no one, not even their old friends the Dutch, will afford them any assistance."[84]

Another reason that congressional delegates expressed enthusiasm for the League of Armed Neutrality is because it seemed sympathetic to their cause, which led them to seek formal diplomatic relations with Russia. Even well before Catherine helped establish the league, Franklin pointed out how the prospect of sending a representative to "Russia should not be neglected."[85] The Massachusetts statesman Francis Dana eventually got the job, serving as "Minister Plenipotentiary" to "engage her Imperial majesty to favor and support the sovereignty and independence of these United States." Believing that a "friendly intercourse" with them would serve "for the mutual advantage of both nations," Dana arrived in St. Petersburg in 1780, confident that his mission would succeed.[86] Writing to the president of Congress in good spirits, he confirmed that, indeed, "the great article [of Russia] is cordage of all sorts, which I am told is the best in all these countries. They export considerable quantities of hemp," which can "perhaps be better purchased at St. Petersburgh [*sic*] than anywhere else." After conducting a "full inquiry into the nature of their commerce," he concluded that "an opportunity by water from hence to Amsterdam now presents itself, and this being the safest way" to conduct trade with the Russians.[87] For these reasons, thought Dana, the United States should have no problem securing a trade agreement with Russia.

As the months passed while he waited patiently in the capital of the Russian Empire for an audience with the empress, though, no such invitation came from Catherine's court. After sending a couple of letters to the French ambassador in St. Petersburg, Marquis de Verac, inquiring as to the status of his mission, Dana received some rather unfortunate and disappointing news.

For one, Verac claimed that Catherine had always "made it a point of honor to hold the balance [of power] perfectly equal between the different parties [in this war], taking particular care not to manifest any kind of preference by carefully avoiding every advance which could indicate the slightest partiality." In other words, not wanting to "dissatisfy the court of London," the empress would "abstain with the greatest possible care from showing any particular inclination for the American cause." It was highly doubtful, he counseled, that she would recognize a minister from a country that had not yet, "in [her] eyes, a political existence, and expose [herself] to the complaints which the court of London will not fail to make against an indication of favor so public."[88]

It seems from the historical record that Dana had a hard time accepting the fact that Catherine would not see the benefits of recognizing the United States. After all, as he explained in another letter, cannabis fiber was "the foundation of the principal commerce of Russia," so it should be "of the highest importance to Russia to turn the thoughts of the Americans from the cultivation of this plant, or in other words, to make it their interest not to cultivate it." If they didn't, he claimed, then the people of the United States, where "both the soil and climate may be adapted to the cultivation of hemp of the best quality," would be forced to grow their own, which "would be prejudicial to the commerce of Russia." He went on to say:

> Will the exclusion of the Americans from a free and direct commerce have this effect [mentioned above]? Will sending them to Great Britain, or to any other country in Europe than Russia, for the commodities of Russia, but especially for her hemp, have a tendency to that effect? Will not the Russian hemp, in consequence of such measures, be burthened [*sic*] with all the charges above mentioned when it comes to the hands of the Americans, that is to say, with the extraordinary charge of twenty-five per cent? And will not this twenty five per cent [*sic*] in fact operate in the nature of a bounty to that amount to encourage the cultivation of American hemp?[89]

Since Dana could not understand what the empress did not understand about the benefits of opening relations with the United States, he adopted the presumption that Verac had an alternative motive in telling him that Catherine would not be willing to accept an American representative until they reached a peace treaty with the British. As he stated in another letter to Congress after receiving another response from Verac, "I am no better satisfied with the reasons given in support of his opinion in his second letter than I was with those in his first. . . . He possibly may have other reasons for his opinions, which he chooses to keep to himself."[90]

History teaches us, though, that the French diplomat had a point. Catherine already declined to provide the British with troops to help fight the American "rebels" in the 1770s, and the League of Armed Neutrality didn't

exactly benefit them.[91] As the Russian diplomat I. A. Ostermann cautioned Catherine II to consider in 1782, they needed to be careful not to give the British "a cause to conclude that we desire to interfere in her affairs with the American colonies."[92] After all, if provoked, the British navy could inflict serious damage on Russian maritime commerce and disrupt the empress's plans to partition the Ottoman Empire and assume full control over the Black Sea.[93] In other words, Catherine did not want to risk war with the British in exchange for diplomatic relations with colonials who were fighting to break away from them. Dana was just going to have to wait.

Of course, none of this was any consolation to the irritated Dana, who remained isolated in St. Petersburg for nearly two years without even obtaining so much as a hint of recognition from the empress. After the British signed the Treaty of Paris and recognized the United States as a sovereign state, Dana finally received a letter from Ostermann, but he considered its contents so insulting that he titled his response "Mr. Dana's Memorial to Count Ostermann." In it, he decried how absurd it was that he "propose to the United States to revoke [my] present letter of credence because it bears date prior to the acknowledgment of [U.S.] independence by the King of Great Britain, and to grant [me] another bearing date since that time."[94] He also rebuked the notion that the United States would have to pay over six thousand rubles in bribes just for the possibility of receiving an audience.[95] In a storm of frustration, the young nation's first diplomatic representative to Russia left St. Petersburg in August 1783. In his final letter back home, he mentioned what his countrymen needed to do to get revenge: "this empire [is] in the power of the United States. . . Should we vigorously adopt the cultivation of hemp, and our territories along the Ohio are exceedingly well adapted to it, we should strike at the foundation of the commerce of this empire, and give her majesty reason to repent at leisure of the line of conduct she has chosen to hold with the United States."[96]

Despite such enthusiasm, however, U.S. Americans were largely unsuccessful in their efforts to increase cannabis production for naval stores in the states. By the outbreak of the Napoleonic Wars, they were still importing nearly all their maritime fiber, usually from the British as re-exports. Occasionally, an American vessel or two would make its way into Sweden through the unforgiving trade routes of the North Atlantic under disguise of the British flag, where the crew could buy the superior processed material directly from Russian merchants; but the British navy made this very difficult and dangerous to try.[97] Some U.S. farmers tried to fix this problem by producing more at home, but they experienced the same problem that the British did before them: the quality just did not match that of the Russian fiber.[98] In 1811, Paul Hamilton of the Navy Department sent an essay to the House of Representatives titled "Culture of Hemp," which explained why. Tapping into the 18th-century transatlantic dialog on cannabis cultivation

and production, he pointed to how the plant's stocks were treated as the main source of the problem:

> In preparing the hemp for braking, the pernicious practice of what is commonly called "dew rotting" still prevails, to a great extent—a practice tedious in its process, partial and unequal in its effects upon the fibre, and destructive of considerable quantities of hemp, by the unavoidable exposure of it to the winds, which blow it about and entangle it. Hemp thus prepared, is in some places strong, in others weak; and has, moreover, a dark color, all which materially affect its value. . . . The experience of other nations has long since decided, that [water rotting] . . . makes it equally strong in all places, renders it more flexible, gives it a lively bright color, and, what is an object of vast importance, especially as respects durability under water, it will receive and retain a greater portion of tar.[99]

If only congress could "persuade our countrymen to relinquish the prevailing pernicious practice of 'dew rotting' and to adopt the practice which the experience of other nations has approved, namely the steeping in water," then the industry would thrive, he thought.[100] Essentially, the Napoleonic wars had further disrupted their ability to conduct trade with Russia, which—like the British before them—left the navy vulnerably lacking in cannabis naval stores.

In his booklet, Hamilton expressed optimism that U.S. Americans would soon take up the culture of water-retting, but an 1827 document from the Navy Department reveals that it was still relatively scarce more than a decade later. It claimed that American "water-rotted hemp, [in terms of] its strength and durability, were ascertained to be fully equal to cordage made of the best Russian hemp similarly exposed," but that the "habit of dew-rotting has become so fixed that . . . considerable time will elapse before the American community can be persuaded to . . . resort to the preferable system of water-rotting."[101] Unlike Quincy's claims nearly a century earlier, these were supported with physical evidence and detailed experiments; yet still, U.S. Americans never adopted the "preferable system." Even in thriving hemp-producing regions of Kentucky—where cannabis cultivation was an important source of income for farmers producing seeds for oil and animal feed, and fiber for linens, cloth, and bale rope, among other commodities—water-retting never replaced the more traditional ways of procuring the fiber. Henry Clay, for example, who was perhaps the most avid cannabis farmer in the United States at the time, wrote as late as 1842 that, despite having knowledge of the subject, "I have never tried water-retting."[102]

There are a few reasons why, as the Department of Agriculture's 1865 *Report of the Flax and Hemp Commission* explained, out of the "eighty-three thousand one hundred and ninety tons" of hemp that were produced annually in the states by 1864, there were "only three thousand nine hundred and

forty-three tons [being] water-rotted."[103] Clay did eventually heed the call and tried the new technique by ordering the building of a long trench to submerge cannabis stocks in once they were cut down at his estate in Ashland, but a report for the Commissioner of Agriculture claimed he stopped using it because "the price . . . hardly warranted the expenditure of the extra labor required."[104] Historian John Hopkins mentioned that the foul smell emitted from the water of rotting cannabis stocks was thought to be poisonous, which also prejudiced farmers against abandoning their traditional practices.[105] In fact, as pointed out in chapter 2, the notion that water-retting cannabis produced hazardous waste was an idea that U.S. Americans inherited from the English going back to the early colonial period, and it continued unabated throughout the 19th century. In the end, it seems that the benefits of producing hemp for the nation did not outweigh the benefits of producing it for domestic consumption, so the United States had to continue importing significant quantities of cannabis fiber from Russia throughout the 19th century.

As for the British, they were nowhere as close to producing enough hemp to satisfy their own consumption needs as the U.S. Americans were after independence. They still maintained control over a vast empire, though, so the British continued searching for colonial outlets through which to cultivate and produce high-quality cannabis fiber. Documents from the guard books of the RSA reveal that, for a time, they experienced some success with producing cannabis fiber in Canada.[106] In 1806, for example, the society awarded a silver medal to a Mr. Philemon Wright, who cultivated "10 English statute acres of hemp" per year from 1802 to 1804. His crop was hit by a strong drought that struck Montreal in 1804, but altogether he produced "about 600 ton of clean [i.e., water-retting] drest [*sic*] hemp of the first quality per acre."[107] They also reported awarding Mr. Joshua Cornwall and Mr. Frederic Arnold of the River Thames, Upper Canada, with silver medals for quality hemp production, and Mr. George Ward of the Township of Camden, Upper Canada, was awarded twenty dollars for the same purpose.[108] Still, production there never came close to reaching levels that were necessary for the British to end their dependence on Russia, which meant they, too, were forced to rely on imports throughout the 19th century. This is also why they sought to promote its cultivation in India after gaining imperial control over large swaths of the ailing Mughal Empire. Once they got there and started bioprospecting the land, though, the British encountered a different variety of cannabis that cultures across the subcontinent had been using for a very long time, albeit for much different purposes. The clash between these different cultural uses marked the beginning of a series of transformations the plant would endure in the Atlantic world over the next two centuries.

This brings us back to Lord Somerville's comments mentioned at the start of this chapter, which were the by-product of a transatlantic discourse on cannabis that signified it as a productive plant of importance for the state. Several attempts were made to encourage its cultivation over the years, but Russia remained the primary source of consumption for both British and U.S. naval stores. Through a network of protected trade routes with historical roots tracing back centuries, high-quality fiber from across the Russian countryside continued making its way into the Atlantic and fueled the Age of Exploration. By the mid-18th century, anxieties over the nature of this trade played an important role in shaping historical relationships with the plant in the Atlantic world, which challenges traditional concepts of Atlantic history as a geographic frame of reference. In effect, cannabis fiber served as one of the ties that bound Russia to the Atlantic world, which means that Atlantic history is better understood as a methodological concept that focuses on the interaction between people and commodities both in and across that world. For cannabis, these interactions produced a transatlantic discourse that shaped historical relationships with the plant and helped determine its meaning as a valuable strategic commodity. Meanwhile, as the Second British Empire responded to Somerville's call by looking into cultivating the plant in their recently conquered territories of the subcontinent, they encountered new cultural uses for the plant, which had a profound impact on transforming its meaning in the Atlantic world.

NOTES

1. Robert Wissett, *Observations on the Sunn Hemp of Bengal: With Statements of Experiments Made from 1802 to 1806 to Ascertain Its Comparative Strength with Russian Hemp, and the Advantages of Encouraging Its Culture and Importation: To Which Are Added Sundry Remarks and Suggestions Calculated to Assist the Endeavours of the Residents in India Towards Its Improvement, and to Remove the Unwarranted Prejudices Excited Against It* (London: Lane, Darling & Co, 1808), 279.
2. See Robert Wissett, *On the Cultivation and Preparation of Hemp, as also, of the Article, Produced in Various Parts of India, Called Sunn* (London: Cox & Son, 1804), v.
3. Ibid., ii.
4. Alfred W. Crosby, *America, Russia, Hemp, and Napoleon* (Cleveland: Ohio State University Press, 1965), 28. Crosby points out on the same page that Russia's total imports and exports by the end of the 18th century were roughly around 100,000,000 rubles a year, with 60,000 tons of their hemp entering Atlantic waters through their Baltic ports annually. Despite this connection, most of the works on Atlantic history do not include Russia. For examples, see Wim Klooster and Alfred Padula, *The Atlantic World: Essays on Slavery, Migration, and Imagination* (New Jersey: Prentice Hall, 2005); Jack P. Green and Philip D. Morgan, eds., *Atlantic History: A Critical Appraisal*; Alison Games, Jane Landers, et al., *The Atlantic World: A History, 1400–1880* (Wheeling: Harlan Davidson, 2007); Timothy Shannon, *Atlantic Lives: A Comparative Approach to Early America* (New York: Pearson, 2004); Jorge Canizares-Esquerra and Erik Seeman, *The Atlantic in Global History, 1500–2000* (New Jersey: Pearson, 2007); Karen Racine and Beatriz Mamigonian, eds., *The Atlantic World, 1500–1850* (New York: Rowman & Littlefield, 2010).

5. For the best account of hemp in the ancient world, see Chris Duvall, *Cannabis* (London: Reaktion Books, 2014), 27–58.

6. Ibid. For a discussion of commodities in ancient Rome, see T. Frank, *An Economic Survey of Ancient Rome*, vol. 4 (Patterson: Pageant Books, 1956), 131.

7. Ibid. See also Ernest Abel, *Marihuana: The First Twelve Thousand Years* (New York: Plenum Press, 1980), 24–30. Even though this book mostly deals with vague allusions and fails to critically analyze source material, it provides excellent source material on the ancient uses of cannabis. Despite many innuendos, there is very little evidence that suggests cannabis was used by Romans or Greeks as a drug as it was in parts of Asia and Africa.

8. Espen Bowitz Andersson, ed., *Bryggen: The Hanseatic Settlement in Bergen* (Bergen: Det Hanseatiske Museums Skrifter Nr 24, 1982).

9. John Sullivan, *Russian Cloth Seals in Britain: Trade, Textiles, and Origins* (Oxford: Oxbow Books, 2012), 8. The word "portage" in English does not adequately depict the actual nature of this movement, for it is associated more with carrying than dragging. Whereas smaller boats such as canoes were in fact carried, larger ones needed to be dragged or pulled across structures. For more details, see Robert J. Kerner, *The Urge to the Sea: The Course of Russian History, the Role of Rivers, Portages, Ostrogs, Monasteries, and Furs* (Berkeley: University of California Press, 1946), 14–15.

10. For an overview of the fragmented nature of the early Russian State, see David MacKenzie, *A History of Russia, the Soviet Union, and Beyond*, 6th Edition (Belmont: Wadsworth Publishing, 2002), 27–34.

11. Charles J. Halperin, *Russia and the Golden Horde: The Mongol Impact on Medieval Russian History* (Bloomington: Indiana University Press, 1985), 80–1.

12. Between the years 1388 and 1528, an average of twenty ships per year sailed between Luebeck and Bergen with Russian hemp (among other goods) on board. See Andersson, *Bryggen*, 22, 82–83.

13. Sullivan, *Russian Cloth Seals in Britain*, 1; Mairin Mitchell, *The Maritime History of Russia, 848–1948* (London: Hazell Watson & Viney, 1948), 59.

14. Paul Bushkovitch, *The Merchants of Moscow, 1580–1650* (New York: Cambridge University Press, 1980), 44.

15. Alistair Maeer, "The Cartography of Commerce: The Thames School of Nautical Cartography and England's Seventeenth Century Overseas Expansion" (PhD diss., University of Texas at Arlington, 2006), 39.

16. For a selection of works pertaining to Russian exploration, see A. Pierce and Alton S. Donnelly (eds.), *A History of the Russian American Company: Documents* (Kingston: The Limestone Press, 1979); Dennis Reinhartz, *Exploration and Encroachment: English, French, and Russian Mapping of California, 1596–1846* (Unpublished manuscript), 12; David Nordlander, *For God & Tsar: A Brief History of Russian America* (Anchorage: Alaska Natural History Association, 1994); P. A. Tikhmenev, *A History of the Russian-American Company*, trans. Richard A. Pierce and Alton S. Donnelly (London: University of Washington Press, 1978); Felipe Fernandez-Armesto, *Pathfinders: A Global History of Exploration* (Oxford: Oxford University Press, 2007), 269.

17. Robert Clarke and Mark Merlin, *Cannabis: Evolution and Ethnobotany* (Berkeley: University of California Press, 2013), 181.

18. Benedict H. Sumner, *Peter the Great and the Emergence of Russia* (London: English University Press, 1951), 121.

19. The term "Atlantic imaginings" evokes the philosopher Charles Taylor's concept of social imaginaries, which he used to describe "the ways people imagine their social existence, how they fit together with others, how things go on between them and their fellows, the expectations that are normally met, and the deeper normative notions and images that underlie these expectations." Charles Taylor, *Modern Social Imaginaries* (Durham: Duke University Press, 2004), 24.

20. For a discussion of the Petrine Reforms in cartography during the early 18th century, see Alexei Postnikov, *Russia in Maps: A History of the Geographical Study and Cartography of the Country* (Nash Dom: L'Age d'Homme Publishing, 1996), 36–40.

21. Sullivan, *Russian Cloth Seals in Britain*, 1.

22. H. E. Ronimois, *Russia's Foreign Trade and the Baltic Seas* (London: Boreas Publishing Co., 1946), 11.
23. Crosby, *America, Russia, Hemp*, 36.
24. Nadra O. Hashim, *Hemp and the Global Economy: The Rise of Labor, Innovation, and Trade* (Lanham: Lexington Books, 2017), 66.
25. William Bailey, *A Treatise on the Better Employment and More Comfortable Support, of the Poor in Workhouses. Together with Some Observations on the Growth and Culture of Flax. With Divers New Inventions, Neatly Engraved on Copper, for the Improvement of the Linen Manufacture, of Which the Importance and Advantages Are Considered and Evinced* (London: J. Dodsley, 1758), 43.
26. Ibid., 45.
27. Ibid., 49.
28. John G. B. Hutchins, *The American Maritime Industries and Public Policy, 1789–1914: An Economic History* (Cambridge: Harvard University Press, 1941), 125.
29. Bailey, *A Treatise*, 43.
30. John Rutherfurd, *The Importance of the Colonies to Great Britain. With Some Hints Towards Making Improvements to Their Mutual Advantage: And Upon Trade in General* (London: J. Millan, 1761), 4–8.
31. Ibid., 8.
32. Ibid., 6.
33. Ibid., 6.
34. Ibid.
35. Joseph Gee, *Observations on the Growth of Hemp and Flax in Great-Britain* (Gainsborough, 1765), 3.
36. Ibid., 14. Another estimate recorded a bit later claimed that the British imported "early from 15 to 25,000 tons of different sorts of hemp from Petersburg in British ships." See Anonymous, *Observations on the Commerce of the American States. With an Appendix; Containing an Account of All Rice, Indigo, Cochineal, Tobacco, Sugar, Molasses, and Rum Imported into and Exported from Great-Britain the Last Ten Years. Of the Value of All Merchandize Imported into and Exported from England. Of the Imports and Exports of Philadelphia, New-York, &c. Also, an Account of the Shipping Employed in America Previous to the War* (London: J. Debrett Press, 1783), 23.
37. Ibid., 30.
38. Joseph Gee, *An Abstract of Reasons for Encouraging the Linen Manufactory* (Gainesborough, 1767), 1.
39. Max Kent, "The British Enlightenment and the Spirit of the Industrial Revolution: The Society for the Encouragement of Arts, Manufactures and Commerce, 1754–1815," (PhD diss., University of California, Los Angeles, 2007), 1.
40. Royal Society of Arts, *The American Correspondence and Transactions of the Royal Society of Arts, 1755–1840: Guard Books and Loose Archives* (hereafter *ACRSA*), 2 reels of microfilm (East Ardsley, Wakefield, Yorkshire: Micro Methods Ltd., 1964), 2.
41. Kent, "The British Enlightenment and the Spirit of the Industrial Revolution," 69.
42. William Shipley, "The Importance of Vines, Hemp, Etc., to South Carolina and to England," July 15, 1755, in *ACRSA*, Guard Book III, doc. 19, 1–4. The "__" is used here to indicate the author's inability to accurately transcribe the word in the letter. All the letters in the microfilm are handwritten, and some of them are damaged.
43. Shipley, "The Importance of Vines, Hemp, Etc.," 1. Not only did the notion of America as an unspoiled Eden influence the British virtuosi, but the Americas in general were the primary engine behind so-called enlightened scientific progress. For an excellent study of European bioprospecting in the Atlantic world and its impact on the Enlightenment, see Susan Parrish, *American Curiosity: Cultures of Natural History in the Colonial British Atlantic World* (Chapel Hill: University of North Carolina Press, 2006).
44. Edward Bridgen, "Urging Premium for Importing Hemp from America," 23 October 1765, in *ACRSA*, Guard Book X, doc. 26, 2.
45. Bridgen, "Urging Premium for Importing Hemp," 1.

46. Edmund Quincy, “Letter from Edmund Quincy of Boston about Cod and Whale Fishery, Pine or Deal, Potash, Pearl Ash of Potash, the Culture of Hemp,” 30 June 1765. Royal Society of Arts (RSA), PR/GE/110/19/10, 1.

47. Ibid., 2.

48. Bridgen, “Urging Premiums for Importing Hemp,” 6.

49. Edmund Quincy, *A Treatise of Hemp-Husbandry; Being a Collection of Approved Instructions, as to the Choice and Preparation of the Soils, Most Proper for the Growth of That Useful and Valuable Material, and Also as to the Subsequent Management Thereof, Agreeable to the Experience of Several Countries Where in It Has Been Produced, Both in Europe and America. With Some Introductory Observations, upon, the Necessity Which the American British Colonies Are Under, Generally to Engage in the Said Production; and upon the Extensive Usefulness, and Great Utility of the Said Material* (Boston: Green & Russell, 1765), 2.

50. Ibid., 4.

51. Ibid., 10.

52. Ibid., 5–6.

53. “Joseph Blaney and Samuel Barton to Edmund Quincy,” 28 January 1765, published in Quincy, *A Treatise*, 24.

54. Quincy, *A Treatise on Hemp, 3.*

55. Herbert Kaplan, *Russia Overseas Commerce with Great Britain during the Reign of Catherine II* (Philadelphia: American Philosophical Society, 1995), 67.

56. William Allen, *The American Biographical Dictionary: Containing an Account of the Lives, Characters, and Writings of the Most Eminent Persons in North America, from Its First Settlement* (Boston: J. P. Jewett and Company, 1857), 688–89.

57. Quincy, “Letter from Edmund Quincy,” 6.

58. *An Abstract of the Most Useful Parts of a Late Treatise on Hemp, Translated from the French of M. Marcandier, Magistrate of Bourges, and Inscribed by the Editor at London, to the Laudable Society for Promoting Arts, Manufactures, &c. Being Much Recommended to the Growers and Manufacturers of That Valuable Material, from Some Modern Discoveries and Experiments of a Method of Preparation, (Not Formerly in Practice) in Order to Its Various Applications for the Use of Mankind Together with Some Observations upon the Prospect of Singular Advantage Which May Be Derived to Great-Britain and Her Colonies from Their Early Adopting the Method Prescribed* (Boston: Edes & Gill, 1766), ii.

59. Isaiah Thomas, *The History of Printing in America*, vol. 1 (New York: American Antiquarian Society, 1874), 136–140.

60. M. Marcandier, *A Treatise on Hemp in Two Parts. I. Containing Its History, with the Preparations and Uses Made of It by the Antients. II. The Methods of Cultivating, Dressing, and Manufacturing It, as Improved by the Experience of Modern Times* (London: T. Becket and P. A. de Hondt, 1764).

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88. “Verac to Dana,” 2 September 1781, in Wharton, *RDCUS*: 4:684–685. Before embarking on his journey, Dana was made fully aware of the argument that Catherine would be hesitant to show support for the American cause out of concern over how the British might react. In fact, he debated this issue in a meeting with Benjamin Franklin and Charles Cravier, the Count de Vergennes. For a copy of Dana’s letter to Congress, explaining the meeting, see “Dana to the President of Congress,” 4 April 1781, in *RDCUS*: 4:350.

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Chapter Four

Reorienting Empire and Transforming Perceptions of Cannabis in the Atlantic World

When the Seven Years' War came to an end in 1763, Great Britain held the largest territorial empire in the Americas and faced unprecedented opportunities in India. In effect, Victory at the Battle of Plassey gave the East India Company (EIC) control over one of the wealthiest regions of the Mughal Empire. Following the loss of thirteen of its American colonies twenty years later, the crown began a new era in British imperialism, situated in South Asia and exercised through control by the company's board of directors. What this new imperial reorientation entailed, and the impact it had on cannabis in the Atlantic world from the late 18th to the mid-19th century, is the subject of this chapter. At the time, British and American scientists, agronomists, medical practitioners, diplomats, travelers, and merchants understood and described the plant to each other, sometimes as a fiber and other times as an eastern intoxicant or a medicine. After the Seven Years' War, as the British started encountering cannabis drugs in Asia more frequently, they ascribed certain qualities to different aspects of the plant, contrasting its use as a sturdy and productive fiber by Europeans with its use as a noxious intoxicant by people living in areas they referred to variously as Asia, the Orient, and the East Indies. The lush environment of South Asia seemed promising enough for the British to start promoting its cultivation for fiber there, but the manner in which the Indians grew and used the plant for intoxication differed markedly from European horticulture and consumption practices. Lack of success in getting Indians to cultivate cannabis for fiber aggravated the British, who were concerned about the vast quantities they imported from Russia. Before long, the discourse positioned India's so-called

degenerate and indolent uses against Europe's productive and industrial ones. Some argued that the Indian plant was a different species, whereas others claimed that the differences were a by-product of a sort of "Asiatic" condition. All agreed, though, that eastern uses were deviant.

However, changes in the 19th century opened new opportunities for this eastern cannabis to successfully transfer as a medical commodity across Europe and the United States. For one, the British need for cannabis fiber diminished slightly after they encountered other plants in India being used for such purposes. Not only that, but medicine became more scientific and professionalized, with a stronger focus on pharmacology, which increased demand for medicinal substances. These factors, coupled with the shifting cultural mindset of British imperialism in Asia, provided incentives for EIC medical practitioners in India to experiment with cannabis drugs and determine if they could be useful medicines for the empire. Eventually, knowledge of British experiments with isolating the plant's resin for medicinal purposes migrated across the Atlantic to influence the way U.S. Americans interacted with the plant as well, but the lack of consistency in the effects of these preparations and their associations with Indian indolence and degeneracy contributed to how they were received. Documenting this history provides a more nuanced understanding of how empire worked to invest cannabis with different meanings and exposes the transatlantic cultural fabric of the plant's transformations as a commodity in the Atlantic world.

ENCOUNTERING CANNABIS DRUGS

The imperial reorientation of the British Empire toward Asia after the American Revolution and its impact on the conceptual distinction between self and other was profound. Their North American empire had relied on private entrepreneurship and colonial agency to function, which some thought was an important factor in causing the American Revolution.[1] This time around, in India, instead of relying on colonial elites to set up institutional control, British imperial agents conducted business under strict EIC authority directed from London. The concept of India's cultural degeneracy was invoked to justify this imperial presence, which became even more prevalent after the governor-general of India, Warren Hastings, was placed on trial for corruption in the 1780s.[2] Through agriculture and commerce, they argued, the British would save the Indians from their degenerative environment and make money in the process. Domestic observers, however, feared the corruption of British identity by the empire's involvement on the subcontinent, and debate over the imperial presence in India ensued.[3] These hopes and fears had an important impact on representations and understand-

ings of cannabis as news that the newly devised medicinal preparations of it from the east derived from the famed intoxicating substance of the Orient.

Remember, cannabis for westerners throughout the 18th century was considered a practical and valuable commodity. It was also difficult to process and required cultivation techniques that the British and U.S. Americans were unwilling to adopt, which is why they both were unable to produce enough to satisfy their own consumption needs. Instead, they imported most of it from Russia, but 18th-century warfare convinced many that relying too heavily on a foreign power for such an important commodity threatened imperial and/or national sovereignty, which is why so many treatises and pamphlets were produced, translated, and circulated across the Atlantic. The United States did not obtain overseas colonial territories for a while after gaining independence, so they continued to focus solely on improving home production to replace their imports. The British, on the other hand, continued seeking a colonial outlet through which to promote the plant's cultivation for fiber. After giving up the North American colonies, they attempted to use Canada as a replacement, but production there never amounted to more than a fraction of what they needed for naval stores. India became the next likely place, which is where the British started encountering the cultivation of its exoticized version with increased frequency over the course of the first half of the 19th century.

To be sure, Europeans were vaguely aware of cannabis drugs before the British reoriented their empire's main direction toward India. The 16th-century Portuguese traveler Garcie d'Orta wrote in a document that circulated in England of a "plant that does not badly resemble hemp, as its seeds are a little smaller and not as white; furthermore, its woody shoots are not covered with any husk, which appears totally in contrast to hemp." He called the plant "Bangue" and explained that "the Indians eat the leaves and the seed of the same to render them more inclined to the venereal act." Sexual promiscuity was not the only vice this plant purportedly induced, for d'Orta claimed to have witnessed soldiers mixing it with wine and opium to be "delivered from all cares."[4] He certainly was not the only European to have witnessed such customs, for another contemporary claimed that "many Portuguese . . . have taken it, and . . . experience the same [effects] as Indian servants," who apparently also used the concoction "so as not to feel work, to be happy, and to have a craving for food."[5]

The English were familiar with such references too. According to one account from the 1670s, for example, a group of British sailors tried the substance while in eastern India. Apparently, two of them "experienced no effects (common among first timers), one 'wept bitterly all Afternoon,' one was 'terrified with fear,' one was 'quarrelsome,' two 'Sat sweating [*sic*] . . . in Exceeding Measure' and four or five 'lay upon the Carpets[,] highly Complementinge [*sic*] each Other in high termes.'" The individual who reported

these observations concluded that "bhang" was of "such a bewitching Sottish nature, that whoever Use it but one month or two cannot forsake it without much difficultie. [*sic*]"[6] Lurid descriptions like this contributed to exotic perceptions of the concoction, but more importantly, both the English and Portuguese sources referred to "Bangue" as a plant, even though the name also refers to a specific drug preparation that Indians made from the leaves, stems, and various clippings of cannabis. The d'Orta source in particular circulated widely, making it one of the earliest definitive accounts of drug-cannabis and its connection to the Orient, which Robert James borrowed to describe "Bangue" in his medical dictionary as a plant that Indians used "to increase their vigour in love affairs and to excite an appetite to their food."[7]

Although James did not mention d'Orta by name, he credited one of his contemporaries, Cristoval Acosta, who claimed in his natural history of the East Indies to have met d'Orta on a chance encounter while traveling through India.[8] Both of these writings were travelogues, and they became the most authoritative sources for British knowledge on eastern uses for cannabis in the early 18th century. In fact, James's *Medicinal Dictionary* was not the earliest 18th-century publication in English to use their accounts, for John Jacob Berlu described bhang in the third edition of his book, *The Treasures of Drugs Unlocked*, as an "herb which comes from Bantam in East-Indies." Although he did not mention the word "cannabis" or "hemp" at all in the book, he claimed that "bang" was "of an Infatuating Quality, and pernicious Use."[9] Very little detail is given about the preparation other than its association as a noxious eastern intoxicant. He published another edition five years later but did not add any new information about cannabis. Louis Lemery's book also repeated much of what d'Orta wrote, describing "Bangue" as one of the many "Drugs in the East," which he reiterated was a plant "almost like unto Hemp" that Indians "used to make Venery."[10]

These descriptions indicate that the British had little to no experience with cannabis drugs before the late 18th century, and what they did know of them largely came from exotic descriptions by travelers with little understanding of their properties. Indeed, all these observers mistakenly classified bhang as a corrupted eastern version of cannabis rather than a unique preparation of the plant itself. Celebrated gardener and member of the Royal Society Philip Miller made the same mistake when he wrote about the "famous Bangue" as "a Species of Hemp." In his *Gardener's Dictionary*, which went through several editions after its initial publication in 1724, Miller described many industrial uses for the plant in Britain, such as supplying fiber, providing employment to the poor, making valuable oil, and using the seeds for poultry, which he claimed "is supposed to cause Hens to lay Eggs in great plenty." Since he argued that this "Bangue" was "not much differing from the common Sort [of hemp]," there was a risk in growing it in Britain, for the plant "is so much used by the *Indians* and *Persians* to promote Venery."[11]

The implication is that cannabis increased sexual drive, which was a connection also made by d'Orta, Acosta, and James. Increased sexual drive might be good for hens, but it was dangerous among people. Given that the drug was "famous" in the east, where sexually promiscuous and degenerative people used it to satisfy their indulgent behavior, the British needed to approach the plant with caution, lest they become like the Indians. John Barrow reproduced much of the exact same passage in his *Medical Dictionary* under the entry "Cannabis, hemp."[12]

Similar associations also surfaced in a 1779 publication by Henry Draper Steel, who described "Bangue" as a "species of opiate in much repute throughout the east for drowning care." Unlike those before him, though, Steel identified the substance as "the leaf of a kind of wild hemp, little differing, as to the leaf or seed (except in size), from our hemp." Instead of cultivating it for fiber, though, he pointed out that the Indians used it to "set the imagination loose, and induce a kind of folly and forgetfulness." He credited a Mr. Grose for describing how the concoction "produces a temporary madness, that, in some, designedly taken for that purpose, ends in running what they call a muck, furiously killing everyone they meet, without distinction, till themselves are knocked on the head, like mad dogs."[13] Again, the underlying assumption is that Indians used a productive plant for nothing more than inducing intoxication. This description was obviously a popular one, for Philipp Nemnich copied much of it for his entry on "Bangue" in a 1799 publication that familiarly described it as a "kind of opiate in much repute throughout the East-Indies for drowning care."[14]

As the British penetrated further into India and established institutional control over societies with a tradition of using cannabis to alter consciousness, the notion that it induced madness became more frequent. This association dates back at least to the interpretation some took from Marco Polo's description of Hassan Sabbah and the assassins, but as historian James H. Mills pointed out, Steel's account "would have been read by merchants and colonial officers serving in India for well over a century after its publication," which means that many people would have been exposed to the negative associations he made between intoxication, madness, and the "Asiatics" who used cannabis for less productive purposes than the industrious Europeans.[15] The same description made its way into Joseph Huddart's transatlantic publication, *The Oriental Navigator*, as well, which included editions from Philadelphia and London. Joseph James also inserted it in his publication, which went through several editions in New York, suggesting that people on both sides of the Atlantic were reading about the deleterious effects of cannabis drugs at the time.[16]

The passages that Steel, Nemnich, Huddart, and James quoted seem to have come from a description provided in a London publication by John Henry Grose. In his 1757 edition, the word is spelled "bang," which differs

from the spelling used by the authors who quoted him. Another significant difference is that Grose never mentioned that the preparation derived from cannabis, referring to it simply as "an intoxicating herb."[17] A decade later, he still had not made the connection, but the slightly altered second edition added a description of some "assailants" in Bengal who fought "with a mad kind of intrepidity, heightened by the inebriation of eating Bang," which he identified as "a plant which either stupefies, or excites the most desperate excesses of rage."[18] This description of bhang is consistent with other primary sources that were published at the time, which started to become more nuanced around the turn of the century. However, all of them reflected the perception that cannabis had a negative impact on easterners who used it for such vile and degenerative purposes.

