CORD OF EMPIRE, EXOTIC INTOXICANT: HEMP AND CULTURE IN THE ATLANTIC WORLD, 1600-1900

by

BRADLEY J. BOROUGERDI

Presented to the Faculty of the Graduate School of

The University of Texas at Arlington in Partial Fulfillment

of the Requirements

for the Degree of

DOCTOR OF PHILOSOPHY

THE UNIVERSITY OF TEXAS AT ARLINGTON

May 2014

For Aiden and Meadow, whose lives are my inspiration.

Acknowledgements

This project could not have been completed without the generous help and excellent guidance of a number of people. Thomas Adam was instrumental in helping me formulate the framework of the topic in its early stages. Dennis Reinhartz has been working with me since I became an academic, and he graciously agreed to continue doings so as Professor Emeritus, for which I am ever so grateful. Christopher Morris stepped in at a time when I thought all was lost and has been more than I could have ever asked for as an advisor. I am also thankful to Imre Demhardt and Alusine Jalloh for agreeing to serve on my committee. I could not have asked for a better team of scholars to work with. James Klotter, Richard Francavilia, 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 and provided excellent direction. Also, Isaac Campos spent time one Sunday to speak with me over the phone and provided outstanding insight. Alfred Crosby and Frances Karttunen shocked me with their generosity when they mailed me a box of microfilm to use for my research. 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 Dr. Crosby's influence on my perspective of history. Chris Duvall, Stephen Maizlish, and Adam Rathge have all spent a great deal of time either conversing with me through email about my project or commenting on sections of this manuscript, and their words have been extremely helpful. I also met with Francis Herbert in London, where he took the time to introduce me to real cider and discuss my project. My friend and colleague Greg Kosc has also been instrumental towards the completion of this project by spending countless hours discussing and debating hemp history with me.

A Global Research Fellowship made possible by the financial support of Mustaque Ahmed 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 Short-term Research Grant from Harvard University allowed me to conduct research at the Widener Library and rummage through the Julio Mario Santo Domingo Collection at the Houghton Library, where archivists are still in the process of cataloging the vast collection pertaining to a variety of topics related to sex and drugs. The archivists there were very helpful, and I look forward to working with them again in the future when more of it is ready to be used. I also want to thank Charlie from the Hash, Marihuana, & Hemp Museum in Amsterdam for taking the time to have a couple of highly informative and insightful conversations with me on the museum collections and the general nature of what we agreed to call the Atlantic War on Drugs. All of 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 degree. Their support has been crucial at every step of the way.

April 18, 2014

Abstract

CORD OF EMPIRE, EXOTIC INTOXICANT: HEMP AND CULTURE

IN THE ATLANTIC WORLD, 1600-1900

Bradley J. Borougerdi, PhD

The University of Texas at Arlington, 2014

Supervising Professor: Christopher Morris

Hemp is a genetically diverse plant that has been used by a variety of different cultures for different purposes over the course of thousands of years. Until the nineteenth century, though, most Europeans understood it to be the source of a durable fiber or a common medicinal seed. People living in exotic places that westerners monolithically referred to as the Orient, however, valued the plant for its intoxicating qualities, and the encounters that took place between these different cultures dramatically transformed the meaning of hemp in the English-speaking Atlantic from an important strategic commodity to a banned intoxicant. The transformation was a long process that can only be fully appreciated by concentrating on the cultural history of hemp and all its intricacies from the 1600s to the 1900s. This dissertation analyzes the multidimensional discourse on the hemp plant in the Atlantic world during this period and argues that British and Anglo-Americans refashioned their understanding of it through the cultural lenses of empire and Orientalism. The transatlantic nature of knowledge exchange in the Atlantic world ensured that perceptions of hemp that the British constructed in India migrated across the ocean to influence Americans, demonstrating how important ideas and objects found far beyond the ocean's shores could be woven into the cultural fabric of the Atlantic world.

Table of Contents

List of Illustrations

List of Tables

Chapter 1

Prologue

In the historical center of Amsterdam lies a rectangular shaped cluster of streets known as Dam Square. The city itself is filled with historical relics and has a port history dating back at least to the thirteenth century. In the Northeast corner, there is a body of water known as *Oosterdok*, where *Scheepvaartmuseum* stands with ships from the fifteenth century docked in its harbor. These ships, along with thousands of others that entered the harbor from all across the Atlantic over the centuries, carried cargoes of various goods, one of which was hemp. Not only that, but the ships were rigged with tons of hemp. The rope, sail cloth, and caulking that waterproofed the wood holding them together were all constructed from this plant, in particular, from its stem. Some of the massive hawser lines that were used to transport the ships are still visible at the museum today. Even in the various canals that bind the city together, one can find similar lines attached to the private boats docked on the sides. The hemp that is still visible today in these areas reflects the more traditional Indo-European and Slavic uses for this once important and highly valued fiber.

Travel a little further west, past the Red Light District, and an entirely different story of the same plant emerges. Here one can find “coffee shops” by the dozens, operating in business-like fashion, albeit quite discreetly due to the political currents of the so-called Atlantic “War on Drugs.” Travel through the canals and streets in this direction, and one will find medical advocates seeking to recruit believers in the value of the hemp plant for patients in need of relief, thrill seekers looking for pleasure, world travelers embarking on a soul searching or religious pilgrimage of sorts, and thousands of people simply interacting and living their lives. Of course the names being used on this side of town refer to a different parts of the plant. Pot, Hash, Weed, Marijuana, Mary

Jane, Dank, Ganja, Killa', Cake, Dro, Chronic, and many other cultural signifiers all represent various preparations of the female flower that grows on a genetically specific version of hemp. Indeed, there is an endless amount of botanical diversity in the plant's chemistry, and this has created so much variety in hemp that many now recognize multiple species. However, the same image of the leaf that smokers and hippies used is the same one industrial hemp farmers or health food advocates today use to represent their cause. It was also the same leaf that grew on the European plant when the British encountered it growing in India for intoxication in the nineteenth century, which is why they assumed that it was the same plant growing there as well. Americans were very familiar with it too, and both they and the British constructed drastically different representations for hemp's uses in the so-called Orient than those used in the Western world.

All of the strikingly different cultural legacies of hemp are on display simultaneously at the Hash, Marihuana, and Hemp Museum of Amsterdam. Here the scholar will find a trove of primary sources pertaining to its different uses over time and across various cultures. However, since it is located on the side of town that caters more to the "high" life of hemp, the museum is something of a hidden treasure of sorts. In fact, many people who enter do so in search of a lounge to sit back in and alter their state of consciousness, and the employee behind the counter has to spend a portion of the day informing would-be customers that they are not in the right place. "They have no idea about the complexity behind the plant and its importance throughout history," he informed me with enthusiasm after finding someone who really wanted to learn and was serious about studying the complex nature of hemp's history. That complexity in fact stands out immediately upon entering the first exhibit room of the museum, where the visitor is hit with a collage of contrasting images of the hemp experience throughout human 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 for hemp from across the world are all under one roof. Although the Dutch do not figure prominently in this work, the history within the museum itself and the contrasting images of hemp that are represented throughout Amsterdam do, for they reveal the complex cultural connections between this highly adaptable and powerfully significant plant that have accumulated over the centuries to make it, as Winston Churchill once proclaimed of Russia, "a riddle wrapped in a mystery inside an enigma."[1]

Hemp could be the plant with the most complex relationship to humanity, and in many ways, this complexity makes it an excellent subject for studying the dynamics of cultural encounters. Because it has been used to make so many different commodities that humans have either wanted or needed, hemp has become loaded with meaning. There is and has been a great deal of confusion about it for a long time now. This work explains why by investigating the history of its transformation in the Anglo imagination from an industrial and medicinal plant into a banned substance with dangerous and exotic qualities. The chapters that follow describe how a discourse, a self-referential cluster of knowledge that invests meaning into the things we use and describe, functioned to create specific representations of this rather exceptional plant. These representations tell us a great deal about the cultures that created them, especially in regards to the manner in which they perceived and received material culture from so-called "others." The journey will be a long one, spanning the Atlantic Ocean and

[1] Winston Churchill, "The Russian Enigma," *BBC Broadcast*, London, 1 October 1939. Transcript available at: http://www.churchill-society-london.org.uk/RusnEnig.html. Accessed 28 February 2014.

including over two centuries of history, eventually bringing us back to the present day, where the hemp plant is yet again being transformed in use and meaning.

Chapter 2

Introduction: Why Hemp?

On July 3, 1893, the British Parliament sent a request to the Government of India, asking for a commission "to inquire into the cultivation of the hemp plant in Bengal, the preparation of drugs from it, the trade in those drugs, the effect of their consumption upon the social and moral condition of the people, and the desirability of prohibiting the growth of the plant and the sale of ganja and allied drugs."[1] After some debate, those involved in this discussion decided that the inquiry should include as many regions of India as possible, so they established the Indian Hemp Drugs Commission, which consisted of six members and a secretary. Three of the members were Indian, and the rest were British. Collectively, they gathered evidence from as many regions as possible on the use, cultivation, wild growth, distribution, effects, and manufacturing of all the different types of drugs the hemp plant produced. To accomplish its goals, and to determine whether or not the Government of India needed to spend time and money attempting to prohibit or regulate the different preparations, the committee met in Calcutta on August 3 to devise an elaborate questionnaire. It contained seventy open-ended questions that allowed participants to provide as much feedback as they possibly could, and when it was all said and done, over one thousand "witnesses" from nine different provinces were either interviewed or given the packet to fill out and return. The volunteers came from broadly different backgrounds, but they were supposed to be "well-informed persons [from] representative associations, whether philanthropic, religious, or social bodies."[2] The report they produced, which operated under the

[1] *Report of the Indian Hemp Drugs Commission, 1893-1894* (Simla: Government Printing Office, 1894), Vol. I, p. 1; reprinted by Johnson Reprint Corporation (New York and London, 1971).
[2] *Ibid*., 4.

assumption that “Indian hemp” was nothing more than an “Asiatic condition of” the same plant used in Europe, represents the drastic transformation of hemp over the course of the eighteenth and nineteenth centuries.[3] This study seeks to explain how this transformation unfolded, the historical circumstances under which it took place, and the impact it had on the meaning of the plant as a whole in the Anglo-Atlantic world.

Hemp is a genetically diverse plant, highly sensitive to human manipulation, and can be used to make a number of products. With the proper care and nutrients, for example, parts of it can be transformed into some of the strongest fibers on earth, or be used to make various paints, oils, lotions, and building materials. With some genetic manipulation the plant can also be grown to make potent medicines, intoxicants, and inebriates designed to alter states of consciousness, relieve pain, or perhaps even cure a number of illnesses. Take further care still and hemp can serve as some of the most nutritious foods and oils for human consumption. It grows wild in various parts of the world, and migration and intermingling over the course of centuries has created many strains and perhaps a few different species, some of which are highly nuanced in the way they differ from each other. This has created culturally specific meanings for the hemp plant in different regions of the world, and studying these meanings and investigating the discourses that developed when they encountered each other are important themes of this dissertation. More specifically, the main concern is to explain how Anglos in the Atlantic world came to understand the hemp plant in all its complexities, and how they refashioned their own cultural understanding of it over the eighteenth and nineteenth centuries. Studying what happened when these different cultural meanings crossed paths reveals how notions of empire and Orientalism were tied to the transatlantic

[3] *Ibid*., 16.

exchange of knowledge on its different uses, thereby laying the foundation upon which the plant would eventually transform from a practical necessity to a banned intoxicant.

Scholarship that focuses on the relationship between the various properties of the plant is minimal from a historical perspective. Activists, journalists, scientists, sociologists, lawyers, doctors, and anthropologists have all produced works on the subject of hemp as an intoxicant, and a number of scholarly articles and books exist on hemp as a fiber; but analyzing the cultural connection between the three main uses for the plant has not been done. There are a few works that attempt to do this, but they are highly political in nature. Activists with a vested interest have told a glorified story of hemp as the most useful plant in the world to convince people of the benefits behind legalizing its production in the United States.[4] For some, there is an economic and environmental interest to be gained from producing industrialized hemp, whereas others promote what they refer to as "hemp awareness" to help justify their use of its mind-altering properties. This is not to say that there have not been some important and interesting works, such as those conducted by scholars like Vera Rubin, Richard Bonnie and Charles Whitebread, Richard Evan Schultes, Brian Du Troit, and more recently Mitch Earlywine.[5] In the past decade, James H. Mills has produced three important books that focus on the relationship between hemp and empire, and Beatrice Acevedo's dissertation on certain aspects of the plant provides further insight into the important role culture

[4] See, for example, Ed Rosenthal (ed.), *Hemp Today* (Oakland: Quick American Archives, 1994); John W. Roulac, *Hemp Horizons: The Comeback of the World's Most Promising Plant* (Totnes: Chelsea Green Publishing Company, 1997); Mark Bourrie, *Hemp: A Short History of the Most Misunderstood Plant and its Uses and Abuses* (New York: Firefly Books, 2003).

[5] Vera Rubin (ed.), *Cannabis and Culture (*Chicago: Mouton Publishers, 1975); Richard Bonnie and Charles Whitebread, *The Marijuana Conviction: A History of Marihuana Prohibition in the United States* (New York: The Lindesmith Center, 1999); Brian Du Toit, *Cannabis in Africa* (Rotterdam: Balkema Press, 1980); Mitch Earlywine, *Understanding Marijuana: A New Look at the Scientific Evidence* (New York: Oxford University Press, 2005).

played in investing it with meaning.[6] However, the bulk of these works deal with the late nineteenth and early twentieth centuries, and only a few of them were written by historians. This is definitely understandable, for it pinpoints the transatlantic coalition against drug use after World War I and the rise of "Reefer Madness" as defining moments in the transformation of the crop in modern western culture. Nevertheless, it has produced a gap in the historiography that this work seeks to fill.

Isaac Campos' groundbreaking book, *Home Grown*, is the best source available that seriously analyzes the rich history of the hemp plant in a nineteenth century Atlantic context, but it is primarily focused on Latin America and mainly considers the intoxicating preparation known as marijuana.[7] Instead, this dissertation is concerned with Anglo-Atlantic culture, taking into account the vast amount of source material pertaining to the discourse on hemp fiber before and after the Age of Atlantic Revolutions, the attempts to appropriate eastern uses into viable medicines for European and American consumption, and perceptions of hemp as an eastern intoxicant throughout the nineteenth century. Combining the histories of these three seemingly different cultural paths for the same plant provides a broader understanding of the story that demonstrates the symbiotic relationship between use and meaning and reveals the interconnected nature of cultural development in the Atlantic world. Not only that, but it reflects the value of viewing the Atlantic world from a wider historical lens, one that privileges the migration or transfer of goods, ideas, and/or people into and across the Atlantic Ocean over a traditional

---

[6] James H. Mills, *Cannabis Britannica: Empire, Trade, and Prohibition* (New York: Oxford University Press, 2003); James H. Mills, *Madness, Cannabis and Colonialism: The 'Native Only' Lunatic Asylums of British India, 1857-1900* (New York: St. Martin's Press, 2000); James H. Mills, *Cannabis Nation: Control and Consumption in Britain, 1928-2008* (Oxford: Oxford University Press, 2012); Beatriz Acevedo, *Understanding Cannabis Reclassification in the United Kingdom: 2002-2005.* Dissertation submitted for the Degree of Doctor in Management (University of Hull, United Kingdom, 2007).