Comparing the publications by Grose, Berlu, Lemrey, Barrow, Miller, and Robert James to those produced by Steel, Nemnich, and Joseph James, then, suggests that the British encountered cannabis drugs more frequently as they reoriented their empire toward India. Even though the latter authors reiterated many of the negative associations cited by those who wrote before them, their descriptions reflect an understanding of the fact that bhang derived from cannabis instead of an unknown intoxicating herb. This meant that the longer the British were in India, the more they associated deviant forms of cannabis use with the east, whose people were, according to the new imperial paradigm, supposedly degenerating. Thomas Arnold, for example, mentioned in his publication on the causes of insanity that "a preparation of a poisonous vegetable called Bangue" is one of the most prevalent "causes of these disorders." In a footnote, he pointed out that this "poison" derived from "cannabis sativa," which he described as a "narcotic, productive of ideal delirium, madness, anodyne, and repellent" when used in the eastern fashion.[19] Though Jonathan Scott did not mention madness specifically in his publication, he certainly alluded to it in his description of "bang" as "a species of hemp, the juice of which intoxicates, and is much used by the Asiatics, both to drink and mix with their smoking tobacco." This description came in a footnote explaining the use of the term in a passage about a man who, "pounding bang, every now and then twisting his whiskers in anger, sat waiting for [his wife] by a fire he had kindled." The man, "instantly on her arrival, rose up in a fury. With the club, which was the instrument to pound his bang, having softened her back and sides, he beat her most severely, and with cruel violence dragged her by the hair out of the hut."[20]

Scott's reference to "Asiatics" smoking cannabis is an important one, for it implies that the British were still perplexed about the nature of cannabis drugs and their use by the supposedly degenerate people they encountered in the far reaches of the empire. More frequent contact with the various cultures on the subcontinent by the late 18th century may have increased the association between cannabis and deviant intoxication, but the British were still

largely unaware of exactly what these preparations were or how they functioned. Mills argues that this had to do with the lack of "direct experience in British medical and scientific circles" with cannabis drug preparations, which explains why the sources above simply copied information from previous publications.[21] Without much direct experience with eastern cannabis cultures, those writing about the eastern uses for the plant simply regurgitated the exotic speculations of highly outdated sources. This helps explain Scott's reference to smoking bhang, which—despite its inaccuracy—got repeated in other sources from the late 18th century as well. Adding to the confusion was one of the earliest references to "Ganja" in John Fergusson's *Dictionary of the Hindostan Language*, in which he identified it as "an intoxicating Liquor which the natives smoke through a Pipe, which is immersed in water."[22] The source has no entry for bhang, and cannabis is not discussed at all. And Henry Harris did not mention cannabis in his dictionary either, although he defined "Bang" as "an intoxicating herb" that also went by the name "ganja."[23]

William Marsden's book, however, mentions all three. Referring to an indigenous plant named *Calooee*, he stated that the natives used it to make "twine, as we do hemp." In contrast, he pointed out that "*cannabis* or hemp, called *ganjo* by the Malays, is cultivated [by them] in quantities, not for the purpose of making rope, which they never think of applying it to, but for smoking, and in that state it is called bang, and has an intoxicating quality."[24] His more elaborate description provides further insight into the developing knowledge culture on cannabis within the British Empire at the time, for by claiming that South Asians never even thought to use the plant for rope, Marsden implied that the Indian plant was the same as the European one, only the degenerative Indians did not have the wits to use it properly. Moreover, like the others before him, he clearly confused the various preparations, for ganja and bhang are two entirely different substances with a long history of use among different social classes in India, yet he portrayed them as the same pernicious substance that easterners used to indulge their appetite for delirium. He also never mentioned the use of cannabis fiber, seed, or oil as non-psychoactive commodities in Asia, where all three had been used for centuries. It seems, then, that the British continued to perceive these preparations as dangerous concoctions that caused problems for the people whom they were trying to save, but direct experience with them continued to be minimal at best.

In other words, before the rise of their new form of imperialism, at least some in the British Empire had a vague understanding of cannabis drugs and the ways they were used in the east. Some were unaware that bhang derived from cannabis, while others were under the impression that it referred to some variety of the plant grown in Asia. References to smoking it existed, but they confused the different preparations with each other and considered

the words used to describe them as synonyms. Although many disagreed on whether the drugs came from a different species of the plant, most accepted that using them was an Oriental phenomenon that contained no beneficial value. This Oriental association was in stark contrast to the more industrial ones that the British developed for the plant, which amplified the perception of difference between east and west and served as justification for a civilizing mission on the subcontinent. The different associations became even more pronounced once the British started promoting cannabis cultivation in India for industrial purposes. By the time members of the Indian medical service began experimenting with preparations of what they referred to as "Indian Hemp," a complicated discourse had developed around the plant that helped transform its use and meaning in the Atlantic world.

COMPETING PERCEPTIONS

As we've already seen, Europeans used cannabis primarily for industrial purposes. Encountering cannabis drugs in India did not change this for the British, but instead exacerbated the differences between eastern and western uses, which complemented the degeneracy narrative of British imperialism very well. After all, the references in the sources above hold significant negative connotations. Moreover, since the British were searching for a new colonial outlet through which to obtain the industrial fiber when they encountered these drugs, the associations only worsened. What transpired next wove new meaning into the plant's already complicated place in the Atlantic world. These competing perceptions—the one pertaining to oriental associations with intoxication and the other to economic and industrial value—worked simultaneously to form a complex discursive relationship between the plant and its different uses. In addition to the new representations of empire that accentuated differences between self and other, this discursive formation converged during the heart of the Napoleonic Wars, which stirred up fresh concerns over the consequences of relying too heavily on imports for cannabis fiber. William Roxburgh's letter to the Royal Society in 1799 on the need to promote "experiments for the culture of hemp in India" is a prime example. In it, he stressed the "national importance" of producing the fiber for home consumption.[25] In another letter, he claimed that "the discovery of a substitute for Russian hemp is certainly an object of the first magnitude," which is why "the attention of all good patriots is drawn towards the discovery of a substitute for Russian hemp."[26]

Despite his patriotic enthusiasm, though, Roxburgh's hopes did not turn out as planned, for he reported that the experiments "have not, I believe, thrown much additional light on the subject."[27] Though he did not go into the details on why, another correspondence over the same subject between other

EIC employees working in India around the same time did. The letters appeared in a six-volume work published in increments from 1799 to 1802. The editor, James Anderson, belonged to an information exchange network spanning across Europe, India, the Atlantic Ocean, and Russia, so the letters, prose, and history he included in each volume were considerably diverse and wide-ranging. One of them came to him at Fort St. George in Madras from an EIC employee stationed in Calcutta, who "arrived here about two months ago in the Lord Duncan, under the sanction of the Court of Directors, by whom I was recommended to the government here for protection and encouragement in establishing the culture of hemp and flax."[28] He wrote Anderson to get information about how to best cultivate these plants, the former of which he referred to as "the bemgue [*sic*] of this country, which is the cannabis sativa of Linnaeus."[29] Although he misspelled the word, the writer was certain that it was "hemp in its highest perfection," which was "of such a quality" that promoting its cultivation could "render us independent of the article on foreign nations, so necessary for the support of our royal navy and commerce."[30]

Anderson acknowledged receiving the letter "regarding your plan of cultivating hemp and flax in these tropical climates," but reported that he had no experience growing flax. Not so for hemp, though, which he claimed "grows up very luxuriantly, as a reed in our gardens here." Unfortunately for the empire, he solemnly reported that "Indians cultivate hemp . . . for the sake of the flowers" that produce "one of those narcotics which, like opium and tobacco, are coveted by the natives of Asia."[31] Lumping all Asians into a category of those who covet "narcotics" is a reflection of the Orientalist thought that objectified the so-called Orient as a representation of deviancy, which shifted any blame for the lack of industrial cannabis production in India away from the British and onto the natives for their perceived cultural predispositions. Though he "considered it a different species or variety [of] cannabis sativa" because it "rises in Europe with a single stem and pretty entire leaf; [whereas] this ginga [*sic*] bang, or Indian kind, is a very branchy shrub, with leaves deeply intersected," he pointed out that "Dr. Fleming assures me that he has raised hemp from European seed in the botanical garden at Calcutta." This meant that, as long as it was done "under suitable care and encouragement, there could be no doubt of the practicability of raising it in any quantity."[32] Of course, Indians could not be trusted to care for the plant properly, for they were too preoccupied with pleasure to recognize the industrial value cannabis had to offer.

From Anderson's perspective, then, cannabis fiber production in India held promising possibilities, so long as the British stepped in and took control of the industry, which they attempted to do around the turn of the century. Despite concerted efforts, though, they could not get rid of the demand for cannabis drugs in India. For his study commissioned by the EIC on the

prospect of growing cannabis for fiber in India, for example, Wissett frustratingly reported that the "Natives were not inclined to depart from their established usage," which he considered especially disappointing due to the "present important crisis of national affairs."[33] At the time, the Napoleonic Wars significantly disrupted Great Britain's ability to obtain cannabis fiber from the Baltic ports, causing the price to skyrocket from £25 a ton in 1792 to £118 in 1808.[34] A source he printed in the report came from a government document that was drafted in 1801, which also stated that the Indians were "notoriously wedded to their customs and habits" and called them "averse to innovation of any kind."[35] These customs, as Roxburgh pointed out in a letter to a correspondent during the same year, meant that Indians only cultivated cannabis "in small quantities everywhere in India on account of its narcotic qualities."[36]

At the time he made that statement, Roxburgh understood the urgent need to find a suitable replacement for cannabis fiber as well as anyone in the British Empire. Having already drafted multiple charts and conducted various scientific studies on dozens of fiber-yielding plants in India, his reputation was such that many recognized him as the "father of Indian Botany."[37] His work circulated widely across the empire, showing up in appendixes and large excerpts in publications on the subject from the time.[38] As he explained in another letter to a colleague, his work on the subject began in the 1790s, when the "recent interruption of our intercourse with Russia, from which our supplies were chiefly drawn," forced the government to "encourage the cultivation of a plant in Bengal and the coast of Malabar, which produces the *Sunn* hemp (*crotularia juncea*), not inferior, when properly managed, to that of Riga hemp."[39] The need to replace Russian imports with some kind of Indian fiber persisted until well after his death in 1815, which is why he continued to experiment with various plants in search of a substitute for the vast quantities imported from outside the empire. One chart he produced listed several varieties of fiber and compared their strength to determine which ones were viable options for replacing cannabis.[40]

After his death, John Forbes Royle stepped into his shoes as the leading scientist for the British imperial botany project and continued adding various specimens to the botanical gardens. As one of the EIC's most active imperial botanists, Royle also spent decades researching the fibrous plants of India, which Great Britain imported more frequently under his tenure as superintendent of the EIC botanic garden at Saharunpore.[41] From the years 1803 to 1810, for example, the British imported an average of 4,479.25 cwt per year from India. In 1831, that number jumped to 9,472 cwt. These figures were minuscule compared to the 506,803 cwt imported from Russia during the same year, but the numbers increased dramatically the following decade; to the point that imports from India nearly equaled those from Russia by 1,851.[42] According to Royle, this increase could be attributed to "the Court

of Directors of the East India Company having directed the culture of Fibres in India at the beginning of this century."[43] Echoing much of what Roxburgh pointed out over the years, he claimed that "during the [Napoleonic Wars,] so many attempts were made to find a sufficient substitute for this important plant," which "exists in abundance in a wild state [in India], but is only used for making an intoxicating drug."[44]

Documents from a government publication in 1855 reflect similar sentiments. In the publication, a letter from Captain H. Huddleston describes how the "Bhung" Indians grew "does not yield a fibre that can be turned to any use," but that "the real hemp, or cultivated kind, is grown chiefly on high lands, and principally on the northern faces of the mountains." Although Indians apparently did not grow much of this "Himalayan hemp," as he referred to it, he claimed that the little they did produce was of "the best quality."[45] However, getting them to produce enough of it to satisfy the empire's consumption needs would be difficult, primarily because of the "well known dislike which the Hill people have to extra labor."[46] In effect, their degenerative nature inclined them to indolence and intoxication, so company employees needed to focus more on the plants that Indians already used for fiber, which he listed as Sunn, Rheea, Bheemul, Odala, Bhabur grass, the Malloo Creeper, the large nettle Jurkundaloo, Kundaloo, Koambhee, and Dhoul Kakussee. He then described each of these plants and the possibilities for using them to replace cannabis fiber. In the year 1854 alone, there were no less than twenty-three memorandums exchanged between EIC employees pertaining to cannabis cultivation in India and the need to find other plants to replace it, and all of them reflect the transatlantic orientalist discourse that positioned eastern uses as degenerative.[47]

For example, Huddleston thought that promoting its cultivation for industrial purposes in India "is of no use whatever, for the very insignificant quantity of 'churrus'—(the inspissated juice of the leaves obtained from the plant by rubbing between the hands)—does not remunerate even the poorest class for the trouble bestowed upon it, and as it does not yield a fibre that can be turned to any use, I need not of course make any further remarks regarding it."[48] Another letter from J. H. Bridgman to a colleague who inquired about cannabis cultivation in his imperial region of India reads as follows:

> [The] cultivation of Hemp (Ganja and Bhang), I believe to be entirely unknown. It is found often growing wild, especially in the neighbourhoods of villages, and its leaves are collected as a narcotic drug, but the fibre is unused. Twelve years ago I made some attempts to introduce it, but I entirely failed; the proposal was universally received with incredulity or indifference.[49]

Like their contemporaries and the generation of botanists who came before them, these EIC employees struggled to get Indians to change their

cannabis use and cultivation habits, so they started looking into other ways of securing a source of British imperial fiber. In the meantime, the plant's reputation as an Oriental commodity started to intensify.

Around the time when the British search for other fiber-yielding plants in India started improving, a revolution in medicine was under way in the Atlantic world. Industrialization had profound social ramifications across the continent, not the least of which was the growing need for improvements in medicine.[50] Beginning in Paris, new concepts about medicine, pathology, and institutional regulations spread to London and across the Atlantic. In Germany, the emergence of the laboratory brought more innovations to the field of pharmacology. In short, medicine was on the rise, and it was becoming a more legitimate profession in capitalist societies. By the 1830s, these dynamic changes provided incentives for imperial subjects stationed in India to experiment with indigenous uses for cannabis to see if they could be transformed into something profitable. Before then, only a few British sources ever mentioned the use of cannabis for medicine by eastern populations, and they were a bit scant in their descriptions. In 1810, for example, John Fleming included a description of "cannabis sativa/hemp/ganja" in his book on the medical plants of India, but he did not elaborate on its uses or explain its benefits.[51] Whitelaw Ainslie's book, *Materia Medica of Hindostan* (1813), provided a little more detail under an entry listed as "Ganja, HEMP, CANNABIS SATIVA," but his description of its medical uses was vague. He started by pointing out how "the leaves are frequently added to Tobacco, and smoaked [*sic*], to increase its intoxicating power," but then claimed that "they are also sometimes, given in cases of Diarrhea and in conjunction with Turmeric, Onions, and warm Gingilie oil, are made into an application for painful, swelled, and protruded Piles."[52]

He also never mentioned the plant's use for fiber, and the medical concoction he referred to was listed as only "sometimes" used. Instead, intoxication was the primary connection he made between cannabis and India. More than a decade later, an expanded edition of his book provided a more elaborate description of the plant and its various uses in the "Orient." To the entry above, he added the following:

> The Chinese, from what Barrow says, use it little for such purposes, but are acquainted with its intoxicating powers. The Malays, Crawfurd informs us, cultivate the plant only for smoking. The Turks know well its stupifying [*sic*] effects, and call it *malach*. Linnaeus speaks of its "*vis narcotic*, *phantastica*, *dementens*, *anodyna*, *et repellens*." It would appear, that even the Hottentots use it to get drunk with, and call it *dacha*. We are told by *Avicenna* that the seeds of the (cannabis sativa), are termed by the Arabians, and that the inebriating substance, prepared from the bruised leaves they name *hushish*. Some account has been given of a liquid preparation, made from the leaves of the

> plant under the head *Bhangie* in this chapter. . . . It is much cultivated by the Mahometans in their gardens.[53]

Although describing the different cultural groups' relationship with cannabis led him to conclude that easterners "chiefly employed [the plant] for [its] inebriating and narcotic qualities," the entry provided more details on specific medicinal preparations than other sources. He even spent some time contrasting the eastern medicines with some of the old European concoctions from the Middle Ages. Moreover, Ainslie also added that, "of late years, in some districts of central India, cordage and a coarse kind of cloth are occasionally prepared with it."[54]

These entries reflect a sort of discursive hierarchy that imperialism in India projected onto the various uses for cannabis, the least civilized and most Oriental of which was intoxication. In stark contrast to this meaning was its most productive and industrial use, and the desire to turn India into a source of production for that use exacerbated the distinction between the two. Then there were the plant's medicinal associations, which occupied a sort of middle ground between the other two. As the spike in demand for new medicines increased during what historian Roy Porter called the "Age of Improvements," though, imperial agents working for the EIC in India found themselves in a position to imagine new uses for the plant at the Medical College of Calcutta, where hopes of transforming the noxious and degenerative intoxicant into something beneficial for the empire replaced the hopes of getting Indians to cultivate it for fiber. Since the imperial project stressed the need to save India from further decay, appropriating the "deviant" properties of cannabis into a usable medicine for the empire could prove useful in furthering the civilizing mission. Results of these experiments quickly entered the circuits of knowledge traveling across the Atlantic to bring more transformations to the plant as a commodity in the Atlantic world.

TRANSFORMATIONS AND ATLANTIC MIGRATIONS

The cultural transfer of cannabis as a viable medicine for western consumption began with a man named William Brooke O'Shaughnessy. After graduating as a doctor of medicine from Edinburgh University in 1829, he applied for an assistant surgeon job in the Bengal Army three years later, for which he was accepted and sent to Madras and then to Calcutta.[55] Nechtman's book points out how working and living in India was viewed with suspicion by Englishmen living in the metropole as early as the late 18th century, but the job did provide the young Irish doctor with an opportunity to research and teach upper-class Indian and mixed-race students, which had become an important part of the imperial project to save Indians from their rapidly degenerating civilization. One way to accomplish this was to establish educa-

tional institutions such as the Medical College at Calcutta, designed to Europeanize an elite class of Bengalis who would obtain the medical skills necessary to civilize the rest of the country and bring their medicine out of the dark and into the so-called modern era.[56] According to a letter that one EIC employee forwarded to his superior officers recommending that O'Shaughnessy be appointed professor so that "lectures of Chemistry [can] be made available to the Pupils of the Hindoo College," the goal was to design a curriculum that, "in the necessary Branches of Medical Science, is laid down, and so arranged as will afford the greatest advantage to the Pupils by . . . allowing them ample opportunity of acquiring their profession, without the fear of over burthening their minds by the presence of too many different subjects at the same time."[57] After all, these were Indian students who were to be taught at the new college and who, "though intelligent beyond all previous anticipation, still require a very different system of instruction from that on which Europeans are taught."[58]

This patronizing attitude towards Indians and their ability to learn fit well with the perception of empire at the time, and it is important to take note of it here, for it provides evidence of the cultural mindset behind O'Shaughnessy's decision to experiment with eastern cannabis in the first place. In *Cannabis Britannica*, Mills argues that it is "necessary to be wary of O'Shaughnessy's conclusions . . . that cannabis was a wonder-drug," primarily because he "was an ambitious and entrepreneurial scientist from relatively humble origins who was evidently casting around for the means to establish a reputation and some degree of financial security."[59] To support his claim, Mills cited the fact that O'Shaughnessy had dabbled in a myriad of fields, the most notorious of which was the telegraph line, which eventually resulted in his being knighted in 1856 and gave him a reputation as the savior of the British Empire in India. As Mills perceptively pointed out, the high demand for medicine in Europe at the time could result in lucrative fortunes for those who patented new concoctions. He did not mention it in his book since the entry came out after its publication, but the *Oxford Dictionary of National Biography* seemed to corroborate this view, pointing out that, by 1849, O'Shaughnessy had "become desperate for more lucrative employment" because of his "large and expensive family," which suggests that financial gain could have been his primary motive.[60]

However, before he decided to focus on what he dubbed the "wonder-drug," O'Shaughnessy's income had been sufficient enough for him to invest in a project to lay "30 miles of wire at his own expense to prove that the telegraph would work [in India]."[61] Moreover, his résumé by the time he decided to experiment with cannabis resin already included a number of publications, self-funded research projects, and a promotion to professor of chemistry at the new Medical College of Calcutta in 1835. In fact, according

to a letter recommending him for the position, the writer had the following to say about O'Shaughnessy:

> As an apology for my introducing the name of a particular individual in this application as a Candidate for the appointment, it will I trust, be believed that I do so, solely on public grounds, and from an earnest desire for the welfare of the Institution, Dr. O'Shaughnessy's well merited fame as a Chemist in England, supported by the powerful recommendations of his fitness for a Chemical Lecturer, which he brought with him, into this Country and his labors since his arrival here, point him out as the best individual on whom the appointment could be conferred.[62]

In response, the letter writer received the following approval note: "The General Committee believes that Dr. O'Shaughnessy enjoys deserved celebrity and which is supported by the testimonials which accompanied his address when originally submitted to the governor's general."[63] These sources do not reflect the narrative of a desperate scientist in search of fame and finances alone at the time he was about to experiment with cannabis.

How, then, are we to interpret O'Shaughnessy's work on a plant that had already gained a reputation for promoting degeneracy among the native people who used it, which he conducted at a college designed with a civilizing mission and funded by imperial colonizers? The answer is through an imperial lens, which is represented in O'Shaughnessy's 1839 essay on eastern cannabis and its possible medicinal uses for both western and native consumption. In the introductory paragraph of his essay on the subject, for example, the Irish doctor pointed out that "the narcotic effects of Hemp are popularly known in the south of Africa, South America, Turkey, Egypt, Asia Minor, India, and the adjacent territories of the Malays, Burmeses, and Siamese. In all these countries Hemp is used in various forms, by the dissipated and depraved, as the ready agent of a pleasing intoxicant."[64] He also mentioned that the narcotic effects used to be employed medicinally in these regions a long time ago, suggesting that Europeans could step in to tinker with the plant's resin and bring back the use of it as a viable medicine. This would go a long way toward bringing civilization back to the Indians, whose climate led their once grand civilization into a degenerative state of idleness and intoxication. Indeed, O'Shaughnessy's reflections on the nature of the plant and its use were directly in line with perceptions of empire at the time. Consider, for example, the following paragraph:

> Much difference of opinion exists on the question, whether the Hemp so abundant in Europe, even in high northern latitudes, is identical in specific characters with the Hemp of Asia Minor and India. The extraordinary symptoms produced by the latter depend on a resinous secretion with which it abounds, and which seems totally absent in the European kind. The closest physical resemblance or even identity exists between both plants;—difference

> of climate seems to me more than sufficient to account for the absence of the resinous secretion, and consequent want of narcotic power.[65]

The comments on the environment, the contrast between Oriental and European uses, and the notion of a seemingly inherent Asiatic drive to consume drugs reflect the imperial paradigm of Indian degradation that had become central to the way the British imagined their colonial territories.

Although in some respects O'Shaughnessy was correct in observing that warmer temperatures help cannabis produce more resinous secretion, more important are the cultivation techniques and genetic code of the plant, which both play a larger role than climate in determining its botanical expressions. In fact, contemporary research reveals that, with the proper genetics, the resinous glands known as trichomes can develop efficiently without degradation in temperatures ranging from 60 to 95 degrees Fahrenheit.[66] Of course, the scientific infrastructure for such knowledge did not exist at the time, so O'Shaughnessy relied on the imperial paradigm to account for the differences he observed between eastern and western plants. Such influences reflected in the way he described various cannabis drugs and how they were prepared for consumption in India. He claimed, for example, that "Churrus is collected during the hot season in the following singular manner. Men clad in leathern dresses run through the Hemp-fields brushing through the plant with all possible violence; the soft resin adheres to the leather, and is subsequently scraped off and kneaded into balls." He also reported that "in Nipal, Dr. McKinnon informs me, the leathern attire is dispensed with, and the resin is gathered on the skins of naked coolies."[67] Then he mentioned Sacy's etymological argument and how the Arabs had a similar preparation they referred to as "*Hasheesha*, which is still greedily consumed by the dregs of the populace, and from consumption of which sprung the excesses which led to the name of 'Assassin' being given to the Saracens in the Holy Wars."[68]

When describing liquid forms of cannabis drugs, though—which he referred to as conglomerations of ingredients mixed with cannabis resin that were known variously as "Sidhee, Subjee, and Bang"—O'Shaughnessy claimed that they were "chiefly used by the Mahomedans of the better classes."[69] His descriptions of those "who practice this vice" are less denigrating, which reflects a sort of hierarchy regarding the type of drug consumption that was considered acceptable in the British Empire. At the lowest level were those who smoked cannabis, which he described as a "debaunch [where a] hookah is passed round, and each person takes a single draught." He continued by pointing out how "intoxication ensues almost instantly; and from one draught to the unaccustomed, within half an hour; and after four or five inspirations to those more practiced in the vice. . . . Heaviness, laziness, and agreeable reveries ensue."[70] He also pointed out that "the habitual smokers of Gunjah generally die of disease of the lungs . . . [or] go mad."[71] At the

other end of the spectrum were those who consumed the liquid preparations, which he still described as a "vice," but a less detrimental one. The implication is that native consumption patterns for drugs, such as smoking, were more degenerative than European customs—which usually took the form of a liquid.

Indeed, with the exception of tobacco, which initially transferred across the Atlantic from the New World as an ingestible medicine that produced a liquid substance when chewed, drugs were usually consumed in liquid form across Europe.[72] Essentially, there were (and still are) less acceptable and more acceptable cultures of drug consumption, and the division represented the perceptual distinction between self and other, as exemplified by the contrast between his description of the liquid and the smokable substance eroticized by foreign bodies who collected it on their naked skin and then huddled together to participate in the "debauch." It is also why O'Shaughnessy attempted to appropriate the plant's intoxicating properties into an ingestible, more acceptable preparation instead of using its more deviant, Oriental form. A similar situation occurred with opium, which Europeans transformed into a liquid substance that they contrasted with the smokable preparations of the Orient. In other words, Europeans who consumed laudanum were perceived as consuming a medicine, but smoking opium was a degenerative vice associated with the east. This was true for cannabis as well, which O'Shaughnessy transformed into a tincture or pill and administered to animals and patients in the 1830s to test its strength as a medicine, because using it in the "Asiatic" form would be unacceptable.

However, condemning Asiatic uses for cannabis did not stop O'Shaughnessy from crediting some "exceptional" natives for providing him with valuable knowledge. Revealing how important indigenous guides were for helping Europeans understand medicine, he mentioned someone named Hakim Mirza Abdul Razes of Tehran, whom he identified as "a most intelligent Persian physician," and a book titled *Mukzun-ul-Udwieh* as two of the most important sources of information on "the exact state of our knowledge of the subject."[73] Both sources apparently warned about the dangers of indulging in the medicine, and O'Shaughnessy took their words seriously. According to one source published in Bengali, he also took lessons from other native doctors who familiarized him with Hindu plant science, and someone by the name of Amir apparently "made majoon in front of O'Shaughnessy quite a few times."[74] Armed with the knowledge of his Oriental predecessors, he began his experiments by noting "the dose in which the Hemp preparations might be administered, constituted of course one of the first objects of inquiry."[75] Starting with native preparations, he administered doses to several types of dogs, then started using alcoholic extracts on other animals, which led him to conclude that "no hesitation could be felt as to the perfect safety of giving the resin of Hemp an extensive trial in the cases in which its apparent

powers promised the greatest degree of utility."[76] These cases included patients with rheumatism, hydrophobia, cholera, tetanus, and infantile convulsions.

Except for cholera, he reported that the experiments "led me to the belief that in Hemp the profession has gained an anti-convulsive remedy of the greatest value," which he claimed to have ascertained through a willingness to "explore the medicinal resources which an untried Materia Medica may contain."[77] The *Manual of Chemistry* that he published a few years later reflects his continued interest in "the indigenous materia medica" and in training "native practical chemists" to be "almost independent of any other country for the remedies required in the practice of medicine."[78] By experimenting with cannabis and helping Indians regain control of their vast resources by teaching proper ways to use their own medicines, O'Shaughnessy had done his part in building the Second British Empire. However, he also made it clear that this new cannabis medicine could be used in the west, where knowledge of it traveled back to the metropole of the empire not long after he published his first experiments in Calcutta.

In 1842, O'Shaughnessy's book *The Bengal Dispensatory* was published in London, and it included more detailed remarks on new trials he conducted with the plant after his initial experiments proved successful.[79] A year later they also appeared in the *Pharmaceutical Journal and Transactions*, which reported O'Shaughnessy's presence at one of the meetings, where he offered "a specimen of Cannabis indica, or Indian hemp, which he had brought with him from Bengal."[80] The same year, another journal published an article by a doctor and Friend of the Royal Society named John Clendinning, who credited O'Shaughnessy as the first "to lay the results of accurate observations [on the value of cannabis as medicine] before the public."[81] Picking up where O'Shaughnessy left off, Clendinning reported sixteen successful cases in which he used a cannabis substance called Squire's Extract. The results led him to conclude that "I have no hesitation in affirming that in my hands its exhibition has usually, and with remarkably few substantial exceptions, been followed by manifest effects as a soporific and hypnotic in [inducing] sleep; as an anodyne in lulling irritation; as an antispasmodic in checking cough and cramp; as a nervine stimulant in removing languor and anxiety," and much more.[82]

The extract that he referred to was manufactured by Peter Squire. According to multiple sources, O'Shaughnessy brought a stash of "gunja" back with him on his visit to London and gave it to Squire, who then made an extract of it for commercial consumption and distribution. One of the sources that mentioned Squire's work with O'Shaughnessy's plants was a paper read by Mr. Ley to the Royal Medico-Botanical Society in 1843. After repeating some of the familiar orientalist tropes about its uses in the east, the author claimed that "Dr. O'Shaughnessy has brought with him to this country a

considerable quantity of the dried plant. He has placed it in the hands of Mr. Squire, to be by him prepared."[83] While on leave from his job in Calcutta, O'Shaughnessy went to the presentation, where others asked about how he came to experiment with the plant. "He had been led to investigate" its medicinal properties, claimed the narrator, "by observing that tens of thousands of persons in the East were constantly producing the most extraordinary effects on themselves by its use in a popular form, and that he thought that an article so exceedingly potent must be possessed of medicinal virtues as well."[84] The implication is that easterners used the plant for degenerative purposes, but if properly supervised by Europeans, then beneficial qualities of the medicine from ancient times could be rediscovered and put to proper use. For Ley and other members of the Royal Botanical Society, such experiments were enough to make O'Shaughnessy a corresponding member, which conferred epistemological authority upon his work and increased his reputation, thereby opening the medicine to a wider audience.

Not long afterward, Squire's extract and other forms of cannabis started showing up in publications more frequently. In 1844, for example, an ad titled "Extract of Indian Hemp" appeared in *The British and Foreign Medical Review*, which stated that "Mr. Squire begs to inform the Profession generally that he has just received a small supply from Dr. O'Shaughnessy, who has prepared it in India." He also mentioned that O'Shaughnessy visited him the previous spring and brought the plant then, seeking Squire's help on how to extract the resin more efficiently.[85] The same journal published most of O'Shaughnessy's 1839 essay on ganja four years earlier, which suggests that the editor was aware of his experiments from the very start and continued to follow his progress with the tincture.[86] Also in 1844, one doctor gave a speech at the annual meeting of the Suffolk Branch of the Provincial Medical and Surgical Association, in which he reported "a favorable point of view" toward the drug "introduced in this country by Dr. O'Shaughnessy." By then, it had also been used "on patients with neuralgia, rheumatism, cholera, and in cases requiring a direct sedative."[87] *The Lancet* published a review of Dr. Neligan's book on medicines that year also, which praised the "Indian hemp used in Persia, and throughout India, for many hundreds of years, for producing inebriation," but had "only very recently [been] introduced into British medicine, through the exertions of Dr. O'Shaughnessy."[88] Of course, the doctor neglected to mention the crucial influence of native doctors in India on O'Shaughnessy's knowledge of the plant and his decision to begin his experiments in the first place.

References such as these continued to appear in various books and journals in London, but they also traveled across the Atlantic and surfaced in publications all over the United States. To be sure, U.S. Americans seemed to have had at least some idea that cannabis could be used medicinally before reading about O'Shaughnessy's work. We've already encountered references

to the use of its seed for purposes other than fiber before the 19th century, but they were not numerous or significant. In 1833, a source published in Philadelphia by William Barton described "Cannabis sativa" as a plant with "leaves narcotic" before regurgitating what Ainslie wrote in his earlier book.[89] Five years later, before O'Shaughnessy published his first study on the plant, another source published in Philadelphia listed "cannabis" as a useful medicine to treat a number of illnesses, including leucoma, cataracts, gonorrhea, and various heart, kidney, and lung issues.[90] However, neither of these sources mentioned the words "hemp," "indica," or any of the eastern preparations that derived from the plant. Barton credited Ainslie, which means he would have been aware of the connection if he read the book; and Jeanes referenced and translated some of the German physician Samuel Hahnemann's work, which described its use and mentioned cannabis on several occasions.[91] Hahnemann is considered by many to be the founder of homeopathic medicine, and his influence in both Europe and the United States is indicated by various translations of his text.[92]

Despite their value for revealing the transatlantic connections in medicine at the time, though, neither of these sources proves that U.S. Americans were experimenting with cannabis for medicinal purposes before O'Shaughnessy. However, just months after the Irish doctor published his first experiments, medical journals in the United States began reprinting his work. In 1840, for example, *The Boston Medical and Surgical Journal*, *Maryland Medical and Surgical Journal*, and the *Medical Examiner* all credited O'Shaughnessy with discovering how well cannabis operated as a remedy for tetanus and other convulsive disorders.[93] Much of the information about his biography in these articles likely came from the *British and Foreign Medical Review* piece mentioned above, but in Philadelphia, *The American Journal for Medical Science* wrote that "the No. of *The Provincial Medical Journal*, for March 18th, 1843, contains an interesting paper on [Cannabis indica,] read before the Royal Medico-Botanical Society by W. Ley."[94] The date indicates how quickly Ley's comments traveled across the Atlantic, but even before then, *The New York Journal of Medicine* reported that the new medicine "has recently attracted much attention in the various journals of the day, both professional and non-professional."[95] The article described O'Shaughnessy's case studies with the plant in Calcutta and borrowed heavily from both his 1839 and 1842 publications. In fact, the writers seem to have been given firsthand knowledge of these experiments, for they reported that O'Shaughnessy traveled across the Atlantic with the plant and showed up to one of their meetings to discuss its potential uses.[96]

Another journal out of Philadelphia published excerpts of O'Shaughnessy's work the following year. In a paper read at a pharmaceutical meeting on November 6, Augustine Duhamel mentioned much of the 1839 essay to the audience before providing a formula devised by a "Mr. Savary" on how to

extract the medicinal resin more efficiently. The same paper was published in a journal out of Cincinnati that year as well.[97] A similar article emerged in a medical journal in Georgia in 1845, and the *New Orleans Medical and Surgical Journal* published a piece in 1848 that pointed out the medicine "has of late years been brought into the European notice by Dr. O'Shaughnessy."[98] Four years later, *The American Journal of the Medical Sciences* mentioned a number of new studies conducted by doctors on both sides of the Atlantic over the years, and two ads published in the *Boston Medical and Surgical Journal* in 1851 indicate how popular the extract had become, for they each belonged to a different drug company, Tilden & Co. and Philbrick & Trafton, respectively.[99] By 1854, O'Shaughnessy's medicine had officially become part of the American pharmacopeia, as it was listed in the U.S. Dispensatory that year.[100]

Clearly, U.S. Americans in the mid-19th century were seeking medical knowledge from abroad.[101] Nowhere is this transatlantic component more visible than in the American Provers' Union.[102] In 1853, a group of doctors and pharmacists created this organization to, in their own words, "ascertain the effects of drugs, or substances which may become such, upon the healthy."[103] They administered various doses of drugs to themselves and to each other, providing specific guidelines and requirements for each "prover" who intended to conduct experiments on their effects through self-observation. The first two pages of the publication list twenty-four officers of the organization, each one holding a title that corresponded to a different country and/or state. Dr. Jas Kitchen, for example, is listed as "Corresponding Secretary for France," and Dr. H. Duffield held the title of "Corresponding Secretary for Pennsylvania, Virginia, England, Scotland, and Ireland." Other members were designated to correspond with Switzerland, Brazil, Portugal, Africa, the East Indies, Russia, Germany, Spain, Turkey, and much more.

It is very difficult to find information on this organization, but out of what seem to be the only three publications still available today, one is a brief pamphlet titled *Provings of Cannabis Indica*. It is only eighteen pages and does not mention O'Shaughnessy by name, but much of the writing describes similar experiments and lists the extracts used as a remedy for many of the same ailments to which he applied it in his initial 1839 essay. Other experiments were listed as well, most of which were conducted by members of the Provers' Union. The pamphlet also describes "Bayard Taylor's experience with Cannabis," which documents his encounters with hashish while traveling through Africa and the Middle East in the 1840s.[104] Although Taylor's work is a literary source depicting cannabis use as an eastern trope, it's important to mention the Provers' use of it as a source of scientific knowledge about a medicine from the east that was gaining quite a bit of attention in medical circles on both sides of the Atlantic. In effect, by doing so, they muddled the lines between science and literature regarding the use of canna-

bis resin. This tendency became a trend during the 19th century, which helped endow the plant with meaning that transformed it into a banned intoxicant.

For example, despite the successful transatlantic migration of eastern cannabis as a medicine, some reported mixed results on its efficacy and included vivid, Orientalist-laced descriptions of its effects on users. O'Shaughnessy himself warned of the "delirium occasioned by continued Hemp inebriation." According to him, "especially among young men," the tincture caused "a constant rubbing of the hands [and] perpetual giggling." He also claimed that, "in a few cases, the patients are violent; in many, highly aphrodisiac; in all that I have seen, voraciously hungry."[105] One article from *The New York Medical Journal* that professed support for O'Shaughnessy's medicine nevertheless warned that "a proper exercise of caution surely demands the frequent repetition of these experiments."[106] The Provers listed a number of ailments they claimed to experience while under its influence, such as "luxurious indolence and erotic delirium." One reported that "he was in constant fear that he would go insane."[107] Other articles, like the one listed in *Pharmaceutical Transactions*, reported a lack of success with using the tincture in England, observing "a difference in the action of the Indian hemp in this country, from what he had been accustomed to in Bengal."[108] An article in the *American Journal of the American Sciences* reported similar failures with the medicine, arguing that cannabis "sent to this country from Calcutta, and not immediately used, has been deteriorated by age."[109] Modern research on THC does indicate that the drug deteriorates with time and exposure to heat and light.

Recognizing this fact led some in the United States to experiment with medical concoctions prepared from plants grown domestically. An article published in *Proceedings of the American Philosophical Society* in 1869, for example, concluded that the plant could indeed be successfully grown in America for medicinal use. After addressing the common assumption that "the hemp of India is specifically distinct from the European plant," Dr. Horatio C. Wood detailed his experiments with Kentucky-grown cannabis, which he concluded "does contain an appreciable quantity of the resinous active principles."[110] His descriptions were rather sensational, even claiming that the effects of the drug remained constant for several days after consumption. However, the effects he described were consistent with other accounts that mentioned altered perceptions of time, space, and reality, so American companies began producing their own "Cannabis Americanus," solidifying the drug's place in U.S. American medical culture for the remainder of the 19th century.[111]

Even as eastern cannabis became more familiar as a medicine in the Atlantic world, though, the plant's medicinal properties continued to remain largely a mystery as experimenters continued to report often strange and

exotic experiences while under the influence of cannabinoids. Many of these descriptions do not correspond with most user experiences and scientific observations today, which historian Isaac Campos explains through what he calls the psychoactive riddle. Suggesting that societal perceptions of a drug oftentimes act as a placebo text through which users interpret their subjective experiences, Campos points out that both the "set" and "setting" work alongside pharmacology to produce the effects that individual users interpret as a "high."[112] Given that many of the effects described above resemble the Oriental discourse of degeneracy perpetuated by the Second British Empire, it seems that consumers of eastern cannabis interpreted their experiences through a cultural lens of Orientalist thought, which acted as a placebo effect on users who were familiar with exotic descriptions of its so-called degenerative uses.

These interpretations played into the transatlantic discourse on cannabis as medicine that developed after O'Shaughnessy's experiments, which circulated widely and influenced medical perceptions of the plant across the Atlantic. Knowledge produced in the so-called periphery of the British Empire seeped into the metropole and then rippled across the Atlantic. Even though many viewed India and the EIC employees working there with suspicion, the transfer of cannabis medicines happened quickly, but the medicine's lack of consistency and effectiveness—along with western perceptions of Oriental degeneracy—caused some to question its value. This did not stop the use of the drug, but rather ensured that a lively debate ensued over its value for western consumption.

By the mid-19th century, despite negative connotations associated with its eastern uses, cannabis had transmogrified into a medicine in the Atlantic world. After the British started encountering the plant more frequently in Asia, they promoted its cultivation for fiber as a way of fulfilling their civilizing mission and ending their reliance on imports of the important commodity. The degeneracy narrative of empire claimed that India's environment had deteriorated a once great civilization, so the British needed to save them from further decay. One way to do this was to fix how Indians consumed cannabis, which meant commodifying it for fiber. This did not work out very well, though, so the British began experimenting with the resin to see if it had any benefit for the empire. When knowledge of these experiments transferred to London and then across the Atlantic, perceptions of its use by the so-called degenerative Orientals went with it, acting as a placebo text in the minds of many who tried to describe the strange effects it had on their psychological state. These negative associations and perceptions, combined with the fact that the medicine did not always work as effectively as many thought it should, had a profound impact on the use and meaning of cannabis in the Atlantic world. Over the years, these perceptions compounded to gradually

invest the entire plant with a more noxious meaning (intoxication) at the expense of its other two (fiber and medicine), paving the way for its full transformation into a banned intoxicant.

NOTES

1. See Thomas Bender, *A Nation Among Nations: America's Place in World History* (New York: Hill and Wang, 2006), 92.
2. See Tillman W. Nechtman, *Nabobs: Empire and Identity in Eighteenth Century Britain* (New York: Cambridge University Press, 2010).
3. Ibid. See also Vanita Seth, *Europe's Indians: Producing Racial Difference, 1500–1900* (London: Duke University Press, 2010).
4. Garcie d'Orta, *Coloquios dos simples e drogas he cousas medicinais da India* (Ioannes Goa, 1563), quoted in James H. Mills, *Cannabis Britannica: Empire, Trade, and Prohibition* (New York: Oxford University Press, 2003), 29.
5. Chris Duvall, *Cannabis* (London: Reaktion Books, 2014), 92.
6. Thomas Bowrey, *A Geographical Account of Countries Round the Bay of Bengal, 1669 to 1679* [1701] (Cambridge: Cambridge University Press, 1905), 81; cited in Duvall, *Cannabis*, 91.
7. Robert James, *A Medicinal Dictionary, Including Physics, Surgery, Anatomy, Chymistry and Botany* (Osborne, London, 1745); quoted in Mills, *Cannabis Britannica*, 27.
8. For a discussion of Acosta's work and its influence in Europe, see Ibid., 29–31.
9. John J. Berlu, *The Treasury of Drugs Unlocked or a Full and True Description of Drugs, Chymical Preparations Sold by Druggists*, 3rd edition (London: S. Clark, 1733), 22.
10. Louis Lemery, *A Treatise of All Sorts of Foods, Both Animal and Vegetable: Also of Drinkables*, 3rd edition (London: W. Innys, 1745), 339.
11. Philip Miller, *Figures of the Most Beautiful, Useful, and Uncommon Plants Described in the Gardener's Dictionary, Exhibited on Three Hundred Copper Plates*, vol. 1 (London, 1760), 52.
12. John Barrow, *Dictionarium Medicum Universale; Or, A New Dictionary* (London: T. Longman, 1749), 121.
13. Henry Draper Steel, *Portable Instructions for Purchasing the Drugs and Spices of Asia and the East-indies* . . . (London, 1779), 14.
14. Philipp Andreas Nemnich, *A Universal European Dictionary of Merchandise* (London: J. Johnson, 1799), 14.
15. Mills, *Cannabis Britannica*, 21.
16. For a discussion of Huddart's work, see Ibid., 21–22; Joseph James, *A System of Exchange with Almost All Parts of the World. To Which Is Added the India Directory, for Purchasing the Drugs and Spices of the East-Indies* (New York: John Furman, 1800), 110.
17. John Henry Grose, *A Voyage to the East-Indies, with Observations on Various Parts There* (London: S. Hooper and A. Morley, 1757), 197.
18. John Henry Grose, *A Voyage to the East-Indies; Began in 1750; With Observations Continued till 1764* (London: J. Hooper, 1766), 89.
19. Thomas Arnold, *Observations on the Nature, Kinds, Causes, and Prevention of Insanity, Lunacy, or Madness*, vol. 2 (Leicester: G. Ireland, 1786), 254.
20. Inayat Allah, *Bahar-danush; or, Garden of Knowledge. An Oriental Romance*, trans. Jonathan Scott, vol. 1 (Shrewsbury: J. and W. Eddowes, 1799), 111.
21. Mills, *Cannabis Britannica*, 32.
22. John Fergusson, *A Dictionary of the Hindostan Language* (London: T. Cadell, 1773), 214.
23. Henry Harris, *A Dictionary of English and Hindostany*, vol. 2 (Madras, 1790), 26.
24. William Marsden, *The History of Sumatra, Containing an Account of the Government, Laws, Customs, and Manners of the Native Inhabitants, with a Description of the Natural*

Productions, and a Relation of the Ancient Political State of That Island (London: Thomas Payne and Son, 1783), 78.

25. William Nicholson, ed., *A Journal of Natural Philosophy, Chemistry, and the Arts*, Volume 11 (London: Crown Court, 1805), 32.

26. Ibid., 34–35.

27. Ibid., 34. For the most definitive account of the hemp crisis in Great Britain during the Napoleonic Wars, see Alfred Crosby, *America, Russia, Hemp, and Napoleon: American Trade with Russia and the Baltic, 1783–1812* (Cleveland: Ohio State University Press, 1965).

28. James Anderson, *Recreations in Agriculture, Natural-History, Arts, and Miscellaneous Literature*, vol. 3 (London: T. Bentley, 1800), 229.

29. Ibid., 229–30.

30. Ibid., 230.

31. Ibid., 231–32.

32. Ibid., 232.

33. Robert Wissett, *On the Cultivation and Preparation of Hemp, as Also, of the Article, Produced in Various Parts of India, Called Sunn* (London: Cox & Son, 1804), v, viii.

34. John Forbes Royal, "Hemp Cultivation in India," 1839, located in the Indian Office Records at the British Library Asian and African Reading room (hereafter cited as IOR), F/4/1754/71645, 1.

35. Quoted in Wissett, *Preparation of Hemp*, 42.

36. Anonymous, *Observations of the Late Dr. William Roxburgh Botanical Superintendent of the Honorable East India Company's Garden at Calcutta, on the Various Specimens of Fibrous Vegetables, the Produce of India, Which May Prove Valuable Substitutes for Hemp and Flax, on Some Future Day, in Europe* (London: J. Darling, 1815), 15. The only surviving copy of this text is located at the Botany Gray Herbarium at Harvard University, Opn.R80.

37. For the various charts and studies he conducted on the strength and durability of dozens of fiber plants in India, see ibid. For information on his reputation as a reputable scientist for the EIC, see P. V. Bole, "Review of Flora Indica or Descriptions of India Plants by William Roxburgh, William Carey," *The Quarterly Review of Biology* 3, no. 51 (1976): 442–43.

38. For works that deal with the same topic and cite Roxburgh's work extensively, see, among others, Wissett, *On the Cultivation and Preparation of Hemp*.

39. William Roxburgh, "A Botanical History of the (Paat and Dooncha) Hemp and Flax Plants of Bengal, with the Mode of Cultivation and Manufacture," 23 December 1794, IOR/H/375, 243–61; George Walter Prothero, ed., *The Quarterly Review: September and December, 1812* (London: C. Roworth, Bell-yard, 1813), 50.

40. Anonymous, *Observations of the Late Dr. William Roxburgh*, 13.

41. *Papers Regarding the Cultivation of Hemp in India* (Agra: Secundra Orphan Press, 1855); John Forbes Royle, *Illustrations of the Botany and Other Branches of the Natural History of the Himalayan Mountains and of the Flora of Cashmere*, vol. 1 (London: William H. Allen & Co., 1839).

42. The averages were calculated by the author with statistics given in John Forbes Royle, *The Fibrous Plants of India* (London: Smith Elder & Co., 1855), 339.

43. Ibid., vii.

44. Royle, *Illustrations of the Botany*, 334, 10.

45. H. Huddleston, "Report on Hemp Cultivation, &c. in British Gurhwal," 14 July 1840, in *Papers Regarding the Cultivation of Hemp in India* (Agra: Secundra Orphan Press, 1855), xviii.

46. Ibid., xix.

47. Ibid.

48. Ibid., xviii.

49. "From J. H. Bridgma, Esq., to C. Chester, Esq., Collector of Goruckpore," 10 August 1854, in *Papers Regarding the Cultivation*, 16.

50. Roy Porter, *The Greatest Benefit to Mankind: A Medical History of Humanity* (New York: W. W. Norton & Co., 1997), 348.

51. John Fleming, *A Catalogue of Indian Medicinal Plant and Drugs, with Their Names in the Hindustani and Sanscrit Languages* (Calcutta: Hindustani Press, 1810), 12.

52. Whitelaw Anslie, *Materia Medica of Hindoostan and Artisan's and Agriculturist's Nomenclature* (Madras: Government Press, 1813), 80.

53. Whitelaw Ainslie, *Materia Indica: Some Accounts of Those Articles Which Are Employed by the Hindoos, and Other Eastern Nations, in Their Medicine, Arts, and Agriculture*, vol. 2 (London: Longman, Reese, and Green, 1826), 109–110.

54. Ibid., 109.

55. The entire copy of O'Shaughnessy's application for the position of Assistant Surgeon can be viewed at the British Library, IOR/MIL/9/383, 124–130.

56. For an early example of O'Shaughnessy's faith in Europeans' ability to take Indian medicine and transform it for the betterment of the Indians and Europeans, see W. B. O'Shaughnessy, "Memoranda on Indian Materia Medica," *Bengal Medical Service* (October 1838): 1–11.

57. "From Dr. M. J. Bramley, Superintendent of the Medical College, to the General Committee of Public Instruction," 9 July 1835, IOR/F/4/1892/80187, 31–32.

58. Ibid., 35.

59. Mills, *Cannabis Britannica*, 45–46.

60. Katherine Prior, "Brooke, Sir William O'Shaughnessy (1808–1889)," *Oxford Dictionary of National Biography* (Oxford: Oxford University Press, 2004), accessed July 22, 2013, http://www.oxforddnb.com/view/article/20895.

61. Ibid. For the published article he produced on this project, see *Journal of the Asiatic Society of Bengal*, vol. 8, 714.

62. "J. M. Bramley, Superintendent to the Medical College, to the General Committee of Public Instruction," 9 July 1835, IOR/F/4/1892/80187, 34.

63. "I.C.C. Sutherland, Esq. to G.A. Bushley, Esq.," 28 July 1835, IOR/F/4/1892/80187, 30.

64. William Brooke O'Shaughnessy, *On the Preparations of the Indian Hemp, or Gunjah (Cannabis Indica), Their Effects on the Animal System in Health, and Their Utility in the Treatment of Tetanus and Other Convulsive Disorders* (Calcutta: Bishop's College Press, 1839), 1, in IOR, Tracts 25 (f).

65. Ibid., 2.

66. Information on the most suitable environments to grow hemp for intoxicating purposes has grown significantly since the hydroponic revolution of the 1980s. There are many handbooks available that instruct readers on how best to cultivate the plant in both natural and artificial environments. For the most comprehensive publication, see Jorge Cervantes, *Marijuana Horticulture: The Indoor/Outdoor Medical Grower's Bible* (Singapore: Van Patten Publishing, 2006).

67. O'Shaughnessy, *On the Preparations of the Indian Hemp*, 6.

68. Ibid., 11.

69. Ibid., 7.

70. Ibid.

71. Ibid., 15–16.

72. For the most definitive study on tobacco, see Jordan Goodman, *Tobacco in History: The Cultures of Dependence* (New York: Routledge Press, 1993). Goodman suggests that tobacco was able to transfer into various European cultures due to its medicinal use in native societies. Despite Europeans' tendency to view New World civilizations as inferior and primitive, the humoral theory of medicine that was prevalent during the Age of Exploration provided the context for this transfer to take place successfully.

73. O'Shaughnessy, *On the Preparations of the Indian Hemp*, 11, 10. Interestingly, the name Hakim Mirza Abdul Razes cannot be found documented anywhere other than by O'Shaughnessy himself. The name can hardly be transliterated correctly, for Razes is not a Persian name. O'Shaughnessy could have meant to refer to Razi, which translates as "from Rey," a old town adjacent to the present city of Tehran. However, the combination Abdul Razes does not make any sense. The translation of the book *Makhzan al-Adwieh* is "Storehouse of Medicines," but no other information on the book is provided. It is possible that O'Shaughnessy made these names up to increase his credibility on the history of medical cannabis in the east, or that he simply mis-transliterated the name so badly that it is impossible to trace the actual individual he claims to have met. Nevertheless, the fact that he felt the need to credit eastern "medicine men" for instructing him on the historical uses of the plant is still

revealing, for it reflects the imperial perception that, despite Oriental degeneration, elements of the grand civilization of ancient times still lingered, however faintly.

74. See Sunil Aggarwal, "Dr. O'Shaughnessy in India," *O'Shaughnessy Online* 47 (Fall 2014): 2. Available online at: http://www.beyondthc.com/wp-content/uploads/2014/09/OS-in-India-9–20.pdf. Last accessed December 3, 2014.

75. O'Shaughnessy, *On the Preparations of the Indian Hemp*, 19.

76. Ibid., 20.

77. Ibid., 36–37.

78. William Brooke O'Shaughnessy, *Manual of Chemistry, Arranged for Native, General, and Medical Students, and the Subordinate Medical Department of the Service*, 2nd Edition (Calcutta: Ostell and Lepage, 1842), i, xxi–xxii, the British Library, IOR/8907.aaa.33.

79. William Brooke O'Shaughnessy, *The Bengal Dispensatory and Companion to the Pharmacopoeia* (London: Allen, 1842).

80. Jacob Bell, ed., *Pharmaceutical Journal and Transactions*, vol. 2 (London: John Churchill, 1843), 594.

81. John Clendinning, "Observations on the Medical Properties of the Cannabis Sativa of India," *Medico-Chirurgical Transactions*, Vol. 26 (London: Longman, Brown, and Green, 1843), 190.

82. Ibid., 209–210.

83. M. Ley, "Observations on the Cannabis Indica, or Indian Hemp," in Hennis Green, ed., *Provincial Medical Journal, and Retrospect of the Medical Sciences*, vol. 5 (London: Henry Renshaw, 1843), 487.

84. Ibid., 437.

85. John Forbes Royle, ed., *The British and Foreign Medical Review*, Vol. 14 (London: John Churchill, 1844), 14.

86. Ibid., vol. 10, 225.

87. W. Ranking, "Address Delivered at the Annual Meeting of the Suffolk Branch of the Provincial Medical and Surgical Association," *Provincial Medical and Surgical Journal* 8, no. 14 (July 1844): 204.

88. Thomas Wakley, ed., *The Lancet*, vol. 1 (London: J. Churchill, 1844), 100.

89. William P. C. Barton, *Prodrome of a Work to Aid the Teaching of the Vegetable Materia Medica, by the Natural Families of Plants, in the Therapeutic Institute of Philadelphia* (Philadelphia: Printed for Pupils of the Institute, 1833), 84.

90. Jacob Jeanes, *Homeopathic Practice of Medicine* (Philadelphia: A. Waldie, 1838), 186, 192, 238, 258, 264–65, 280, 286, 298, 342.

91. For a discussion of Hahnemann's work, see O'Shaughnessy, *On the Preparations of the Indian Hemp*, 17.

92. For a discussion of Hahnemann and his influence, see Alicia Puglionesi, "Proving It: The American Provers' Union Documents Certain Ill Effects," *The Public Domain Review: A Project of the Open Knowledge Foundation*, accessed September 29, 2014, http://publicdomainreview.org/2013/09/04/proving-it-the-american-provers-union-documents-certain-ill-effects/.

93. J. V. C. Smith, ed., "New Remedy for Tetanus and Other Convulsive Disorders by W. B. O'Shaughnessy," *The Boston Medical and Surgical Journal* 23, no. 10 (October 1840): 153–55; G. C. M. Roberts et al., eds., "New Remedy for Tetanus and Other Convulsive Disorders. By W. B. O'Shaughnessy," *Maryland Medical and Surgical Journal and Official Organ of the Medical Department of the Army and Navy of the United States* (October 1840): 517–19; J. B. Biddle and W. W. Gerhard (eds.), "New Remedy for Tetanus and Other Convulsive Disorders. By W. B. O'Shaughnessy," *Medical Examiner* 3, no. 33 (August 1840): 530–31. I am in debt to Adam Rathge, Ph.D. Candidate at Boston College, for bringing these articles to my attention.

94. Isaac Hayes, ed., *The American Journal of the Medical Sciences* (Philadelphia: Lea & Blanchard, 1843), 188.

95. Samuel Forry, ed., *The New York Journal of Medicine, and the Collateral Sciences*, vol. 1 (New York: J. & H. G. Langley, 1843), 390.

96. Ibid., 397.

97. Augustine Duhamel, "Some Account of Gunjah, or Indian Hemp and Its Preparations," in *American Journal of Pharmacy*, vol. 9, ed. Joseph Carson and Robert Bridges (Philadelphia: Merrihew & Thompson, 1844), 259; L. M. Lawson, ed., *The Western Lancet: Devoted to Medical and Surgical Science*, vol. 3 (Cincinnati: Sparhawk Printing, 1844), 32–33.

98. Paul F. Eve and I. P. Garvin, eds., *Southern Medical and Surgical Journal*, vol. 1 (Augusta: James McCafferty, 1845), 194, 196, 216, 627–29, 655–59; J. Harrison, W. M. Carpenter, and A. Hester, eds., *The New Orleans Medical and Surgical Journal, Devoted to Medicine and the Collateral Sciences*, vol. 4 (New Orleans: S. Woodall, 1848), 81.

99. Isaac Hayes, ed., *The American Journal of Medical Sciences*, vol. 23 (Philadelphia: Lea & Blanchard, 1852), 260. J. V. C. Smith, ed., *Boston Medical and Surgical Journal*, vol. 44 (Boston: David Clapp Publishing, 1851), 288.

100. G. B. Wood and F. Bache, *The Dispensatory of the United States* (Philadelphia: Lippincott, Brambo & Co., 1854), 339.

101. For another example of a publication in the United States that references O'Shaughnessy, cannabis, and its usefulness as a medicine, see Jonathan Pereira, *The Elements of Materia Medica and Therapeutics* (Philadelphia: Lea & Blanchard, 1843), 205. This work was initially published in London, and Joseph Carson edited and expanded it before publishing it in Philadelphia.

102. There is an interesting problem in the historiography on cannabis as medicine that is worth addressing here. In all the books that mention the American Provers' Union over the last forty years, the authors mention that the organization published an article on *Cannabis indica* in 1839. It seems that the first secondary work to record this mistake was Ernest Abel, *Marihuana: The First Twelve Thousand Years* (New York: Plenum Press, 1971), 182, in which he cites T. F. Allen, ed., *The Encyclopedia of Pure Materia Medica* (New York: Boericke and Tafel, 1875), 448. The encyclopedia did indeed list 1839 as the date, but it was a mistake. Apparently, Abel did not consult the actual source, which lists 1859 as the publication date; but it seems that nobody else who cited the source after him over the years consulted it either, for they all repeat what Abel said, which has led to the erroneous assumption that Americans were experimenting with Indian hemp as a medicine before O'Shaughnessy. Consequently, our ability to understand the transatlantic transfer of cannabis as a medicine has been disrupted. For examples of contemporary works that make the same mistake, see Martin Booth, *Cannabis: A History* (New York: St. Martin's Press, 2003), 139; Martin A. Lee, *Smoke Signals: A Social History of Marijuana—Medical, Recreational, and Scientific* (New York: Simon and Schuster, 2012), 25.

103. American Provers' Union, *Suggestions for the Proving of Drugs on the Healthy* (Philadelphia: King & Baird Printers, 1853), 5.

104. Ibid., 12–15.

105. O'Shaughnessy, *On the Preparations of Indian Hemp*, 36.

106. Samuel Forry, ed., *The New York Journal of Medicine, and the Collateral Sciences*, vol. 1 (New York: J. & H. G. Langley, 1843), 390.

107. American Provers' Union, *Provings of Cannabis Indica* (Philadelphia: King & Baird Printers, 1859), 11.

108. Bell, *Pharmaceutical Journal*, 190.

109. Hayes, *The American Journal*, 189.

110. Horatio C. Wood, "On the Medical Activity of the Hemp Plant, as Grown in North America," *Proceedings of the American Philosophical Society* 11, no. 81 (January 1869): 229.

111. See, among others, Edward Parrish, *A Treatise on Pharmacy*, 4th Edition (Philadelphia: Henry C. Lea, 1884), 661. As stated earlier in this book, there is in fact a difference in the genetic structure of *Cannabis sativa* and *Cannabis indica*, but there are no reproductive barriers between the two. Given the nature of transatlantic exchanges and the frequency of cross-cultural encounters, it seems logical to assume that, by the time Wood conducted his experiments, significant cross-pollination between the different species resulted in the creation of new strains.

112. Isaac Campos, *Home Grown: Marijuana and the Origins of Mexico's War on Drugs* (Chapel Hill: University of North Carolina Press, 2012), 28–30.

Chapter Five

"At Once a Curse and a Blessing"

The Transatlantic Transformations of "Oriental" Cannabis

Thus far, we have seen how various people throughout the Atlantic world thought of cannabis in three different yet interconnected ways by the 19th century. It was extremely useful as a fiber but hard to process and manufacture. Eastern varieties that looked like western ones had been transformed into transatlantic medicines, but they did not always work, which caused many to question their efficacy. The resin's association as a noxious Asiatic substance did not help the plant's reputation, either. In fact, most pharmacological descriptions of cannabis medicines came with some sort of distorted discourse on the deleterious effects of its use as a recreational drug in the east. Moreover, the transfer of these medicines into the Atlantic world from British India converged with the rising literary genre of autobiographical drug narratives to exacerbate the connection between cannabis and the so-called Orient, which was a term used by English speakers in the Atlantic world to describe cultural groups in Asia and the Middle East as a monolithic Other. As such, Oriental associations with the plant started to overshadow the unreliable medical ones, adding meaning to cannabis as a representation of eastern degeneracy. It took a while for this process to play out, but the discursive formation of cannabis as oriental intoxicant highlights the cultural conditions under which perceptions of the plant as a problem were constructed in the British Empire and the United States. Gradually, this discourse invested it with a more pernicious meaning as a drug, at the expense of its medicinal and industrial ones. The process intensified over the second half of the 19th century, establishing the foundation upon which the entire plant would later transform into a banned intoxicant across the Atlantic.