[7] Isaac Campos, *Home Grown: Marijuana and the Origins of Mexico's War on Drugs* (Chapel Hill: The University of North Carolina Press, 2012).

geographical or spatial orientation limited to the Atlantic Basin.[8] After all, much of the hemp used for naval stores in the Atlantic world came from Russia, and perceptions of the plant's medicinal and intoxicating properties entered that world through British involvement in India. As we shall see, activities in these two regions were integral to the story of hemp's place in Atlantic history, which means Atlantic historians cannot ignore them simply because they do not border the Atlantic Ocean.[9]

There are well over two hundred different names in use across the Atlantic for the hemp plant today, and the slang used in the United States alone for the intoxicating preparations is enough to send one's head spinning.[10] However, hemp is the only word that has historically been used to refer to all three uses described above. One of the most common words used in academia for hemp is cannabis, but this term holds a more scientific connotation and is rarely ever used to describe the fiber. Marijuana/marihuana is another commonly used word, but it holds a very specific cultural meaning and should really only be used to signify the use of hemp for a specific intoxicating substance. In other words, cannabis and hemp mean roughly the same thing with different connotations, but marijuana/marihuana is a substance that derives from the hemp plant. Some scholars have attempted to use the latter to refer to all three meanings, but it is highly anachronistic and reflects their bias in favor of legalization over sound scholarship.

---

[8] As this argument suggests, transatlantic history is less of a geographical concept than it is a tool by which to trace the interconnected nature of historical development. For a definition of transatlantic history and a discussion as to how it differs from the more geographical concept of Atlantic history, see Kristen Burton and Isabelle Rispler, "What is Transatlantic History?" *Traversea: Journal of Transatlantic History*, Vol. 1, No. 1 (2011): 1-4.

[9] The author is in debt to historian Alfred Crosby and his dissertation for revealing how important it is to view Atlantic history as a conceptual framework that goes beyond geographical boundaries. See Alfred Crosby, *America, Russia, Hemp, and Napoleon: American Trade with Russia and the Baltic, 1783-1812* (Cleveland: Ohio State University Press, 1965).

[10] See Acevedo, *Understanding Cannabis Reclassification*, 130.

Ernest Abel's often cited *Marihuana: The First Twelve Thousand Years*, for example, begins by stating that "Marihuana is undoubtedly a herb that has been many things to many people. Armies and navies have used it to make war, men and women to make love. Hunters and fishermen have snared the most ferocious creatures, from the tiger to the shark, in its herculean weave. . . . Obstetricians have eased the pain of childbirth with its leaves…," and so on.[11] The quotation would have made perfect sense if he had used the word hemp, but instead he uses "marihuana" as a synonym for all the properties of the plant, which is inaccurate. This word developed specifically in reference to the flower that grows on the female plant, and it holds powerful cultural connotations today that did not exist back then. Moreover, marijuana is a relatively recent term. Some have traced its roots back to a Portuguese phrase used by slaves in the New World to refer to the intoxicating substance they derived from hemp, but it hardly follows from this that the word can be used to describe the fiber or medicines people extracted from it so often in different cultures over the centuries.[12]

Although the primary meaning evoked from the word hemp today is industrial, sources indicate that it was used quite frequently throughout the nineteenth century to refer to medicinal and intoxicating preparations as well. Indeed, multiple descriptions of hashish, ganja, charras, or any of the other so-called Oriental preparations of this plant during the nineteenth century mentioned that these substances derived from hemp. In fact, one can still find instances today in which the word hemp is used in the context of intoxication, such as the marijuana paraphernalia store called Hempy's in central Arlington, Texas; or the lyrics to an Outkast song from the 1990s in which the rapper Big

[11] Ernest Abel, *Marihuana: The First Twelve Thousand Years* (New York: Plenum Press, 1980), p. ix.
[12] For a discussion of the controversy over the word's origins, see Campos, *Home Grown*, chapter 2.

Boi stated that "I used to slang a fat rock, but now I'm servin' hemp."[13] Clearly, the word is still thick with meaning, but the situation gets even more complicated when we add the fact that it was also used throughout history to refer to over twenty different genera that have no botanical relationship to the actual hemp plant at all.[14] Indeed, it was such an important source of fiber in the English-speaking Atlantic that both the British and the Americans referred to any fiber-yielding plant they encountered as hemp.[15]

To provide the "thick description" of hemp, this study has relied heavily on anthropologist Sidney Mintz's theory of meaning, which he outlined in his book, *Sweetness and Power*. For Mintz, the cultural meaning of a substance in a society does not naturally stem from the substance itself, but rather arises out of the manner in which it is used within the culture. Members of a society use a substance that is available to them for a particular purpose, which endows it with meaning and normalizes its use. Over time, the substance may become more or less available to members of the society, and as a result the meaning of it will change, alter, or transmogrify. He uses sugar as an example, which began as a luxury good for the elite in Europe, and as a sparse and expensive medicine. As historical circumstances changed and the plant became more readily available as a source of cheap calories for the poor, its meaning began to transform from a luxury good to a common staple crop. However, these different meanings did not evolve in sequential order, but rather overlapped and intersected

---

[13] Outkast, Song "Hootie Hoo," Verse 1, Album *Southernplayalisticadillacmuzik* (LaFace Records, 1994). The verse literally means that he used to sell crack cocaine, but now sells marijuana.

[14] Ernest Small and David Marcus, "Hemp: A New Crop with New Uses for North America;" in Jules Janick and Anna Whipkey (eds.), *Trends in New Crops and New Uses* (Alexandria: ASHS Press, 2002), p. 284.

[15] For the etymology of the word hemp and its application to the various species of plants, see the *Oxford English Dictionary* entry on hemp, accessed by the author online at: http://libproxy.uta.edu:2399/view/Entry/85870?rskey=ilXaxL&result=1&isAdvanced=false#eid (accessed on June 27, 2012.)

throughout time. As a result, old meanings for sugar never entirely disappeared, but were rather reincorporated or refashioned by some in particular ways to fit the new uses. So, for example, when sugar became primarily a sweetener used by the working class for calories, this luxury good gained a more "down-to-earth" meaning. However, the older meaning never entirely dissipated, but instead got reinvested into certain social rituals, such as the way sugar was used in ceremonial occasions like weddings and funerals, in which elaborate concoctions of it were constructed and displayed. For Mintz, these rituals reflect more continuity with past meanings for sugar.

He labels this process of meaning alteration and preservation as extensification and intensification, and it is an excellent prism through which to view hemp's changing place in the Atlantic world. Its history there began as an important strategic commodity for European exploration, which endowed the plant with meaning associated with imperial/national security, sovereignty, and productivity. However, historical circumstances "extended" the plant into other areas of society, and this "extensification" created new meanings for hemp. The old meaning continued to exist, though, even "intensifying" in certain historical periods. One example of this is when, during the 1940s, after the rise of "Refer Madness" and the strong legislative assault on its production and consumption, the United States government found itself in a massive shortage of fiber. Access to the Philippines had been cut off by the Japanese during World War II, which meant the Americans no longer had access to the fibrous abaca plant they had been extracting from there. As a result, the government capitalized on the lingering old meaning of the hemp plant, producing flyers and instructional videos designed to entice Americans to "Grow Hemp for the War" (see Appendix). Even today, one can detect a sense of intensification in the campaign by many to legalize its production for food consumption. The advertisement on the box of Nature's Path Organic Hemp Plus

Granola cereal is a case in point, which comes illustrated with the same hemp leaf that hemp-smokers appropriated in the second half of the twentieth century as a symbol of their counter-cultural identity, only this time it is being used to market hemp seed as a healthy "high" for human consumption. Whereas the first example harks back to an older meaning of the plant that reflects its use for important, productive purposes before its "eastern" meanings came into use more commonly, the second attempts to appropriate a symbol of the popular intoxicating "meaning" to advertise a healthy food option.

As these examples indicate, the hemp example of extensification and intensification is more complicated than sugar, mainly because it is a multipurpose plant that can be used to make so many different things. Since these uses did not fit neatly into separate periods or transition so smoothly from one form to another but rather overlapped and intertwined as different cultures interacted and encountered each other, the different meanings were in constant competition. Indeed, this is the overall theme of the dissertation: the constant contestation of meaning that arises out of the clash between the three main uses for hemp. Ultimately, the intoxicating use and meaning prevailed over the industrial and medicinal ones, and this dissertation in part seeks to explain why. Richard DeGranpre said it well when he wrote, in true Weberian fashion, that "drugs in twentieth-century America thus became a vast and layered realm of significance, a territory of meaning contested with great zeal."[16] Hemp was one of those drugs, but the territorial meaning it occupied was vastly larger. Difficulties with procuring its fiber led to more awareness and understanding of its use as a drug, and a variety of non-pharmacological factors contributed to the manner in which these preparations were received. This is not to say that the pharmacological properties of the hemp plant were

[16] Richard DeGrandpre, *The Cult of Pharmacology: How America Became the World's Most Troubled Drug Culture* (Durham: Duke University Press, 2006), p. vii.

not important in affecting how they were received in western medicine, but rather that pharmacology is merely one component to the puzzle. Such an interpretation operates on the assumption that drugs are neither good nor bad substances, but instead function in connection with the set and setting of the individual taking them to produce the effects people in their respective cultures interpret as a "high."[17] Moreover, as DeGrandre pointed out, "the social meanings drugs acquire often transform their effects, their uses, and their users."[18] This dynamic nature of a drug experience helps explain why hemp transformed the way it did.

Like Mintz's study of sugar, *Cord of Empire, Exotic Intoxicant* is also a cultural history, which breaks from the traditional approach to commodities that tends to place the product being investigated at the center of the discussion or trace its economic history and diffusion into areas across the globe.[19] The chapters are designed thematically to accentuate the overall theme of hemp's cultural transformations, paying particular attention to how cultural encounters and cultural connections operate to invest the plant with new meaning over the course of three centuries. Chapter 3 breaks the hemp plant down into its component parts and investigates some of the different cultural relationships that people have developed with it across the globe. The debate over whether or not there is more than one species is treated in the context of the images that Europeans and Americans constructed of the people living in areas they referred to monolithically as the Orient, and the analysis of industrial hemp, medicinal hemp, and intoxicating hemp that

[17] For an excellent example of the most recent research into the effect of drugs, see Carl Hart, *High Price: A Neuroscientiest's Journey of Self-Discovery that Challenges Everything You Know About Drugs and Society* (New York: HarperCollins, 2013).
[18] DeGrandpre, *Cult of Pharmacology*, ix.
[19] For a discussion of the trends in commodity history, see Bruce Robbins, "Commodity Histories," *PMLA*, Vol. 120, No. 2 (March, 2005): 454-463.

follows demonstrates how encounters and interactions between distinct cultural groups helped refashion its meaning in the Atlantic world.

Chapter 4 is concerned with answering two fundamental questions. First, what role did hemp fiber play in the Atlantic world, and what impact did its meaning have on Great Britain and the Americans both before and after the American Revolution? This is the primary focal point of the chapter, but there is another important question it addresses: where did the bulk of this hemp come from, and what does this tell us about the structure of the Atlantic world? The answer requires a brief journey back to the trade networks developed by the Hanseatic League during the twelfth century, which allowed the superior product made in Russia to enter Europe and the Atlantic world through the Baltic Sea. Both the Americans and the British had a difficult time producing enough hemp to satisfy their consumption needs, so they had to import most of it from Russia. Their anxiety over relying so heavily on a foreign power for such an important strategic commodity drove the British to promote its cultivation within the so-called periphery of the empire, and the trade-minded Americans after declaring independence felt confident that Russia would serve as their main supplier for hemp. Both would be disappointed in their expectations, which played an important role in the transformation of the plant after knowledge of its other uses began circulating across the Atlantic.

Chapter 5 picks up with the British imperial reorientation towards the East. It relies heavily on historian Tillman W. Netchman's monograph, *Nabobs*, which succinctly documents the important role that the Second British Empire played in transforming British identity.[20] Although the justification and image of empire drastically changed over the second half of the eighteenth century, many of the goals remained the same, which is

[20] Tillman W. Netchman, *Nabobs: Empire and Identity in Eighteenth-Century Britain* (New York: Cambridge University Press, 2010).

why the British attempted to grow hemp in India the same way they had in the Americas. However, they encountered the Indians growing the plant for intoxicating purposes, and had a difficult time getting them to abandon their cultural uses. To be sure, the British were vaguely aware of the so-called "Oriental" uses for hemp before the late eighteenth and early nineteenth centuries, but they were confused on what they were and how they functioned. As the British exerted more control over India, they encountered these preparations more frequently, leading some to experiment with the so-called degenerative preparations to see if they could be appropriated into something useful for the empire. The medicines that East India Company concocted transferred to London and then across the Atlantic, where Americans also adopted them into their Materia Medica by mid-century. However, the lack of consistency in the preparations and the western associations with Oriental degeneracy had an impact on the way they were received in Anglo-Atlantic culture.

Interestingly, the distinction between hemp as an intoxicant and a medicine was never very well defined; in fact the lines between them were blurred from the very beginning. As chapter 6 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 was difficult to procure for naval stores, explains how hemp as a plant fell out of favor for both the British and the Americans. Michel Foucault's work on discursive formations figures prominently in this chapter, for it reflects the importance of power and discourse in contributing to our understanding of how people interpreted hemp intoxication. Moreover, I use the term Atlantic Orientalism to describe perceptions of the Orient that travelled from France and the British Empire to the United States of America. Alexander Macfie's book, *Orientalism: A Reader*, has influenced my

interpretation of Orientalism as a complex fetish that both attracted and repulsed westerners, for it helps explain the complicated love/hate relationship that the British and the Americans developed with the hemp plant as a whole.

The conclusion will pick up where this work began: with the IHDC and the transatlantic discourse on hemp at the turn of the century. Although the report did not have much of an impact and was not cited often, the witness accounts it contains demonstrates how prevalent the association between hemp intoxication and Oriental degeneracy had become. These perceptions continued to follow the plant across the Atlantic, where sources published in English mention the word marijuana in connection with hemp well before the rise of "Reefer Madness." This dissertation should not be read solely as a history of hemp in the eighteenth and nineteenth centuries, but rather as a history of the relationships that Anglos in the Atlantic world developed with the plant. It makes no value claims on the plant itself and steers entirely clear from the debate over whether the plant is beneficial or detrimental to humanity. However, *Cord of Empire, Exotic Intoxicant* does illuminate the historical and cultural conditions under which perceptions of hemp as a problem were constructed, and in this regard it may serve as a form of reference for contemporary drug researchers attempting to make sense of hemp's history as an intoxicant. It is also hoped that it can be read as an interpretation of culture in 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 we must be weary of the categories we as historians 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, as this study demonstrates, important ideas and perceptions that were constructed in regions far beyond the ocean's

shores often times entered the Atlantic world and were woven into the webs of significance spun by people living within it.