DRUGS AND DISCOURSE

Drugs are complex pharmacological substances that operate in different ways; some stimulate the body and/or mind, while others act as depressants or sedatives. Some drugs alter human consciousness or distort the perception of reality. Alcohol is a drug, along with nicotine and caffeine, yet they are rarely categorized as such today, as indicated in part by the popular phrase "Alcohol *and* Drugs."[1] "With the solitary exception of the Eskimos," notes journalist Michael Pollan, who points out that their climate is too extreme for the growth of such substances, "there isn't a people on Earth who doesn't use psychoactive plants to effect a change in consciousness."[2] As historian David Courtwright has observed, many of the drugs that are considered harmful and dangerous in societies today "began their careers as expensive and rarefied medicines, touted for a variety of human and animal ailments."[3] These two different perceptions of drugs—the one holding negative connotations of abuse and addiction, the other signifying medicinal value—are perhaps as old as drugs themselves. The duality was certainly present in the meaning of the ancient Greek word *pharmakon*, which refers to both a remedy and a poison. As Jacques Derrida explained:

> This *pharmakon*, this "medicine," this philtre, which acts as both remedy and poison, already introduces itself into the body of the discourse with all its ambivalence. This charm, this spellbinding virtue, this power of fascination, can be—alternately or simultaneously—beneficial or maleficent. The *pharmakon* would be a substance—with all that that word can connote in terms of matter with occult virtues, cryptic depths refusing to submit their ambivalence to analysis, already paving the way for alchemy.[4]

The discourse on drugs in the Atlantic world during the 19th century also reflects this dichotomy. On the one hand, doctors prescribe them to patients who need remedies for illnesses or relief from pain. However, countries also spend billions of dollars each year trying to curb the illicit use of drugs on the so-called black market (hence the dubious phrase "War on Drugs").

There is a fuzzy distinction between licit and illicit drugs, as there is for the separation between medical and recreational ones. In fact, these cultural categories of acceptable, unacceptable, medical, and recreational have tended to overlap and intertwine in Great Britain and the United States. Alcohol, tobacco, and caffeine, for example, are all acceptable drugs for recreational consumption in these countries today, but cannabis and opium are not. However, in certain forms, opium is considered an acceptable drug for medicinal use, whereas tobacco and alcohol are not (anymore). Not only that, but some of the acceptable recreational drugs that are legal in these societies are more detrimental to the health of consumers than some of the ones that are illegal. For instance, each year thousands of people die from alcohol and tobacco

use, whereas no scientific data has ever established a direct chemical link between death and cannabis, which as a plant today still has no nationally accepted medical uses in either country, despite a growing number of studies reflecting its value for such purposes.[5] For some reason, as anthropologists Ross Coomber and Nigel South mention, "there are forms of recreational drug use that are increasingly perceived as 'normal' while some of the harms historically attributed to illicit 'drug use' per se (but particularly to recreational use) can be questioned."[6]

How can this be? Why are the perceptions of drugs in these societies so seemingly contradictory? Granted, cultures in regions all over the world have developed complicated relationships with drugs, but for the British and U.S. Americans in the 19th and 20th centuries, these substances were, as William Jankowiak and Daniel Bradburd put it, often "embedded in systems of meaning and of power that affect[ed] the ways they [were] distributed and used."[7] For example, one of the reasons that alcohol consumption in early English societies became acceptable is because of the role it played as a wholesome medicine with deep cultural roots in European societies.[8] Beers, ales, and wines were also important sources of calories, but they spoiled quicker than brandy, whiskey, rum, and gin, which could explain why production of the latter increased over time. The longer shelf life of distilled spirits facilitated storage and trade on a larger scale, but the alcohol content was more potent, so people started to feel the effects of drunkenness much quicker and more frequently as the production of hard liquors increased. Especially after the sugar revolution of the mid-17th century, which increased the availability of rum from the Caribbean and made it cheaper to consume, perceptions of intoxication as a problem became embedded in power relations between slaves and masters, and consumers and producers.[9] Members of Parliament passed legislation in the 1750s based on the argument that consumption of "deleterious" spirits like gin was depleting the health and morality of the working class.[10] William Hogarth's 1751 lithograph *Gin Lane* depicts this perception quite well, demonstrating how notions of intoxication were increasingly associated with the debauchery and degenerative behavior of the poor.

Unlike alcohol, tobacco came to England through the Columbian Exchange, which means Europeans encountered it in the Americas during the Age of Exploration and brought it back to Europe, where its use and meaning transformed several times as well. Even though James I and others vehemently opposed its use as early as 1603, the plant had already become popular in England, which helped secure its place as one of the first cash crops to be cultivated in the colonies for transatlantic consumption. Since Europeans came in contact with tobacco through encounters in the New World, the plant had to go through a process of trans-acculturation or intercultural transfer before the English could accept its use.[11] Commodity Indigenization is the

end result of these transfers, which refers to the methodological development that occurs when a commodity from one culture transfers to another.[12] Historian Peter Mancall articulated a key element of this process when he noted that, “contrary to the hopes of colonial promoters, commodities did not just exist in America. Natural products—whether sugar or cod—needed to be understood and explained to potential consumers in order to create demand.”[13] Native American uses for tobacco as a medicine helped Europeans understand its potential through the lens of their humoral theory of medicine, so it easily crossed cultural thresholds into European societies. The foreignness associated with smoking during the 16th century caused many to raise alarm over its use, but as Mancall put it, “the thriving tobacco market rested on its promoters’ ability to translate the benefits of the plant and simultaneously downplay its potential dangers—notably its associations with heathen rituals.”[14]

Today, the circumstances have certainly reversed for tobacco, given that a growing number of cultures in societies across the globe have been weighing the potential dangers of its consumption far more heavily than its benefits for quite some time now, which significantly transformed its use and meaning over the course of the 20th century.[15] Interestingly, the historical transfer, reception, and transformation(s) of eastern cannabis as a commodity for the British and the United States have developed in an inverse manner from that of tobacco. Initially, for example, imperial encounters with it suggested the plant was a pernicious substance, and even though promoters like O’Shaughnessy manipulated its resin into transatlantic medicines that enjoyed some popularity for a while, they ultimately failed to downplay the perceived dangers of cannabis consumption enough for its benefits to take hold in Anglo-Atlantic cultures. The growing connection between Orientalism and drug consumption proved too strong to overcome, so it fell out of favor, which eventually transformed the entire plant into a banned intoxicant—including non-psychoactive varieties. As with the tobacco example, though, circumstances for cannabis also seem to be reversing (again), only in the opposite direction. In other words, although the process is still playing out in Great Britain and the United States today, the plant’s meaning seems to be regaining positive connotations as more people consider the overall cost of illegalization to be far more detrimental to society than any perceived benefits.[16]

On the contrary, opium has had a much different (and longer) historical relationship with these societies, where it became an important medicine for European consumption centuries earlier. Indeed, opium consumption for medicinal purposes in England was already widespread by the 17th century, when English physicians touted its virtues as a pain reliever.[17] It is unclear exactly where the plant originated from—theories range from southwestern Europe to western China—but it is clear that its association with medicine is

deeply rooted in various cultures.[18] Especially after German pharmacologist Friedrich Sertürner isolated its principal alkaloid (morphine) in 1805, more potent preparations were developed that helped transform opium into the quintessential medicine of the 19th century. Laudanum—an extract made with raw opium, water, alcohol, and mercury—was cheap, unrestricted, and widely available. The plant also didn't have a myriad of industrial uses competing with the meaning of its medicinal ones, but its abuse and overdose potential exceeded that of cannabis. Still, even though medical practitioners had long recognized the possible dangers associated with opium consumption, the discourse on it as a social problem did not develop until the 19th century in Great Britain and the United States.[19]

Thomas De Quincey's literary drug autobiography, *Confessions of an English Opium Eater*, was one of the earliest signs that a shift in its meaning was taking place. Initially published as a series of articles in the *London Magazine* the year before, the first book version that came out in 1822 caught the attention of critics on both sides of the Atlantic. Reprints and reviews circulated widely, appearing in *The Saturday Magazine* in New York, Trenton, and Philadelphia the same year it was published in London.[20] Along with a series of Orientalized confessions pertaining to his own opium experiences, De Quincey proclaimed that an "immense" portion of the British population belonged to a diverse range of people from various classes in Britain who had taken up the "habit of opium-eating."[21] He also made a point of justifying how he acquired the habit, which he claimed was from using the drug to treat several painful injuries. Still, critics chastised his vivid depictions of opium-induced experiences for being too alluring, and their comments reflect a growing stigma toward excessive drug consumption in the British and U.S. American Atlantic worlds at the time. An appraisal published in *The Eclectic Review*, for example, lamented how De Quincey's "debauchery" with opium was an "object of pity and scorn," claiming that "the seductive picture he presents, is but too likely to tempt some of his readers to begin the practice."[22] Another assessment from *The British Review* argued of De Quincey that a "brain morbidly affected by long access of indulgence in opium cannot reasonably be expected to display a very consistent or connected series of thoughts and impressions. The work before us is accordingly a performance without any intelligible drift or design."[23]

These concerns over the effects of "indulgence" with opium were connected to the growing discourse on Orientalism and excessive drug consumption, which one reviewer of De Quincey's book claimed was "common among the Turks and Asiatics of all classes" who often went "*running a-muck*" after prolonged use.[24] Testimonials of Asians having "run a-muck" after consuming drugs were already well documented in western expressions of eastern intoxication by then. It referred to a phenomenon in which individuals lost control of their mental state after consuming a drug—usually a

preparation of opium or cannabis—then spontaneously lashed out with some horrific act of violence.[25] Campos called it "the most famous of the so-called culture-bound syndromes," and the descriptions crafted by Henry Grose and Henry Draper Steel discussed in the previous chapter are prime examples.[26] Indeed, their reference to a "species of opiate" that "produces a temporary madness" where the user "sporadically starts killing everyone they meet, without distinction" belonged to a historical tradition in western thought of constructing Asiatic otherness through perceptions of drug use.[27] However, it was De Quincey's "opium-tinted orientalism," as one scholar described his *Confessions*, that "inaugurated" the transatlantic literary genre of drug autobiography, which employed "imperial tropes" to connect certain forms of drug consumption with "nightmares of racial invasion."[28]

Before De Quincey's book was published, though, opium had already developed a reputation for heightening creativity and inspiring visions, as depicted by the cultural concept of the "drugged genius" at the time.[29] The rumor that Samuel Taylor Coleridge's poem *Kubla Khan* (1816) was a by-product of an opium vision is one of the earliest examples, but De Quincey's *Confessions* added an element of fear to the drug's reputation by narrating how, as Zeigar put it, "the English self had been invaded and compromised" through consumption of an Oriental intoxicant.[30] In other words, consuming opium served as a metaphor for consuming the Orient, which brought pleasure and inspiration but also threatened to contaminate one's sense of self through a horrible enslavement that often mentally transported De Quincey to Oriental landscapes via terrible nightmares. Such imagery exacerbated concerns over the drug in the public sphere and further complicated perceptions of its recreational use. Moreover, the Opium Wars of the mid-19th century increased scrutiny of the drug, especially as transatlantic images of the debauchery of Chinese opium dens intensified with the influx of immigrant workers from China into the United States from across the Pacific.[31] Even as the concept of recreational opium consumption shifted from an expression of intellectual creativity to the idea of enslavement and addiction, though, the notion that drug use stimulated literary inspiration never ceased.

These two opposing perceptions—the one denouncing recreational drug use as a moral vice and the other embracing it as a source of inspiration—hark back to the comment made by Derrida mentioned earlier, and they reflect the binary functions at work in the western Orientalist thought process. There has been significant debate on the subject of Orientalism since Edward Said's book on the subject came out in 1978, in which he argued that western mindsets about the Orient "share with magic and with mythology the self-containing, self-reinforcing character of a closed system, in which the objects are what they are because they are what they are, for once, for all time, for ontological reasons that no empirical material can either dislodge or alter."[32] In other words, Orientalism acted like a timeless cultural lens

through which westerners constructed images and perceptions of people and cultures in the east, and it reinforced distinctions between "self" and "other" that provided justification for the former to exert power over the latter. However, subsequent scholarship has documented how the concept also represents an influential space of allure and fascination in western systems of thought. Countless travelers, for example, entered this space and wrote travelogues of their experiences that enthralled public audiences.[33] European artists and cartographers found inspiration in personified representations of Oriental landscapes, and *nabobs* consumed material culture in India that they brought back with them to reshape culture in London.[34] And in the United States, porcelain, silk, tea, and stories from the *Arabian Nights* all became important commodities for different classes of people whose notions of the American dream were profoundly influenced by their Oriental imaginings.[35]

The discourse on drug consumption in the Atlantic world throughout the 19th century, then, essentially underscores the dichotomous duality of Orientalism in western cultures, and cannabis as a commodity was caught up in the middle of its mounting complexity. This is how, for example, despite negative associations with its eastern uses, drug preparations of the plant became somewhat fashionable within subcultural groups of artists, poets, travelers, and doctors who were attracted to exotic representations of Oriental landscapes during the second half of the 19th century. Their "indulgence" with cannabis blended scientific inquiry with artistic expression to produce an Orientalized transatlantic knowledge culture about its use as a drug that circulated in France, Great Britain, and the United States. Vivid depictions of its peculiar Orientalist effects both inspired creativity and induced frightful hallucinations, which brought countercultural appeal to the plant but also reinforced notions of difference between east and west that transformed cannabis into a banned intoxicant at the expense of its other uses.

PLAYING EASTERN WITH CANNABIS

By the mid-19th century, De Quincey's drug autobiography had inspired a new literary genre, with cannabis joining opium as the drug of choice for those who contributed to the field.[36] Indeed, descriptions of the effects that cannabis consumption had on western literary figures "playing eastern" became a source of interest on both sides of the Atlantic. The Romanticism of post-Napoleonic France during the 1840s provided a cultural platform for the growth of such an interest, where a small group of artists, poets, and doctors started gathering to ceremoniously experiment with hashish. French rumors about this famous "drug of the east" continued growing after Silvestre de Sacy's article on the etymology of the word *hashishin* came out in 1809, but a wave of Romanticists started to defy conventional social norms by disre-

garding the warnings of its deleterious effects and embracing an introspective lens of subjectivity toward cannabis consumption.[37] One of the most popular examples came from the poet Theophile Gautier, who published an article titled "Vaudeville" in 1843. In it, he described "Orientals" as those for "whom the use of wine is forbidden by their religion," so they consumed an "extract of flowers of hemp [that] was fed by the Old Man of the Mountain to the executioners of the victims designated by him, and from it is derived the word Assasin, i.e., hashashin [*sic*] or eater of hashish." Gautier then proceeded to describe the dual effect of the drug, which he claimed both "raises you to heaven" and induced "a fit of madness."[38]

Three years later, he published another piece titled "Le Club des Hachichins," and in it he described his first encounter with a group of artists who met at an old house on the Ile Saint-Louis in Paris, where they experimented with hashish and played Oriental by dressing up and acting out eastern fantasies. In a ceremony designed to mimic the actions of the Old Man of the Mountain from the assassin's legend, Gautier mentioned a doctor dressed in Oriental garb, who administered a greenish paste to the people in the room at the start of every meeting. "This will be taken out of your portion of paradise," said the doctor as he gave everyone a portion of the concoction on saucers of Japanese porcelain.[39] Gautier did not mention this person by name but claimed that the mysterious figured made several lengthy trips to the "Orient," where he encountered the drug and studied its negative and positive effects. Available evidence identifies two doctors who attended these meetings, and one of them was a man named Louis Aubert-Roche who traveled to Egypt in the 1830s and experimented with hashish as a cure for the plague while he was there.[40] The other, Jacques Joseph Moreau, also traveled extensively throughout Asia, and he published an entire book on hashish in 1845, in which he confessed to having provided Gautier with a portion of the drug made from cannabis.

Specific references to the Hashish Club from Britain and the United States at the time do not seem to have been frequent, but they did exist. As early as 1846, for example, *The Quarterly Review* in London ran an advertisement that listed a location where interested parties could go to buy Gautier's "Le Club des Hachichins."[41] Four years later, a book titled *The Pillars of Hercules* included ten pages that described hashish, its use in the east, and the effects one could expect to experience while under its influence. Although the author did not mention the Hashish Club specifically, his vivid and lurid tale of the drug included the following passage: "The French have become intoxicated with hashish. A number of works and essays have been published on the subject in Paris."[42] He only picked one to describe, which he did not name; but it seems to have come from Gautier because it mentions how someone's "body was dissolved, that he had become transparent. He clearly saw in his chest the hashish which he had swallowed, under the form

of an emerald, from which a thousand little sparks issued."[43] The passage is written from the narrator's perspective of witnessing another person's hashish "high," but Gautier described his own experience with the drug in a remarkably similar fashion: "My body seemed to be dissolving and become [*sic*] transparent. I could see perfectly clearly within my breast the hashish I have consumed, in the form of an emerald which was emitting millions of little sparks."[44]

It is unclear where Urquhart received the witness account of Gautier's experience, but the story does indicate that the French poet's work had become a component to the transatlantic dialogue on cannabis consumption by mid-century, for the book immediately made its way across the Atlantic and was published months later in New York by Harper & Brothers.[45] Much of what Urquhart had to say about the plant also reflects the dichotomy of Orientalist thought, as does an article from the *Medical Times* from the same year, titled "Indian Hemp in a French Café." Echoing his sentiments, the anonymous author claimed that the effects of cannabis consumption varied from "strange hallucinations," "tranquil sleep," "hysterical laughter," and inducing a propensity toward violence. The article went on to describe an incident with the drug in which "it was *Mardi-gras*, and copious libations of flaming punch had prepared the natives for anything and everything. Monte Cristo, besides, had made the wonders of Hashish familiar to them, and all were anxious to test the properties of the unknown drug." After about an hour's time, the author claimed that "the curious were lapsing into incredulity," with one of the girls "conclud[ing] that she was mad." The effects were purportedly highly varied, though, with the majority of the "adventurous tasters" feeling "repaid for their curiosity."[46]

The discourse on cannabis in sources like these reflects how the lines between medicine and literature were blurred when it came to the plant's eastern qualities, especially with Moreau, whose book on hashish and involvement with the Hashish Club reflect how sources pertaining to medical knowledge of cannabis were connected to literary perceptions of it as an Oriental intoxicant. Bayard Taylor's article in *Putnam Magazine* from 1854 is another example; the magazine frequently published a variety of pieces pertaining to science, literature, and the arts. Titled "The Vision of Hasheesh," the piece depicts how Taylor's Oriental imaginings led him to experiment with the drug while traveling through Damascus. In what seems to have become a ritual by then for those writing on the subject, Taylor first observed that the "preparation of the dried leaves of the *cannabis indica*" that he took "was frequently used by the Saracen warriors to stimulate them to the work of slaughter, and from the Arabic term of '*Hashasheen*,' or Eaters of Hasheesh, the word 'assassin' has been naturally derived."[47] Indeed, his vivid description of the drug's effects were quite lurid:

> The spirit (demon, shall I not rather say?) of Hasheesh had entire possession of me. I was cast upon the flood of illusions, and . . . I suddenly found myself at the foot of the Great Pyramid of Cheops. . . . [Then] I was moving over the Desert, not upon the rocky dromedary, but seated in a barque made of mother-of-pearl, and studded with jewels surpassing lustre. . . . [My emotions] took a warmth and glow from that pure animal joy which degrades not, but spiritualizes and ennobles our material part, and which differs from cold, abstract intellectual enjoyment, as the flaming diamond of the Orient differs from the icicle of the North.[48]

These oriental landscapes had "sand made of grains of gold" and air that "was radiant with excess of light" and "the most delicious perfumes." Basically, he claimed to have unlocked the mystery of the Orient, which, along with "the glow and luxury of all Oriental poetry, I now recognized more or less of the agency of hasheesh."[49]

Of course, the drug also had a darker side, for the ecstasy soon gave way to flashes of terror, confusion, dread, and fear, which he described as "this devil that has possession over me."[50] Taylor labeled these opposing experiences as both the "paradise" and "hell" of hashish, and he expressed fear for the "demons" that the drug seemed to bring out of his soul. Despite the obvious literary character of the work, though, his exotic hashish story became a rather popular source of scientific information pertaining to the use of eastern cannabis as a medicine. Not even a year after his story appeared in *Putnam Magazine*, for example, *The Anthenaeum* in London published a favorable review of Taylor's visions, along with references to his work from Johnston's *The Chemistry of Common Life*.[51] In 1856, the *North American Journal of Homeopathy* reprinted his entire essay in their volume, which was published in seven different cities, including one across the Atlantic.[52] The volume also included two other articles that referenced cannabis and "haschish," and the publication by the American Provers' Union titled *Provings of Cannabis Indica* cited Taylor as an authority for understanding the medical properties of the drug.[53] Around the same time, *The Eclectic Magazine* cited Taylor, Moreau, Jonathan Pereia's *Materia Medica*, and Johnston's *The Chemistry of Common Life* as evidence that "hemp (that is, hashish)" was an eastern, Oriental, and Asiatic "narcotic" of the most dangerous type.[54] These publications reflect the duality of Orientalism at work behind western cultural constructions of cannabis in the Atlantic world at the time and demonstrate the influence of literary sources on medical knowledge of the plant's pharmacological properties.

The line between cannabis as medicine and cannabis as eastern intoxicant became nearly indistinguishable after the publication of Fitz Hugh Ludlow's book *The Hasheesh Eater* (1857). In it, he provided an important description of encountering a substance labeled "Tilden's Extract of Cannabis indica" at the local apothecary shop in his hometown of Poughkeepsie, New York. He

was only a teenager at the time but described himself as a "pharmaceutical Alexander" because of all the exotic medicines he had sampled from the store, so he was excited about trying this new one when the shopkeeper apparently stopped him and exclaimed, "That stuff is deadly poison!" Intrigued by the warning, he read through Johnston's *Chemistry of Common Life* and Pereia's *Materia Medica* in search of more information about the drug and learned that the new extract came from the same plant as "the hasheesh referred to by Eastern travelers, and [was] the subject of a most graphic chapter from the pen of Bayard Taylor, which months before had moved me powerfully to curiosity and admiration."[55] Then, Ludlow proceeded to refer to the extract as "hasheesh" instead of *Cannabis indica* or Indian hemp extract, thereby blurring the medico-intoxicating line even further. He also cited O'Shaughnessy and other medical works on the plant's medicinal properties, claiming that a "series of experiments [were] made with it by men of eminent attainment in the medical profession, principally at Calcutta."[56] However, neither the Irish doctor nor any of the other medical sources he referenced referred to the substance they were experimenting with as hashish.

Given the content and style of the book, it seems that Ludlow decided to call the medicine hashish as a way of "playing eastern," which had become a rather fashionable form of literary expression at the time.[57] From the start, for example, he pointed out how "the singular energy and scope of imagination which characterize all Oriental tales, and especially that great typical representative of the species, the Arabian Nights, were my ceaseless marvel from earliest childhood." These marvels led him to conclude that "we try to imitate Eastern narrative, but in vain. Our minds can find no clew [*sic*] to its strange, untrodden by-ways of speculation."[58] Echoing the sentiments of Taylor, Ludlow then proceeded to reduce eastern art and literature to the experience of cannabis consumption by claiming that "the secret" of this difference in the "Oriental" mind "lies in the use of hasheesh," which possessed the ability to transport him to "the topmost pinnacle of Bel's Babylonish temple—higher than Ararat."[59] On another occasion, he described the landscape of his hashish hallucinations with even more revealing language:

> Oriental gardens waited to receive me. From fountain to fountain I danced in graceful mazes bound with fillets of jasmine. I pelted with figs the rare exotic birds, whose gold and crimson wings went flashing from branch to branch, or wheedled them to me with Arabic phrases of endearment. Through avenues of palm I walked arm-in-arm with Hafiz, and heard the hours flow singing through the channels of his matchless poetry.[60]

This theme of traveling to what he also described as "grand old Asia" through cannabis consumption, and then essentially becoming Oriental for a

time through its psychoactive effects, is persistent throughout the narrative, complicating the plant's meaning in the Atlantic world.[61]

These Oriental imaginings also suggest that Ludlow appropriated more from De Quincey than just a play on his title. Indeed, literary forms of imperialism echo throughout both sources, as depicted through the drug-induced visions of travel across the "Asiatic world" in each of them—which also reflected and perpetuated a discourse that intermingled intoxication with the Orient. The lines between the drugs as medicine versus Asiatic intoxicants became twisted and crossed in them both, but for cannabis, the inviolable boundary Ludlow constructed between "the hemp" that "grows almost entirely to fibre" for Europeans yet "loses its fibrous texture [and] secretes . . . an opaque and [intoxicating] greenish resin" for "Orientals" also clouded its meaning for industrial uses.[62] In effect, becoming intoxicated by an "Asiatic" version of the plant used in an "Asiatic" way—and through this use being transported experientially to the "primitive" East, yet without becoming Asian—reinforced his Occidentalism and essentialized the plant into an eastern trope. In other words, *The Hasheesh Eater* was a powerful example of how, through literature and Oriental adventurism, the plant literally and figuratively transformed from a medicine into an exotic intoxicant. Pharmacopeias on both sides of the Atlantic continued listing it as a medicine throughout the 19th century, and non-psychoactive cannabis commodities were still used in a variety of industries, but neither the British nor U.S Americans had come any closer to producing naval store quality rope from its fiber, and as such continued facing problems with the plant. These older meanings and associations for cannabis continued to linger, but then the more sinister one of Oriental intoxication and deviancy started to overshadow them.

Soon after its publication, a discussion of Ludlow's book appeared in *Harper's Monthly*, and it warned that the "use of such drugs of enchantment is one of the most fatal of all diabolic illusion." The author defined Ludlow's "deadly herb [called] hasheesh" as the "juice of the Indian hemp," and pointed out how "in northern climes, [it] grows almost totally to fibre, producing materials from mats to cordage." Contrarily, "under a tropical sun the plant loses it fibrous texture, and secretes profusely an opaque and greenish resin," which "has been used for ages in the east as a narcotic and stimulant, and at this day forms a habitual indulgence with all classes of society in India, Persia, and Turkey."[63] A year later, another review from the same magazine added a description also mentioned by O'Shaughnessy, which claimed that Asian men obtained the resin by going "naked through the fields, receiving the precious gum upon their bodies."[64] Around the same time, an article from *The Knickerbocker* reported, "Everybody knows what opium is, but everybody may not know that Hasheesh is the resin of a peculiar sort of hemp, called '*Cannabis Indica*,' which in southern climates

loses its fibrous texture, and secretes this powerful narcotic." The author called it a "soul-exciting, soul-subduing drug" and expressed concern over the growth of works he called "opium-eaters simulators" that reflected more interest in the consumption of Oriental drugs.[65]

Another review published in *Russell's Magazine* provides more evidence of the muddled meaning that was developing for cannabis in the Atlantic world during Ludlow's time. The author described Ludlow as "a student of medicine" with a fascinating story of "Hasheesh deliriums."[66] By recounting the same narrative that Ludlow told of himself encountering the extract of *Cannabis indica* for the first time at the apothecary shop and labeling it "Hasheesh," the reviewer crossed the same lines between cannabis as medicine and cannabis as Oriental intoxicant. The same thing occurred in an 1858 edition of the *Saturday Review*, in which the reviewer criticized the "Transatlantic Pythagorean" for being so foolishly "ready to adopt anything, from a creed to a medicine."[67] Then, four years later, an article titled "Narcotics" appeared in *The North American Review*. It included extensive commentary on both De Quincey and Ludlow but also added a review of M. C. Cooke's book titled *Seven Sisters of Sleep*. The article's three main concerns were tobacco, opium, and cannabis consumption in England and the United States, which the author claimed was frequent and on the rise.[68] Although it offered various statistics, the article provided no references for readers to corroborate the data. Overall, the narrative provides yet another example of the peculiar blend of meaning that surrounded the plant.

For example, according to the author, the "Caucasian races" were increasingly making their way to "the doors of the Eastern nations," which led them "to crave and use the stronger narcotics . . . of Oriental habits." One of these was identified as cannabis, which the "Asiatic nations" used to "stimulate the imagination to frenzy."[69] Like so many of the publications before it, the article described the story of the assassins, who, like other "hasheesh-eaters, when mad with hemp, sometimes plunge into the streets, and run amok, as it is called, killing all whom they meet."[70] Echoing Ludlow and Taylor, it also asserted that the *Arabian Nights* were "the product of an Eastern mind under the influence of hemp."[71] The author went into particular detail when describing the effects of cannabis on Tartars, Indian fakirs, Ottomans, Persians, Arabs, Chinese, and "Asiatic" Turks and repeatedly cited O'Shaughnessy, Moreau, and Johnston's *Chemistry of Life* as authorities, again reflecting the transatlantic nature of knowledge construction about cannabis at the time.[72] The lines between medicine and literature are clearly blurred in this text as well, and consumption for "indulgence" is always described as culminating in "insanity, death, or abandonment."[73] Of course, as the author pointed out, "race has a powerful influence in determining the nature of the delirium, which is fierce in the Malay, sensual in the Turk, abject in the East Indian, or intellectual in the Caucasian"; but as Ludlow's vivid descriptions of his own

experiences demonstrated, even westerners who played eastern with cannabis could succumb to its peculiar "mysteries" if they consumed it long enough.[74]

This kind of Orientalist-infused rhetoric followed the plant everywhere, including into various types of medical publications on both sides of the Atlantic. Francis Nye's thesis discussed in the previous chapter is an excellent example, but another candidate for the degree of Doctor of Medicine at Albany Medical College produced a work just like it more than ten years later. His name was James Humphrey, and his twenty-page thesis on "Hashish or Indian Hemp" demonstrates yet again this peculiar blend of Orientalist thought that informed western medical knowledge of cannabis. The thesis contains a familiar description of the botany, distinguishes between eastern and western uses, and faithfully regurgitates the story of the assassins.[75] Humphrey also justified the value of his "research" by pointing out how the plant "being thus extensively used, it's almost romantic history, its curious and terrible influence upon the mind and body when taken excessively, its therapeutic qualities, invest it with interest of no ordinary character."[76] His sources were transatlantic in nature as well, citing Moreau, an English account that attributes the Indian Mutiny of 1857 to cannabis intoxication, and the same M. Berthart source cited in the *Harper's Monthly* article mentioned above. He also discussed "our distinguished countryman, Bayard Taylor" at length and used his descriptions as scientific proof that "hashish, or bang, as it is called in India," leads to insanity when abused.[77]

Another source published in Boston the following year contained similar descriptions. Titled *The Guide to Clairvoyance*, it indicates just how multifaceted playing eastern with cannabis had become. The section on "hashish, its uses, abuses, and dangers, its extasia, fantasia, and illuminati" of course described the assassins but also pointed out that "this strangely powerful drug is at once a curse and a blessing to mankind. Medicinally it is invaluable," for its "effects upon our keener nerves and larger brains differs greatly from that upon the Orientals." However, the author claimed that "I do not approve of the use of hashish for . . . clairvoyance any more . . . because poisonous compounds abound [in the extracts] and, when had, great wisdom is required in its use." Since "thousands are using what purports to be hashish; and knowing these compounds to be dangerous, and deadly poisons, I have prepared this article upon its use, effects, antidotes, and true methods of exhibition."[78] The author's name was Paschal Beverly Randolph, an eccentric African American spiritualist who'd gained a rather popular reputation by the 1860s in occultist circles across the Atlantic.[79] Seven years prior to publishing this paper, he produced the following advertisement for "Oriental hemp":

> Will cure the most inveterate STRICTURE, PILE, PROSTATIC, and FEMALE DIFFICULTY. I have made arrangements with an importer to furnish me the very best Oriental Hemp, upon whose genuineness my correspondents may place implicit reliance. Persons who use this herb in medical baths, as a poultice, or in any way, should be aware of the miserable trash usually sold under its name. Above all, they should avoid the so-called "Extracts." The medicinal properties of this remarkable plant are *absolutely destroyed* by heat and alcohol. . . . Procure the French and Egyptian extracts. I am the only person in this country possessed of the Egyptian formula for the extraction of the medicinal properties of this plant, and I will impart it to those who want it, if paid for my time in writing it out.[80]

Randolph encountered eastern cannabis in a variety of cultural settings on a series of travels across the Atlantic in the 1850s before bringing it back with him as a commodity for spiritual enlightenment in the United States, and his reflections demonstrate the shift in meaning that playing eastern with cannabis produced for the plant over time.[81]

According to his own account, for example, "I first learned of [hashish] in France, but in Egypt I studied it perfectly."[82] In between these destinations he traveled to London twice, and back to America once, where he spread word of the drug's value in aiding spiritualists in obtaining "clairvoyance." By 1860, he had become one of the United States' most enthusiastic importers of cannabis drugs, often prescribing the "medicine" to cure "nervous exhaustion" and increase "passional excess, onanism, etc." However, he frequently altered his stance on the drug, often reflecting the binaries at work in his Orientalist thought: "Look sharp, be steady, for there's a power at work within you, capable of plunging you into thick gloom, elevating you into the bliss of paradise, and of leading your soul through the shadow, into regions of ineffable light, and glorious, illimitable, transcendent beauty." Having claimed to have "seen pounds of it used in Egypt, Arabia, Turkey, France, England, and here in America," the transatlantic observer and sometimes personal experimenter warned of both the good and evil experiences that "the common gunjah, or the distilled or buttered hemp" stirred up in the user.[83] It was both a curse and a blessing, but its cursed qualities seemed to be overpowering the others in the U.S. American and British cultural imaginations.

CONTESTING CANNABIS CONSUMPTION

In 1842, the India Office House in London received a letter from Dr. Kean, an assistant surgeon in Bengal at the time. The tone of the letter is rather urgent, with the professed purpose of calling attention to the "increasing consumption of deleterious drugs" by Indians and their "baneful influence on the health and morals of the population."[84] He listed ganja, bhang, and opium as the most commonly used drugs, but pointed out that even though "almost

the whole of the mussulman [*sic*] population of the neighboring City are said to be addicted to the use of opium," the effects of ganja were much worse. After all, he claimed, "I am not sure that I have seen a single case of insanity caused by [opium use;] on the other hand the use of ganja seems to be exceedingly prevalent both in this and the neighboring districts, and amongst every patient brought into the Insane Hospital has been less or more accustomed to its use."[85] Kean worked at the insane asylum in the region, and he reported that "ganja is given secretly to their victims by evil disposed persons."[86] For him, cannabis consumption was a problem in British-governed India, so colonial authorities needed to gain control over its production and distribution. In the process, perceptions that habitual consumption led to insanity grew stronger, which converged with transatlantic Orientalist discourse on the plant to strengthen cultural animosity toward it.

Even before this convergence, though, colonial officials in India expressed concern over ganja smuggling as a cause for gaining control over the industry. In a letter from Fort St. George in 1826, for example, an EIC employee recommended steps to secure "the prevention of illicit traffic" in "Betel, Tobacco, and ganja."[87] A decade later, the government established Act XIV to help prevent "smuggling in the Articles of Gunjah and Bang at Madras."[88] In *Cannabis Britannica*, historian James Mills demonstrates how this illicit trade linked cannabis with "criminal associations in the minds of the British in the empire."[89] This association between degeneracy and criminality helps contextualize Kean's aversion to ganja cited in his letter, which he sought to regulate in part due to the criminal connection that had already formed around the plant. Yet despite the government's sympathy toward his stance—which they indicated in a response by stating that "the improper us of Ganja, Bang, Opium, and other stimulants is to be regretted"—their course of action would not follow Kean's recommendations: "the prohibition of these drugs by the government, as suggested by Mr. Kean, would not be effective or expedient."[90] After all, the British were in India to make money, and there was simply too much of it at stake in the form of levying taxes to ban the substances entirely—even if they were involved in a civilizing mission on the subcontinent.[91]

Whether or not Kean's observations that ganja consumption promoted insanity and criminality were valid is less relevant for this study than the fact that he made the connection. Scholars such as Acevedo have used Foucault's work on power relations and the dynamics of discourse to investigate cannabis classification in the UK, but it is also a useful approach for examining how cultural knowledge of the plant operated to create new meanings for it in the Atlantic world.[92] To understand how the plant transformed into a banned intoxicant, then, we must place what Foucault referred to as the archaeology of knowledge collected on its association with insanity into the cultural context within which the discourse arose (genealogy), which for cannabis was

Orientalism and the Second British Empire. One source described the effects of "Bhang, charras, and ganja," for example, as causing the users' "hands and feet [to] become long and attenuated, his eyes dull, and the white of the eye yellow and bloodshot," leading to "the poor debauchee at last fall[ing] a sacrifice to his favorite drug."[93] The journal also recounted a story of twelve "hashish-takers" who were found dead in a building where they spent the night participating in an eastern style "orgie."[94] Another described a missionary witnessing its effects firsthand:

> When I visited the seat of some celebrated Mohammedan faqirs at Makkanpur, I found men there naked and rubbed over with ashes, like Hindoo sunyasees, whose whole appearance was that of those who use intoxicating drugs; and I saw them smoking ganja [which he also described as "hemp"], one of the worst preparations of the sort. The course of life which a devotee leads, and these drugs, stupefy him. He becomes decidedly stupid; and then, after exciting himself, raving, silly, furious, [which] the people come [to associate with] insanity.[95]

Dr. Thomas Wise also published an article in 1852 with detailed accounts of how "the use of the preparations of Indian hemp, or gunja, (Cannabis Sativa), has a much more pernicious influence on the mental faculties than opium or spirits."[96] He even included statistics from insane asylums and vividly described what he considered long-term detrimental effects produced from using all forms of the cannabis drugs.

Much of what these authors had to say about these preparations showed up in the sixth edition of a popular book on medicine in the United States. Published by James Johnston, the volume included an elaborate fourteen-page description of the plant and cited authorities from both sides of the Atlantic—including O'Shaughnessy. After detailing the old story of Hassan Sabbah and his assassins, he argued that "the effects produced by hemp . . . renders [the individuals] excitable and quarrelsome, and disposes to acts of violence" before citing another source that referred to "haschisch" as "an abominable poison."[97] An article appearing in the magazine *The Living Age* cited Johnston and recounted many of the exotic representations of eastern "debauchery" and violence that accompanied most cannabis descriptions during the 1850s.[98] Another one from *The Saturday Magazine*, though, really exposed the transatlantic connections with British imperialism that contributed to the scientific knowledge of cannabis in the United States:

> The drowsy appearance and indolent character of Eastern nations is not only due to the climate of the countries, and the almost spontaneous production by the earth of everything necessary for the life of man, thus in a great measure rendering labor unnecessary, but it is aided and increased by the use of powerful narcotics. The Chinese have their opium . . ., [which] is relished by the inhabitants of that most conservative country . . ., [and the other] Asiatics

> prefer the intoxication produced by hasheesh, which is preparation of the Indian hemp. . . . The first smokers and eaters of hasheesh were called hasheeshins . . ., from which our word assassin is derived. . . . Persons who are in the habit of using this drug usually terminate their existence as lunatics, and since the French have had Algeria their insane hospitals have been filled with the victims of hasheesh.[99]

Clearly, the degeneracy narrative of the Second British Empire had an impact on the writers' perceptions of the Orient and intoxication. However, instead of the British asylums in India, the author cited France's presence in Algeria, which reflects the wider circulation of this Orientalist knowledge about cannabis drugs in the Atlantic world by then.

Despite these associations, however, medical doctors continued using extracts of cannabis resin for their patients. From 1840 to 1890, for example, nearly two hundred articles mentioning cannabis or Indian hemp for medicinal purposes appeared in the British medical journal *The Lancet*, and the overwhelming number of them either recommended the drug for various ailments or attested to its medicinal value.[100] Still, documents indicating skepticism regarding the effects of these drugs continued surfacing as well. A doctor named Thomas Hayes Jackson published a letter in the *British Medical Journal* in 1857 titled "Uncertain Actions of Cannabis Indica," and the following year a medical student in Charleston, South Carolina, submitted a thesis on "Cannabis Indica" for his medical degree, referring to it as "one of the most wonderful, the most useful, and the most dangerous [medicines] that Botany has furnished us."[101] The author, Francis Nye, argued that the plant was wonderful and useful as a remedy in various ailments, but that it was also dangerous because it was "poisonous." If using it did not lead to death, then "the allurement of and desire to return to the awful grandeur and unearthly scenery its employment" induces would surely degenerate the soul. His testimony of firsthand experience with the drug smacks of Taylor's Oriental imaginings, which he claimed brought him "so nearly to Heaven and Hell" that nothing could compare to the "strong set of mental phenomena . . . experienced by any but a Hasheesh eater."[102] He also mentioned O'Shaughnessy and its prevalence in "Arabia" before issuing a warning to other physicians: "Experiment carefully with your little store, few physicians who were really new in search of scientific information have lost their lives."[103]

These publications and medical examinations connecting cannabis to insanity also came at a time when the British government started gaining more control over India. After 1857, for example, parliament dissolved the East India Company and placed control in the hands of London officials. Concern over company activity dated back at least to the late 18th century, when rumors connecting the excessive wealth of EIC employees to immoral behavior boiled over into parliamentary debates. By 1784, EIC officials stationed

in India were no longer allowed to correspond with their superiors in London without a Board of Controls monitoring their correspondences. In effect, this government-appointed board signed off on and wrote summaries of all transactions between London and each of the nine colonial regions in British India.[104] Shortly afterward, Parliament passed Act XXXVI, which provided the legal means for the British to incarcerate members of the native population considered to be "lunatics."[105] By 1871, statistical data collected from these asylums across British India linked cannabis use to insanity so frequently that Allen Hume, secretary to the government of India's Department of Agriculture, Revenue, and Commerce, had this to say in a letter to colonial authorities: "It has frequently been alleged that the abuse of ganja produces insanity and other dangerous effects." Pointing out that "it does not appear that the attention of the officers in charge of the lunatic asylums has been systematically directed to ascertain the extent to which the use of the drug produces insanity," he called for a complete inquiry from each of the nine colonial regions "into the effects of the use or abuse of the several preparations of hemp," including the "alleged influence of ganja and bhang in exciting to violent crime."[106]

Over the next three years, a series of correspondences occurred between the provinces that exchanged detailed information on the use of cannabis drugs by the native populations. The remarks were very diverse, ranging from "no instances of insanity, or of crime committed under the influence of ganja," to "insanity, or permanent disorder of the mind, is a result of the evil habit of over-indulgence in [bhang and charas]."[107] Others reported that "there is a considerable difference of opinion regarding the evil effects" produced by these drugs, but most claimed that persistent, habitual indulgence of at least one form (usually ganja) probably induced insanity.[108] However, general opinion also suggested that banning them entirely would be unproductive. One argued that "even if the consumption of these drugs could be virtually abolished by any restrictions, there would still remain many intoxicating liquors which are so cheap that no person need ever have the slightest difficulty in making himself intoxicated."[109] Many of the reports mentioned how "hemp grows wild" in the region they worked in, and that "intoxication is much more a vice of the Asiatic than the Englishman," which made attempts to ban the substances entirely futile.[110] All agreed, however, that continued regulation and taxation was needed.

As a result, the government passed Act II in 1876, which required cultivators to obtain a license to legally grow the crop.[111] The government also provided Baboo Hem Chunder Kerr with leave from his administrative duties for nearly four months so he could travel to the centers of cannabis production in the Bengal region for research. After returning, he sent the secretary of the Board of Revenue an essay titled *Report on the Cultivation of, and Trade in, Ganja in Bengal*. The title is somewhat of a misnomer, for the

report includes a great deal more than just information about ganja. Indeed, it turned out to be a rather comprehensive study of cannabis and its uses in British India. His language abilities gave him a distinct advantage when consulting ancient texts such as the *Atharva Veda*, which, according to his translations, provided detailed accounts of the cultural uses for the plant throughout history. He also lamented "the vile propensities of those who indulge in" the drug and "the grotesque behaviour of the *Genjels* of India [who smoke ganja]."[112] He even referenced the Orientalist De Sacy as the "learned" scholar who "rightly concludes that the English word assassin is derived from" the "Hashishens" before recounting the same story told by von Hammer-Purgstall and the others.[113] Indians of course had their own complex cultural relationships with cannabis, but those who worked for the British, such as Kerr, were influenced by the Orientalism of empire.

By then, perceptions of cannabis as a dangerous and inconsistent drug were widespread. In an article on the use of drugs by physicians, for example, William Lowe mentioned that "at one time, Indian hemp was said to do wonders," but like so many other medicines, had "fallen into disuse." He went on to explain why: "With the medicinal properties of cannabis Indica, as illustrated by direct experimentation, we are even less familiar. By its use in toxic doses, the Malay produces a wild delirious intoxication."[114] Another source provided a description of "Indian Hemp" that claimed "as an intoxicant it is certainly not used to any extent in England, and as a medicine it has much disappointed practitioners." The author reported that various preparations of it were "ascertained to be the cause of a very large proportion of the cases of acute mania admitted to the native lunatic asylums of Bengal."[115] Robert Jackson's description of the medicine was almost identical, claiming that the natives used it to produce a "kind of mirthful or extravagant delirium," which sometimes makes them "ill-tempered, violent, and pugnacious." He also stated that "the great drawback to its employment is its exceeding uncertainty of action, small doses in some cases causing marked symptoms, whilst in other instances full doses produce no effect."[116] Alfred Stillé published an extensive description of the plant in his book as well, which cited O'Shaughnessy, Moreau, Aubert, Christison, and H. C. Wood. He also included a description of the assassin story and claimed that cannabis either "enlivens or saddens, excites or depresses, fills with tenderness, or urges to brutality, imparts vigor and activity, or nauseates and weakens."[117]

In his 1882 article on the detrimental effects of abusing "narcotics," Henry Barnes referred to cannabis as a "poison," and an article in *The Lancet* a decade later claimed that using it produced "much misery, poverty, insanity and moral deterioration."[118] Henry Cayley argued in another article that it was worse than opium, hoping to convince those who had recently embarked on a campaign to ban the latter that the former was a "far more deleterious nerve stimulant" and would "takes its place."[119] Articles such as these ap-

peared frequently in both *The British Medical Journal* and *The Lancet* over the course of the 19th century, but those like the one Mary C. Hungerford wrote for *Popular Science* in 1884 were designed for a wider audience, so they likely had more influence on pubic opinion. In it, she explained her trials with "Indian hemp (hasheesh), in the hope of holding my intimate enemy [of headaches] in check."[120] The love/hate, good/evil dichotomy she described indicates the influence of Taylor and Ludlow, as does her use of the word "hasheesh" to describe the cannabis tincture medicine she was consuming. Moreover, the fear, dread, and hallucinations she reported having under the drug's influence, as well as a lack of consistency with the drug, were all part of the popular discourse on cannabis as a questionable, Oriental substance at the time. Although still useful as a fiber and occasionally as a medicine, the increased attention it got as an intoxicant caused more people to contest its use.

The meanings of cannabis as a medicine and an intoxicant in the Atlantic world, then, were multilayered, intertwined, and infused with Orientalism. British imperialism in India may have been responsible for establishing the medico-intoxicating connection, but the knowledge culture of cannabis as a burgeoning social menace evolved as these perceptions circulated around the Atlantic. Doctors, literary figures, and occult leaders experimented with its use and told vivid tales of their Orientalist experiences, which shaped public opinion about the plant's otherness. Especially as drug use for recreational purposes increasingly came under fire by temperance advocates and social reformers, the commodification of cannabis as a transatlantic medicine gave way to its status as a social menace. Western pharmacopeias continued listing it for a variety of ailments, but cultural perceptions that consuming it induced insanity were widespread by the 1870s. The British government passed legislation to enforce stronger regulations on cannabis drug trafficking in colonial India, which reverberated across the Atlantic to influence U.S. American relationships with it as well. Meanwhile, the large-scale attack on the morality of intoxication opened another chapter in the plant's transformation from an important strategic commodity to a banned intoxicant, then again into a legitimate medicine and respectable drug of high society. Its reputation as both a curse and a blessing pulled and tugged against each other, picking up cultural meanings along the way that helped guide these transformations.

NOTES

1. At the 2015 Alcohol and Drugs History Society Biennial Conference, there was a lively debate on the organization's linguistic classification between drugs and alcohol. For a review of the panel, see "Points: The Blog of the Alcohol & Drug History Society," accessed April 24,

2018, https://pointsadhsblog.wordpress.com/2015/06/23/conference-wrap-up-borders-boundaries-contexts/.

2. Michael Pollan, *Botany of Desire: A Plant's-Eye View of the World* (New York: Random House, 2001), 139.

3. David Courtwright, *Forces of Habit: Drugs and the Making of the Modern World* (Cambridge, Mass.: Harvard University Press, 2001), 3–4.

4. Jacques Derrida, *Dissemination* (London: The Athlone Press, 1981), 70, quoted in Beatriz Acevedo, "Understanding Cannabis Reclassification in the United Kingdom, 2002–2005" (PhD diss., University of Hull, 2007), 17.

5. For several examples of such studies, see Mitch Earleywine, *Understanding Marijuana: A New Look at the Scientific Evidence* (Oxford: Oxford University Press, 2002).

6. Ross Coomber and Nigel South, eds., *Drug Use and Cultural Contexts 'Beyond the West'* (Warren Street: Free Association Books, 2004), 16.

7. William Jankowiak and Daniel Bradburd, eds., *Drugs, Labor, and Colonial Expansion* (Tucson: University of Arizona Press, 2003), 8.

8. Kristen D. Burton, "Intoxication and Empire: Distilled Spirits and the Creation of Addiction in the Early Modern British Atlantic" (PhD diss., University of Texas at Arlington, 2015), 30–35.

9. Ibid., 176–249.

10. Ibid., 116–160; see also Brian Inglis, *The Forbidden Game: A Social History of Drugs* (London: Hodder and Stoughton, 1975), chapter 5.

11. For a discussion of the methodological approach to history called intercultural transfer, see Thomas Adam*, Intercultural Transfers and the Making of the Modern World* (New York: Palgrave, 2012).

12. For a discussion of commodity indigenization, see Susan Parrish, *American Curiosity: Cultures of Natural History in the Colonial British Atlantic World* (Chapel Hill: University of North Carolina Press, 2006).

13. Peter C. Mancall, "Pigs for Historians: Changes in the Land and Beyond," *William and Mary Quarterly* 67, no. 2 (April 2010): 374.

14. Ibid.

15. For the definitive history of tobacco and its transformations in history, see Jordan Goodman, *Tobacco in History: The Cultures of Dependence* (New York: Routledge, 1993).

16. See, for example, Michelle Alexander, *The New Jim Crow: Mass Incarceration in the Age of Colorblindness* (New York: The New Press, 2011); Carl Hart, *High Price: A Neuroscientist's Journey of Self-Discovery That Challenges Everything You Know about Drugs and Society* (New York: HarperCollins, 2013).

17. Geoffrey Harding, "Constructing Addiction as a Moral Failing," *Sociology of Health and Illness* 8, no. 1 (March 1986): 77.

18. Courtwright, *Forces of Habit*, 31.

19. Harding, "Constructing Addiction as a Moral Failing," 77–78. For a discussion of drug autobiography as a literary genre, see Susan Ziegar, "Pioneers of Inner Space: Drug Autobiography and Manifest Destiny," *PMLA* 122, no. 5 (October 2007): 1531–1547.

20. Anonymous, *The Saturday Magazine: A Compilation from the British Reviews, Magazines, and Scientific Journals*, vol. 2 (Philadelphia and New York: E. Little & R. Norris Henry, 1822), 165, 174–80. Also see Jared Sparks, Edward Everett, Russel Lowell, and Henry Cabot Lodge, *The North American Review*, vol. 17 (Boston: O. Everett, 1824), 94–98; Robert Carruthers, ed., *Chamber's Cyclopaedia of English Literature,* vol. 7, 3rd edition (New York: American Book Exchange, 1881), 190–96.

21. Thomas De Quincy, *Confessions of an English Opium-Eater*, 3rd Edition (London: Taylor and Hessey, 1823), 7–9, 13.

22. William Hendry Stowell, *The Eclectic Review*, vol. 19 (London: J. Holdsworth, 1823), 371.

23. *The British Review and London Critical Journal*, vol. 20 (London: J. Hatchard and Son, 1822), 471.

24. *The Asiatic Journal and Monthly Register for British India and Its Dependencies*, vol. 14 (London: Kingsbury, Parbury, & Allen, 1822), 579.

25. Campos, *Home Grown*, 26–28.
26. Ibid., 27.
27. Henry Draper Steel, *Portable Instructions for Purchasing the Drugs and Spices of Asia and the East-Indies* . . . (London, 1779), 14.
28. Susan Ziegar, "Pioneers of Inner Space: Drug Autobiography and Manifest Destiny," *PMLA* 122, no. 5 (October 2007): 1531, 1535.
29. Daljit Nagra, "Kubla Khan and Coleridge's Exotic Language," *British Library*, 15 May 2014, accessed May 3, 2018, www.bl.uk/romantics-and-victorians/articles/kubla-khan-and-coleridges-exotic-language.
30. Zeigar, "Pioneers of Inner Space," 539.
31. Courtwright, *Forces of Habit*, chapters 3 and 7. On the history of opium use in America and its association with the Chinese migrant workers, see David Courtwright, *Dark Paradise: A History of Opiate Addiction in America* (Cambridge, Mass.: Harvard University Press, 2001); Virginia Berridge, *Opium and the People: Opiate Use and Drug Control Policy in Nineteenth and Early Twentieth Century England*, Revised Edition (New York: Free Association Books, 1999); Timothy A. Hickman, "Drugs and Race in American Culture: Orientalism in the Turn-of-the-Century Discourse of Narcotic Addiction," *American Studies* 41, no. 1 (Spring 2000): 71–91.
32. Edward Said, *Orientalism* (New York: Pantheon, 1978), 70.
33. See, among others, Ali Behdad, *Belated Travelers: Orientalism in the Age of Colonial Dissolution* (Durham: Duke University Press, 1994); R. C. Bridges and P. E. H. Hair, eds., *Compassing the Vast Globe of the Earth: Studies in the History of the Hakluyt Society 1846–1996* (London: Hakluyt Society, 1996).
34. John Crowley, *Imperial Landscapes: Britain's Global Visual Culture* (New Haven: Paul Mellon Centre, 2011); William Dalrymple, *White Mughals: Love and Betrayal in Eighteenth-Century India* (New York: Penguin Books, 2004).
35. See Susan Nance, *How the Arabian Nights Inspired the American Dream, 1790–1935* (Chapel Hill: University of North Carolina Press, 2009).
36. Zeigar, "Pioneers of Inner Space," 1535.
37. M. Silvestre de Sacy, "Memoir on the Dynasty of the Assassins, and on the Origin of their Name," in *The History of the Assassins*, ed. Joseph von Hammer-Purgstall, trans. Oswald Charles Wood (London: Smith and Elder, 1835), 235. A year after Sacy's essay appeared, an apothecary to Napoleon's troops published a paper on the effects of cannabis consumption as well. See Eric T. Carlson, "Cannabis Indica in 19th-Century Psychiatry," *American Journal of Psychiatry*, 131, no. 9 (Sept. 1974): 1004.
38. Theophile Gautier, "Hashish," in Maurice Stang, *Hashish, Wine, Opium* (London: Calder & Boyars, 1972), 57–58, 61.
39. Theophile Gautier, "Le Club des Hachichins," in *Revie deux Mondes* (Paris: Au Bureau de la Revenue des Deux Mondes, 1846), 522. The reference to Japanese porcelain is yet another indication of how broadly monolithic European perceptions of the east were; Japanese, Chinese, Indian, Persian, and Arab were all the same thing: Orientals.
40. Louis Rémy Aubert-Roche, *De la Peste, ou, Typhus d'Orient: Documens et Observations Recueillis Pendant Less Années 1834 a 1838, en Egypte, en Arabie, sur la Mer Rouge, en Abyssinie, a Smyme et a Constantinople: suvivis d'un essai sure le Hachisch et son emploi dans le traitement de la peste, et d'un mémoire sure la prophylaxie générale de la peste* (Paris: Just Rouvier, 1843).
41. *The Quarterly Review*, no. 154 (London: John Murray, 1846), 25.
42. David Urquhart, *Pillars of Hercules, or, A Narrative of Travels in Spain and Morocco in 1848* (London: B. Bentley, 1850), 88.
43. Ibid., 89.
44. Stang, *Hashish, Wine, Opium*, 59.
45. David Urquhart, *Pillars of Hercules, or, A Narrative of Travels in Spain and Morocco in 1848*, vol. 2 (New York: Harper & Brothers, 1850).
46. Anonymous, "Indian Hemp in a French Café," *Medical Times: A Journal of Medical and Chemical Sciences Literature, Criticism, and News*, Vol. 21 (London: John Churchill, 1850), 137.

47. Bayard Taylor, "The Vision of Hasheesh," *Putnam's Monthly Magazine of American Literature, Science, and Art* 3, no. 16 (April 1854): 402.
48. Ibid., 404.
49. Ibid., 404–405.
50. Ibid., 406.
51. James Buckingham et al., eds., *The Athenaeum Journal of Literature, Science, and the Fine Arts* (London: J. Francis, 1855), 481, 428–29, 402.
52. E. E. Mercy, John Peters, William Holcombe, and Henry Preston, eds., *The North American Journal of Homeopathy: A Quarterly Magazine of Medicine and the Auxiliary Sciences*, vol. 4 (New York: William Rade, 1856), 262–71.
53. The American Provers' Union, *Provings of Cannabis Indica* (Philadelphia: King & Baird, 1859), 12–15.
54. W. H. Bidwell, ed., *The Eclectic Magazine of Foreign Literature, Science, and Art* (New York: Beekman Street, 1858), 306.
55. Fitz Hugh Ludlow, *The Hasheesh Eater: Being Passages from the Life of a Pythagorean* (New York: Harper & Brothers, 1857), 18–19.
56. Ibid., xxii.
57. Nance, *Arabian Nights*, 51–78.
58. Ludlow, *The Hasheesh Eater*, vix.
59. Ibid., x, 31.
60. Ibid., 42–44.
61. Ibid., 53–54.
62. Ibid., xi.
63. Anonymous, "Literary Notices," *Harper's New Monthly Magazine* 15, no. 90 (November 1857): 834–35.
64. Anonymous, "Hasheesh and Hasheesh-Eaters," *Harper's New Monthly Magazine* 16, no. 95 (April 1858): 654.
65. Anonymous, "Literary Notices," *The Knickerbocker: Or, The New York Monthly Magazine* 51 (February 1858): 197–198.
66. Paul H. Payne, *Russell's Magazine*, vol. 2 (Charleston: Steam Power Press of Walker, 1858), 397.
67. Anonymous, "Hasheesh," *Saturday Review* 5, no. 120 (February 1858): 166–167.
68. The article provides various statistics but no ability to verify them. It did not provide statistics on the amount of cannabis consumed (though the author claims it was a lot), but the author listed 42,000 lbs. for home consumption of opium in England for 1857 and 72,000 lbs. for the United States. Many other statistics are provided for the "big three" drugs in general, one of which is that cannabis was consumed by about one-fourth the entire world's population. The validity of the statistics is less important than the fact that discussions of cannabis in this context were taking place. See Anonymous, "Narcotics," *The North American Review* 95, no. 197 (October 1862): 375.
69. Ibid.
70. Ibid., 380.
71. Ibid., 382.
72. Ibid., 404.
73. Ibid., 407.
74. Ibid., 386, 408. The issue of how drugs affect individuals who take them has been a source of controversy for a long time now. Over the course of the past four decades, however, research has increasingly pointed to the fact that an individual's psychological state and the culture in which he or she lives have more of an impact on the drug-induced experience than we have recognized. For an older example, see Howard Becker, "History, Culture, and Subjective Experience: An Exploration of the Social Bases of Drug-Induced Experiences," *Journal of Health and Social Behavior* 8, no. 3 (September 1967): 163–76. For more recent examples, see Richard DeGrandpre, *The Cult of Pharmacology: How America Became the World's Most Troubled Drug Culture* (Durham: Duke University Press, 2006); and Campos, *Home Grown*, chapter 1.

75. James L. Humphrey, *Hashish or Indian Hemp* (Dissertation for Albany Medical College, 1866).
76. Ibid., 3.
77. Ibid., 14.
78. Paschal Beverly Randolph, *The Guide to Clairvoyance, and Clairvoyant's Guide* (Boston: Rockwell & Rollins, 1867), 32.
79. For Randolph's biography, see John Patrick Deveney, *Paschal Beverly Randolph: A Nineteenth-Century Black American Spiritualist, Rosicrucian, and Sex Magician* (New York: State University of New York Press, 1997). For an early publication in London that mentions Randolph, see *The British Spiritual Telegraph: Being a General Record of Spiritual Phenomena* (London: E. Pitman, 1859), 73, 111.
80. Paschal Beverly Randolph, *The Unveiling: Or What I Think of Spiritualism* (Newburyport: William H. Huse & Co., 1860), 66–67.
81. Ibid., 70–72.
82. Randolph, *Guide to Clairvoyance*, 32.
83. Randolph, *Guide to Clairvoyance*, 35–36. For a detailed account of Randolph's changing views of Indian hemp, see Deveney, *Paschal Beverly Randolph*, 69–72.
84. "Public Letter No. 21 of 1842 from the Government of Bengal," July 6, 1842, British Library, Indian Office Records, Asian and African Reading Room (hereafter IOR), IOR/F/4/2015/90072, 1.
85. Ibid., 5–6.
86. Ibid., 7.
87. "Letter to the India Office from Fort St. George, Madras," 11 September 1829, IOR/E/4/360, paragraph 19.
88. Board of Control's Board's Collections for 1838, IOR/F/4/1747, no. 71081.
89. James H. Mills, *Cannabis Britannica: Empire, Trade, and Prohibition* (New York: Oxford University Press, 2003), 68.
90. "Court of Director to Mr. Kean," 25 October 1843, IOR/E/4/776, 285.
91. Mills, *Cannabis Britannica,* chapter 3. According to some Indian Office Records, the duties on ganja were so high by 1844 ("80–90 percent of the value of the article") that the government had to lower them significantly because of the "temptation to smuggling which necessarily attends it." "Legislative Department Papers," 20 February 1844, IOR/E/4/777, 531.
92. Acevedo, "Understanding Cannabis Reclassification," 26, 29; Michel Foucault, *The Archaeology of Knowledge and the Discourse on Language*, trans. A. M. Sheridan Smith (New York: Pantheon Books, 1972).
93. William Chambers and Robert Chambers, eds., *Chambers's Edinburgh Journal*, vol. 11 (Edinburgh and London: Chambers Brothers, 1849), 63.
94. The same text appeared in a New York journal that year. See Anonymous, *The Gazette of the Union, Golden Rule, and Odd-Fellow's Family Companion*, vol. 10 (New York: Crampton and Clark, 1849), 152.
95. Anonymous, *The Home and Foreign Record of the Presbyterian Church in the United States of America*, vol. 1 (Philadelphia: Presbyterian Board of Publication, 1850), 200.
96. Thomas A. Wise, "Insanity as It Occurs among the Inhabitants of Bengal," *London Journal of Medicine* 4, no. 43 (July 1852): 661.
97. James Johnston, *Chemistry of Common Life*, vol. 2 (New York: D. Appleton and Co., 1856), 100.
98. Anonymous, "Hashish," *The Living Age* 56, no. 717 (February 1858): 449–512.
99. Anonymous, "Hasheesh and Its Smokers and Eaters," *Scientific American* 14, no. 7 (October 1858): 49.
100. The Harvard Library search engine, Hollis, provides an excellent break down of the number of articles in *The Lancet* for each year, ranging from 1823 to the present. With access permitted, see http://www.sciencedirect.com.ezp-prod1.hul.harvard.edu/science?_ob=ArticleListURL&_method=list&_ArticleListID=-328588799&_st=13&searchtype=a&originPage=rslt_list&_acct=C000014438&_version=1&_urlVersion=0&_userid=209690&md5=83771c73861bae1605dc22348ffa5c01, accessed August 8, 2013. Many of the issues only mention Indian hemp briefly, and none refer to its negative impact until the 1890s.

101. Thomas Hayes Jackson, "Uncertain Actions of Cannabis Indica," *British Medical Journal* 1, no. 1 (January 1857): 15; Francis Marion Nye, *On Cannabis Indica* (MD Thesis for the Medical College of the State of South Carolina, 1858), 3.
102. Ibid., 4.
103. Ibid., 18.
104. Richard Morel, research consultant on the East India Company at the British Library, is an excellent source of knowledge on how to use the archives and understand the correspondence that took place between London and India. For a brief description of the process, see Richard Axelby and Savithri Nair, *Science and the Changing Environment in India, 1780–1920* (London: The British Library, 2010).
105. James H. Mills, *Madness, Cannabis, and Colonialism: The "Native-Only" Lunatic Asylums of British India, 1857–1900* (New York: St. Martin's Press, 2000). For a series of letters that detail the purpose and scope of the creation of the Calcutta Medical College located at the British Library, see IOR/P/186/66, nos. 20–21; IOR/P/186/82, nos. 28–30; IOR/F/4/2200, no. 107906.
106. "From A. O. Hume, Esq., C.B., Secretary to the Government of India, Department of Agriculture, Revenue and Commerce, to the Secretary to the Government of Madras, Bombay, North Western Provinces, Punjab, and Chief Commissioner of Qudh, Central Provinces, British Burmah, Mysore, and Coorg, and Resident at Hyderabad," October 10, 1871, in *Copies of the Following Papers Relating to the Consumption of Ganja and Other Drugs in India*, ed. Arthur Godley (London: House of Commons, 1893), 7.
107. Ibid., 12,15.
108. Ibid., 10. For the entire list of correspondence that took place between 1871 and 1873, see ibid., 8–92. Some of the reports included charts with trade and cultivation statistics, while others included information on the plant's medicinal use by natives.
109. Ibid., 62.
110. Ibid., 77, 86.
111. Ibid., 115.
112. Ibid., 97, 101.
113. Ibid., 98.
114. William Lowe, "An Address Delivered at the Opening of the Section of Psychology, at the Annual Meeting of the British Medical Association, in Edinburgh," *The British Medical Journal* 2, no. 762 (August 1875): 176; Anonymous, "Action and Inaction," *The British Medical Journal* 1, no. 784 (January 1876): 46.
115. Alexander Wynter Blyth, *A Dictionary of Hygiene and Public Health* (London: Charles Griffin & Co., 1876), 311.
116. Robert Edmund Scoresby-Jackson, *Note-Book of Materia Medica, Pharmacology and Therapeutics*, 3rd Edition (Edinburgh and London: Maclachlan & Stewart, 1875), 523.
117. Alfred Stillé, *Therapeutics and Materia Medica: A Systematic Treatise on the Action and Uses of Medical Agents, Including Their Description and History*, vol. 1, 4th edition (Philadelphia: Henry C. Lea, 1874), 959.
118. Henry Barnes, "On the Abuse of Narcotics," *The British Medical Journal* 2, no. 1143 (November 1882): 1032–1033; Anonymous, "Notes in Parliament," *The Lancet* 141, no. 3625 (Feb. 1893): 394.
119. Henry Cayley, "The Opium Question," *The Lancet* 139, no. 3589 (April 1892): 833.
120. Mary C. Hungerford, "An Overdose of Hasheesh," *Popular Science* 24, no. 4 (February 1884): 509.