Chapter 3

Hemp: Botany and Culture

Introduction

The origins of the hemp plant are shrouded in mystery. Its known history of usage starts around ten thousand years ago, most likely in a region of the Himalayan mountain ranges in Central Asia, where archeologists have discovered traces of the plant buried with human remains. According to K.C. Chang, decorated clay pots made with hemp 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 excavations have unearth traces of the seeds and stems in Greece dating back at least to 500 BC. Until the mid-eighteenth century, most Europeans were only familiar with hemp 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, hemp 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. Various cultures, however, used the plant for different purposes, and the way hemp transmogrified and transformed in meaning when these different cultural uses collided is the main subject of this work.

What is hemp? A comprehensive answer to this question is complex, for it requires an investigation into the botany, pharmacology, economics, and history of the plant through time. In the past, scholars have studied hemp within these discrete academic fields, but no one has written a cultural history that combines them in order to objectively examine humanity's unique historical relationship with the plant. No doubt the

[1] Kwang-chih Chang, *The Archeology of Ancient China* (New Haven: Yale University Press, 1968), p. 249.

plant itself is responsible for the considerable amount of confusion regarding what it actually is. After all, it has been used for different purposes within various civilizations throughout time. In fact, one might argue that hemp has been put to use by people for more purposes than any other plant, all of which emanate from three separate parts of its botany. As ethno-botanist Richard E. Schultes explained, hemp is "a triple-purpose economic plant. 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."[2] Psychologist Mitch Earleywine hinted at the cultural significance of the plant's multipurpose when he wrote that "[t]he stalks help produce fiber; the seeds provide food and oil. The flowers, leaves, and resin appear in medical and intoxicating preparations. 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."[3]

Earlywine used three separate words – hemp, cannabis, marijuana – to refer to the same plant, and each one carries a much different meaning. Unlike the other two, however, there was a period of time when the word hemp could simultaneously refer to all three. This is an important fact that has largely gone unnoticed in the historiography, and it has created a tendency to isolate the meanings and study them in separate contexts.[4] Instead, if we focus on the connection between the three, then we can see how the histories of hemp as a fiber, medicine, and intoxicant intertwine and overlap with

---

[2] Richard Evans Schultes, "Random Thoughts and Queries on the Botany of Cannabis;" in C. R. B. Joyce and S. H. Curry, *The Botany and Chemistry of Cannabis* (Baltimore: The Williams & Wilkins Co., 1970), p. 12.
[3] Mitch Earleywine, *Understanding Marijuana: A New Look at the Scientific Evidence* (New York: Oxford University Press, 2002), p. 3.
[4] Even Earlywine's book, which is one of the most significant contributions to our understanding of hemp intoxication, explicitly states that the history of hemp as an intoxicant is separate from its history as a medicine, which is also separate from the fiber's history. See Earlywine, *Understanding Marijuana*, 22-24.

each other throughout the nineteenth century. Indeed, by the end of the eighteenth century, people writing about one of these meanings often also mentioned the other two, thereby endowing the entire plant with a myriad of perceptions, connotations, and associations that would eventually work towards transforming it from an important strategic commodity to a banned intoxicant in the Atlantic world.

Another reason why these meanings have been treated so separately could perhaps be due to the sheer controversy that has surrounded the plant over the past century. For one, many people who claim to study the intoxicating properties of hemp often form opinions before researching and use those opinions to endow their research with meaning, and very few people in the academic world want to be associated with such blatant biases.[5] As a result, there is a certain risk associated with such a project; but it would be a mistake to assume that such a study provides no historical value simply because the subject has been tainted by the partiality of its historiography.[6] Sifting through the biased and embellished accounts of the plant's history can be a daunting task, but doing so reveals a mountain of evidence that explains how hemp transformed in use and meaning in the Atlantic world. Although the present work is less about the plant itself than the discourse that followed it across the ocean, this chapter will break hemp down into its component parts and investigate certain societal relationships to each of them, for doing so helps illuminate the symbiotic relationship between use and meaning behind its transmogrification during the eighteenth and nineteenth centuries.

---

[5] See, for example, Beverly Potter and Dan Joy, *The Healing Magic of Cannabis* (Oakland: Ronin Publishing, 1998); Patrick Matthews, *Cannabis Culture: A Journey through Disputed Territory* (London: Bloomsbury, 1999). The most popular of such studies is Jack Herer, *Hemp & The Marijuana Conspiracy: The Emperor Wears No Clothes* (Van Nuys: Queen of Clubs Publishing, 1992).

[6] For an essay that documents the propensity of those writing about hemp to do so with a blatant bias, see Erich Goode, "Marijuana and the Politics of Reality," *Journal of Health and Social Behavior*, Vol. 10, No. 2 (Jun. 1969): 83-94.

The Plant

The hemp plant is of the genus *Cannabis*, which is for now agreed upon by many scientists as belonging to the small family of flowering plants with a similar sounding name: Cannabaceae. There are over 11 genera and 170 species belonging to 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 *Cannabis*, the male plants develop and produce pollen that travels to the female plants, which catch the pollen in their resinous flowers and mature to produce randomly sexed and genetically diverse seeds. Though *Humulus* looks entirely different, the pollenization process is relatively similar in both genera, leading to extreme amounts of diversification and – as any beer connoisseur knows perfectly well – allowing for the creation of thousands of varieties of cross-bred plants with unique abilities to express a significant amount of genetic variation. Today, now that scientists have come to better understand the hemp plant, we see a similar pattern developing within the consumer market of its intoxicants. As journalist professor Michael Pollan mentions, like hops, developments in hemp breeding today make it possible to develop strains with subtle and unique differences: "At the top end of the market this has led to a connoisseurship of cannabis – not just of its taste or aroma, but of the specific psychological texture of its high."[7] The publication *Cannabible* is an excellent example of this point, as it contains detailed images of various varieties of the flowering tops with

[7] Michael Pollan, *The Botany of Desire: A Plant's Eye View of the World* (New York: Random House Press, 2001), p. 150.

exotic names and detailed descriptions regarding the subtle ways in which each strain tastes, smells, and affects the consciousness of its user.[8]

In fact, this variation is so dynamic that it has led to much taxonomic confusion. Carl Linnaeus, in his famous 1753 work, *Species Plantarum*, only identified a single species of the plant, which he called *Cannabis sativa*; but he may have only been referring to its use for cordage in Europe. As contact with Asia increased, though, Europeans started encountering the plant being used for different purposes by the so-called "Asiatics" more frequently, which caused some to assume that there was an entirely different species. With the exception of its size, the plant looked virtually the same, but the so-called "Orientals" made inebriates with it instead of cordage and sailcloth for rigging ships. Jean-Baptiste Lamarck's 1783 work officially established what scientists would later refer to as the polytypic concept for *Cannabis*, suggesting that there are multiple species. Referring to it as *Cannabis indica*, *Chanvre des Indes*, and – perhaps most revealing for purposes of this study in general – *Cannabis similis exotica*, he listed its distinctive features as "smaller, has ramification of the stems, which are tough and more cylindrical . . . This plant grows in the Oriental Indies. Its stem is strong, having a thin cortex rendering it incapable of providing fiber comparable to those others mentioned here which are in great usage. Its odor is strong and in some ways resembles that of Tobacco."[9]

Although Lamarck's observation that this "Oriental" version was not and could not be used for fiber was inaccurate, there is in fact a difference between the plants grown in the west versus those in the east; the latter being smaller, bushier, more broad-leafed, and filled with the psychoactive molecule tetra-hydrocannabinol (THC) that induces

[8] Jason King, *The Cannabible 2* (Berkeley: Ten Speed Press, 2003).
[9] Jean-Baptiste Pierre Antoine de Monet de Lamarck, *Dictionnaire Encyclopedique de Botanique* (Paris: Panckoucke, 1789), Vol. I, p. 695.

intoxication, while the former is taller, more narrow-leafed, produces fiber more efficiently, and has little to no intoxicating potential.[10] Scientists have found it difficult to agree on how to interpret these differences, though, for there are no reproductive barriers prohibiting hemp plants from breeding with each other. This has produced an extreme amount of diversity among them, but the most recent research strongly suggests that there are in fact two highly unique genetic variations of hemp that correspond to the *sativa* and *indica* distinctions mentioned above.[11] Some have attempted to identify a third species, *Cannabis ruderalis*, but there is just as much disagreement on this issue today as there was on the indica/sativa debate in the twentieth century.[12] More importantly for purposes of this work, however, is the role that the perceptions of difference played in the discourse on hemp in the eighteenth and nineteenth centuries.

For Lamarck and the camp of enlightened naturalists who supported him in the late eighteenth century, for example, the differences they observed in hemp were understood within the context of a theory known as acquired characteristics, which assumed that living organisms handed down characteristics and abilities to their offspring that they acquired through living and responding to the environment.[13] Since nature had overprovided for Asia by endowing the subcontinent with warm climates, the hemp plant

---

[10] Due to these differences, hemp consisting of high concentrations of THC is not a viable economic option for cultivating the fiber, but the fiber can in fact be extracted from the plant commonly referred to as *Cannabis indica*.

[11] For the most recent research, see Robert Clark and Mark Merlin, *Cannabis: Evolution and Ethnobotany* (Berkeley: University of California Press, 2013). For a more scholarly and less bias source, see Karl Hilling, A *Systematic Investigation of Cannabis*, Ph.D. Dissertation in Biology, Indiana University (Bloomington: Indiana University, 2005).

[12] See Ernest Small, H.D. Beckstead, and Allan Chan, "The Evolution of Cannabinoid Phenotypes in Cannabis," *Economic Botany*, Vol., 29, No. 3 (Jul.-Sept., 1975): 219-232; William E. Emboden, "Cannabis: A Polytypic Genus," *Economic Botany*, Vol. 28, No. 3 (Jul.-Sept., 1974): 304-310; Richard Evans Schultes, William M. Klein, Timothy Plowman, and Tom E. Lockwood, *Cannabis: An Example of Taxonomic Neglect* (Cambridge, Mass.: Botanical Museum Harvard University, 1974).

[13] See Philip Wiener, *Dictionary of the History of Ideas: Studies of Selected Pivotal Ideas* (New York: Scribner, 1973).

there accommodated the degenerate behavior of the people in the Orient, whose environment created a weak sense of work ethic in the people. Indeed, Lamarck emphasized the distinction he felt nature made between the west and the "Oriental Indies" by using the Latin epithet *indica* for their hemp, 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 the theory of acquired characteristics, his work perpetuated a discourse on the scientific nature of the hemp plant that was stimulated by a Western perception of the Orient as an untamed region of the world where civilization degenerated due to environmental abundance.

Lamarck's choice of words, then, reveals a great deal about Western perceptions of the Orient and the peoples and cultures living within it. Indeed, there have been numerous sources published in the west throughout the centuries that indicate hemp's use for intoxication was associated with the exotic eastern or "other" mentality, and among those was a man named M. Marcandier. Although he assumed that there was only one species of hemp, his treatise on the plant published in 1755 mentioned "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."[14] Hottentots is a name that European colonizers used to refer to the Khoikhoi people they encountered in southern Africa during the mid-seventeenth 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

[14] M. Marcandier, trans., *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. Beckert and P.A. de Hondt, 1764), p. 12.

them drunk."[15] Though the plant he described was most likely another intoxicant known as *Leonotis leonurus*, Marcandier's mentioning of it as a "kind of wild hemp" reflects the belief that non-European cultures used the plant for intoxication. He also mentioned on another occasion 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."[16] The implications in these statements are that the hemp 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 which Europeans considered primitive used it for more leisurely purposes.

This association between hemp used in the west for more practical reasons than hemp used in the east continued to dominate the discourse throughout the remainder of the eighteenth and into the nineteenth 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."[17] As historian James H. Mills has pointed out, this publication became a well established field manual for colonial officers working abroad. Joseph Huddart even

---

[15] Quoted in Brian Du Toit, *Cannabis in Africa* (Rotterdam: A.A. Balkema Press, 1980), p. 12.
[16] Marcandier, *A Treatise on Hemp*, 18, 23-24.
[17] Henry Draper Steel, *Portable Instructions for Purchasing the Drugs and Spices of Asia and the East-Indies: Pointing out the Distinguishing Characteristics of Those that are Genuine, and the Arts Practised in Their Adulteration. With Practical Directions for the Choice Of Diamonds, And an Accurate Account of the Chinese Touch-Needles, OR, The Method Of Judging Of The Fineness Of Gold BY Its Colour. To Which is Prefixed, a Table of the Custom-House Duties at London* (London, 1779), p. 14.

included the entire booklet in his 1801 publication, *The Oriental Navigator*, which gained international notoriety in England, France, and America for its usefulness as a travel guide into the remote and exotic crevices of the world.[18] The publication was also reprinted in a similar booklet published across the Atlantic in the United States in 1800, the purpose of which seems to have been to provide the peripatetic American merchant with a trustworthy guide to rely upon for exchanging goods in exotic places of the east, which by that time had already become an important destination (especially China) for western traders.[19] As a result, anyone perusing these volumes for descriptions of drugs or spices from Asia would have encountered this description of eastern hemp differing little from the western version, other than in the manner by which the so-called Orientals used it.

Writing in 1804, Robert Wissett contributed to the nomenclature debate by mentioning that the hemp he observed growing in Bengal was "no doubt, our own famous plant, now so common and useful in Europe." He continued:

> 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

[18] Joseph Huddart, *The Oriental Navigator or New Directions for Sailing to and from the East Indies, China, New Holland*, 2nd Edition (London, 1801); cited in James H. Mills, *Cannabis Britannica: Empire, Trade, and Prohibition* (New York: Oxford University Press, 2003), chapter 2. Although Mills' book is mainly concerned with revealing the misinformation about cannabis drugs and how it was perpetuated by the British throughout the late nineteenth and early twentieth centuries, the first few pages of chapter 2 provide valuable insight into early British perceptions of the hemp plant.

[19] James Joseph, *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: Furman Press, 1800). By the 1790s, the American economy had become increasingly more global as Boston merchants began trading with China and the East. See, for example, Eric Dolin, *When America First Met China: An Exotic History of Tea, Drugs, and Money in the Age of Sail* (New York: Liveright Publishing, 2012).

> for any purpose. It is cultivated in small quantities everywhere (in India) on account of its narcotic qualities.[20]

Such commentary reveals a great deal about Wissett's perception of the Bengal people he observed. As a clerk for the East India Company working in Bengal for the purpose of assessing whether or not the British could use their colonial territories there to extract the valuable fiber from the hemp plant needed to rig their ships, he paid particular attention to the way in which indigenous people used the plant. Since he claimed that the hemp growing in Bengal was the same plant that the British considered "so necessary in every respect," the fact that he believed the people in Bengal were unaware of, or refused to use it for such practical and scientific purposes, and instead "cultivated it for the purpose of obtaining an intoxicating drug," speaks volumes about the perception he and others in Britain had of the Indian people and the manner by which they used things designed for productive purposes.[21]

A couple of decades later, Orientalist and moral reformer Ainslie Whitelaw'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."[22] Clearly, Whitelaw was under the impression that there was only one hemp plant, but that the "Asiatics" used it for much different purposes than Europeans. For him, the fault of such practices in India can be attributed to their primitive

---

[20] Robert Wissett, *On the Cultivation and Preparation of Hemp; as also, of an Article, Produced in Various Parts of India, Called Sunn, Which, With Proper Encouragement, May Be Introduced as a Substitute For Many Uses to Which Hemp is at Present Exclusively Applied* (London: Cox & Son, 1804), p. 18.
[21] These quotes are taken from *ibid*., page viii and v respectively.
[22] Ainslie Whitelaw, *Materia Indica, Or, Some Accounts of Those Articles Which are Employed by the Hindoos and Other Eastern Nations, in Their Medicine, Arts, and Agriculture* (London: Longman, Rees, Orme, Brown and Green, 1826), Vol. II, p. 109.

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.”[23] If the publication in 1855 of a series of correspondences concerned with hemp preparation and cultivation in India is any indication, the dichotomy between eastern and western uses for hemp became a defining characteristic of the discourse by mid-century, with most writers assuming that the Indian version was as sort of Asiatic condition of the same plant used in Europe.[24]

To be sure, this discourse was transatlantic, and it continued unabated throughout the nineteenth century. As late as 1900, for example, the American novelist James Allen illustrated the difference in a story he published that takes place in a Kentucky hemp field, which opens with some revealing commentary about his perception of the Orient based on their use of hemp products. Contrasting the easterners’ use of hemp with hard-working, patriotic Anglo-Saxons who pushed west to tame its wild environment and peoples and cultivate the plant for the betterment of the nation, he mentioned that, after Americans prepared the crop for manufacture, they laid it on the ground for a while so it could give “back to the soil the nourishment they have drawn from it.” One part of the plant that decomposed during this process is the flowering tops, which he noted were “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

[23] *Ibid*., iii.
[24] See Published by Authority, *Papers Regarding the Cultivation of Hemp in India* (Agra: Secundra Orphan Press, 1855).

the very history of this plant is lost in the antiquity of India and Persia, its home – *land of narcotics and desires and dreams*."[25]

Scholars have written extensively on the images that Europeans and Americans constructed about the peoples and cultures they encountered in the east. Especially during the eighteenth century, when the Enlightenment urge to order the world and classify the peoples and cultures within it created what Foucault referred to as a taxonomic impulse, Europeans postulated theories of historical development that reflected their belief in stages of human progress.[26] This, according to historian Sudipta Sen, apprehended "the Orient as a serious object of study in the comparative progress of humankind" and allowed Europeans to construct images of the east as belonging to primitive societies of indolent people who were on a lower stage of historical development.[27] Other scholars have referred to Orientalism as a complex colonial fetish that includes both attraction and revulsion, which instilled a desire for the perceived exoticism of the east that was contrasted with notions of sexual deviance and primitiveness.[28] Others have argued that constructed notions of the Orient migrated across the Atlantic to create an imagined adventurous space used by Americans to

---

[25] James Lane Allen, *The Reign of Law: A Tale of the Kentucky Hemp Fields* (New York: The MacMillan Company, 1900), p. 16. Emphasis has been added for affect.
[26] Michel Foucault, *The Order of Things: An Archaeology of the Human Science* (New York: Vintage Books, 1994). For the acceptance of a stadial aspect of human progress, see Adam Smith, *Juris Prudence; or, Notes from the Lectures on Justice, Police, Revenue, and Arms Delivered in the University of Glasgow*; in Robert L. Heilbroner (ed.), *The Essential Adam Smith*, (New York: W. W. Norton, 1986), 37-56.
[27] Sudipta Sen, *Distant Sovereignty: National Imperialism and the Origins of British India* (New York: Routledge, 2002), p. 31. Edward Said pioneered the study of Orientalism in his book of that title in 1978, which argued that westerners constructed images of the oriental "Others" to justify dominating, controlling, and penetrating into the area for empire and conquest. See Edward Said, *Orientalism* (New York: Vintage Books, 1979). See also Edward Said, *Culture and Imperialism* (New York: Vintage Books, 1994).
[28] See John M. MacKenzie, *Orientalism: History, Theory, and the Arts* (Manchester: Manchester University Press, 1995).

construct their own identity.[29] In regards to hemp and the perception of the manner by which the plant was cultivated and used differently among cultures in the west versus those in the east, though, it is important to take note of such theories, as they are relevant to the overall shift in meaning that the plant itself endured so many times within the Atlantic world. Before investigating how these transformations took place in a transatlantic context, a historical overview of the three most significant properties of the hemp plant mentioned earlier is required, for each use carried different connotations, which ultimately played an integral role in the process of refashioning meaning.

Industrial Hemp

Hemp 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 hemp 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 on such long voyages, massive hawser lines for towing ships were carried on board as well. Moreover, on one of his voyages across the world, Ferdinand Magellan lowered what explorers in the sixteenth century referred to as a "hemp-line" into the ocean to a depth of 750 meters, which obviously required a lot of manufactured hemp.[30] Even the caulking (oakum) used to repair the seams of wooden vessels came from this plant. Before setting sail, a ship could have as many as one

[29] See, for example, Susan Nance, *How the Arabian Nights Inspired the American Dream, 1790-1935* (Chapel Hill: University of North Carolina Press, 2009). See also Richard V. Francaviglia, *Go East Young Man: Imagining the American West as the Orient* (Logan: Utah State University Press, 2011).
[30] John Noble Wilford, *The Mapmakers* (New York: Vintage Books, 1981), pp. 327-329.

hundred tons of hemp aboard, which translates into a crop harvested ranging anywhere from eleven to twenty-seven acres of land.[31]

Especially after the onslaught of the Age of Exploration, when Europeans embarked upon a relentless campaign to map, chart, and essentially penetrate into a body of water they imagined would connect them to the riches of Asia, hemp 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, hemp was to the Atlantic world what uranium was to the interconnected world of the twentieth century: a practical and strategic necessity for becoming a dominant power on a large scale. The earliest known attempt by Europeans to introduce hemp into the New World occurred in 1545, when the Spanish Crown ordered its subjects to cultivate the plant in various areas of their colonial territories.[32] Although the plant grew and was cultivated in Spain, the amount could not meet the consumption needs of the empire, so they continued to encourage its production in their colonies well into the eighteenth-century.[33] Portuguese and French ropewalks and Dutch-made canvases from the early modern period confirmed the

---

[31] John Hopkins, *A History of the Hemp Industry in Kentucky (*Lexington: The University Press of Kentucky, 1951), p. 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," *Department of Crop and Soil Science* (Agricultural Experiment Station: Oregon State University, 1998). Accessed on January 5, 2014 at: http://extension.oregonstate.edu/catalog/html/sb/sb681/

[32] Sanford A. Mosk, "Subsidized Hemp Production in Spanish California," *Agricultural History*, Vol. 13, No. 4 (Oct. 1943): 171. See also Jerry W. Cooney, "A Colonial Naval Industry: The 'Fabrica de Cables of Paraguay," *Revista de Historia de America*, No. 87 (Jan.-Jun. 1979): 105-126. 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: The University of North Carolina Press, 2012), pp. 1-3.

[33] See Brian E. Coutts, "Flax and Hemp in Spanish Louisiana, 1777-1783," *Louisiana History: The Journal of the Louisiana Historical Association*, Vol. 26, No. 2 (Spring 1985): 129-139.

prevalence of hemp within their empires as well, but it was the English and American involvement with hemp cultivation for fiber (among other uses) with which the present work is primarily concerned.[34]

For the English, the effort to secure a steady supply of hemp dates back at least to the early colonial period, when lawmakers back in England expressed concern with relying too heavily on imports from foreign countries for such a valuable strategic commodity. Since imperial conflict between rivals could cut off the hemp supply and potentially drain the empire of its naval stores, images of an unspoiled Eden enticed English lawmakers to instruct the Jamestown colonists in 1611 to grow it.[35] By 1633, the Virginia Assembly enacted a law that forced "every planter as soone as he may, provided seede of flaxe and hempe and sowe the same."[36] The law of 1673 is perhaps more revealing, for it offers an explanation as to why the lawmakers felt that the English needed to produce more hemp: "FORASMUCH as it much conduceth to the well being 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. As a result, the Assembly enacted another law, demanding that "one quart of hempe seed for every tythable person within their countyes

[34] See A.J.R. Russell-Wood, *The Portuguese Empire, 1415-1808* (Baltimore: John Hopkins University Press, 1998), pp. 126-127. For an account of Dutch activity in the Atlantic world, see Philip Morgan and Jack P. Greene, *Atlantic History: A Critical Appraisal* (New York: Oxford University Press, 2009).
[35] Lewis C. Gray, *History of Agriculture in the Southern United States to 1860* (Gloucester, Mass.: Peter Smith Press, 1958), Vol. 1, pp. 5-6.
[36] 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* (Torrance: Freddie L. Spradlin, 2009), Vol. 1, p. 218; the transcription of these laws can be obtained at http://www.vagenweb.org/hening/.

and the same cause to be distributed amongst the inhabitants, and that the courts failing to procure the said hempe seed, and thereof make distribution in manner as aforesaid, be fined five thousand pounds of tobacco."[37] By the end of the seventeenth century, colonial governments in Virginia, Maryland, Pennsylvania, and certain areas of New England had all heeded the call from their mother country to encourage hemp cultivation over tobacco.[38]

The primary reason behind the drive to encourage hemp cultivation in the colonies of the empire 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 hemp into fiber was an extremely arduous task. Although it did not require laborers to work in the fields as regularly as plantation crops such as sugar and cotton did, the work one needed to put in was extremely grueling. After they were cut down with a special knife, the plants needed to be retted to separate the fiber from the outer bark and detach it 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 the retting process. Known as heckling or beating, the laborer used a hemp brake to separate the fibers by placing the retted stalks onto the wooden structure and used a lever on the upper frame of the brake to manually strike the stalks over and over until the dried inner gum broke off into small pieces. To ensure proper technique, the laborer had to periodically whip the fiber against the brake so that the pieces of gum would fall out, slowly freeing it for use. From a physical labor perspective, this process was incredibly demanding, even by eighteenth century standards.

---

[37] *Ibid*., Vol. 2, p. 306.
[38] Hopkins, *A History of the Hemp Industry in Kentucky*, 6-9.

Indeed, sources ranging from at least the seventeenth century indicate that Europeans understood hemp to be a difficult and arduous plant to manufacture. A seventeenth century complaint by a group of London hemp dressers against Dutch competition claimed that "many thousands have been set on work [on hemp] and have lived thereby very well with their hard labour." In fact, the work was considered to be so hard that "it hath been 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 statue in that case provided."[39] William Bailey published *A Treatise On the Better Employment of The Poor in Workhouses* over twenty years later, and in it he promoted hemp manufacturing and cultivation as a means to providing gainful employment to 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."[40] 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.

Five years earlier, a literary source published a story 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

[39] "The London Hempressers Complain of Dutch Competition, temp. Charles I;" P.R.O., SP 16/520, No. 123; reprinted in Joan Thirsk and J.P. Cooper (eds.), *Seventeenth Century Economic Documents* (Oxford: Clarendon Press, 1972), p. 254.
[40] William Bailey, *A Treatise in the Better Employment, and More Comfortable Support, of the Poor in Workhouses…* (London: J. Dodsley, 1758), p. 50.

dreadful fall indeed to wake to beat hemp."[41] The tendency to force inmates housed at correctional facilities to beat hemp is a clear indication that it was considered a difficult and undesirable task.[42] This perception made its way across the Atlantic as well, where Edmund Quincy mentioned in his treatise how using 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 even included an image of a copper plate engraving of a hemp mill that he designed in hopes of making the process easier.[43] Another publication over a decade later included an even more detailed drawing of a machine used for breaking flax and hemp, the latter of which he claimed "is more troublesome in the handling."[44] Indeed, "handling" hemp was considered so difficult that, decades after the American Revolution, one observer mentioned how "hemp grows spontaneously [in Virginia,] with luxuriance I never met with anywhere." However, due to "the indolence of the people," who were not fond of working with a plant that "affords much labor [during the] season of frolic and dissipation," Americans never realized hemp's full potential.[45]

---

[41] Mary Cooper, *The Adventures of Mr. Loveill, Intersper'd with Many Real Amours of the Modern Polite World*…, Vol. I (London: M. Cooper, 1750), p. 267.

[42] 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 *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. II (London:J. Dodsley, 1764), p. 21. Also, William Hogarth produced an engraving that reflected the same perception. See chapter 2 of this work for more details.

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

[44] 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), p. 39.

[45] William Strickland, "Observations on the United States of America," 8 March 1796; in Edmund Ruffin (ed.), *The Farmer's Register: A Monthly Publication Devoted to the Improvement of the Practice, and Support of the Interests of Agriculture*, Vol. III (Petersburg: Edmund Ruffin, 1836), p. 267.

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 slaves they brought with them from the tidewater region helped clear the forests and transform the wilderness into farmland. Indeed, 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 afterwards, settlers flooded into the region today known as Kentucky, and one of the crops they cultivated was hemp, which, as one historian pointed out, "was the hardest, dirtiest, most laborious agricultural task performed by Kentucky field hands."[46] 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."[47] Over time, the association between slavery and hemp increased, and advertisements in newspapers indicate that African Americans in the region increasingly became the primary laborers for the crop.[48] By the end of the nineteenth 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."[49] Such

---

[46] Marion B. Lucas, *A History of Blacks in Kentucky: From Slavery to Segregation, 1760-1891* (Lexington: University Press of Kentucky, 2003), p. 4. For information on Christopher Gist, see *Ibid*., xi.

[47] 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), p. 74.

[48] One advertisement 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." See *Kentucky Gazette*, 25 April, 1809, Volume XXII, Number 1226. For more examples of ads like this, see http://kdl.kyvl.org/.

[49] Hopkins, *A History of the Hemp Industry in Kentucky,* 24. Hopkins' book is rather outdated, but it was one of the first academic historical accounts of hemp in Kentucky, which represented the largest hemp producing state of the Union in the nineteenth century. He cites some important sources regarding the connection between hemp and slavery, but a monograph on the subject has yet to be explored thoroughly. For a more

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, hemp was not very hard to grow. It needed a suitable amount of sunlight each day, and thrived in temperatures ranging from 60-90 degrees Fahrenheit. Indeed, in almost any climate, as long as the soil was fertile enough without becoming too water-logged during the growing season, and prolonged periods of drought did not occur, the plant grew and thrived with little effort on the part of the farmer. Basically, the seed was sown thickly at a rate of fifty pounds per acre in the spring in well-tilled soil that was fertilized with high levels of nitrogen and contained an appreciable amount of humus, and then 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 hemp field removing weeds because they did not survive in the dense growth of the hemp stalks, and the plant acted as a natural repellent to most pests, thereby minimizing precautions that the farmer had to take during the vegetative growth stage. The plant grew best in soils with a pH range of 6.5-7.0, which allowed it to absorb and process the nutrients more efficiently. Generally speaking, if the climate of the region allowed for the seed to be sown in early spring, then the crop would be ready for harvest by mid-summer.