Chapter Six

From Rope to Dope

The Indian Hemp Drugs Commission and Its Transatlantic Aftermath

By the turn of the 20th century, pharmacologists in the Atlantic world had isolated several active chemicals in medicinal plants, but the psychoactive cannabinoid known as THC was not one of them. Despite this lack of knowledge, though, preparations of the plant remained part of western pharmacology, even as complaints of inconsistent trials with cannabis medicines mounted. Cannabis fiber was still used for a variety of commodities as well, but several replacements had been found that were cheaper to import and less cumbersome to process for naval stores. These are critical aspects of cannabis history because they draw attention to the negotiation process or struggle for meaning that was taking place in the Atlantic world regarding its usefulness as a commodity. Over time, associations with Oriental vice and deviancy began to overshadow these more industrial uses, slowly transforming the plant into something westerners considered menacing to society. Along the way, the British funded an imperial study of the plant known as the Indian Hemp Drugs Commission, which collected a vast amount of data on cannabis cultures throughout the subcontinent. Researchers developed a questionnaire about cannabis consumption and distributed it to thousands of people from different classes across British India, and even though the conclusion of the report claimed that the negative effects of cannabis drugs had been exaggerated, the witness responses reflected strong cultural ties between the plant and Oriental degeneracy throughout British India. It didn't generate too much attention when it was first published, but knowledge of the report and its conclusions started circulating across the Atlantic at a time when the word "marihuana" began surfacing more frequently in the United States to de-

scribe Mexican preparations of the plant. Over time, Oriental associations were projected onto these preparations to create the illusion of a new public menace, but it wasn't until the League of Nations brought more attention to cannabis consumption that the federal government of the United States started focusing on eradicating the supply. The British followed suit even quicker than the United States, passing laws that criminalized recreational use in the 1920s. While cannabis drugs were still minor commodities in both countries at the time, foreign associations and temperance rhetoric on addiction brought more national attention to them, transforming the plant into a banned intoxicant and criminalizing its use.

THE IHDC

As the last chapter explained, there was a transatlantic discourse by the 1870s that cast a shadow of doubt on particular forms of cannabis consumption. It surfaced in publications ranging from medical journals to Orientalist literature before inspiring the British to investigate the nature of cannabis use and cultivation in India. Over the next two decades, British moral reformers became more critical over imperial policies toward drug trafficking and intoxication. In 1891, one of these critics called for the colonial government to end its licensing of opium cultivation for nonmedical purposes, while another spoke out against the sale of ganja, which he claimed was rumored to be "far more harmful than opium."[1] Three years later, an article appeared in the *British Medical Journal* that reported how a government-sponsored commission "is actively engaged in investigating and considering the prevalence and effects of the use of opium in India and China," and pointed out that another one was already under way "regarding the extent and consequences of the consumption of various preparations of hemp (cannabis Indica)."[2] The latter was called the Indian Hemp Drugs Commission (IHDC), while the one under way would become the 1895 Royal Commission on Opium, and they both are excellent examples of what anthropologists Ronen Shamir and Daphna Hacker referred to as "investigative modalities" of the British civilizing mission in India.[3] In other words, they represent "dramatic performances of forceful authority . . . through 'officializing' procedures that established and extended [Britain's] capacity to govern [India]."[4]

Historian James H. Mills has done an excellent job investigating the politics behind the origins of these two connected commissions, but the academic historiography of the IHDC is still rather thin.[5] Especially since the surge of marijuana activism in the 1960s, the tendency has been to isolate the report's conclusions from the imperial context in which they were formed and to use them as evidence of a conspiracy by governments today to decommodify the plant.[6] On the contrary, Mills points out how the conclusions

from both reports need to be taken with a "healthy dose" of skepticism because those in charge of producing them had a vested interest in promoting regulation instead of prohibition. In effect, his work demonstrates how politics functioned to create "exaggerated, ill-founded, and downright mistaken perceptions" of eastern cannabis.[7] As for this study, it is less concerned with validating or discrediting interpretations of cannabis used for such purposes than it is with investigating how and why they were formed, which helps contextualize the IHDC as another by-product of the British colonizing mentality toward Indians and their "deviant" uses for the plant. Even though the report concluded that cannabis consumption was not "deleterious" enough to warrant prohibition, for example, it nevertheless perpetuated a discourse that normalized certain uses at the expense of others, which in turn validated the British civilizing mission in India.

Shamir and Hacker's article reinforced the view that this civilizing mission "had been premised on the idea that advanced peoples had an obligation to help those less advanced, to provide guidance and instruction and even to rule them."[8] In fact, cannabis is perhaps the best plant to study in relation to British imperialism because of how strikingly different the colonizers' cultural uses were from those of the colonized. The British contrasted these deviant, "Asiatic" uses from their own, seemingly more productive ones, which reinforced their sense of cultural superiority and provided justification for an imperial presence on the subcontinent. After failing to convince Indians to use the plant "properly," the next plan was to transform it into a useful medicine. However, indigenous cultural consumption patterns remained strong, so the British decided that control and regulation was the best approach. Licenses granting permission to producers and distributors were established as early as 1793, but it wasn't until the 1840s that the trade became associated with smuggling to the point that imperial agents started investigating its distribution.[9] This was roughly around the same time in which the British began setting up insane asylums throughout India, and the statistical data they compiled in these institutions overwhelmingly pointed to the notion that consuming cannabis caused insanity.[10]

Swirling rumors of the pernicious effects of cannabis drugs also left the colonial government vulnerable to attacks by the moral crusaders against intoxication, so the commission made it a priority to collect data on the validity of these assumptions. Question 45f on the questionnaire they sent out to over one thousand "witnesses," for example, asked whether cannabis consumption "deaden[s] the intellect or produce[s] insanity."[11] This question was part of a larger section titled "Effects," which consisted of about thirty percent of the entire survey and included very detailed questions that asked the witnesses to be as thorough and specific as possible with their answers. Since associations suggesting a link between cannabis and insanity emanated from the asylum statistics, "every asylum in British India was visited either

by the Commission or by some members of the Commission, and careful inquiries were conducted on the spot in every case of insanity attributed to the use of hemp drugs for a given period."[12] The answers the committee received from the questionnaires and the interviews they conducted with various personnel at the asylums, though, in no way put this issue to rest, for the responses ranged from denial of the insanity thesis to wholehearted belief that cannabis could be the most dangerous drug of all. Some claimed it helped stimulate the intellect, while others either skipped the question entirely or reported not knowing anything about it.[13]

The conclusion drafted and endorsed by a majority of the commission included four British and one Indian member, and they strung the evidence together in such a way that suggested moderate use had no ill effect on the consumer, while excessive use (mostly of ganja) could lead to insanity. Two of the three Indian representatives on the committee vehemently disagreed with this conclusion and used the same body of evidence to argue that "hemp drugs are very deleterious in their effects."[14] Both wrote lengthy dissenting opinions to support their arguments, which included statistical data of evidence taken from the witness accounts and various charts revealing what, in their minds, amounted to a strong link between cannabis consumption and moral decay. Both of the dissenters supported prohibition, and even though their conclusions were not implemented, their essays were attached to the final document and included in the publication.[15] Those in favor of the majority conclusion argued that the minority position was based on speculation and hearsay, but the fact that the speculation and hearsay existed in such large quantities and was even popular among medical experts who were interviewed is far more important than the legitimacy of the claims, for the discourse on drugs in a society can directly influence what people think happens when they consume them. For cannabis, this discourse was constructed through an imperialist lens, which colored the way the British and their aspiring colonial elites perceived and understood the plant and its effects on those who used it.[16]

In fact, even those who endorsed the majority opinion of the IHDC seemed grounded in a firm belief in the degenerate narrative of British imperialism. Consider, for example, the following quote from the conclusion of the majority opinion:

> Vague statements are made by a small minority of the witnesses regarding the stupidity or moral weakness of consumers [of ganja] whom they have met. But after making allowance for the fact that these observations have often been of excessive consumers, and for the lower mental and moral tone found generally among the lower orders to which the consumers, or at all events the smokers of hemp drugs, almost exclusively belong, there is little left in the evidence on which to base any opinion.[17]

In effect, it was the morally abject classes of India who were attracted to ganja and charras in the first place, but only excessive use led them to mental deterioration anyway, which is why the British needed to step in and pass laws that regulated consumption and controlled distribution. As the reasoning went, prohibition was a lost cause, for even though "ganja is the most noxious of all intoxicants now commonly used in India, . . . the result [of prohibition] might be to induce the use of still more noxious drugs." Indeed, the committee exaggeratedly professed that "India abounds with plants, growing wild, from which drugs can be procured which are more deleterious in their effects than ganja."[18] Such an overabundant and spontaneously productive environment naturally inclined Indians toward getting "high," so there was nothing much the British could really do except try and contain their behavior as much as possible. In other words, the subcontinent had the capacity to transform productive commodities into dangerous intoxicants, which posed a threat to the population the British was trying to civilize if the people's whimsical desires were not put in check with imperial regulations.

Although the IHDC purported to be a truth-seeking mission about cannabis drugs and cultures, then, the majority position seems to have used the evidence selectively to achieve the results they needed to promote regulation instead of prohibition. After all, they accepted the answers of witnesses who emphasized moderate use at face value but called in the witnesses who argued for the insanity thesis for a follow-up interview to scrutinize their position. Moreover, they also stressed "the legitimate leisurely aspects of consumption, the benefits of hemp in providing staying power and meditative ability, and its ascribed applications in 'native medicine.'"[19] This allowed the commission to play up the use of cannabis drugs in Indian religious ceremonies and social customs. In the section of the questionnaire titled "Consumption or Use," for example, question 32 asked the witnesses to "mention any customs, social or religious, in regard to the consumption of any of these drugs. Give an account of every such custom." Question 33 asked whether there was "any custom of worshipping the hemp plant on certain occasions by certain sects of the people," and wanted the witnesses to emphasize how "the consumption of each of these drugs [is] generally regarded."[20] Demonstrating a commitment to preserving the religious freedom of the people they were trying to civilize was a key element of a benevolent empire, so stressing their efforts to preserve such liberties was essential to the British mission.

Indeed, examples of this professed commitment to the religious practices and customs of the people of India are littered throughout the majority opinion. Take, for instance, the following conclusion arrived at after summarizing some of the answers that various "witnesses" provided to question 33:

> The Commission are [*sic*] of opinion that the use of bhang is more or less common everywhere in connection with the social and religious customs of the people. As regards ganja, they find that there are certain classes in all parts, except the Punjab, who use the drug in connection with their social and religious observances. The Commission are [*sic*] also of opinion in regard to bhang that its use is considered essential in some religious observances by a large section of the community . . . interference with the use of hemp in connection with the customs and observances above referred to would be regarded by the consumers as an interference with long established usage and as an encroachment upon their religious liberty.[21]

The detailed descriptions they included about cannabis use at festivals such as Diwali, Chait Sankranti, Pous Sandranti, Sripanchami, Sivachaturdasi, Ramnavami, and the religious usage of ganja by worshippers of Shiva all reinforced this view. They also established a sense of "otherness" between the colonized and the colonizers. A British collector of land revenue and opium customs in Bombay pointed out, for example, how "to the Hindu the hemp plant is holy."[22] He described in detail many of the ceremonial rituals and superstitious customs for which Indians used cannabis, including various rituals where bhang was used to ward off evil spirits, provide offerings to Hindu gods, and greet friends at home or at weddings. Indeed, so important was this drink to the various religious rites and social customs the author described that he claimed, "no gem or jewel can touch in value bhang taking truly and reverently." The only time he mentioned anything negative about cannabis consumption is when he pointed out that "ganja in excess causes abscess, even madness," which led him to conclude that "to forbid or even seriously to restrict the use of so holy and gracious an herb as hemp would cause widespread suffering and annoyance and to the large bands of worshipped ascetics deep-seated anger."[23]

Such a position gave the British justification for promoting regulations over prohibition, which allowed them to continue making money and exercising control over the population. It also sent a message that the British were enlightened imperialists who respected the cultural customs of the "others" they governed, but that they were willing to do what needed to be done to improve native lives. Of course, the Indian minority members of the commission vehemently disagreed, arguing that such a view constructed a false image of an Indian tradition that grossly exaggerated the use of cannabis drugs in religious and social customs.[24] For Shamir and Hacker, the dissenting opinion of the commission included evidence that went far beyond witness responses to "derid[e] ganja as a vice and ganja smokers as a menace to society," so their conclusions need to be taken with a heavy dose of skepticism as well.[25] Remember, both of the writers for the dissenting opinion on the report were part of the aspiring colonial elite who considered themselves members of the enlightened class of Indians. They, too, were influenced by

the British colonial civilizing mission in India, so they blamed the plant for the problem of intoxication on the subcontinent. For them, cannabis needed to be eradicated for the Indian masses to reach a higher stage of social development. It is worth pointing out here that, of all the witnesses and evidence used by both the majority and minority opinions of the committee, there was virtually no representation or account given by those who consumed the "menacing" substance called ganja.[26]

So, despite the biased nature of its concluding positions, then, the IHDC was a rich source that revealed the struggle for meaning that was taking place within the British Empire regarding the value of cannabis. Popular opinion circulated the notion that cannabis drugs induced insanity, and the diverse array of responses collected for the survey about them reflected the complicated nature of this transatlantic discourse. Images and perceptions of Indian degeneracy and oriental "otherness" converged with the spirit of the temperance movement to call cannabis consumption into question, but legislation remained focused on regulating its use in British India. Still, knowledge of the report migrated across the Atlantic to influence the way U.S. Americans thought about the plant as well. Here, too, the IHDC failed to garner significant attention after its initial publication, but the discourse it perpetuated on cannabis as an exotic intoxicant that needed to be controlled and regulated caused many to reconsider the plant's place as a commodity, especially as word spread of its connection to Mexicans and the drug called marihuana they seemed to bring with them as migrants. Only after the League of Nations began discussing cannabis drugs in the 1920s, though, did the process of transforming the plant into a banned intoxicant really get under way in the Atlantic world.

THE TRANSATLANTIC AFTERMATH

When it first came out, the IHDC did not generate much attention, and the movement by the moral crusaders who initially championed its creation stagnated for a while afterwards.[27] However, publications on both sides of the Atlantic discussed the report, pointing out how general opinion tended not to line up with its conclusions. One article from the *British Medical Journal* in 1895 stressed how much "hemp has been represented as a specially [*sic*] noxious substitute or alternative for opium in India." In particular, the author reported that the "use of haschish has been credited with terrible effects, violence, debauchery, insanity and crime," but that "the report of the Hemp Drugs Commission has clearly demonstrated that this view of the effects of the consumption of hemp is grossly exaggerated."[28] That same year, *The Lancet* reported how "it appears that there are no such marked ill-effects" in the consumption of cannabis drugs as ascribed by popular opinion, and that

there "has, in fact, been a great deal of popular prejudice and exaggerations as to the evil effects arising from the use of hemp drugs and ganja."[29] Exaggeration or not, many within the British Empire were under the impression that the plant caused problems. Not only that, but the new regulations that the IHDC recommended for cannabis cultivation and distribution in British India increased the use of law enforcement against the plant, while back in London its medical uses seeped into literary circles and occult practices very much like in the United States during the 19th century.[30] By 1905, the plant had become criminalized in parts of the British Empire and was well on its way to becoming a banned intoxicant in the Atlantic world.[31]

Across the ocean, the *American Journal of Insanity* published a similar article in 1896 to the one in *The Lancet* the year prior, and in it the author reported various links between "hashish and insanity" but also ended by suggesting that this relationship "has yet to be determined, notwithstanding the labors of the Indian Hemp Drugs Commission, whose conclusions may be summarized as follows: The moderate use of Indian hemp has no physical, mental, or moral ill effects whatever. Its excessive use injures . . . the mind and may cause insanity."[32] A publication out of Michigan the following year also mentioned the IHDC, reporting how it demonstrated that "Indian hemp drugs are regarded as causing insanity more rarely than has popularly been supposed."[33] Over ten years later, another article from *The Therapeutic Gazette* mentioned the IHDC report as "an interesting read" that was designed "to investigate the so-called evil of the hemp drug habit" before quoting O'Shaughnessy and describing the assassins and other talking points from the transatlantic discourse. The author also commented on how it could not "clearly prove that the habit gave rise to mental aberration," but that popular opinion had led many to "continue to list it with such habit-forming drugs as morphine, chloral, and alcohol."[34] Clearly, the transatlantic knowledge culture on eastern cannabis from the 19th century had taken a toll on the plant's reputation, for its connection to insanity intensified.

Nevertheless, physicians kept experimenting with the plant. After all, medicines were in high demand, for this was the Age of the Laboratory, when pharmacology was soaring through changes that would reshape the history of medicine on a global scale. As Roy Porter pointed out, "drug therapy had long been a jumble of items and uses lacking unity. . . . But [now] new laboratory skills brought the systematic advances dignified by the name of pharmacology."[35] However, attempts to isolate the active pharmacological ingredient in cannabis remained unsuccessful as the 19th century came to a close, which often led to more inconsistent trials with its medicinal uses.[36] One medical textbook published in New York and Philadelphia, for example, complained that "there is great uncertainty concerning the active principle of this drug," which the author described familiarly as "hasheesh," "Ganja," "Guaza," and "Indian hemp" before including a variety of the

Orientalist tropes to describe its uses.[37] Correspondence between U.S. government officials in 1918 over trials conducted with cannabis on dogs between 1916 and 1917 led one pharmacologist to conclude that "cannabis indica" was "physiologically weak."[38] Others stressed the fact that cannabis medicines had a number of additives in them that could be causing the problems; yet despite a surge in experiments at the turn of the century, none succeeded in identifying THC until the 1960s.[39] Meanwhile, more and more began dismissing cannabis medicines or joining in what some scholars have referred to as the "cannabinomania" circulating across the Atlantic at the turn of the century.[40]

As concerns over its medicinal efficacy mounted, a new word started surfacing to describe the plant in the English-speaking Atlantic. At first, knowledge that the substance known as "marihuana" derived from cannabis seems to have been minimal, with stories published in newspapers across the United States at the turn of the century indicating confusion about the drug. Many agreed that it emanated from Mexico, though, and Campos's book on the subject reveals just how much perceptions of the "menacing drug" in the United States were connected to those from their neighbors south of the border, where marijuana had a troubled history well before rumors of its deleterious effects traveled north.[41] However, sources from this period definitively demonstrate an awareness in the United States and Great Britain that the drug derived from cannabis, and that the transatlantic discourse on Orientalism was still part of the rhetoric positioning parts of the plant as a social problem. Even before the IHDC was commissioned, for example, *The American Journal of Pharmacy and Science* published a description of "Cannabis indica" that reported its connection with "hallucination" and referred to it as the "Marihuana (Cannabis indica)" that was one of the "more or less well known drugs [to] have found a place in the Mexican Pharmacopoeia."[42] Earlier still, an article titled "Contributions to American Botany" appeared in a publication out of Boston, which included the following listing: "Cannabis sativa, Linn. At Guanajuato (Dugges); known as 'Marihuana.'"[43] It contained no further description, but it's clear that the author took "marihuana" to be a substance that derived from cannabis. Another source from 1898 did as well, pointing out that the "smuggling of marihuana (cannabis medica) into the barracks has recently caused a number of murderous assaults among the soldiers."[44]

Nearly a decade later, a description appeared in an essay titled "The Hashish Plant in Arizona and Mexico," which included far more details. The author narrated his "cause to become familiar with a plant known as 'marijuana,'" and his story is an excellent example of how Orientalist perceptions of cannabis converged with negative associations of Mexicans to exacerbate the plant's ailing reputation. His name was Herbert Brown, and he worked for a prison in the southwest region that he claimed provided him with

firsthand knowledge of this "exceedingly dangerous" drug that caused users to "become bloodthirsty, trebly daring, and dangerous to an uncontrollable degree." Initially unaware of the type of plant that produced such "hypnotic power for evil," he sought help from a botanist friend, who "identified the plant as a species of hemp, Cannabis indica."[45] Seemingly struck by the revelation, he continued:

> Here was the Oriental dream making, murder inspiring bhang of Indian song, story and thuggism, taking root in the far west; a household plant grown at every cottage door in the vale of Kashmir found thriving before the door of a mud hovel on the desert begirt banks of the Santa Cruz. . . . Under flaring headlines a recently published newspaper article recites the seizure of "eight large boxes of marijuana, the largest collection of the national dope weed of the Mexican peon ever captured in a single haul" . . . Enough of this brain-wrecking weed was seized to have caused any number of murders had it reached the poor persons for whom it was intended. The effects of marijuana are like, but worse than those of opium. It has a tendency to craze the brain of the smoker . . ., but in the end it produces a murderous mania.

Brown went on to claim that, "though recognized under several forms and names, . . . marihuana . . . is generalized under that of *Cannabis sativa*," which had been used in "India and China, from times most remote." He then proceeded to regurgitate much of the knowledge handed down in various books about the eastern preparations, only now it was being used to describe the degenerate "Mexican railroad laborers."[46]

The Orientalization of Mexicans in the United States had become a rather popular motif during the first quarter of the 20th century, and cannabis was part of that narrative.[47] One example from *Popular Science* lamented the "hundreds of heartbroken 'dope fiends'" who gathered around in crowds to watch as police in Los Angeles prepared to light a "$25,000 bonfire, the flames of which were fed by confiscated marihuana, contraband opium and 'hop' pipes." The author described this "precious burning dream-stuff" as follows: "One ton of marihuana or 'Indian Hemp' was put on the fire. Marihuana is a weed with narcotic properties, is closely akin to hasheesh, and is smoked when dry. It is in particular favor with Mexicans," who, along with several "Chinamen," were apparently in the crowd acting like "fiends" when law enforcement set the confiscated pile on fire.[48] A novel from the 1920s reflected the same perception when the author wrote, "Marihuana. 'What's that,' Gail queried. 'It's a drug . . . a hemp product, a cousin to hasheesh. It's the curse of Mexico, as opium is the curse of China."[49] And a medical textbook titled *A Manual of Pharmacology and Its Applications to Therapeutics and Toxicology* mentioned that the "oriental use of Cannabis ('Hashish,' Bhang, Charas, etc.) antedates history" before claiming that the "exaltations" and "hallucinations of double personality" that were associated with its use

"seems to be much more marked in orientals."[50] The revised edition from 1920 did not mention it, but the 1926 edition added the word "marihuana" to the entry on cannabis and claimed that "Cannabis smoking is becoming prevalent in Mexico" as a "menace to civilization."[51] Apparently, when it came to cannabis medicines, as the British Orientalist Edward Browne put it in a speech to medical students about the plant, "if there is romance in history, there is also romance in the Materia Medica."[52]

In fact, it's almost as if, when it came to cannabis commodification, Mexico became for the United States what India was for the British Empire: a touchstone for constructing one's identity in opposition to a perceived "other" that used a productive plant for degenerative purposes. Not only that, but perceptions of the Orient were projected onto Mexicans and their uses for cannabis, and these associations began to overshadow the plant's industrial uses, which seemed to be causing more problems than they were worth,[53] especially when it came to fiber production, as one story published in *Popular Mechanics* in 1910 indicated. Titled "Oriental Narcotic Overpowers Fireman," it warned that "hasheesh, the subtle narcotic of the Far East, is held responsible for the temporary discomfiture of no less than 75 of Chicago's firemen." Apparently, a fire broke out in a rope factory, where an "immense quantity of hemp fiber went up in flames." The firefighters went in to douse water on "the burning hemp, . . . only to succumb to the overpowering fumes." The poor firemen "could not account for the situation, never dreaming that the piles of straw colored fiber on which they were working contained the narcotic, that for centuries has been famous as a sleep producer."[54] Given the type of cannabis that was generally used for fiber and the manner of processing that took place before the dry stocks went to the factory, it's highly unlikely that smoke from the burning hemp could have caused the firemen to become intoxicated, but the plant's reputation as an Oriental menace to society had already begun to trickle into the context of its other uses.

Still, neither the Harrison Act of 1914 in the United States nor the 1916 Defense of the Realm Act (DORA) in the UK included cannabis in their legislative prohibitions. However, laws against the plant had already formed at the state level in the United States and in some colonies of the British Empire.[55] Transnational concerns over drug consumption and distribution circulated more widely throughout the Atlantic world by then as well, so it's no surprise that cannabis drugs became a topic of discussion among delegates from the League of Nations at a conference for the Advisory Committee on Traffic in Opium and Other Dangerous Drugs on August 12, 1924. As a by-product of World War I, this international organization made curbing the traffic of "dangerous drugs" a primary concern of its member states, projecting a kind of transnationally oriented cultural hegemony over the concept and purpose of drug use in general.[56] Although the United States was not a member of the League of Nations, they sent delegates to the

conference nonetheless, with one of the professed goals being to get nations to "enact effective laws or regulations for the control of the production and distribution of raw opium and coca leaves so that there will be no surplus available for purposes not strictly medical or scientific."[57] Mills has thoroughly deconstructed how the politics of the international drug trade led to a discussion of cannabis being brought up at a conference mainly concerned with opium, and the language the delegations used to describe the plant reflected the Orientalist discourse that was shrouding its meaning.[58]

One delegate, for example, warned that cannabis would "become a terrible menace to the whole world" if left unchecked. Referencing his understanding of "the mentality of Oriental peoples," he went on to plead for the League of Nations to help combat "this scourge which reduces man to the level of the brute and deprives him of health and reason, self-control and honour."[59] Such rhetoric helped get cannabis included on the list of dangerous drugs in the draft language of the meeting, and the following year new legislation against the plant was passed by British Parliament, along with more in 1928. Although no such counterpart to these laws emerged on a national level in the United States during the 1920s, thirty-one states already had laws against the plant by the end of the decade.[60] Moreover, military personnel working in the Canal Zone of Panama were barred from using or possessing it in 1923, and a committee was formed in 1925 to study the effects it had on the morale of soldiers serving in this region of the U.S. American empire, which added another foreign element to its meaning.[61] By the 1930s, government officials clearly took cannabis, marihuana, and Indian hemp to be the same plant, and combating its use and distribution were becoming important priorities for the larger narrative of drug control in the Atlantic world. Especially after the League of Nations' Advisory Committee on Traffic in Opium and Other Dangerous Drugs reported an increase in 1932 of the "illicit sale of Marihuana cigarettes (containing Indian hemp)" in Canada that were smuggled in from "Detroit, Michigan," investigation into the plant's deleterious effects and distribution patterns intensified.[62]

In response to the committee's desire to investigate "the cannabis problem" more thoroughly, the United States provided the League with a study on the plant in November 1934.[63] Titled "The Abuse of Cannabis in the United States," it reflected the multifaceted meaning the plant had acquired and explained why it was being considered a more sinister, foreign commodity. From the outset, for example, the author and eventual chair of the Opium Advisory's Subcommittee on Cannabis, Stuart J. Fuller, pointed out how "Indian hemp is not indigenous to the United States, but is now to be found as a roadside weed in almost every state in the Union." Also referring to it as "marihuana," "Cannabis Americana," and "Cannabis Indica," he claimed that the "hundreds of Mexicans" working in the beet industry "are practically all addicted to smoking" this substance he also referred to as "reefer," "kiff,"

and “Indian hay.”[64] It was rumored to be popular among “Turks, Filipinos, Greeks, Spaniards, Latin Americans and Negroes” as well, and produced insanity and increased crime.[65] In fact, he even made reference to one case in which a man “resorted to marihuana, ran amok, attempted to shoot his wife, but mortally wounded his grandmother, and after shooting it out with the police officers, finally killed himself.” And that was after mentioning that the drug was “worse than heroin. It gives men the lust to kill, unreasonably, without motive—for the sheer sake of murder itself. In Eureka, California, a man under the influence of marihuana actually decapitated his best friend.”[66] Such perceptions of cannabis consumption were widespread at the time, and they were the culmination of a long line of transatlantic discourse on its Oriental associations. Now that the League of Nations had taken it upon itself to curb the traffic of opium, nations across the Atlantic world had to worry about the “substitution of Indian Hemp for heroin” among addicts.[67]

His alarmist rhetoric reflects the growing discourse on cannabis in the United States, which historiographically has been referred to as Reefer Madness and which endowed the entire plant with a more sinister meaning and devalued its other uses. We have already seen examples of how concern over drug cannabis penetrated its meanings as a fiber and a medicine in the early 20th century, but the situation got worse after Fuller’s report came out. The secretary of the Opium Research Committee, Helen Howell Moorhead, for example, wrote in a letter regarding her interest in “emergency action to eradicate this summer’s crop of wild hemp,” that “it is obviously necessary to protect the legitimate interest in the hemp crop,” but “we need to get ahead of the illicit trader by some type of legislation before the use of this new drug of addiction becomes widespread.”[68] Fear of the plant became so great in New Orleans that, according to a manager for the Philadelphia Seed Company, his distributors in the city “received a rather threatening letter from the local District Attorney in which it is alleged that the Hemp Seed has been analyzed and has been found to be a derivative of a plant known as Marihuana.” To ensure that the company was not inadvertently manufacturing “some sort of dope,” he sent seed samples with his letter and hoped that authorities could “throw any light on this matter.”[69] In reply, the chief of the bureau, F. D. Richey, pointed out how “it is true that the hemp seed in question is that of the marihuana plant,” but it is the “female inflorescence of the plant” that “possesses the physiological properties that are the basis of its use as a potent drug.” Still, even though the “mature seed is considered to be devoid of such properties,” he stressed that various states had passed laws against the plant “in order to prevent the production and surreptitious use and distribution” of it for pernicious purposes.[70]

That year, the Uniform Narcotics Act gained more support from various states, and it included cannabis in the list of drugs that the government wanted to regulate and control more uniformly across state lines. Word

spread across the United States about how fast the plant grew and how difficult it was to eliminate, and the Federal Bureau of Narcotics' (FBN) campaigns against the plant increased fear of its resin and the drugs that derived from it.[71] By 1937, the national Marijuana Tax Act was passed, which prohibited the sale of cannabis drugs and required a strict licensing system for those seeking to cultivate the plant. One of its main proponents was Harry J. Anslinger, the commissioner of the FBN, who wrote of "marihuana" in his 1936 article of the same name that "this killer" was also "known to history as hashish." While narrating exaggerated stories of innocent U.S. Americans being mentally destroyed by the drug, he repeated the familiar trope that it "is a weed of the Indian hemp family, known in Asia as Cannabis Indica and in America as Cannabis Sativa. . . . In the year 1090, there was founded in Persia the religious and military order of the Assassins whose history is one of cruelty, barbarity, and murder, and for good reason. The members were confirmed users of hashish, or marijuana."[72] Clearly, Orientalist thought permeated the knowledge culture on cannabis in the United States.

Yet even still, some continued to tout the plant's benefits—with one article even referring to it as a "Billion-Dollar Crop" in 1938.[73] However, the discourse on its intoxicating properties proved too difficult to overcome, so the plant's full potential as a commodity never became realized. In fact, even though many cannabis activists today cite the 1938 *Popular Mechanics* piece as evidence of a conspiracy against the plant, the article itself pinpointed the problem that was the cause of concern: "the blossom of the female hemp plant contains marijuana, a narcotic, and it is impossible to grow hemp without producing the blossom."[74] Given the lack of knowledge about cannabinoids and the endocannabinoid system at the time, anyone reading this from the 1930s would have very little scientific literature to suggest otherwise. In other words, cannabis had become too associated with marijuana in the United States, and it could be portrayed as an exceptionally fearful substance because of how little it was understood. Although the plant could still be legally cultivated after 1937, it was such a hassle for anyone who wanted to do so that the industry declined more rapidly. Finally, the transatlantic discourse on cannabis and orientalism had taken its toll on the plant at the national level in the United States, bringing it one step closer to fully transforming from an important strategic commodity to a banned intoxicant.

It can be difficult to comprehend the transformation of cannabis in the Atlantic world without a thorough appreciation for the Orientalist discourse that followed it from British India to the UK in the 19th century, and then from the UK to the United States. A blend of literary and medical sources produced the complicated knowledge culture about the plant that allowed for such a transformation to take place, but the Indian Hemp Drugs Commission

set the process in motion. Although the report that this British imperial agency produced on the plant argued for regulation and control instead of prohibition, the evidence the committee collected showed widespread perceptions that cannabis drugs could be harmful if left unchecked by the civilizing forces of the west. This became the dominant position against drug use for nonmedical purposes among western nations at the turn of the century, which meant that concerns over addiction were being constructed through the lens of Orientalist thought, which exacerbated the problem in the United States once people started making a connection between cannabis and marijuana. By the time the League of Nations started calling for the investigation of cannabis drugs in the 1930s, the plant's meaning as a valuable commodity had shifted significantly. No longer associated with the durable fiber that produced rope for so long since the Age of Exploration, cannabis was reimagined as a foreign dope that was scourging the nation.

This transformation increased fear of users and animosity toward distributors so much that it paved the way for the process of criminalization that came afterward, which in turn brought skyrocketing incarceration rates for the drug in both the United States and the UK. As more funds were allocated toward eradicating "the drug problem" in the Atlantic world, the process of criminalization transformed preparations of the plant into transgressive drugs of use, which sparked a culture war that drove cannabis cultivation indoors. As the next chapter explains, this shift in cultivation pattern ended up transforming cannabis into more of a legitimate medicine than it ever was before, and new cultural consumption patterns developed that added to its transgressive meanings, including a new one as a respectable recreational drug for connoisseurs in high society by the end of the 20th century. In effect, cannabis got re-commodified through governmental efforts to de-commodify it, and its re-commodification, as we shall see, brought more transformations to the plant's place in U.S. national society and the Atlantic world at large—and at a great cost.

NOTES

1. Virginia Berridge, *Opium and the People: Opiate Use and Drug Control Policy in Nineteenth and Early Twentieth Century England*, Revised Edition (New York: Free Association Books, 1999), 185; John F. Richards, "Opium and the British Indian Empire: The Royal Commission of 1895," *Modern Asian Studies* 36, no. 2 (May 2002): 386; "Enclosure No. 1: House of Commons Question," 16 July 1891, in William Caine, *East India Consumption of Ganja* (London: Eyre & Spottiswoode, 1893), 3.
2. Anonymous, "The Hemp Drugs Commission," *The British Medical Journal* 1, no. 1741 (May 1894): 1040.
3. Ronen Shamir and Daphna Hacker, "Colonialism's Civilizing Mission: The Case of the Indian Hemp Drugs Commission," *Law & Social Inquiry* 26, no. 2 (Spring 2001): 436.
4. Ibid.