Why is it, then, that the English and Americans had so much trouble producing enough hemp to satisfy home consumption? To be sure, hemp cultivation had always been a viable and sometimes thriving industry 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. The most popular method was to allow the stocks to dry (ret) in the fields for a month or so before beginning the breaking process, but

---

contemporary account of slavery in Kentucky in general, see Lucas, *A History of Blacks in Kentucky*.

according to Marcandier, the problem with "curing" hemp in the sun was that the "water, which falls upon the Hemp before it is dry, makes it of a blackish color, and full of spots."[50] Instead, if the hemp was placed in water as soon as it was pulled, the gum that fills the core of the stem dissolved quicker, thus eliminating the molding that occurred when it was left to dry immediately after pulling. Marcandier also pointed out that, after allowing the bundles of hemp to soak in a ditch for the 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 hemp that "is always the whitest, and of the best quality" and 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."[51]

Evidence clearly indicates that at least some in both Great Britain and America understood that water-retting produced more superior quality hemp, but the prejudice against the technique persisted.[52] Edmund Quincy pointed out how in "many parts of Europe, the Farmers are forbid to water their hemp in rivers, as it has been found to poison their fish."[53] In fact, nearly two centuries before, poet Thomas Tusser had the follow to say about water-retting: "Now pluck up thy hempe, and go beat out the seed,

---

[50] The actual quote from the French version is 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), p. 54. The black spots Marcandier referred to were undoubtedly some kind of mold, which weakened the strength of the ropes on ships over the course of time.
[51] Quoted in Marcandier, *A Treatise on Hemp,* 65.
[52] For sources promoting the use of water-retting in replace of dew-retting, see chapter 4 of this work.
[53] Quincy, *A Treatise of Hemp-Husbandry*, 17.

and afterward water it as ye se need; But not in the river where cattle should drinke, for poisoning them and the people with stinke."[54] 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.[55] Evidently, the perception that water-retting hemp produced pollutants that caused more problems than they were worth has a long history in Anglo-Atlantic culture, and the concerns still persist today.[56] To be sure, other crops such as indigo also caused pollution, yet that business persisted. However, unlike with indigo, the advantages to be gained for putting up with the pollution that water-retting hemp produced did not outweigh the easier processing techniques. In other words, the cost of processing hemp for the empire or nation did not always line up with the cost of processing it for the individual, so the inferior method persisted.

Besides planting to grow for fiber, another alternative industrial use for hemp that travelled across the Atlantic was in the form of oil extracted from its seed. Goods such as soap, candle oil, and paint were all once products in which hemp seed figured prominently. According to Hopkins, "When pressed it yields from 30 to 35 percent of its weight as peculiar-smelling oil, mild in taste and in color a greenish yellow which turns to brownish yellow with age. After the liquid, which is useful in manufacturing paint, varnish, and soap, has been extracted by crushing, the residual seed cake may be employed as fertilizer or stock food."[57] These uses were important enough that multiple treatises written about hemp cultivation gave specific instructions as to the manner by which the

[54] Thomas Tusser, *Five Hundred Points of Good Husbandrie* (London: 1580); revised and edited by W. Payne and Sidney Herrtage (London: English Dialect Society, 1878), p. 41.
[55] Anonymous, "Improvements in Treating Flax and Hemp," *The Farmer's Magazine*, Vol. 11 (London: Rogerson & Tuxford, 1857), p. 384; Anonymous, "Flax, Hemp, etc. – Improvements in their Treatment," *The Working Farmer*, Vol. XI (New York: Frederick McCready, 1858), p. 94.
[56] Paolo Ranalli (ed.), *Advances in Hemp Research* (New York: The Haworth Press, 1999), p. 74.
[57] Hopkins, *A History of the Hemp Industry*, 43.

plant needed to be cultivated for the production of seed rather than fiber, which required different techniques to allow the seed to grow to its full potential on the flowering branches of the female plant. Both the London and Boston publications of Marcandier's treatise provided instructions on how to cultivate the plant for seed production, which he claimed "is 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."[58] Several others ranging in dates from the late eighteenth to the early twentieth centuries provide similar descriptions of how to properly cultivate the plant for the production of seed rather than fiber.[59]

Another industrial use for hemp seed that was commonly familiar in the British Atlantic during the eighteenth century was its use as an important source of food for animals. In his *Natural History of English Song-birds*, for example, Eleazar Albin mentioned hemp seed on multiple occasions as an essential food for attracting the "pretty and innocent" song birds to one's dwellings.[60] 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 source mentioned the seed as an

[58] Marcandier, *A Treatise on Hemp*, 18.
[59] 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).
[60] 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, 1741), 2nd Edition, pp. 16, 26, 32, 33, 48, 56, 65, 67, 72, 121, and 123.

important source of food for those trying to attract birds.[61] This book 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."[62] Both of these descriptions made their way into the London and Boston translations as well, and various other sources on both sides of the Atlantic included similar descriptions of the seed's use for food.

To sum up, then, hemp for industrial purposes played a major role in both British and American societies. It was not very difficult to cultivate, but hard to transform into the valuable fiber needed for naval stores, and labor-intensive to prepare for the market. Nevertheless, it needed to be obtained by any means necessary. Both the Americans and the British demonstrated a strong desire to figure out how to best cultivate hemp for naval stores, but neither were able to end their reliance on Russia for such an important strategic commodity. Both grew hemp 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 the ships that sailed across oceans on long voyages. As a result, when other fibers were discovered that could be used to replace hemp, both Americans and Britons sought to use them. We shall see the impact this had on hemp fiber in the Atlantic world in the next chapter, but for now it suffices to say that industrial hemp occupied an important role in the Atlantic world throughout the eighteenth and into the nineteenth century.

---

[61] *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), p. 29.
[62] Marcandier, *Treatise on Hemp*, 19-23.

Medicinal Hemp

Hemp seed and the oil made from it possess no intoxicating value, but they do contain about 25% protein and have all the necessary amino acids that are important for human health. Today, many health food products are being marketed on both sides of the Atlantic as a healthy and environmentally friendly option for consumption, but the seed and oil produced from it have a history that far precedes these cultural trends and requires our attention at this point if we want to understand the complicated nature of hemp's place in the early modern Atlantic world. We have already seen how hemp seed figured prominently in English law as a means to the end result of producing fiber in the seventeenth and eighteenth century, but there were many other associations that existed in England well before the rise of mercantilism and the Age of Discovery. There are also a number of references towards the use of hemp seed for other purposes in ancient societies dating as far back as four thousand years ago, but most of them deal with cultures in Asia or the Middle East.

An Anglo-Saxon source written in Old English and Latin in the eleventh century A.D., known as the *Lacnunga* (remedies), mentions a holy salve used to ward off the devil that includes hemp as an ingredient.[63] According to the historians who translated the text, this ancient book reveals the establishment of a culture that blended Pagan, Christian, and Mediterranean influences with Anglo-Saxon customs. Indeed, regarding the medicinal use of hemp seed, Europeans seem to have associated it with the Mediterranean, for sources published during the Renaissance credit Dioscorides, Galen,

[63] 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), p. 123.

Pliny, Virgil, Homer, and Herodotus.[64] John Parkinson's book on plants from the 1640s is an excellent example. As apothecary to James I, he produced one of the most comprehensive botanical studies of plants in England during his time. Relying on classical works written by some of the author's mentioned above, he claimed that hemp 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."[65]

By the time he published this book, hemp seed had already become a popular commodity for English medicine, as seen by the fact that the so-call Water Poet, John Taylor, published an ode to the seed. Titled *The Praise of Hemp-seed*, one section reads as follows:

> Apothecaries were not worth a pin,
> If Hempseed did not bring their commings in;
> Oyles, Unguents, Sirrops, Minerals, and Baulmes,
> (All nature's treasures, and th'Almighties almes),
> Emplasters, Simples, Compounds, sundry drugs
> With Necromanticke 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 health, preservatives, and riches brings.[66]

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

---

[64] For a more extensive information about these sources, see David T. Brown (ed.), *Cannabis: The Genus Cannabis* (Amsterdam: Harwood Academic Publishers, 1998).
[65] John Parkinson, *Theatre of Plants* (London, 1640). For a list of various sources published in sixteenth century Europe that cite classical works for the use of hempseed as medicine, see Michael Aldrich, "History of Therapeutic Cannabis;" in Mary Lynn Mathre (ed.), *Cannabis in Medical Practice: A Legal, Historical, and Pharmacological Overview of the Therapeutic Use of Marijuana* (London: McFarland Publishers, 1997), p.42.
[66] John Taylor, *The Praise of Hemp-seed* (London: E. Wright, 1623), p. 7.

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 as to the nature by which such medicinal knowledge of hemp seed transferred into early Anglo-Saxon culture, sources indicated that the association became more prevalent in the eighteenth century.

One publication, already in its seventh edition in the 1720s, reiterated that "the seed of [hemp] boil'd 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 that could be developed from the seed: "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."[67] These descriptions were obviously well known by the early eighteenth century, for Philip Miller's *Gardener's Dictionary* claimed in the 1730s that "the seeds afford an oyl 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."[68] The celebrated Dutch enlightenment scholar, Herman Boerhaave, mentioned hemp seed in his *Materia Medica*, in which he included a similar description of its presumed medical value, claiming that an emulsion of the "Seed of the common Hemp" is "excellent in Jaundices and other Diseases arising from Obstructions of the Viscera."[69] Marcandier's reference to the healing powers of the seed suggests that it was used for such purposes in France as well:

---

[67] Steven Blankaart, *The Physical Dictionary* (London: John and Benj. Sprint, 1726), p. 65.
[68] 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); quoted in Mills, *Cannabis Britannica*, 31-32.
[69] Herman Boerhaave, *Herman Boerhaave's Materia Medica* (London: 1755), p. 68.

> 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.[70]

It is difficult to gauge the extent to which the use of hemp seed for medicinal purposes made its way into the British colonies across the ocean during the eighteenth century. Marcandier's treatise was of course published in America, but it is difficult to determine how many people read it and for what purpose. His goal in writing the book was to demonstrate the value of industrial hemp cultivation, so most people who read it likely did so with the intention of obtaining knowledge on the best way to cultivate it for fiber. According to physician Ernest Abel, there was a source published in 1764 titled, *The New England Dispensatory*, which mentioned the use of hemp roots to treat inflamed skin, but he provides no citation and no library seems to have any record of it. As such, the overwhelming majority of material published on hemp in the colonies at this time dealt specifically with its cultivation and use for fiber.[71]

Perhaps the goal of British colonial policy might explain the lack of published knowledge in the colonies over the use of hemp seed 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 the American colonies, 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

[70] Marcandier, *Treatise on Hemp*, 23.
[71] Ernest Abel, *Marijuana: The First Twelve Thousand Years* (New York: Plenum Press, 1973), p. 119.

> 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.[72]

Further discussion on the society will be warranted in chapter two, but it is worth noting here that, of all the mentions of hemp in the microfilm collection, there were no references to hempseed for medicinal use.

In contrast to the scarcity in the eighteenth century of any discussion of the medical uses of hemp in the colonies, nineteenth century sources abounded with such discussions. A medical dictionary published decades after the American Revolution in Philadelphia, for example, details some of the same medical uses for hemp seed 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."[73] Works of this nature increased in volume as the nineteenth century progressed, 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 mentioned 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 without any

---

[72] 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), p. 10.
[73] Robert Hooper, *A New Medical Dictionary* (Philadelphia: Griggs & Co. Printers, 1817), p. 163.

rational indications for their use, their employment is a kind of haphazard practice, which will be more likely to do mischief than good."[74]

Such skepticism towards the use of folk remedies was not uncommon either in the early American republic or Great Britain. Especially at the height of the Enlightenment, in which the European impulse to identify, categorize, and understand everything through the absolutism of science called many traditional associations into question. However, it would be a mistake to assume that traditional remedies did not play a role in medical developments. Historian Roy Porter argues in his seminal work on medicine that "it is a gross mistake to view folk medicine as a sack of bizarre beliefs and weird and wonderful remedies." He goes on to say that, "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."[75] 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. Porter mentions that, in many cases, traditional medicines become 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."[76] Although today we mainly associate hemp with the color green, the plant does in fact turn yellow towards the end of its life cycle, and the oil made from

[74] John Eberle, *A Treatise on the Practice of Medicine* (Philadelphia: John Griggs, 1830), Vol. II, pp. 294-295.
[75] Roy Porter, *The Greatest Benefit To Mankind: A Medical History of Humanity* (New York: W.W. Norton & Company, 1997), pp. 37, 39.
[76] *Ibid*., 37.

its seeds is of a yellowish tent. Such reasoning by analogy could explain the use of it in curing jaundice.

Nevertheless, Porter's observation on the connection between the use of certain plants in social rituals and medicine is an important one, especially since hemp seed was also used in rituals in various European peasant cultures. In fact, anthropologist Sula Benet argues that the use of hemp seed in social rituals occupied an important space in Siberia before migrating 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.[77] Other Eastern European rituals cited by Benet include sprinkling hemp seeds on brides after wedding ceremonies, casting magical spells with hemp seed on the eve of St. Andrews to advance the date of marriage, and using the plant against persons suspected of witchcraft. The ceremonial use of hemp seed 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*, he mentioned how, "On this night, also, Hemp-seed is sown with certain mystic ceremonies."[78]

A much earlier source published in Edinburgh in 1801 reveals the fact that knowledge of a ceremonial aspect of sowing hemp seed would have indeed been widespread, for a compilation of poems from the famous Scottish poet Robert Burns (1759-1796) includes an interesting reference to its ritualistic use. One of the poems is titled Halloween, and the use of the word hemp in one of the stanzas prompted Burns to include a footnote for the readers who were perhaps unfamiliar with such customs to which the seed was applied:

---

[77] Sula Benet, "Early Diffusion and Folk Uses of Hemp;" in Vera Rubin, *Cannabis and Culture* (The Hague: Mouton Publishers, 1975), p. 42.
[78] Richard Folkard, Jr., *Plant Lore, Legends, and Lyrics: Embracing the Myths, Traditions, Superstitions, and Folklore of the Plant Kingdom* (London, 1884), p. 52.

> 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. Some traditions say, Come after me, and Shaw thee,' that is, show thyself; in which case, Others omit the harrowing and say, 'Come after me, and harrow thee.'[79]

By alluding on the last two lines to the fact that certain traditions have different versions of the ritual, Burns suggests that the custom was widespread enough to be transferred from one culture to another, transmogrifying and adapting along the way. 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 would be received by many audiences. In fact, a source published across the Atlantic in Philadelphia in 1806 included a similar version of Burns' hemp seed ritual. The book seems to have been a collection of various articles written by individuals on a diverse array of random topics, but one particular issue includes a letter written to the editor, which describes a version of Burns' story of the ceremonial use of sowing hemp seed, only this time it was cited as taking 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.'"[80]

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' poem made it out to be, in which case the sources quoted above

[79] *Poems By Robert Burns: With his Life and Character,* Vol. 1 (Edinburgh: Oliver Press, 1801), p. 119.
[80] Joseph Rakestraw, *The Evening Fire-side, or Literary Miscellany*, Vol. 2 (Philadelphia, 1806), p. 85.

would be a sort of cultural residue left over from the transfer of a poem written by a well-respected literary figure into a society where cultural agents appropriated his work by adapting it to their own cultural surroundings. However, the origins, impact, and significance of the ritualistic and for that matter early medicinal uses of hemp seed in European or American societies is here less relevant than the more important fact that these discourses existed and were written about on both sides of the Atlantic. They demonstrate that historical memory had already associated the plant with various uses within the Atlantic before the epithet *Cannabis indica* became prevalent, thereby endowing hemp with a great deal of meaning before the clash between *indica* and *sativa* began in the transatlantic public discourse.

Taken together, then, the industrial and medicinal sections of this chapter demonstrate the multi-dimensional discourse that surrounded the hemp plant in the early Atlantic world. Although understood primarily as a fiber-yielding plant that helped extend imperial influence and promote national sovereignty, the perception that it had medicinal value and was used in social rituals and superstitious ceremonies perpetuated this multi-dimensional discourse, which travelled across the Atlantic with English colonization. However, there were still other dimensions and uses as well. In fact, hemp had become such a common part of British society by the eighteenth century that the seed seems to have been adopted as a literary unit of measure to explain the size of other things. For example, in *The Angler's Pocket Book*, the author mentions that a river fish known as the Bleak "bites at all sorts of small insects, at mid water, or deeper; at paste, which must be as white as snow, in shape and size of a hemp-seed."[81] Another example can be found in a two volume work on medicine published in 1730, where the author describes a

[81] *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), p. 6.

common tumor that emerges on the face and neck as being "of the Bigness of a Hemp-seed."[82] Evoking the image of a hemp seed to explain the size of other objects suggests that common familiarity with the plant was widespread.

The discourse over hemp, then, focused primarily on its multi-dimensional industrial and medicinal applications over the course of the eighteenth and early nineteenth century in both Great Britain and the United States. However, knowledge of the plant's intoxicating qualities added yet another dimension to the conversation, further complicating the meaning of hemp and contributing significantly to refashioning the plant in the Anglo-Atlantic imagination over the course of the nineteenth century. As we shall see, the notion that hemp could be a problem for those consuming it was forged in the wake of these new, oriental associations of intoxication, which first entered into the English lexicon via India and then travelled across the Atlantic to the United States.

Intoxicating Hemp

For people living today in societies across the globe, the resinous properties of the hemp plant are common enough that somewhere between 200 and 300 million people have reported using them. Since hemp intoxicants are considered illegal in most countries, these numbers could in fact be much larger, for even diligent researchers conducting surveys have to rely on self-reports from those whom they interview, and fear of negative repercussions could conceivably deter many individuals 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 hemp resin in different forms. In the United States, all hemp drugs are still listed under schedule 1 classification, which means they have no

[82] John Allen, *Dr. Allen's Synopsis Medicinae* (London: J. Pemberton, 1730), Vol. 2, p. 63.

beneficial qualities and are considered severely detrimental to the users' health. Although the British considered reclassifying hemp drugs 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.[83] Even in countries such as Jamaica, where the plant is extensively used for religious purposes by a significant minority of the population, consuming intoxicating hemp products is illegal. Many advocates of legalizing hemp products point to the fact that millions of people die each year from tobacco and alcohol products – which are legal in most countries across the globe – yet evidence suggests that the negative impact of hemp intoxicants on users' lives is nowhere near comparable.[84]

How can this be the case? It is certainly a legitimate question, and the answer may in fact be connected to the perceptions and associations that developed regarding its use over time. But this work is less concerned with *why* such perceptions emerged as it is with explaining *how* the discourse developed, as well as analyzing the significance of its transatlantic context. To this end, it seems relevant to begin by pointing out that, similar to the ways in which the English word hemp was used to refer to various fiber-yielding plants in the eighteenth and nineteenth centuries, marijuana has become the signifying term of the twentieth century that endows hemp resin with meaning.[85] In the

---

[83]Beatriz Acevedo*, Understanding Cannabis Reclassification in the United Kingdom, 2002-2005*. Dissertation Submitted for the Degree of Doctor in Management (University of Hull, United Kingdom, 2007).

[84] See Earleywine, *Understanding Marijuana,* chapter 2.

[85] Europeans exhibited a similar tendency with grain, which at one point was all referred to as corn, unless it was grown in the water, in which case it was referred to as rice. However, so prevalent was this tendency that it led the English to refer to all fiber-yielding plants as hemp. In 1597, for example, John Gerard referred to the Water Agrimony plant as a kind of "Bastard Hemp." Throughout the centuries, others referred to various fiber-yielding plants of entirely different species by such diverse names as African Hemp, Bengal Hemp, Bombay Hemp, Brown Indian Hemp, Jute Hemp, Sunn Hemp, and Nettle Hemp. This tendency was transferred into American culture after the revolution and

historical section of his book on the subject of marijuana, for instance, Earleywine claims that "Robert Burton's *Anatomy of Melancholy* (1621) suggested medical marijuana may aid mood disorders." He even writes that the "sacred Indian text *Atharvaveda* listed marijuana as a holy plant that could relieve stress."[86] However, it is indeed a far stretch of the imagination to invoke these sources to describe this word. For one, marijuana is a modern term that signifies a twentieth-century illegal narcotic, and is thus being taken out of context when applied to either of these texts.

Among others, Stanford Law Professor John Kaplan did the same thing in his 1969 book, *Marijuana: Report of the Indian Hemp Drugs Commission, 1893-1894*, which is essentially a reproduction of excerpts from a British commissioned enquiry into the use of hemp intoxicants in India at a time when the word marijuana was nonexistent in the English language. He justified his choice of wording in the introduction by pointing out that "there is no one inclusive term in the United States any more than in India for all the psychoactive products of the plant." As a result, he used the term marijuana "in a broad sense to cover all of the psychoactive preparations made from *Cannabis sativa* – all of which are today supposed to share the same active ingredient or ingredients."[87] The Indian Hemp Drugs Commission (IHDC) is the most extensive study to date on the nature of hemp intoxicants and is a vital primary source, but Kaplan's anachronistic use of the British signifier "Indian hemp" to refer to marijuana is inaccurate, even though it seems to

---

continued well into the nineteenth century, when Americans referred to the abaca plant they encountered in the Philippines as Manila hemp. For an etymology of the word hemp and its application to various plant species, see the *Oxford English Dictionary* entry on hemp, accessed by the author online at: http://libproxy.uta.edu:2399/view/Entry/85870?rskey=ilXaxL&result=1&isAdvanced=false#eid (accessed on June 27, 2012.)

[86] Earlywine, 12, 10.

[87] John Kaplan, *Marijuana: Report of the Indian Hemp Drugs Commission, 1893-1894* (Silver Spring: Thomas Jeferson Publishing, 1969), p. xv.

be a common phenomenon in the historiographical tradition on the subject.[88] A possible answer to why this has been the case may be explained by commenting briefly on the justification he provided in the last sentence of the previous quote, for by stressing the fact that the forms of hemp intoxicants analyzed in the report by the IHDC "share the same active ingredient or ingredients" as marijuana, Kaplan reveals his motives for compiling these sources and writing the introduction to this book: to use history as a tool by which to defend a substance that has become a victim of what many consider to be the preposterous nature of contemporary drug laws.[89]

Such was the strategy of writers and activists in the counter-cultural movement of the mid-twentieth century, and it has largely been the case ever since. With the exception of a handful of scholarly works, most books and articles written about hemp intoxicants look to the past primarily as a way to demonstrate the fact that these properties of the plant are not only harmless, but were used for good until certain factions within governments and health institutions embarked on a campaign to demonize the plant in order to further their own interests. As a result, answers to the question mentioned above as to how hemp became illegal while alcohol and tobacco use remained lawful have been constructed with a selectively focused political lens. Problems of validity or inaccuracy aside, the essential shortcomings of this common approach to telling the story of hemp intoxicants is that it diverts our attention from some of the important transatlantic connections that can be drawn by approaching the subject from a broader perspective. After all, each version of hemp intoxicants that were used or

[88] Examples of this include, among others, Abel, *Marijuana*; 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* (Nov., 1966): 107-112; Martin Lee, *Smoke Signals: A Social History of Marijuana-Medical, Recreational, and Scientific* (New York: Scribner, 2012).
[89] Kaplan, *Marijuana*, xv.

known about in the nineteenth century Atlantic world has an important history that well precedes the use of the term marijuana, and studying them more particularistically in the context of certain Atlantic communities allows us to more fully deconstruct the meaningful transformations the plant endured through time. Not only will a more nuanced understanding of the various preparations of hemp intoxicants allow us to document the evolution of meaning regarding the hemp plant in the Atlantic world, but it can also reveal the existence of a transatlantic circuit of knowledge that travelled across national boundaries and influenced the way medical practitioners, politicians, and eventually wider social audiences thought about the plant as a whole. Although subsequent chapters will explore these circuits of knowledge and the impact they had on the plant and the cultural fabric of the societies that used them, it is important to provide a brief historical overview of the most important preparations that were used and understood within the context of the Atlantic world.

As mentioned earlier, the primary intoxicating chemical of the hemp plant is the cannabinoid that scientists refer to as THC, which is a psychoactive chemical that resides in the microscopic trichomes that grow on the flowering tops and smaller leaves of the female plant. There are over 60 other cannabinoids residing in these glands as well, and scientific research suggests that they all work together with the cultural setting and the individual psychology of the user to create the experience of a "high."[90] Indeed, this is one of the most problematic aspects of THC consumption: the subjective nature of its affects on the user. For example, some people describe their use of hemp intoxicants as

[90] For an indispensible study on the pharmacological effects of drugs on the people who use them, see Richard DeGrandpre, *The Cult of Pharmacology: How America Became the World's Most Trouble Drug Culture* (London: Duke University Press, 2006). See also Isaac Campos, *Home Grown: Marijuana and the Origin of Mexico's War on Drugs* (Chapel Hill: University of North Carolina Press, 2012), chapter 1. Another excellent source is Thomas Szasz, *Ceremonial Chemistry: The Ritual Persecution of Drugs, Addicts, and Pushers*, Revised Edition (Syracuse: Syracuse University Press, 2003).

beneficial. For these individuals, the experience is one that promotes creativity, open-mindedness, euphoric ecstasy, pain relief, increase in appetite, and even prolonged surges of energy. On the other hand, individuals who experience negative reactions to the intoxicant describe feelings of dread, terror, paranoia, delayed reaction time, depth and perception disorientation, and panic.[91]

Earleywine put it well when he suggested that "[s]ome 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."[92] Such criteria make it difficult for scientific research to provide accurate and objective results on the nature of its effects on the human mind and body, and the extreme genetic variation of the hemp plant discussed earlier increases this difficulty by ensuring that users experience different effects with each strain they consume. With the exception of developments within the last two decades or so, in most cases users had no way of knowing which genetic strain they were consuming, which could be one reason why, as we will see later, medical practitioners of the nineteenth century often reported mixed results of their experiments. It is important to keep this in mind as we discuss the various ways it is consumed, for even the same preparations could have an entirely different effect on two individuals, especially if each individual came from a society with different culturally prescribed norms regarding the use of intoxicants.

One of the earliest versions of hemp intoxicants that Europeans associated with the Orient seems to have been hashish, which is a substance that is mainly smoked and is prepared in a similar fashion as the Indian version known as charras. Basically, the

---

[91] For an excellent example of the scientific research on the subjective affects of cannabis use as an intoxicant, see Earlywine, *Understanding Marijuana*, chapter 5.
[92] *Ibid*., 97.

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. Though a number of new techniques have emerged over the years to manufacture it, the consensus seems to be that hashish is the most potent hemp intoxicant because it is the most concentrated version of the resin.[93] Marco Polo's story, *The Old Man and the Mountain*, is the first of many travelogues from the Middle Ages that refers 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.[94] His name was Hassan ibn Sabbah and, according to legend, he successfully employed the use of assassination to slowly regain Persia from the Seljuk Turks in the early twelfth century.[95] Though the story continued to surface in publications over the centuries, it was the French Orientalist Sylvester de Sacy who established the notion that there was a connection between the word assassin and hashishin. According to him, "[t]he 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 Europe, he claimed that "it is not impossible that hemp, or some parts

[93] 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).
[94] Ronald Latham (trans.), *The Travels of Marco Polo* (New York: Penguin Books, 1958), pp. 70-73.
[95] 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*, Vol. 22, No. 4 (1Oct. 1947): 497-519; Juliette Wood, "The Old Man of the Mountain in Medieval Folklore," *Folklore*, Vol. 99, No. 1 (1988): 78-87. Also see W. B. Bartlett, *Assassins: The Story of Medieval Islam's Secret Sect* (Stroud: The History Press, 2001).

of that vegetable, mixed with other substances unknown to us, may have been sometimes employed to produce a state of frenzy and violence."[96]

Sacy seems to have concluded that hashish use brought humans into such a violent state that a corrupted version of the word came to mean a hired killer in the English language. 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.[97] 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.[98] Although no evidence yet exists that he investigated the use of hashish in French society, Sacy does claim that, "when the French army was is Egypt, the general-in-chief, Napoleon, was obliged to prohibit, under the severest penalties, the sale and use of these pernicious substances."[99] 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.[100]

---

[96] 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), p. 235.
[97] For a study of the relationship between Islamic rivalries and western knowledge of the story of The Old Man on the Mountain, see Michael Aldrich, *Cannabis Myth and Folklore*, Ph.D Dissertation (Buffalo: Faculty of the Graduate School of State University of New York, 1971).
[98] See Abel, *Marijuana*, 148-9. Also see Lester Grinspoon, *Marihuana Reconsidered* (Cambridge: Harvard University Press, 1971), p. 64.
[99] In von Hammer-Purgstall, *History of the Assassins*, 233.
[100] This is not to say that there were no other reasons for arguing that hemp intoxication induced one to hallucinate or act out violently. In fact, Campos' book demonstrates that

Nevertheless, it was not long before Sacy's etymological argument made its way into books published in London. To be sure, as we have already seen, the British were familiar with eastern uses of hemp intoxicants, but this familiarity started to increase towards the end of the eighteenth century. As historian Thomas Bender has pointed out, despite losing a significant portion of their colonial territory in the Atlantic due to the American Revolution, the British were, oddly enough, the "big winners" in 1783, for they were able to secure a promise from the Dutch "not to interfere with British navigation in Asia or Africa . . . , which consolidated [their] position as a world power, even as it lost the thirteen colonies"[101] This allowed them to consolidate their presence in the east and focus more heavily on building a new version of imperial rule, which meant they encountered hemp used for intoxication more often (see chapter 5). By 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, but chiefly appropriated to this: it is chewed in its crude state, inhaled by means of a pipe, or formed, with other ingredients, into an electuary, *maijun*."[102] Given the general tone of the book, which addresses the various articles of dress, food, and customs of the "savage" people the author supposedly

---

similar discourses on the effects of hemp resin emerged in completely different parts of the world at entirely different times, seemingly suggesting that there was/is in fact a connection between the use of hemp resin and violent, adverse intoxication. The conclusion he derives at is of course much more complex and relies heavily on the DeGrandpre source mentioned above. See Campos, *Home Grown*, chapter 1 and DeGrandpre, *Cult of Pharmacology*, introduction.

[101] Bender, *A Nation Among Nations*, 88.

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

encountered throughout his travels, the book conforms to the standard Orientalist view of the exotic east.