5. James H. Mills, *Cannabis Britannica: Empire, Trade, and Prohibition, 1800–1928* (New York: Oxford University Press, 2003), 99–133.

6. See, for example, John Kaplan, *Marijuana: Report of the Indian Hemp Drugs Commission, 1893–1894* (Silver Spring: Thomas Jefferson Publishing, 1969).

7. Mills, *Cannabis Britannica*, 218. For an excellent review of Mills's book, see Beatriz Acevedo, "Cannabis Britannica: A History of the Present," *Ephemera* 6, no. 2 (2006): 208.

8. Shamir and Hacker, "Colonialism's Civilizing Mission," 436.

9. Mills, *Cannabis Britannica*, 67.

10. James H. Mills, *Madness, Cannabis, and Colonialism: The "Native Only" Lunatic Asylums of British India, 1857–1900* (New York: St. Martin's Press, 2000).

11. Indian Hemp Drugs Commission, *Report of the Indian Hemp Drugs Commission 1893–1894* (Simla: Government Central Printing Office, 1894), vol. 4, iii (reprint, New York: Johnson Reprint Corporation, 1971) (hereafter cited as *IHDC*).

12. Ibid., vol. 1, 7.

13. Shamir and Hacker, "Colonialism's Civilizing Mission," 443.

14. Raja Soshi Sikhareswar, "Note of Dissent by Raja Soshi Sikhareswar Roy from Opinions Expressed in the Report," in *IHDC*, vol. 1, 369. Both dissenters pointed out the pernicious effects of ganja, which was used predominantly by the lower classes. Interestingly, only three of the witnesses reported using ganja, and none of them came from the lower class. See Shamir and Hacker, "Colonialism's Civilizing Mission," 445.

15. *IHDC*, vol. 1, 363–477. Shamir and Hacker eloquently point out that, while highly impressive and more soundly documented than the majority position, the dissenters' opinions need to be viewed with caution as well, for they represent the views of an aspiring colonized elite that were positioning themselves as the enlightened rulers of India, in contrast to the lower classes who consumed such pernicious substances.

16. For an excellent article that discusses the notion of empire and its impact on British knowledge of India, see Rajani Sudan, "Mud, Mortar, and Other Technologies of Empire," *The Eighteenth Century* 45, no. 1 (Summer 2004): 147–169.

17. *IHDC*, vol. 1, 202.

18. Ibid., 268.

19. Shamir and Hacker, "Colonialism's Civilizing Mission," 447.

20. *IHDC*, vol. 4, 11.

21. Ibid., 166.

22. "Note by Mr. J. M. Campbell, Collector of Land Revenue and Customs and Opium, Bombay, on the Religion of Hemp," in *IHDC*, vol. 3, 250.

23. Ibid., 251–52.

24. "Note of Dissent by Lala Nihal Chand," in *IHDC*, vol. 1, 403.

25. Shamir and Hacker, "Colonialism's Civilizing Mission," 453. For discussion of the minority members' attempt to "assert their own authoritative elite position," see ibid., 454–59.

26. In the randomly generated sample that Shamir and Hacker generated for analyzing the report, the only three to admit to consuming ganja were Brahmins. One of them, described as a "native doctor," reported that he had "smoked ganja for thirty-five years . . . take ganja regularly . . . [and] have good health and always appetite . . . I have never been intoxicated, i.e. insensible from ganja . . . I have never seen a ganja smoker grow mad . . . I can bring two hundred old men who are able and hearty, who have smoked fifty years." See ibid., 444.

27. Berridge, *Opium and the People*, 188.

28. "The Indian Hemp Drugs Commission," *British Medical Journal* 1, no. 1791 (April 27, 1895): 938.

29. Quoted in Mills, *Cannabis Britannica*, 144.

30. Ibid., 149–151.

31. Government Records Office, *The Legislative Enactments of Ceylon*, vol. 4, part 5 (Colombo: G. J. A. Skeen, 1906), 313–14.

32. G. Alder Blumers, Henry M. Hurd, and Richard Dewey, eds., *The American Journal of Insanity*, vol. 53 (Chicago: Rand, McNally & Co., 1896), 292.

33. H. A. Hare and Edward Martin, eds., “Hasheesh (Cannabis Indica) as a Cause of Insanity,” *The Therapeutic Gazette: A Monthly Journal of General, Special, and Physiological Therapeutics*, vol. 21 (Detroit: William M. Warren, 1897), 460.

34. M. V. Ball, “The Effects of Haschisch Not Due to Cannabis Indica,” *The Therapeutic Gazette* 26, no. 11 (November 1910): 777–780. For examples of other articles published in the United States that mention the IHDC, see Richard Bonnie and Charles Whitebread, *The Marijuana Conviction: A History of Marijuana Prohibition in the United States*, Revised Edition (New York: The Lindesmith Center, 1999), 130–145.

35. Roy Porter, *The Greatest Benefit to Mankind: A Medical History of Humanity* (New York: W. W. Norton & Co., 1997), 333.

36. Mills, *Cannabis Britannica*, 146–149.

37. Charles F. Millspaugh, *American Medical Plants; An Illustrated and Descriptive Guide to the American Plants as Homeopathic Remedies: Their History, Preparations, Chemistry, and Physiological Effects* (New York and Philadelphia: Boerricke and Tafel, 1887), 154.

38. United States Department of Agriculture, “Memorandum for Dr. Kebler,” November 23, 1918, Records of the Food and Drug Administration, Division of Pharmacology, Declassified General Subject Files, Record Group (hereafter RG) 88, Entry 2, Box 3, National Archives at College Park (hereafter NACP).

39. Ball, “The Effects of Haschisch Not Due to Cannabis Indica,” 780. For an account of the surge in cannabis experimentation after the IHDC, see Mills, *Cannabis Britannica*, 140–151.

40. Stephen Snelders, Charles Kaplan, and Toines Pieters, “On Cannabis, Chloral Hydrate, and Career Cycles of Psychotropic Drugs in Medicine,” *Bulletin of the History of Medicine* 80, no. 1 (Spring 2006): 102. See also Mills, *Cannabis Britannica*, 140–44.

41. Campos, *Home Grown*, 203–215.

42. John M. Maisch, ed., *The American Journal of Pharmacy*, vol. 58 (Philadelphia: Royal Printing Co., 1886), 21, 156.

43. Sereno Watson, “Contributions to American Botany: List of Plants from Southwestern Texas and Northern Mexico, Collected Chiefly by Dr. E. Palmer in 1879–1880,” *Proceedings of the American Academy of Arts and Sciences*, vol. 10 (Boston: University Press, John Wilson and Son, 1883), 155.

44. B. F. G. Egeling, “Mexican Department,” *Meyers Brothers Druggist* 29, no. 9 (St. Louis, 1898): 293. For an example of a source published in the UK at this time that demonstrates an understanding of the connection between cannabis, hemp, and marihuana, see *Journal of the Society of Arts*, vol. 44 (London: George Bell and Sons, 1896), 409–414, 417, 425, 684, 801. This same article was published in the United States the same year. “The Production of Pulque in Mexico,” *Scientific America* 75, no. 20; also see Peter Squire, *Companion to the Latest Edition of the British Pharmacopeia*, 17th Edition (London: J. & A. Churchill, 1899), 180.

45. Herbert Brown, “The Hashish Plant in Arizona and Mexico,” *The Plant World: An Illustrated Monthly Magazine of General Botany* 10, no. 1 (January 1907): 180–181.

46. Ibid., 181–82.

47. See Campos, *Homegrown*, chapter 6. For an excellent study on how Americans “Orientalized” the American frontier in general, see Richard Francaviglia, *Go East, Young Man: Imagining the American West as the Orient* (Logan: Utah University Press, 2011).

48. Anonymous, “Five Thousand Dollars a Minute,” *Popular Science Monthly* 88, no. 1 (January 1916): 64.

49. Peter B. Kyne, *The Enchanted Hill: A Novel* (New York: Cosmopolitan Book Corporation, 1924), 230.

50. Torald Hermann Sollman, *A Manual of Pharmacology and Its Applications to Therapeutics and Toxicology*, 2nd Edition (Philadelphia and London: W. B. Sauders Co., 1920), 249.

51. Ibid., 302, 323.

52. Edward Browne, “A Chapter from the History of Cannabis Indica,” *Saint Bartholomew’s Hospital Journal* 4, no. 42 (March 1897): 86.

53. For an account of the hemp industry’s decline after the Civil War, see James F. Hopkins, *A History of the Hemp Industry in Kentucky* (Lexington: University Press of Kentucky, 1951), chapter 6.

54. Anonymous, "Oriental Narcotic Overpowers Firemen," *Popular Mechanics* 14, no. 6 (December 1910): 824.

55. For a recent study of the state laws against cannabis before federal legislation, see Adam R. Rathge, "Cannabis Cures: American Medicine, Mexican Marijuana, and the Origins of the War on Weed, 1840–1937" (PhD diss., Boston College, 2017).

56. For more on the concept of cultural hegemony, see T. J. Jackson Lears, "The Concept of Cultural Hegemony: Problems and Possibilities," *The American Historical Review*, 90, no. 3 (June 1985): 567–593.

57. Quoted in Mills, *Cannabis Britannica*, 166.

58. For a discussion of the politics behind the origin of cannabis discussions in the League of Nations, see ibid., 152–71.

59. Quoted from ibid., 171.

60. For a list and description of laws against cannabis in the United States by 1931, see Stuart J. Fuller, "Summary of State Laws in Regard to Cannabis Indica, Cannabis Americana, Indian Hemp and Marihuana," September 21, 1933, in Department of State: Division of Far Eastern Affairs (hereafter DFEA), Subject Files Related to Control of Narcotics Traffic, 1908–1941; RG 59, Box 11, A1 1489; NACP.

61. For an overview of the Panama Canal Zone, 1914–1935, see Points (blog), Alcohol and Drug History Society, November 22, 2016, accessed June 18, 2018, https://pointsadhsblog.wordpress.com/2016/11/22/rumor-and-libel-regulating-cannabis-in-the-panama-canal-zone-1914-1935/. For the government report on the investigation that Orientalized marijuana but also concluded that its effects were exaggerated, see W. P. Chamberlain, Committee Chairman, "Report of the Committee Appointed Per Letter from the Governor, Dated April 1, 1925, for the Purpose of Investigating the Use of Marihuana and Making Recommendations Regard Same," Balboa Heights, December 18, 1925, in DFEA, Subject Files, 1908–1941; RG 59, Box 11, A1 1489; NACP.

62. League of Nations Document O.C. 99, Advisory Committee on Traffic in Opium and Other Dangerous Drugs, "Illicit Traffic in Canada in Cigarettes Containing Indian Hemp," Geneva, February 27, 1933, in ibid.

63. Mr. Phillips, "Memorandum on Marihuana and Its Proposed Destruction in the United States," 1, May 8, 1935, in ibid.

64. Stuart J. Fuller, Esquire, "Memorandum on the Abuse of Cannabis Indica in the United States," League of Nations Document 1542 (c), 1, 4, in ibid.

65. Ibid., 7.

66. Ibid., 9, 8,

67. Ibid., 11.

68. Helen Howell Moorhead, Secretary of Opium Research Committee, to Henry A. Wallace, Department of Agriculture, May 28, 1935, National Headquarters, New York, in ibid.

69. J. B. Hertzfeld, Philadelphia Seed Company Manager, to U.S. Department of Agriculture, Philadelphia, October 2, 1935; Department of Justice: Bureau of Narcotics and Dangerous Drugs (hereafter DJBN), Subject Files, 1916–1970, Philadelphia Seed Company Records; RG 170, Box 40; NACP.

70. F. D. Richey, Chief of Bureau, to J. B. Hertzfeld, Philadelphia Seed Company Manager, October 4, 1935, in ibid.

71. Zachary Falck, *Weeds: An Environmental History of Metropolitan America* (Pittsburgh: University of Pittsburgh Press, 2010), chapter 2. For the classic account of Reefer Madness and the federal government's legal relationship with cannabis, see Ricard J. Bonnie and Charles H. Whitebread, *The Marijuana Conviction: A History of Marijuana Prohibition in the United States* (New York: The Lindesmith Center, 1999).

72. Harry Anslinger and Courtney Cooper, "Marihuana: Assassin of Youth," *The American Magazine* 124, no. 1 (July 1937); accessed October 6, 2017, http://www.redhousebooks.com/galleries/assassin.htm.

73. "New Billion-Dollar Crop," *Popular Mechanics*, February 1938, 238ff, http://www.cifas.us/sites/g/files/g536796/f/BillionDollarCrop.pdf.

74. Ibid. For an example of this interpretation, see Jack Herer, *The Emperor Wears No Clothes: Hemp & the Marijuana Conspiracy* (Van Nuys: Queen of Clubs Publishing, 1992).

Chapter Seven

Shifting Cultural Consumption Patterns of Cannabis in 20th-Century U.S. Transatlantic History

Well before the Marihuana Tax Act passed in the United States, signs that preparations of cannabis were becoming transgressive drugs of use were present across the nation. It already had strong associations with indigenous cultures in Mexico and the African Diaspora elsewhere in the Atlantic world much earlier, but a fascination with "Oriental magnificence"—as one frequenter of a clandestine Hashish house or "hemp retreat" in New York City during the 1880s described it—also sparked subcultural uses among those seemingly at odds with the protestant work ethic mentality of western cultures in the late 19th century.[1] On top of that, a strong connection between cannabis, jazz musicians, and nightclub workers developed throughout the first quarter of the 20th century, which racist anti-drug crusaders used to present consumption as a social threat to the nation, adding another racial dimension to the plant's Mexican and Orientalist associations. At the time, the concept of the American junkie was well established in U.S. American culture, which Caroline Acker shows "gave rise to an image of deviance that has shaped American drug policy ever since."[2] Yet even as the national scorn for users and peddlers intensified, drug cannabis became a powerful cultural commodity symbolizing an authentic, anti-establishment identity against law enforcement institutions of the state. Ranging from within marginalized communities throughout the nation to inside college campuses and literary circles across the Atlantic, consumers transformed the plant into what historian Emily Dufton called a "signifier of protest."[3]

The cultural significance of this transformation is quite interesting. After all, this is a plant that crossed the Atlantic as a valuable commodity with

myriad uses more than three centuries earlier, and now—after becoming a popular transatlantic medicine and an Oriental intoxicant—it had transformed into a symbol of countercultural resistance. Not only that, but this symbolism continued to follow cannabis, transmogrifying over the decades of the 20th century to fit the agendas of countercultural movements that developed out of the government's so-called "War on Drugs." And yet today, with more states having laws in favor of one or the other instead of against them, both recreational and medicinal cannabis consumption seem to be on an unstoppable path toward legalization and regulation in the United States. Indeed, despite having destroyed the lives of countless people and families for over half a century now, the criminalization of cannabis has also (somewhat ironically) transformed the plant into a legitimate medicine and now a respectable recreational drug of high society. The cultural battle over its meaning is far from over—if anything, it has become more complicated than ever before—but the revolution in domestic cultivation that personalized cannabis use and ramped up investments in hydroponics seems to have shifted consumption patterns too strongly for the momentum behind its commodification to be stopped now. Only time will tell, of course, but the history of this process—as well as the fluidity with which this genetically diverse plant transmogrified over the 20th century—reflects how important cultural constructions are for shaping the way societies and communities choose to embrace and condemn commodities.

CANNABIS, COUNTERCULTURALISM, AND THE WAR ON DRUGS

So far, we have seen how a wider transnational western imperial mindset of the Orient drove cultural perceptions of the plant in the United States and the wider Atlantic world, which connected cannabis to Oriental degeneracy, crime, and insanity. These connections gave Harry Anslinger and the Federal Bureau of Narcotics (FBN) the justification they needed to go after the plant for its perceived deleterious properties, and the Reefer Madness campaign they waged helped strengthen the groundwork for the so-called "War on Drugs"—which is a phrase popularized in Richard Nixon's administration to describe his approach to the perceived drug problem that was developing in the United States.[4] Of course, this popular phrase really refers to a war on culture, or, more specifically—in the case of marijuana—a war against subcultural uses for cannabis, which were tied to the meanings behind its consumption. From this perspective, the "War on Drugs" becomes more of a transatlantic phenomenon that has been going on since the late 19th century, when anti-opium campaigns across the Atlantic combined with Orientalist thought to fuel support for stronger legal measures to control the use of

opium drugs.[5] A sensationalized racial discourse emerged regarding the "Negro Cocaine Fiend" around the turn of the century as well, which drew legislative support for more force against particular groups of users of that drug also.[6] By the early 1930s, the League of Nations' approach to subduing nonmedical cultural uses for these two "Dangerous Drugs" had become so successful in "the control over the opium and coca derivatives" that many transnational drug crusaders worried that "recourse will increasingly be had to Indian hemp for addiction purposes."[7]

In the United States at the time, the perception that addiction was a form of enslavement perpetuated by "the persistent avarice of the peddlers," as a publication by the Opium Research Committee put it, exacerbated people's fears of drug traffickers.[8] Although the concept of drug addiction was still portrayed as dangerous and deviant, contemporary documents pertaining to the narcotics farms movement indicated a shift toward more emphasis on the victimization of addicts by drug pushers, which those in charge of the institutions behind drug enforcement increasingly blamed on "negroes and Mexicans."[9] Other fears of drug peddling came in the form of articles such as the one from the *New York Evening Journal* in 1934 that lamented how the "growth of marijuana" was considered a dangerous "lure to youth" because it was "so cheap [and] within the reach of school children!" It also "has been discovered in use by college students," military personnel, and "in smart circles as a 'fad.'" Echoing the transatlantic Orientalist discourse on cannabis, the author warned that the "illicit traffic" in Brooklyn alone amounted to "millions of dollars" per year, which posed a serious threat to the nation's future because the plant "makes addicts subject to mental disorders, and frequently causes them to run amok with murderous intent." Therefore, he urged action against distributors before the "threat to civilization" that this "virulent weed" presented became realized.[10]

Four years later, an article written by an assistant dean of the Pharmacy College at Rutgers University expressed similar sentiments when it warned how "our children, homeward bound from school, are being introduced to the greatest curse today in the form of drug—the deliriant narcotic—Cannabis." The author called it "as dangerous a weapon to humanity as has ever been used by man" before diving into all the familiar eastern tropes from the 19th century, which led him to conclude that persistent use "makes [users] a slave to the Mexican Reefer."[11] Not only that, he claimed, but the 1937 legislation only helped control "the legitimate sources of the drug" by requiring everyone involved in cannabis industries to register with the government and pay a tax, which meant that "marihuana will continue to be the greatest curse today . . . unless the illegitimate sources of production and illegal distribution . . . can be curbed."[12] Another article from the period regurgitated much of the sensationalized rhetoric from both of these sources nearly verbatim before suggesting that "often, free samples are offered by peddlers purport-

ing these cigaretes [*sic*] to be harmless," when in fact they induced "the wildest debauchery and sexual crimes."[13] Perhaps this was the type of imagery that motivated J. Edgar Hoover to scrawl a handwritten note to Anslinger about his alarm over the increase in "small business places opening up in town that are run by Mexican people who have been selling Marijuahna [*sic*] what I'm trying to spell is the cigarette known as weed." What concerned him the most was that "lately I notice young white people of high school age, and some of college age, going in there to buy," which is why he ended by asking the commissioner to "please do something."[14] If the publication of young "Joe's story is any indication," this fear of cannabis peddlers infiltrating the morality of good white Americans was widespread by 1939.[15]

The racial undertones behind Reefer Madness have already been well documented in cannabis historiography, but it's also important to note the significance of the fact that the confusion and lack of knowledge about cannabinoids that remained prevalent at the time helped make such rhetoric part of the cultural consciousness of mainstream society.[16] This confusion also made it difficult for many to distinguish the dichotomy between legitimate and illegitimate cannabis use and production, which allowed for the menacing perceptions of the plant's drug properties to continue seeping into its other meanings. Helen Howell Moorhead, for example, wrote to the Department of Agriculture to ask the government for help with identifying the "location of any considerable growth of hemp wherever grown, whether on public or private land."[17] Another letter included sixty copies of a report sent to Stuart Fuller of the League of Nations' Opium Advisory Committee regarding the "Preparation of an Extract Having 'Marihuana-Like' Activity from the Fruits of Cannabis Sativa." In it, he mentioned how the document was a by-product of a discussion at the League of Nations Cannabis Subcommittee in May 1939, "at which time the Canadian and American representatives voiced an opinion that the narcotic effect was produced by the smoking of crushed cannabis seeds."[18] In fact, the National Archives at College Park has an archival file titled "Marihuana: Smoking of Seeds," which contains several essays on the subject and a stack of letters from narcotics agents across the nation who responded to Anslinger's memorandum requesting "information to the effect that cannabis seed is smoked or otherwise used as a narcotic or intoxicant."[19] Concern over the possible germination of cannabis seed that companies used for bird food is well documented in the primary source material as well, which led the government to call for businesses to sterilize their seeds before packaging them for sale.[20]

There is also an entire file called "Indian Hemp—Door Mats," and it contains several sources that indicate how much of a nuisance Reefer Madness made it to cultivate cannabis for fiber production. Some government agents even expressed concern "that the common Indian hemp door mat could be smoked with the same effects as smoking marihuana."[21] Often-

times, narcotics agents were sent out to regions across the nation to investigate businesses that were still involved with cultivating cannabis for fiber. In Chicago, for example, one narcotics agent sent a letter to his district supervisor regarding "information relative to the type of business the Indiana Hemp Products Company of Crown Point, Ind., is engaged in." Throughout the letter, he referred to cannabis fiber and seed as "marihuana," and described a detailed investigation into the company's affairs, which did not turn up anything nefarious.[22] From letters such as these, it seems that the mere act of conducting business with cannabis had become deeply suspicious due to the Orientalist discourse surrounding the plant. Similar documents reveal several investigations into legitimate fiber-producing operations that caused good material to go to waste, such as the letter Anslinger wrote to one company manager on December 27, 1940, to inform him "that the stock of hemp plants now stored at the Danville plant had the flowering tops and foliage still remaining attached to the stalks," which meant they "could not be transferred free of the transfer tax under the Marihuana Tax Act."[23] For the average farmer, these types of problems were not worth the hassle, so cannabis fiber production continued to decline in the United States.

After entering World War II, though, the U.S. military found itself in desperate need of a new source of fiber for naval stores. Cut off from supply in the Philippines, the government created fliers and a promotional film about cannabis, hoping to convince farmers to cultivate more for the war effort.[24] As the *Washington Times Herald* reported, they also developed a program to grow a crop of their own:

> Burly Harry J. Anslinger, commissioner of narcotics, will have to play watchdog over 150,000 acres of farmland in Wisconsin, Iowa, Illinois, and Minnesota next year, when the domestic hemp program—sponsored by the Commodity Credit Corporation—gets underway. Jap conquest of the Philippines and in East India sheared off the nation's supply of hemp rope, essential to all craft of Navy and Merchant Marine. The truth is that Indian hemp, the type being planted besides furnishing valuable rope is also an abundant source of Marijuana, dread enemy of juvenile law enforcement authorities. The stalk of the hemp plant is utilized in rope-making. Its leaves and tiny flowers are the stock in trade of the underworld "reefer" merchant.

In order "to keep racketeers out of the hemp lands," the commissioner was given 367 men to watch over the harvest."[25] According to a government telegram at the time, the shortage of rope the United States was facing amounted to "approximately 50,000,000 pounds," so they were feeling desperate for fiber.[26] Yet just as the British had failed in prior centuries to promote cannabis cultivation for the empire, so too did the United States fail to get a meaningful number of farmers to grow it for the nation. In the end, the decades of negative transatlantic discourse on the plant proved too pow-

erful to overcome, so cannabis fiber never recovered as a commodity. By 1958, all cannabis production was illegal, and mandatory minimum prison sentences were set for those caught in possession of any part of the plant. By the 1970s, as Duvall points out, both "U.S. and Canadian anti-narcotics agencies were goading taxonomists to label hemp *Cannabis* as indistinguishable from marijuana," which could bring life imprisonment for those caught with it in certain circumstances.[27]

Despite this criminalization, though, consumption and production increased dramatically across the nation, which has led to its re-legalization in several states by now. To be sure, the plant remains illegal at the federal level and is still listed as a Schedule I drug, which means it has no acceptable medicinal value and is considered among the most dangerous drugs of use.[28] However, these policies have backfired in some culturally significant ways, sparking new cultural meanings for the plant once again. For one, the criminalization of cannabis shifted cultural consumption patterns toward a nonconformist countercultural mentality in opposition to the hegemonic representation of recreational drug use as a reprehensible act of antisocial behavior. The Beatniks, for example, who were described as a youth culture of "mutiny against society," gravitated toward marijuana in their explorations of consciousness and search for individuality during the 1950s.[29] Their "marijuana reveries," as one writer put it, were "crucial to their work and their relationships," which had a "vital . . . influence on the rising counterculture" movements across the country.[30] Novelists such as Norman Mailer recalled feeling "wonderfully criminal, as if we were truly breaking a frontier," when he consumed it.[31] Both he and the Beat writers developed a "fulsome and romantic view of the black jazzman as a cultural and social outlaw," which no doubt bolstered the plant's transgressive social meanings across racial lines.[32] Clandestine operations like "tea-pads" and "speakeasies" were said to be the bane of "municipal authorities" in New York by the 1940s, and they were rumored to be heavy spots of cannabis consumption.[33] For the youth culture in rebellion against the "stunting conventionality" of the time, these spaces—and the cannabis consumption that occurred within them—came to symbolize what Emily Dufton perceptively described as a form of "rebellion against everything 'straight' in American culture."[34]

At the peak of hippiedom, then, the plant had become a quintessential symbol of resistance to the state, and its popularity exploded, especially on college campuses, where university students were portrayed as unruly and more violent at a time when, as Acker put it, "Nixon made law and order a central plank of his 1968 presidential campaign, [in which] he saw drug abuse as an important contributor to crime."[35] As president, he called drugs "America's public enemy number one in the United States" and announced "a new, all-out offensive" against users, producers, and distributors.[36] Incarceration rates increased under his professed "War on Drugs," with fears of

trafficking and addiction serving as its primary justification. Selective law enforcement and draconian policy combined to disproportionately target minorities as the government began seizing larger quantities of cannabis and targeting transnational cultivation centers. Despite destroying the lives of millions of people and costing billions of dollars, though, these policies only served to strengthen the countercultural reputation of the plant, which stimulated a culture of grassroots activism that has grown ever since.[37] Granted, powerful reactionary movements have also developed on a grassroots level in response to this countercultural symbolism, and they have helped keep the plant federally criminalized throughout this culture war. In the meantime, however, the shift in cultural consumption patterns has reshaped the plant's image in the Atlantic world, where versions of the same criminalization policy in other countries have experienced similar histories. From all over that world, the consequences of cannabis criminalization have generated cultural changes that have once again refashioned the meaning of this multidimensional commodity.

CANNABIS RECOMMODIFICATION

In 1974, a magazine called *High Times* came out with its first two editions in history, which the editors described as a "lavish new" publication "devoted entirely to the exploration of psychoactive drugs [with] an international network of underground sources."[38] The second edition provided a bullet-point summary of the content from the first, the type of information included in the new one, and what readers could expect to find in those to come. Examples included: "Hemp Paper Reconsidered—Hemp (the World's Finest Paper) Could End the Rape of our Forest," "The 'Three Cannabis' Legal Defense—Harvard Botanist Dr. Richard E. Schultes Testifies before a Florida Court," and "smokeasies," which were described as "the increasingly popular dope boutiques where heads wile away the current Pot Prohibition."[39] Taken together, these headlines on cannabis illustrate how its triple purpose meaning had been reclaimed by enthusiasts seeking to reestablish it as a legitimate commodity in the Atlantic world. One of the driving cultural forces behind this recommodification is reflected in the modified meaning of the word "dope" from the quote, which demonstrates how a semantic loop developed that transformed it from a disparaging term into a powerful signifier of countercultural authenticity. Much like the way in which African Americans transformed the United States' "superlative racial epithet" into a powerful expression of marginalized identity, for example, the new meaning of "dope" derived force from being in a semantic loop with its older, more sinister meaning, which reversed the discourse and turned it into a subcultural ex-

pression of anti-assimilationist attitudes against the hegemonic view of drugs within law enforcement institutions of the state.[40]

As a historical process, the recommodification of cannabis that shifted consumption patterns and transformed its meaning began with what an article from the second edition of the magazine described as "overwhelmingly huge busts that have been made recently."[41] The next year's opening edition expressed similar sentiments, with one section eschewing the "Pot Blockade" that caused a tremendous "shortage" across the nation.[42] By 1976, the government had ramped up its criminalization policies so much that articles were lamenting the Drug Enforcement Agency (DEA) for establishing "terror to the fields abroad and tension to the line of supply at home."[43] Others pointed out that "smart money is going out of the import game and into domestic cultivation," because "if people in America want to get high, they're going to have to Grow their own."[44] In fact, an increasingly popular option for doing just that started appearing in advertisements sporadically dispersed throughout the magazine, with the first one appearing in May 1976. It displayed a picture of two cannabis plants growing in a bucket called the "Carefree Super Pot," which "contained [a] hydroponic growing system that grows super stoning pot (and gourmet quality vegetables and herbs)." This was the first time in the magazine's history that the word "hydroponic" appeared in print, and the company that used it promised customers their "closets and attics [will] become your own secret Eden" if they purchased the system for "$14.50ea plus $ 1.50 postage."[45]

In the November edition, a company called "High Lite" bought some advertising space for their product that explained how "you can grow your own highest quality herbs in the privacy of your own home (a never-ending supply!) . . . with our full-spectrum lighting systems that duplicate sunshine indoors," but it did not mentioned hydroponics.[46] The same ad showed up in the following edition as well, shortly before a much larger one from a different company appeared with symbols of cannabis leaves outlining its large bold letters that announced, "AT LAST! GROW DYNAMITE POT. INDOORS." The "HOME GROWER'S KIT" they listed for sale at "$12.75 plus $1.50 for U.P.S. delivery" came with a "guarantee that you can grow lush, beautiful, potent plants INDOORS . . . at a fraction of the cost." In fact, the ad claimed that "your plants will produce as much as three pounds of powerful marijuana, at $3.00 per Ounce!"[47] Several different ads with similar rhetoric were published in these early editions as well, but like these two, most of them did not use the term "hydroponics." The December edition did include one ad for a "Hydroponic Houseplant Kit," but like the "Carefree Super Pot" one from earlier that spring, it did not include much information on the technique or how it differed from soil gardening.[48]

By the end of 1977, the magazine had grown into a monthly publication, and the editions included much more space for advertising. A variety of

different companies published ads selling all types of cultivation products designed to improve domestic cannabis production and, as one of them put it, "help alleviate America's trade deficit [in] superb organic marijuana."[49] In the February edition, one article reported how "last summer's crop of domestic marijuana exceeded all previous harvests in quantity and quality and introduced a number of hybrids that could shake the bottom out of the import market."[50] The authors credited "American agrarian ingenuity" for mastering the "delicate juggling of seeds, soils, fertilizer, altitude, growing seasons and other variables," but they did not mention hydroponic cultivation. Despite their enthusiasm for how much closer the United States had come to achieving "self-sufficiency in the dope market," though, the country still faced such a shortage in supply that "America's Bicentennial will be remembered by potheads as the year of the Great Drought." They also complained about prices climbing so high that "dopers in Boston, Philadelphia, and New York snapped up the seedless tops at prices from $200 to $300," and in Vermont it was "selling for up to $600 a pound."[51] Even after adjusting for inflation, these are much higher prices than the numbers given in sources from the early Reefer Madness era, which reflects the impact that decades of cannabis criminalization had on the plant.

In terms of a cultural shift toward hydroponic gardening for cannabis cultivation, though, the ads and articles from these early editions suggest that it hadn't caught on as a popular alternative to soil gardening quite yet. As a commercial industry, hydroponics did not really emerge until the 20th century. Coincidentally, the same year as the Marijuana Tax Act (1937) is when botanists from the University of California, Berkeley, coined the term to describe "the process of growing plants in nutrient solutions."[52] Philosophically, however, the concept is centuries old, if not millennia. John Woodward published the first study of the technique in English in 1699, but it goes back much further in world history. Some even cite the Hanging Gardens of Babylon as early examples of hydroponics.[53] These complexly engineered gardens are rumored to have been built during the reign of King Nebuchadnezzar II (606 B.C.E.–562 B.C.E.), who designed them out of large mud bricks that held pools of water for plants to grow in. Although evidence of their historical existence is a bit scant, sources from Mesoamerica in the 14th century more confidently indicate that the Aztecs built floating gardens (*Chinampas*) in Tenochtitlan, which certainly counts as hydroponics.[54] Marco Polo might have mentioned observing water gardens on his travels throughout Asia, where ancient rice cultivation techniques originating in China centuries earlier also bear resemblance to the technique.[55] Clearly, even though the term is a 20th-century phenomenon, a culture of hydroponics has been around much longer in different regions throughout world history.