So, the British knew of hashish before reading about Sacy's argument, but there is no evidence that they associated the word assassin with the drug until encountering his essay, which happened rather quickly after its publication. A discussion of it surfaced the following year in a journal published in Belfast, and a book by William Marsden published in London seven years later that described Marco Polo's travels throughout the "orient" quoted extensively from Sacy's essay, which suggests that his work had already become an important source by then.[103] News certainly travelled rather fast across the Atlantic at this time as well, for *The Christian Journal* in New York published an article two years later that mentioned William Marsden's book and Sacy's essay in connection with the word assassin, which the authors claimed derived from the "name of Haschisch," which referred to "a preparation of hemp" that was used "[t]hroughout all of the East."[104] During the same year in which Marsden's book came out, the German Orientalist Joseph von Hammer published a massive work on the history of the assassins, and in it he reprinted Sacy's entire essay.[105] Reviews, comments, and discussions of this work surfaced all over the Atlantic in various publications, all of which mentioned Sacy and the etymological argument of the assassins and its connection to hemp.[106]

---

[103] 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*, Vol. 4 (Belfast: Smyth & Lyons, 1810), pp. 373-375. William Marsden, *The Travels of Marco Polo: A Venetian . . .* (London: Cox and Baylis, 1818), p. 118.
[104] Anonymous, "Story of the Old Man of the Mountain," *The Christian Journal*, Vol. V, No. 9 (New York: September 1821): 281.
[105] Joseph von Hammer, *Die Geschichte der Assassinen, aus Morgenländischen Quellen* (Stuttgard un Tübingen, 1818).
[106] Indeed, the numbers are too numerous to list in their entirety here, so here is a small selection: Anonymous, *The Foreign Review*, Vol. 1 (London: Treuttel and Wurtz, 1827), p. 461; Anonymous, *Athenaeum: Journal of English and Foreign Literature, Science, and Fine Arts* (London: J. Francis, 1833), p. 644; Anonymous, *The Museum of Foreign*

A full translation of the book appeared in London 17 years later. As a member of the Royal Asiatic Society of Great Britain, translator Oswald Charles Wood was, like many others of his time, infatuated with the Orient. His book, *The History of the Assassins*, recounted the old myth of Hassan Sabbah and his evil henchman, but on page 137, Wood included a footnote to explain a word that von Hammer used to describe the substance that the so-called Old Man of the Mountain used to lure his victims. Whereas von Hammer claimed that the young boy was "intoxicated with henbane (*hashishe*)," Wood noted that "this appears to be a mistake, as the *hashishe* is found to consist chiefly of hemp."[107] He then instructed the reader to turn to Note D at the end of the volume, where Wood attached Sacy's full paper on the origins of the name assassin, which was read to the Institute of France on July 7, 1809. Interestingly, the preface on the first page of Oswald's work pointed out that "The Translator deems it unnecessary to apologize for the notes which he has appended, believing that their curiosity will plead his case."[108] Given the tone of the preface, it seems that Wood felt the etymology of the word Hashish would either be interesting or important to know for his British audience. Indeed, out of the entire 219 pages that Wood translated, he only felt the need to insert five notes, and two of them pertained to hashish use and its connections to the word assassin and the hemp plant. To be sure, it is unclear whether Wood felt his audience needed to know more about how the word assassin was connected to hemp or vice-versa; but whichever it was, or if it was neither, is less significant than the more important fact that he actually made the connection, which contributed to the growing discourse of difference between east and west based on hemp use. As London Botanist Gilbert

---

Literature and Science, Vol. XIII (Philadelphia and New York: E. Littell and G. & C. Carvill, 1828), p. 6; Joseph Dennie and John Elihu Hall (eds.), *The Port Folio*, Vol. II (Philadelphia: Harrison Hall, 1827), p. 361-371.

[107] Oswald Charles Wood, *The History of the Assassins* (London, 1835), p. 137.

[108] *Ibid.*, v.

Burnett explained, alcohol was the "more civilized" intoxicant, the "narcotic power of [which] is slight; much less than that of hemp," which the "Asiatics" used to "stupefy" instead of promote industriousness.[109]

For the British, then, the perception of hemp seemed to be transforming in the first half of the nineteenth century as a result of the interplay between empire and nation. As Nechtman claimed in his study mentioned earlier, the "individuals who transported the material culture of the British Indian empire back and forth between Britain and India" eventually became viewed as "harbingers of a globalized and imperial sense of Britishness as a consequence of the material culture they brought home with them to Britain from South Asia."[110] Hemp, which was used for more practical purposes in British society, became a symbol by which the metropole could distinguish itself from the so-call periphery of empire, where a more uncivilized form of human development existed. However, those who lived and worked in the outskirts of the empire perceived themselves as harboring a certain Englishness that could be used to transform the hopeless material culture of India into something useful for the empire, which is why – as we will investigate in further detail in chapter 5 – the British started to experiment with Indian hemp as a medicine to see if it had anything productive to offer. However, those living in England were highly suspicious of the imprint that such endeavors would have on British society, and it is within this context that the discourse on hemp in the Atlantic world needs to be situated if we want to make sense of its evolution.

So, as we have seen, the histories of hemp's place as an intoxicant and a western medicine in the early nineteenth century overlap and intertwine, which reveals a great deal about the relationship between empire and identity; but there are other hemp

[109] Gilbert T. Burnett, *Outlines of Botany: Including a General History of the Vegetable Kingdom*, Vol. II (London: John Churchill, 1835), pp. 560-561.
[110] Nechtman, *Nabbobs*, pp. 11, 16.

intoxicants that need to be introduced before moving on to subsequent chapters, the first of which is bhang. This substance will be discussed further in chapter 5, so for now suffice it to say that it is a milder liquid preparation of the plant used primarily in India. The other, known as ganja, refers to a preparation of the resin that generally resembles what has become known 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 and dried and cured. The more potent version of this intoxicant is prepared by removing all the male plants from the garden during the pre-flowering stage so their pollen does not have a chance to latch on to the flowers and induce germination inside the calyxes of the resinous flowers. The Mexican versions of the intoxicant that Americans consumed in large quantities throughout the twentieth century were of the latter type, whereas the ganja consumed in India and later Jamaica was of the former. The relationship between these two versions is worthy of attention for those attempting to understand the contemporary evolution of the plant in today's society, and analyzing the distinction between the two could tell us a great deal about the separate cultures that transferred each version to their respective sphere's of empire; but this study will only follow the Indian version that was discovered by the British and migrated to the West Indies with the indentured servants from Calcutta and Madras whom the British sent across the Atlantic in increasingly larger numbers after abolishing slavery 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.[111] The shortage of labor produced by emancipation in the 1830s created a need

[111] Lomarsh Roopnarine, "East Indian Indentured Emigration to the Caribbean: Beyond the Push and Pull Model," *Caribbean Studies*, Vol. 31, No. 2 (Jul.-Dec. 2003): 101.

for a cheap labor source to work in the Jamaican cane fields, and since the planters had a difficult time getting the newly freed population to accept low wages, many of these East Indians were imported to the island as their replacements.[112] It was not long before 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, immigration was seen as a tool by which planters could 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." Revealing his negative perception of these people "from the ends of the earth," Cornford went on to say that the planters were 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!"[113]

Indeed, despite the fact that ganja is today most readily associated with societies in the Caribbean, the East Indian Diaspora introduced the intoxicant to the region when they crossed the Atlantic as indentured servants.[114] At some point, the Afro-Caribbeans of British Jamaica who encountered these migrant workers appropriated ganja for their own use. Even today, the Rastafarians of Jamaica use this intoxicant in their religious

---

[112] 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, 1839), pp. 264-280. 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*, Vol. 25, No. 2 (Apr., 1940): 217.

[113] P.H. Cornford, *Missionary Reminiscence, or Jamaica Retraced* (London, 1856), pp. 93, 96.

[114] Vera Rubin, "The 'Ganja-Vision' in Jamaica;" in V. Rubin (ed.), *Cannabis and Culture*. See also, James H. Mills, "Globalizing Ganja: the British Empire and International Cannabis Traffic c. 1834 to c. 1939;" in Jordan Goodman, Paul E. Lovejoy and Andrew Sherratt, *Consuming Habits: Global and Historical Perspectives on How Cultures Define Drugs*, 2nd Edition (New York: Routledge Press, 2007), pp. 178-193.

ceremonies as they seek to connect with their African roots, often times failing to acknowledge that their sacred "herb" was taken from these East Asian migrants.[115] Perhaps even more intriguing is the fact that, as historian Nemata Blyden's study on the re-migration of African-descended people in the West Indies back to Africa demonstrates, the people who left Jamaica (known as Krios) took their newly formed transatlantic identity with them to Sierra Leone during the nineteenth century when the British sought to fill the colony with what they considered to be a less barbaric group of people to mingle with the native Africans whom they were trying to "civilize."[116] Could these individuals have brought hemp intoxicants with them on their journey back to West Africa? Extensive archival work needs to be done in order to provide a sufficient answer to this question, but for now we can accurately state without reservation that the history of ganja in the Atlantic world is in large part a story of cross-cultural fusions that washed up on the Atlantic shores with the transported people and cultures.

Conclusion

Taken together, the three main sections of the chapter demonstrate the rich and diverse cultural significance of hemp in the Atlantic world. As a fiber, its meaning evoked associations that differed markedly from its seed, and the resin has a history of its own that distinguishes it from the other two in a myriad of ways. However, it would be a mistake to assume as most studies have that the history of the three are not connected and intertwined. As the evidence above demonstrates, people in the Atlantic world

[115] 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).
[116] Nemata Blyden, *West Indians in West Africa, 1808-1880: The African Diaspora in Reverse* (New York: University of Rochester Press, 2000). The term Krios refers to a distinct cultural group of African-descendent people who migrated (both voluntarily and involuntarily) across the Atlantic before finally settling in Sierra Leone to establish an life for themselves.

became ever more familiar with the different properties of the hemp plant throughout the eighteenth and nineteenth centuries. As the Atlantic world expanded, so did the encounters and interactions between distinct cultural groups. These encounters introduced new meanings and assumptions about many things, and hemp serves as an excellent example of this process, making it one of the quintessential crops for exploring the cultural fabric of the Atlantic world. After all, as anthropologist Sidney Mintz observed in his study regarding sugar's place in history, meanings do not "inhere in substances naturally or inevitably. Rather, I believe that meaning arises out of use, as people use substances in social relationships."[117] This is not to say that old associations get lost as new uses are introduced, but rather that the meaning slowly transforms and transmogrifies as other uses are discovered, eventually shifting the entire meaning of the plant as a whole.

In other words, hemp's use as a fiber and its association with strength and national sovereignty declined as its intoxicating and medicinal uses increased. New associations were formed, and as other, less expensive products slowly replaced hemp fiber, these new meanings and associations intensified, thus contributing to the transformations the plant endured through time. However, it never lost its old meaning entirely, as seen by the growing amount of support by activists to revitalize the industrial hemp industry today. The establishment of Hemp Week is a great example of this, in which activities around the United States promote what they refer to as hemp awareness to explain the benefits that they feel such an industry could provide to the national economy and the environmental movement. The new trends seem to be endowing hemp with another form of meaning, but the plant is still evolving, and the space it has occupied

[117] Sidney Mintz, *Sweetness and Power: The Place of Sugar in Modern History* (New York: Peguin Books, 1985), p. xxix.

in the Atlantic world is one that deserves attention from historians who seek to understand the complex interconnected nature of Atlantic history and the meaning of useful plants within it.

Chapter 4

The Ties that Bind: Hemp Fiber and the Atlantic World

Introduction

"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 the Right Honorable Lord Somerville as he reflected on the state of the British Empire, "[the] subject [of hemp cultivation] should not for a day be neglected."[1] The date was March 8th, 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 the growth of hemp in India.[2] The urgency expressed by Lord Somerville was not unwarranted; after all, Great Britain at the time was importing about £600,000 worth of hemp every year from Russia because they could not produce enough at home to satisfy their consumption needs. Moreover, the Napoleonic Wars disrupted trade networks so much that Britain's source for this important strategic commodity was being dangerously cut off.[3] In fact, ever since they decided to recognize the American colonists as an independent country, the British had been searching for a new colonial outlet through which to promote hemp cultivation in order to prevent such a crisis, and India seemed to be as good a location as any. History had taught them to be wary of relying too heavily on foreign countries for such a necessary commodity, so they were searching for a solution to the problem.

---

[1] "A Letter from the Rt. Hon. Lord Somerville, on the Importance of Growing Hemp, Together with an Estimate of the Expences [sic]," 2 March 1808; reproduced in appendix of Robert Wissett, *A Treatise on Hemp, …* (London, 1808), p. 279.
[2] See Robert Wissett, *On the Cultivation and Preparation of Hemp, …* (London, 1804), p. v.
[3] Wissett, *A Treatise in Hemp*, p. ii.

To be sure, these lessons had deep historical roots. Towards the end of the seventeenth century, the warfare between empires over territorial dominance in the Atlantic world grew more troublesome, which all but guaranteed that hemp fiber would remain in high demand. As a result, the British doubled down on their attempts to establish a firm culture of hemp production within the so-called periphery of their empire. When the Great Northern War (1700) between Russia and Sweden exposed the problems that could arise for Great Britain if they did not find a way to gain control over the supply of their naval stores, Parliament placed another round of bounties on hemp cultivated in the American colonies so as to encourage its adoption by more English subjects living there. Although the bounty failed to spark the hemp boom that many felt the empire desperately needed, the perception that the colonial territories could fill the void in Britain's imperial hemp supply never ceased. Especially after Empress Elizabeth of Russia allied with the French after the Diplomatic Revolution, the sense of urgency amplified, leading not only to parliament establishing more bounties on the fiber, but also to the publication of a series of treatises dedicated to convincing farmers across the empire to become hemp cultivators. Before long, a transatlantic discourse connecting France, Russia, Great Britain, and the American colonies developed on how to best cultivate the plant.

The dialog stimulated by this discourse and the impact it had on hemp's place in the Atlantic world is the focal point of this chapter. From the Age of Atlantic Revolutions on through the nineteenth century, hemp's fiber increased and declined in use and value a number of times, but the meaning the plant evoked regarding its important role for the sovereignty of empires and later for nations never seemed to entirely fade away. With nearly all the contemporary scholarship concerned primarily with explaining the period after the perceptual transformation of the plant in the West from a strategic commodity to

a banned intoxicant, it can be difficult to see how significantly ingrained the meaning of this plant as a fiber was in the social imaginaries of the Atlantic world.[4] After all, with the exception of a few important works, those who focus on hemp history before the twentieth century drug regulation movement do so from a very narrow lens or with an agenda designed to demonstrate when and how authorities went wrong instead of exploring the cultural significance of the plant in the Atlantic world.[5] Since this study follows anthropologist Sidney Mintz's position that meaning does not stem naturally from a commodity but rather that meaning arises out of use, it is important to analyze the discourse surrounding hemp's use as a fiber in the Atlantic world before the period in which it became more widely known as an intoxicant.[6] In effect, as this chapter seeks to demonstrate, the use of hemp as the predominant fiber for, among other things, rigging ships sailing across the Atlantic, helped to solidify its meaning as an important plant for acquiring and maintaining national sovereignty. This meaning not only had an impact on the relationship between Great Britain and the American colonists, but it also played an

[4] The term social imaginary is borrowed from philosopher Charles Taylor, who used it to refer to "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), p. 24.