By the late 19th century, several companies existed in the Atlantic world that sold nutrient solution recipes for soilless plant cultivation to scientists

and institutions for experimental purposes, but the idea still had not generated large-scale commercial interest.[56] Claims that hydroponic gardening could revolutionize agriculture brought a surge of attention to the industry in the 1940s, though—even if concerns over pricing and proper practices kept many skeptical of its commercial utility. After learning about the success that Pan American Airways had with growing food hydroponically on Wake Island in the late 1930s, an article from the *Science News-Letter* claimed that the U.S. military decided to provide "hydroponic or soilless farms" to its "personnel living on baron atolls and islands in the Atlantic and Pacific Ocean, and on isolated tropical posts" because they "need fresh vegetables rich in vitamins and minerals to keep them in the best condition for carrying out their missions successfully." Although "not practical for a large number of troops," the author reported that the tomatoes it produced "were the size of a baseball, had smooth skin with unbroken surfaces and fine textures as well as excellent flavor."[57] Four years earlier, the same publication printed an article about hydroponics that claimed it could "Provide Bigger and Better Vegetables," and the author hinted at the surge of popularity in the technique when he mentioned how multiple "firms are offering both equipment and prepared chemicals for home gravel-culture set-ups, and many of them are quite attractive in appearance as well as quite mechanical." The article also included an advertisement for a new book on the subject that pointed out how many people had recently "heard and read plenty about the amazing results from soilless growth," which also indicates that knowledge of it was becoming more widespread.[58]

Nevertheless, many continued to have their doubts, with one team of academics from Berkeley concluding that "most claims for the advantage of nutriculture are unfounded."[59] These were the old colleagues of one of the main founders of the industry, William Gericke, who subsequently left the university over a dispute about his work. Afterward, he published a book, *The Complete Guide to Soilless Gardening*, in which he mentioned how these early critics "failed to realize" that hydroponics "is not an exact science at present," meaning that the technique was "still in the experimental stage." He also stressed the importance of understanding how "soilless crop production presents a challenge to the amateur," for it is a complex endeavor that requires careful attention to detail.[60] However, when done correctly, he claimed that the benefits far outweighed the challenges. Gericke's desire to open these cultivation practices up to a wider audience brought more attention to the industry and influenced the design of multiple company products—many of which were put on display at fairs and expositions across the nation.[61] Despite this surge in popularity, though, several factors contributed to the erratic fluctuations of interest in hydroponic gardening over the decades that followed, with the early 1970s falling into a period of decline for the industry.[62] Perhaps this decline explains why it did not get mentioned

in the earliest editions of the magazine's history, despite a preoccupation among the articles within them to promote more domestic cannabis cultivation.

For about a year after hydroponics first surfaced in *High Times* magazine, the frequency of ads mentioning it did increase, but they generally consisted of vague allusions and exaggerated claims that offered little explanation. The April edition from 1977 reflects a shift in this tendency, however, with one of its many ads pertaining to hydroponics consisting of a book specifically on how to grow cannabis using the method. The image on the book included a picture of a toilet with cannabis growing out of it, which became an advertising symbol for cultivation products in subsequent editions.[63] Other ads from this edition included hydroponic kits with far more information about the systems and how they functioned, indicating that the method had finally become popular within cannabis subcultures. One of them took up more space than any other hydroponic ad that came before it, and it included a sketch of the toilet image from the book that was introduced the previous month. The company called it the "Hydropot," and claimed that "you'll never go back to smoking commercial dope again!" It also included far more printed text than any other before it, which helped explain why the "world's finest weed grows in water, not dirt."[64] Over the next several editions, the same ad appeared multiple times, with some variation in the language used to describe the system. A version from the September edition added that the Hydropot "needs just 2.5 sq. ft. of room," which suggests an increase in demand for smaller, more clandestine operations as the cultural war on cannabis consumption intensified.[65]

Over the next few years, an explosion of interest in the new method among cannabis cultivators ensued. Not only did the frequency of hydroponic ads continue to increase, but a growing number of new products showed up in them that were designed to improve indoor growing environments. Before long, more of the magazine's articles started commenting on the improved quality of domestically grown cannabis. A new column titled "Dope Connoisseur," for example, pointed to this cultural shift in cannabis consumption when the author wrote that, "it's not how high you get; it's the quality of the high when you get there that counts."[66] By the time Disney's Epcot Center opened in 1982, hydroponic cultivation techniques were far more advanced, with all kinds of technological innovations in the market that helped horticulturalists establish controlled environments in which to organize their clandestine operations on a more scientific scale.[67] Artificial means of regulating temperature, light spectrums, humidity, CO_2 production, and nutrient distribution helped transform the quality of cannabis that could be produced, and nuanced distinctions in taste and potency between different plant varieties became more pronounced and identifiable. This, in turn, stimulated a connoisseurship subculture of cannabis consumption as a respect-

able, upscale social activity—even as the criminal justice system continued to disproportionately incarcerate people of color for possessing the plant.[68]

It also transformed marijuana into a more socially acceptable medicine, with a trail of established data to support what became known as the Medical Marijuana Movement.[69] Granted, cannabis remained a powerfully symbolic transgressive drug of use in a variety of different subcultures throughout this historical process; but the transformations the plant endured over the decades of hydroponic cultivation also rendered it more conducive to medical uses.[70] Comparing images of cannabis published in *High Times* from the 1970s to those in the early 2000s and today, for example, provides a striking visual representation of how much the plant changed during that time. Earlier images depict smaller, less manicured flowers with very little nuance between different varieties, whereas the more recent ones have far more density and are profoundly more expressive in color, shape, fragrance, size, and potency. The more sterile environment that indoor hydroponic gardening provided also improved the medical quality of cannabis, and more research into the medicinal properties of cannabidiol (CBD) have confirmed much of what some medical practitioners have been saying for decades.[71] In other words, the culture war against cannabis did not accomplish anything that its supporters claimed to be waging it for. Instead, it transformed the plant first into a popular symbol of antiestablishment identity, then into a recreational drug of high society and a legitimate medicine. In 1996, California became the first state to re-legalize cannabis for medicinal purposes. Others followed suit, and then Colorado opened the door for recreational laws in 2012.

Meanwhile, the federal government continues to resist the plant's shifting meaning by refusing to declassify cannabis as a Schedule I drug, which jeopardizes the legality of these state initiatives—along with the freedom of those involved in them. Not so long ago, for example, Attorney General Jeff Sessions was quoted as saying that "good people don't smoke marijuana," and he instructed his department to pursue the highest federal charges possible in cannabis criminal cases.[72] Still, more than half the states in the nation now have some form of medical or recreational policy that reflects this new cultural meaning for cannabis, and the latest polls on public opinion show a decisive majority in favor of the shift.[73] Marijuana has become big business in the United States, and it is in no small part due to the so-called "War on Drugs" that has been taking place over the course of the past century or so.

One final point is worth mentioning here at the end of this chapter, which is that Orientalism continued to play an important role in shaping the meaning of cannabis throughout this historical process. Late 19th-century expressions of Orientalist thought led some to embrace cannabis consumption as a symbolic rejection of the Protestant work ethic mentality that dominated western cultural mindsets.[74] Historian Susan Nance demonstrated how admiration for the Orient inspired various meanings of the "American Dream" for

social groups across the United States, and a strong lure for its material culture initially enticed writers such as Bayard Taylor and Fitzhugh Ludlow to embrace cannabis consumption.[75] Eastern words like "ganja" became symbolic representations of cannabis for some, while others such as Jack Kerouac from the Beat Generation referenced it in works such as *The Dharma Bums*.[76] Allen Ginsberg published an essay in 1966 called "The Great Marijuana Hoax," which captured this deep fascination with the Orient that inspired cannabis consumption among the hippie generation:

> I smoked legal ganja (as marijuana is termed in India, where it is traditionally used in preference to alcohol), bought from government tax shops in Calcutta, in a circle of devotees, yogis, and hymn-singing pious Shaivite worshipers in the burning ground at Nimtallah Ghat in Calcutta, where it was the custom of these respected gentlemen to meet on Tues. and Saturday nights, smoke before an improvised altar of blossoms, sacramental milk-candy & perhaps a fire taken from the burning wooden bed on which lay a newly dead body, of some friend perhaps, likely a stranger if a corpse is a stranger, pass out the candy as God's gift to friend and stranger, and sing holy songs all night, with great strength and emotion, addressed to different images of the Divine Spirit. Ganja was there considered a beginning of sadhana (Yogic path or discipline) by some; others consider the Ascetic Yogi Shiva Himself to have smoked marijuana.[77]

A similar sort of fascination with elements of the Orient existed from the outset of *High Times* magazine as well, in which the author of one article referred to "marijuana" as a "medical wonder drug . . . that was revered as a healing agent in ancient Chinese and Indian Empires."[78] In another edition, one of the leading cannabis reform advocates and founder of the National Organization for the Reform of Marijuana Laws (NORML) wrote to the magazine referring to himself as a "NORML Nabob."[79] Clearly, an inspirational form of Orientalist thought pervaded countercultural interests in the plant from a variety of social milieus.

Other examples include descriptions of "hemp reveries" depicted as a "scene of Oriental Magnificence," an author describing his walk in Miami while high on hashish as feeling like he had been transported to "Manila or Bangkok," and an article about India that referred to it as the "land of ganja smokers, bhang drinkers, charras yogis, [and] high holy hemp gurus."[80] It can be inferred from these and the mountain of others just like them, that for countercultural consumers of cannabis, the Orientalist tropes used by moralists to fuel the plant's criminalization became tools for relegitimizing its meaning as a commodity. The last example is particularly revealing, for the author went on to explain how "nobody was more surprised than we Indians who had for centuries of British rule been called filthy beggars and told to bloody well push off," that now "tens of thousands of westerners came to

India seeking verities and drugs from our gurus and merchants," where "during summer months fellows may see naked hipsters running gleefully through the fields of ganja . . ., falsely believing that such is the native manner."[81] Some of the visitors were described as "beat birds" and "early hippies" who were there for the "digging of India."[82] The Oriental imaginings of these countercultural cannabis consumers helped illuminate what Jamaican Prime Minister Michael Manley once described as the problematic "contradiction between a law and a people that don't accept that law."[83] For cannabis in the United States, this lack of acceptance fueled its recommodification as both a medicine and recreational drug. Although developments in hydroponics made this transformation possible, it was countercultural Orientalist thought that kept interest in cannabis consumption strong enough for consumers to start imagining innovative ways to alleviate the problems of supply generated by the transatlantic culture war against the plant.

Ever since cannabis became a symbol of transgressive youth culture, the plant has endured myriad transformations in both use and meaning. Although it has been recommodified in several parts of the Atlantic world and the United States over the past decade or so, only time will tell how these shifts will affect the plant's broader legal status as a transatlantic commodity. One thing does seem clear based on the history of cannabis in the Atlantic world, though, which is that culture will be a deciding factor in shaping that status. After all, harking back to what anthropologist Sydney Mintz once proclaimed in his important book, *Sweetness and Power*, meaning does not "inhere in substances naturally or inevitably. Rather, I believe that meaning arises out of use, as people use substances in social relationships."[84] For cannabis, its multiple uses have created a variety of meanings for the plant over the last two centuries, and the cultural forces behind these meanings have played a vital role in determining its place in societies throughout the Atlantic world. During the 20th century, the cultural forces of Orientalism that earlier followed the plant throughout the United States transformed into powerful expressions of countercultural identity, which helped reshape its meaning yet again and eventually shifted cultural consumption patterns in ways that have brought more social acceptance for different cannabis cultures. With the battle over its commodification still waging, though, it helps to take note of the cultural roots behind these constructed meanings, so that, hopefully, we may recognize the flaws within them and make adjustments accordingly.

NOTES

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3. Emily Dufton, *Grass Roots: The Rise and Fall and Rise of Marijuana in America* (New York: Basic Books, 2017), 6.

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8. Frederick T. Merrill, *Marihuana: The New Dangerous Drug* (Washington, D.C.: Opium Research Committee, 1938), 24, in ibid. For more on the fears of drug peddlers, see Alexandra Chasin, *Assassin of Youth: A Kaleidoscopic History of Harry J. Anslinger's War on Drugs* (Chicago: University of Chicago Press, 2016).

9. W. T. Duffy to L. J. Ulmer, "Hash or Marijuana Traffic," Pittsburg, Penn., March 16, 1934, Department of Justice, Bureau of Narcotics and Dangerous Drugs (hereafter DJBN), Subject Files, 1916–1970, Philadelphia Seed Company Records; RG 170, Container 40; NACP. There is a dearth of documentation in the national archives pertaining to this shift in focus by the 1930s, which includes letters sent by random people across the United States to the FBN seeking help for their addicted relatives and correspondence between government officials regarding the type of people to be admitted into these farms for treatment of their addictions. See DJBN, Subject Files, 1916–1970; RG 170, Container 40; NACP.

10. Allen Bernard, "Growth of Marijuana Habit Seen as Lure to Youth," *New York Evening Journal*, November 5, 1934, 11A–11B, in DJBN, Subject Files, 1916–1970, Marihuana District #2; RG 170, Container 110; NACP.

11. George C. Schick, "Marihuana: Depriver of Youth," *Druggist Circular* 5 (March 1938): 12, 81, in Division of Far Eastern Affairs (hereafter DFEA); Subject Files, 1908–1941, Cannabis: 1937–1938; RG 59, Box 11; NACP.

12. Ibid., 81.

13. R. S. Winters, "Marihuana," *Hygeia* (October 1940): 887, in ibid., Subject Files, 1908–1941, Cannabis: 1941; ibid.

14. J. Edgar Hoover to Harry J. Anslinger, Washington, D.C., September 7, 1935, in DJBN, Subject Files, 1916–1970; RG 170, Container 110; NACP.

15. John C. Almack, *Fact First on Narcotics: Alcohol, Tobacco, Opium, and Cocaine* (Mountain View, Cal.: Pacific Press Publishing Association, 1939), 96.

16. For a good starting point on the racialized undertones of Reefer Madness, see Duvall, *Cannabis*, 153–75.

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18. Herbert E. Gaston, Assistant Secretary of the Treasury to Stuart J. Fuller, Assistant Chief, Far Eastern Affairs," May 17, 1940, in DJBN, Subject Files, 1916–1970, Marihuana: Smoking of Seeds; RG 170, Container #110; NACP.

19. Joseph Bell, District Supervisor, Bureau of Narcotics, to Harry Anslinger, Commissioner of Narcotics, Houston, Texas, August 9, 1939; in ibid.

20. League of Nations Advisory Committee on Traffic in Opium and Other Dangerous Drugs, Report O.C. 1632(c)(1), "Rules Recommended for the Effective Control over Pharmacies," Geneva, June 9, 1937, 35, in DFEA, Subject Files, 1908–1941, Conferences and Conventions, 23rd Session Report; RG 59, Box 34; NACP.

21. H. J. Anslinger to Joseph Bell, Washington, D.C., May 21, 1943, in DJBN, Subject Files, 1916–1970, Marihuana: Door Mats—Indian Hemp; RG 170, Container #110; NACP.

22. Cornelius J. Kelly, Narcotic Agent to James J. Biggins, District Supervisor, Bureau of Narcotics, Chicago, Illinois, April 13, 1940, in ibid., Subject Files, 1916–1970, Marihuana: Hemp Equipment; ibid.

23. Harry J. Anslinger to R. D. Acton, Trustee, Anhempco Corporation, December 27, 1940, in ibid.

24. See, for example, Government flier, "Hemp for Victory," 1943, display #35 in the Hash, Marihuana, and Hemp Museum, Amsterdam. By the time World War II broke out, Americans had already replaced some of their cannabis fiber with the abaca plant, which many referred to as "Manila hemp," despite its lack of botanical relationship to cannabis. Much of this was imported from the Philippines, but the Japanese cut off the American supply during the war, so the United States government hastily established a pro-hemp campaign to try and secure more fiber. For more information, see Duvall, *Cannabis*, 85–88.

25. John O'Donnell, "Capitol Stuff," *Washington Times Herald*, November 17, 1942, in ibid.

26. Mrs. Altrup to Miss Renfrew, Treasury Department Inter Office Commination, October 18, 1943, in DJBN, Subject Files, 1916–1970, Marihuana: Smoking of Seeds; RG 170, Container 110; NACP.

27. Duvall, *Cannabis*, 166.

28. For an explanation of Drug Scheduling in the United States, see United States Drug Enforcement Administration, "Drug Scheduling," accessed June 27, 2018, https://www.dea.gov/druginfo/ds.shtml.

29. Peter Stanfield, "Crossover: Sam Katzman's 'Switchblade Calypso Bop Reefer Madness Swamp Girl' or 'Bad Jazz' Calypso, Beatniks and Rock 'n' Roll in 1950s Teenpix," *Popular Music* 29, no. 3 (October 2010): 451; also see Dufton, *Grass Roots*, 15–16.

30. Regina Marler, ed., *Queer Beats: How the Beats Turned America on to Sex* (San Francisco: Cleis Press, 2004), xxxvii, 4.

31. Normal Mailer, "On Marijuana and Whiskey," published on YouTube, November 28, 2009, video, 2:58, https://www.youtube.com/watch?v=H729_DYd_V0.

32. Stanfield, "Crossover," 450–51.

33. Samuel Allentuck, Loius Oitzelter, and Frank Anker, "Report on Marihuana Research," 1 September 1941, accessed June 15, 2018, https://nyamcenterforhistory.files.wordpress.com/2014/05/clinicalreport_merged_watermark.jpg.

34. Emily Dufton, *Grass Roots*, 6.

35. Acker, *Creating the American Junkie*, 217.

36. Richard Nixon, "Remarks about an Intensified Program for Drug Abuse Prevention and Control," June 17, 1971, accessed June 27, 2018, http://www.presidency.ucsb.edu/ws/?pid=3047.

37. Dufton, *Grass Roots*, 1–44.

38. Editors, "Introducing High Times: The Only Magazine Dedicated Solely to Getting High. Really High," *High Times*, September 1974, 10.

39. Ibid.

40. Randall Kennedy, *Nigger: The Strange Career of a Troublesome Word* (New York: Pantheon Books, 2002); for a cultural study of the semantic evolution of this racial slur, see Nneka Logan, *Uncovering the Range of Intentions and Interpretations Associated with N-word Usage in American Film* (M.A. thesis, Department of Communications: Georgia State Univer-

sity, 2006); for an analysis of the theoretical concept of semantic looping, see Andrew T. Jacobs, "Appropriating a Slur: Semantic Looping in the African American Usage of Nigga," *Journal of Media and Culture* 5, no. 4 (August 2002), accessed May 1, 2018, http://www.journal.media-culture.org/au/0208/semantic.php; for more on the concept of reverse discourse, see Michel Foucault, *The History of Sexuality: An Introduction* (New York: Random House, 1990), 101. As a side note, it is worth pointing out how, in modern slang terminology, the term "dope" also means cool, hip, or awesome, which also reflects the process of semantic looping described above.

41. Editors, "High Crimes," *High Times*, September 1974, 16.
42. Editors, "Flashes," *High Times*, January 1975, 5.
43. "The Rising Cost of Getting High," *High Times*, June 1976, 8.
44. "Drug Panic," *High Times*, November 1976, 8.
45. "Carefree Super Pot," *High Times*, May 1976, 16.
46. "Grow Your Own," *High Times*, November 1976, 103.
47. "Home Grower's Kit," *High Times*, December 1976, 55.
48. "Hydroponic Houseplant Kit," *High Times*, December 1976, 136.
49. "Smoke American," *High Times*, April 1978, 2.
50. "Bringing in the Sheaves," *High Times*, February 1977, 83.
51. Ibid. "Seedless tops" refers to female flowers of cannabis that have been cultivated in isolation from male plants to prevent pollination. This cultivation technique keeps seeds from growing inside the calyxes of female flowers, which forces them to grow more potent, resinous trichomes that contain cannabinoids. A transnational colloquial term for this more valuable form of drug cannabis is sinsemilla ("without seed") marijuana. For more details, see Jorge Cervantes, *The Cannabis Encyclopedia: The Definitive Guide to Cultivation & Consumption of Medical Marijuana* (Vancouver, WA: Van Patten Publishing, 2015), 85–98.
52. Douglas Chrétien, "Hydroponics," *American Speech* 13, no. 3 (October 1938): 231.
53. David R. Hershey, "Solution Culture Hydroponics: History and Inexpensive Equipment," *The American Biology Teacher* 56, no. 2 (February 1994): 111.
54. Ibid. Also see Jeff Edwards, "Hydroponic History Part I: Water Culture," available online at: http://hydroponicgardening.com/history-of-hydroponics/water-culture-hydroponics-history/.
55. Marco Polo, *The Travels of Marco Polo the Venetian* (London: J. M. Dent), 65, 80, 300, accessed July 16, 2018, https://archive.org/details/marcopolo00polouoft.
56. Hershey, "Solution Culture Hydroponics," 111.
57. Anonymous, "Soilless Farms on Islands," *The Science News-Letter* 46, no. 3 (July 1944): 36.
58. Frank Thone, "Science Stunts for the Gardener," *The Science News-Letter* 37, no. 15 (April 1940): 234–35.
59. D. R. Hoagland and D. I. Arnon, *Circular 347: The Water-Culture Method of Growing Plants without Soil*, Revised Edition (Berkeley: The College of Agriculture, 1950), 2.
60. William F. Gericke, *The Complete Guide to Soilless Gardening* (New York: Prentice-Hall, 1940), 3, 5.
61. Jeff Edwards, "History of Hydroponics Part 3: Applying Water-Culture Science to Hydroponic Food Production," accessed July 2, 2018, http://hydroponicgardening.com/history-of-hydroponics/hydroponics-history-part-3/.
62. For an overview of the fluctuating interest in hydroponics in the United States from the 1940s to the 1990s, see University of Arizona, "History of Hydroponics," College of Agriculture & Life Science, accessed July 1, 2018, https://cals.arizona.edu/hydroponictomatoes/history.htm.
63. Editors, "Just Published! How to Grow Marijuana Hydroponically (Without Soil)," *High Times*, April 1977, 87.
64. "Introducing Hydropot," *High Times*, April 1977, 17.
65. "Hydropot," *High Times*, September 1977, 79.
66. R, "The Dope Connoisseur," *High Times*, May 1978, 38.
67. For information pertaining to Disney's Epcot hydroponics experiment, see Wendy B. Murphy, *The Future World of Agriculture* (New York: Grolier, 1984).

68. For a rather telling example of how this irony still exists today, take note of the fact that hundreds of thousands of people still get incarcerated for cannabis possession each year in certain parts of the United States, while others enjoy upscale social activities while consuming it. See, for example, Mackenzie Wagnor, "How Cannabis Is Fueling a New Fitness Movement," *Vogue*, May 25, 2017. For more on the subtle nuances of cannabis strains that have been developed over the past four decades, see Michael Pollan, *The Botany of Desire*.

69. For more of the Medical Marijuana Movement, see Emily Dufton, *Grass Roots*, 207–225.

70. For examples of the continued use of cannabis in antiestablishment subcultures—both in the United States and throughout the Atlantic world—see Duvall, *Cannabis*, 170–75; also Bruce D. Johnson, Flutura Bardhi, Stephen J. Sifaneck, and Eloise Dunlap, "Marijuana Argot as Subculture Threads: Social Constructions by Users in New York City," *The British Journal of Criminology* 46, no. 1 (January 2006): 46–77.

71. Government documents from the National Archives at College Park, for example, reveal how experiments from the 1930s indicated that cannabis could be used to improve the condition of those with epileptic seizures, but the plant's Oriental associations overshadowed the results. Moreover, cannabinoids were still hardly understood in science at the time, which further complicated matters.

72. Jacob Sullum, "Senator Says 'Good People Don't Smoke Marijuana.'" April 6, 2016, accessed December 21, 2017, http://reason.com/blog/2016/04/06/senator-says-good-people-dont-smoke-mari.

73. Jennifer De Pinto, Fred Backus, Kabir Khanna, and Anthony Salvanto, "Marijuana Legalization Support at All-time High," *CBS News*, April 20, 2017, accessed July 7, 2018, https://www.cbsnews.com/news/support-for-marijuana-legalization-at-all-time-high/.

74. Andrew C. Kimmens, ed., *Tales of Hashish: A Literary Look at the Hashish Experience* (New York: William Morrow and Co., Inc., 1977), 7–11, 156–57.

75. Susan Nance, *How the Arabian Nights Inspired the American Dream, 1790–1935* (Chapel Hill: University of North Carolina Press, 2009).

76. Duvall, *Cannabis*, 173.

77. Allen Ginsberg, "The Great Marijuana Hoax: First Manifesto to End the Bring Down," *The Atlantic Monthly* (November 1966), https://www.theatlantic.com/past/docs/issues/66nov/hoax.htm.

78. Anonymous, "Marijuana: Wonder Drug?" *High Times*, June 1974, 36.

79. Keith Stroup, "NORML Nabob," *High Times*, September 1976, 13.

80. H. H. Caine, "Hash Hells of New York," *High Times*, November 1976, 37, 35; Albert Goldman, "Confessions of a Hashish Eater," *High Times*, June 1977, 66; Terry Clifford, "Interview with a Dope Guru," *High Times*, January 1978, 77.

81. Clifford, "Interview," 77, 115. Images of naked Indians running through fields of cannabis to collect resin on their bodies goes back to information gathered by William Brooke O'Shaughnessy in his study of the plant, which became part of the Orientalist transatlantic discourse that positioned it as a dangerous foreign intoxicant. See William Brooke O'Shaughnessy, *On the Preparations of the Indian Hemp, or Gunjah (Cannabis Indica), Their Effects on the Animal System in Health, and Their Utility in the Treatment of Tetanus and Other Convulsive Disorders* (Calcutta: Bishop's College Press, 1839), 6. It's interesting how this negative discourse transformed into a source of inspiration for cannabis subcultures.

82. Ibid., 78.

83. Stanley W. Farrar, "Manley on Marijuana," *High Times*, June 1978, 28.

84. Sidney Mintz, *Sweetness and Power: The Place of Sugar in Modern History* (New York: Penguin Books, 1985), xxix.

Conclusion

Refashioning Meaning

In recent years, cannabis seed and the oil made from it have received a lot of attention from health food enthusiasts in the United States. A simple trip to an upscale grocery store will reveal several products recently developed for consumers wishing to add more variety to their diet. "So perfect for energy that many customers have to eat Hemp Hearts salads early, or they have too much energy to sleep at night. . . . So perfect for satisfying hunger that many customers do not eat again on days that begin with a Hemp Hearts Salad for Breakfast." Each claim is backed up with a stern money-back guarantee.[1] Continue searching in different sections of the store, and one might find a variety of soaps, candles, lotions, or creams such as the Nubian Heritage Shea Butter, which advertisers claim is "infused with Indian hemp." This recent attention to the value of industrial uses for cannabis has also developed alongside a resurgence of interest in its fiber. "Discover the benefits of hemp," urged a 2011 brochure from Vermont's Hemp History Week campaign. Slogans such as "Nutritious, Sustainable, Versatile," and "Good for the Earth, Good for Our Bodies, Good for Our Farmers and the Economy" are all juxtaposed with images depicting the potential industries the plant could serve if it were legal.[2] The brochure also includes a familiar list of facts, with tidbits of "Did you know?" information designed to demonstrate to potential readers just how important the plant used to be in the nation's past. To be sure, people have been continuously promoting cannabis for a range of industries throughout the whole complicated history presented in this book, only now it seems that more people have begun to listen again.

Indeed, although most of the plant remains federally illegal to possess, consume, cultivate, or distribute, states across the nation are experiencing a

surge in medical and recreational marijuana dispensaries, cannabis paraphernalia shops, and industrial hemp farms. The marketing behind these new businesses and the popular support for them reflect the unique cultural mosaic of the plant's history, which is a by-product of the struggle for meaning that has so often redefined its place in many societies over the course of centuries. I have tried to untangle the webs of cultural significance behind this struggle to get at the core of what drove the plant's transformations over the years, and it has led me to the transfer of eastern uses for cannabis into the Atlantic world during the early 19th century as a defining moment in the whole process. Transatlantic networks of knowledge exchange between the British Empire and the United States brought these "foreign" and "exotic" uses for the plant across the Atlantic in the form of medicines, but Oriental associations combined with inconsistent medical trials and racial stereotypes about marginalized users transformed it into a banned intoxicant. These transformations in turn inspired subcultural uses for cannabis as a symbol of resistance, which then brought more transformations in use and meaning. However, throughout this historical process, older meanings and associations for cannabis never entirely dissipated. Instead, as the advertisements above indicate, they have resurfaced and intensified as the cultural struggle for meaning has shifted in favor of the plant's recommodification.

Anthropologist Sidney Mintz described how a similar cultural process unfolded in the history of sugar, which he labeled "extensification" and "intensification." By "extensification," he referred to the process of transformation that commodities endure as they get repurposed for use in different dimensions of society. The meaning of sugar, for example, became less luxurious and more commonplace as its use extended to larger numbers of people, which "endowed [it] with ritual meaning by those who consumed it, meanings [that were] specific to the social and cultural position of the users."[3] As production increased and prices declined, sugar became a common (and increasingly more necessary) working-class commodity, which shifted the meaning of its consumption. However, its older meaning as a luxurious commodity in Medieval Europe never entirely dissipated, but rather resurfaced in different forms as the imagery of sweetness became attached to ceremonial customs of the upper class. That is what Mintz called "intensification," and he cited cultural customs such as the elaborate use of sugar sculptures on wedding cakes or at fancy, aristocratic parties. These two concepts serve as excellent prisms through which to view the history of cannabis in the Atlantic world, which began as an important strategic commodity with a variety of valuable uses. It transformed into a banned intoxicant and countercultural symbol of resistance before being refashioned into a legitimate commodity again. Along the path toward relegitimization, older representations of cannabis have resurfaced in medical proclamations from enthusiasts who evoke O'Shaughnessy with claims that it is a "wonder drug" or

among environmentalists who highlight past uses and meanings for the plant to explain how "hemp can save the world."[4]

Just as with sugar, these older associations for cannabis never entirely faded from the plant's meaning as a commodity over the course of its transformations. The negative images have not faded from its reputation either, even though its use is becoming more widely accepted in societies where it is still illegal. And they likely never will, for negative perceptions of cannabis are also deeply ingrained in the cultural milieu of societies throughout the Atlantic. This complex saga of meaning has been the defining characteristic of cannabis history in the Atlantic world for the past two centuries, and that does not seem to be changing anytime soon. Today, for example, the dynamic interplay between representations of eastern and western uses for the plant reminds me of the Dutch scene described at the beginning of this book, which seems to be re-creating itself on a larger geographical scale in the United States. It's not hard to imagine Kentucky or Virginia, for example, where older meanings for cannabis as a powerful industrial commodity once dominated, becoming scenes upon which the negotiations of meaning between different uses for the plant play out the same way they are in the city of Amsterdam. A similar battle has perhaps already begun in cities throughout Colorado, where the struggle between opposing cultural forces over the social meaning of the plant unfolds in the court systems and city councils within municipalities that are debating where to allow cannabis businesses to operate.

Psychologist Ethan Watters once commented on "how deeply culture shapes human cognition," suggesting that "the mind's capacity to mold itself to cultural and environmental settings [is] far greater than had been assumed."[5] The cultural history of cannabis in the Atlantic world reflects this point quite well. The way westerners reacted to encountering different uses for the plant—along with the struggle for meaning that has taken place ever since—illuminates just how deeply culture molds our perceptions and understandings of the world by investing meaning into the commodities we use within it. This, I think, is one of the major values of this approach to history that I referred to from the outset as post-commodity studies. Influenced by the skepticism for objectivity that postmodernist thinkers perhaps went a little too overboard embracing, post-commodity studies investigate the myriad ways in which cultures commodify objects and resources in the material world by focusing less on the commodities themselves than on the cultures that use them and develop meaning out of their social existence.[6] Approaching the history of cannabis from such a perspective reveals the important role that Orientalist thought has played in shaping and reshaping western perceptions of the plant over time, and it also explains how a wider historical lens helps us more accurately understand the frame of reference that historians refer to as the Atlantic world. The cultural transformations that cannabis

endured over the 19th and 20th centuries cannot be properly contextualized through a narrow, geographical understanding of Atlantic history, but rather as a methodological concept revolving around the intercultural transfer of people, ideas, and commodities into that world from history originating far beyond the ocean's shores.

This means that it's not the locations, then, so much as it is the interactions that take place within them that matter most in history. This study has attempted what I hope is a promising approach for examining the history of commodities and cultural attitudes toward them in the Atlantic world. At the very least, it accomplishes one of the core tenets of history that one of my late mentors in life, Clement Price, advocated throughout his important work: "Keep it complicated." In that, it has been a success.

NOTES

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2. "Discover the Benefits of Hemp," *Hemp History Week Brochure*, May 2–8, 2011. More information on this movement can be found at www.HempHistoryWeek.com.
3. Sidney Mintz, *Sweetness and Power: The Place of Sugar in Modern History* (New York: Penguin Press, 1985), 122.
4. For an example of medical advocates of cannabis evoking O'Shaughnessy's experiments with the plant, see Bradley J. Borougerdi, "The Cult of O'Shaughnessy," *Points*, July 24, 2014, accessed July 1, 2018, https://pointsadhsblog.wordpress.com/2014/07/24/the-cult-of-oshaughnessy/; for an example of the more recent works on the potential of industrial hemp, see Doug Fine, *Hemp Bound: Dispatches from the Front Lines of the Next Agricultural Revolution* (White River Junction: Chelsea Green Publishing, 2014).
5. Ethan Watters, "We Aren't the World," *Pacific Standard Magazine* 25 (February 2013). Available at: http://www.psmag.com/magazines/magazine-feature-story-magazines/joe-henrich-weird-ultimatum-game-shaking-up-psychology-economics-53135/. Accessed 2 March 2013.
6. For a discussion of the consequences of postmodern thought, see David Foster Wallace, "The Problem with Irony," published on YouTube, October 6, 2016, video, 9:54, https://www.youtube.com/watch?v=2doZROwdte4.

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