[5] The most scholarly source on hemp fiber from a broad view to this date is Alfred Crosby, *America, Russia, Hemp, and Napoleon: American Trade with Russia and the Baltic, 1783-1812* (Cleveland: Ohio State University Press, 1965). There are a number of articles that have been written, and the history of hemp in particular nations has been discussed periodically in various works over the decades, but none focus on the interconnected nature of the plant's place in the Atlantic world. There are also a number of sources that clearly have an agenda and are less scholarly. A few examples of these include Mark Bourie, *Hemp: A Short History of the Most Misunderstood Plant and its Uses and Abuses* (New York: Firefly Books, 2003); Rowan Robinson, *The Great Book of Hemp: the Complete Guide to the Environmental, Commercial, and Medicinal Uses of the World's Most Extraordinary Plant* (Rochester: Park Street Press, 1996).

[6] Sidney Mintz, *Sweetness and Power: Sugar's Place in the Modern World* (New York: Penguin Books, 1985).

important role in determining the type of diplomatic relationship the United States of America had with Russia during the early national period.

However, there is another important point that stands out from analyzing this discourse, which is that a wider historical lens provides a more accurate scope through which to view the transatlantic forces at work in the Atlantic world. After all, most of the hemp Europeans and their colonial subjects used during the Age of Exploration came from Russia through trade networks established by the Hanseatic League in the Baltic Sea during the twelfth century. Studying these networks expose the limits of a geographical approach to Atlantic history by demonstrating that people, ideas, and goods originating from distances far beyond the ocean's shores often times entered the Atlantic world and navigated its historical direction.[7] Instead, if Atlantic history is re-imagined as a methodological concept that focuses on the interconnectedness of human experience in the Atlantic Ocean, then we can more easily see how, to borrow a most useful phrase from Alfred Crosby, Russia was "inextricably knotted into the skein" of the Atlantic world through trade and culture.[8] Tracing the movement of ideas across the Atlantic over the use, cultivation, production, consumption, and importance of hemp fiber, then, exposes the transatlantic nature of historical development and allows us to observe the historical and cultural conditions under which this plant came to be understood in the Atlantic

---

[7] 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, *Atlantic History: A Critical Appraisal*; Alison Games, Jane Landers, et all, *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).

[8] Crosby, *America, Russia, Hemp, and Napoleon,* 28. Crosby points out on the same page that Russia's total imports and exports by the end of the eighteenth century was roughly around 100,000,000 rubles a year, with 60,000 tons of their hemp entering Atlantic waters through their Baltic ports annually.

world, thereby laying the foundation needed to better understand the shift in meaning it endured through time.

Networks and Foundations

Hemp fiber in the Atlantic world has a long and complex history. Most scholars point to the late fifteenth century and the Age of Exploration as the historical frame of reference for understanding the origins of Atlantic history, but the hemp fiber that rigged the ships navigating this vast body of water came from a network of trade developed in Northern Europe much earlier. Even before the Baltic trade routes were established, the fiber occupied an important place in ancient societies. It is not known 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.[9] 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 medicinal value.[10] Though an analysis of hemp 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 travelled with them. It also points to the fact that hemp was already considered a multipurpose plant in various regions of Europe early on, for the same sources mention that the seed was used in medicinal

[9] See Ernest Abel, *Marihuana: The First Twelve Thousands Years* (New York: Plenum Press, 1980), pp. 24-30.
[10] *Ibid*., pp. 33-34. For a discussion of commodities in Ancient Rome, see T. Frank, *An Economic Survey of Ancient Rome* (Patterson: Pageant Books, 1956), Vol. 4, p. 131.

preparations and ritualistic social contexts.[11] Moreover, Rome imported the plant, which ensured that trade networks for hemp existed from a very early period.

By the twelfth 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 trade in the region for hundreds of years. Due to the dangerous and risky nature of trade in Medieval Europe, the German merchants scattered across the region formed this commercial alliance in order to protect their economic interests, which allowed trade routes to develop in the region that stretched along the Northern coast. The practice of religious fasting created a high demand for Norwegian dried fish, and the spawning grounds along the North and Western coasts of Norway provided ample supply for all the good Catholics in need of a protein source for their Friday meals. At the end of the twelfth century, Bergen was an important outpost for this trade, which – as one report written by a band of Danish and Norwegian crusaders demonstrates – was already becoming an internationally known commercial city by 1191:

> This town is the most famous in the country . . . A very great number of people live in the town, which is rich, and abounding with wares. There is dried fish (known as *skrei*) beyond telling. Ships and men arrive from every land: there are Icelanders, Greenlanders, Englishmen, Germans, Danes, Swedes, Gothlanders, and other nations too numerous to mention. Every nation can be found there if one only takes the trouble to look. There are also quantities of wine, honey, wheat, fine cloths, silver and other commodities, and a busy trade in all of them.[12]

Strategically located on the West coast of Norway in the North Sea, Bergen became one of the centers of trade for goods (like hemp) being peddled by Hanseatic merchants

---

[11] Though Abel's book provides excellent source material on the ancient uses of cannabis, it spends a great deal of time with vague allusions to the possibility that it was used as an intoxicant. Despite such innuendos, however, there is no evidence that suggests hemp was being used by Romans or Greeks as an intoxicant like it was in parts of Asia.

[12] Quoted in Espen Bowitz Andersson (ed.), *Bryggen: The Hanseatic Settlement in Bergen* (Bergen: Det Hanseatiske Museums Skrifter Nr 24, 1982), p. 12.

enjoying trading privileges stretching as far northeast as the city of Novgorod, which at the time represented the northernmost boundary of the Russian state.

Known as Kievan Rus, this loosely organized state extended as far south as the Dnieper River. An elaborate port system stitched the region together into a network of trade that allowed such bulky goods as timber, iron, and hemp to be pumped into Europe. Given the abysmal road conditions at the time, the rivers served as the arteries of trade. Many of the goods (including hemp) that were exported out of Novgorod by the Hansa merchants, who docked their ships in the Gulf of Finland to load with cargo before heading back West through the Baltic Sea, were cultivated in the central black-earth region. The roads were too unfit to support travel over such long distances, so merchants relied on the rivers systems, dragging ships stocked with hemp from ports (*voloki*) across the land bridges that connected them all into an elaborate maze of waterways.[13] Not only was this system vital towards ensuring that important 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 was not suitable for the extensive cultivation of grain.

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.[14] As a result, the Mongols were able to sweep through in 1240 and take the city of Kiev. Only

---

[13] John Sullivan, *Russian Cloth Seals in Britain: Trade, Textiles, and Origins* (Oxford: Oxbow Books, 2012), p. 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 the smaller boats such as canoes were in fact carried, the larger ones needed to be dragged or pulled across the 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), pp. 14-15.

[14] 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), pp. 27-34.

Novgorod maintained some resemblance of independence, and the Mongols agreed to protect the Baltic and Volga River trade routes into the city as 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 and passing through Suzdalia. Novgorod was the entrepot for nearly all Baltic trade entering and leaving Russia, and this Mongol policy probably increased trade and hence income."[15] This is important for the early history of the hemp trade between Europe and Russia, for it allowed Russian hemp to continue its journey from the south to the Baltic Sea, where it entered Bergen via Luebeck and was re-exported to their Atlantic Island trading partners, which included the English.[16]

Eventually, *Gospodin Veliki Novgorod* (Novgorod the Great) faced fierce competition from the rising power out of Lithuania. By the late fifteenth 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 so as to gain more control over trade in the region. War with Livonia in the Baltic region quickly followed, and Russia lost. As a result, the White Sea replaced the Baltic Sea as the next outlet through which to pump Russian hemp into Europe and the Atlantic Islands, with Archangel becoming the chief port city. Among the goods exported to the Atlantic during the sixteenth century from here were hemp, flax, timber, tallow, and

[15] Charles J. Halperin, *Russia and the Golden Horde: The Mongol Impact on Medieval Russian History* (Bloomington: Indiana University Press, 1985), pp. 80-81.
[16] 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.

rope.[17] However, the voyage from Archangel to the North Sea was much more difficult to make, for the port remained frozen for a good portion of the year, thereby limiting the amount of trade that could take place there 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 mid-sixteenth century held great privileges in this trade, including the right to manufacture hemp rope.[18] 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.[19]

By the time of Peter the Great, then, 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. Although Peter eventually revitalized the traditional path by which Russian hemp made its way into Atlantic waters, the vast continental frontier to the east posed a significant problem and needed to be addressed before this could take place. Conquering the dense forests, mountainous terrain, and indigenous communities of Siberia was a daunting task, but the Muscovite princes and early Romanov Tsars successfully solidified a Russo-Chinese border along the Amur River in 1689 with the Treaty of Nerchinsk. The desire for protection against "Eastern Hordes" contributed significantly to this expansion, but the thirst for riches and geographical interest in a new and distant realm ensured that the Russians would

---

[17] See Sullivan, *Russian Cloth Seals in Britain*, 1. Also Mairin Mitchell, *The Maritime History of Russia, 848-1948* (London: Hazell Watson & Viney, 1948), p. 59.
[18] Paul Bushkovitch, *The Merchants of Moscow, 1580-1650* (New York: Cambridge University Press, 1980), p. 44.
[19] Alistair Maeer, *The Cartography of Commerce: The Thames School of Nautical Cartography and England's Seventeenth Century Overseas Expansion*. Ph.D. Dissertation, University of Texas at Arlington (2006), p. 39.

continue to seek land beyond their borders.[20] 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 hemp.[21]

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 came from a desire to keep up with and obtain recognition from the west. After Peter consolidated his rule in 1696, he embarked on a path towards modernization that was designed to transform Russia into a major European power. Revealingly, after defeating the Swedes in the Great Northern War (1700-1721) and gaining international recognition of his title as Peter the Great, 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."[22] By referring to the fact that Russia was in the dark before being recognized by the west, Peter hinted at the extent to which he and his noblemen's Atlantic imaginings contributed to Russia's historical development. He spent weeks in various European countries in disguise, learning as much as he could about as many western countries through first-hand experience so that

---

[20] 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), p. 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), p. 269.

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

[22] Quoted in Benedict H. Sumner, *Peter the Great and the Emergence of Russia* (London: English University Press, 1951), p. 121.

he could bring that knowledge back to Russia. When he returned, western culture came with him: he taxed the Nobility who refused to dress and wear their facial hair in a more westerly fashion, ordered factories of foreign merchants to be constructed in his city, St. Petersburg, and established western-styled education facilities such as the Moscow Mathematical and Navigational School, where students from the age of 12 to 17 studied arithmetic, geometry, and trigonometry before being sent to navigational classes to learn naval astronomy, navigational skills, technical drawing, and the basics on how to make maps – all of which suggests that the Atlantic loomed large in the imaginations of the Russian elite.[23]

By the mid eighteenth century, these imaginings turned into reality, for Russia became intrinsically connected to the Atlantic world. The Baltic ports were reclaimed, and St. Petersburg was transformed into an Atlantic gateway. According to John Sullivan, these ports were full of western merchants, with those from Great Britain outnumbering all others: "By the 1740s Britain was the recipient of over two thirds of exported Russian hemp and half its exports of flax, by far the largest part of this trade passing through St. Petersburg-Kronstadt."[24] In 1800, as much as seventy percent of foreign trade took place there, with the advantage overwhelmingly favoring Russia, where most of the profits filled the pockets of the vast minority of noblemen who ruled the country.[25] Indeed, the Atlantic connections that Peter secured etched their way into Russian culture in the most revealing ways. As Crosby noted, the nobility came to regard trade with the West as an essential component to their daily lives: "The Russian noble

[23] 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), pp. 36-40.
[24] Sullivan, *Russian Cloth Seals in Britain*, 1.
[25] H.E. Ronimois, *Russia's Foreign Trade and the Baltic Seas* (London: Boreas Publishing Co., 1946), p. 11.

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."[26]

In order to satisfy their indulgence for the material culture of the Atlantic world, however, a lot of good quality hemp needed to be procured by the peasants in the countryside so that the nobles had a medium of exchange that the British wanted and needed.[27] As the next section demonstrates, this vast amount of trade became a source of alarm for the British and the American colonists as the European colonial wars gave way to the Age of Revolutions. Documenting the trade networks and foundations that began in the Middle Ages, though, allows us to see how far the boundaries of Atlantic history extend beyond the ocean's shores, thereby allowing us to recognize the value of a broader, methodological concept of the Atlantic world that focuses on the exchange of ideas, goods, and people from one side to the next, and the impact that such exchanges have on historical development.

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 is mainly concerned with figuring out a better way to employ the poor people of England. However, various sections of the treatise are dedicated to promoting hemp 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

[26] Crosby, *America, Russia, Hemp*, 36.
[27] For a study on the importance of Russian hemp for the British Empire, see Herbert Kaplan, *Russian Overseas Commerce with Great Britain during the Reign of Catherine II* (Philadelphia: American Philosophical Society, 1995).

similar manner, a discussion on the methods of improving the one also applied to the other. The point William Bailey tried to make on the importance of these two plants for the British Empire was that increasing their cultivation in the metropole would decrease the "vast Quantities we still take of it from foreign Nations." [28] The potential "danger" that could arise from allowing hemp cultivation 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[?]"[29] This would result in a disaster for England, because, as he pointed out, "our naval Strength . . . arises from our national Trade, [which leaves] an almost intolerable Burthen upon our Estates."[30] The reason England's naval strength was connected to their national trade is because hemp was one of the most important crops for naval stores. As economist John Hutchins has pointed out, "During the sailing-ship age, cordage, which was used both for the standing rigging supporting the masts and spars and for the running rigging, was of primary importance. . . This was made of hemp."[31] As a result, Bailey hoped that the "utmost Efforts will be made to promote and establish [the cultivation of hemp] throughout the Kingdom."[32]

Bailey was not alone in his concern for the consequences of relying on a country that was at war with England to provide a commodity so vital for its naval power. John

---

[28] 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: Bailey and Dodsley, 1758), p. 43.
[29] *Ibid.,* 45.
[30] *Ibid*., 49.
[31] John G. B. Hutchins, *The American Maritime Industries and Public Policy, 1789-1914: An Economic History* (Cambridge: Harvard University Press, 1941), p. 125.
[32] Bailey*, A Treatise*, 43.

Rutherfurd, esquire of North Carolina, was also distressed by the fact that "this nation cannot subsist as a maritime power without importing materials from manufactures, such as hemp."[33] According to Rutherfurd, in the year 1759 alone, about twenty five thousand tons of hemp entered the British Empire from Russia, costing them around £450,000 sterling, which is an average of £18 sterling per ton.[34] This was not the worst of it, for Rutherfurd continued: "It has been reckoned for some years past, that we have not paid less to Russia than 500,000£ sterling in ready money for so much balance in their favour; this may fairly be charged to the article hemp, which, in our present situation as a maritime power, we must have, cost what it will."[35] He went on to say that, unless England addressed the issue of dependence on Russia with "all imaginable care" and figured out "how to provide so necessary an article independent of them," they would be subjected to the same fate that occurred in 1703 [during the Great Northern War], when the government of Sweden "refused to let us have [pitch, tar, and turpentine] for our ready money, otherwise than in their bottoms, at their own prices, and in such quantities as they pleased."[36] In effect, Rutherfurd claimed that historical memory "ought to put us on our guard against a like necessity, which, if it should happen, would be of infinite prejudice to us."[37]

Joseph Gee addressed this same issue by asserting his position from the very start of his treatise on the growth of hemp and flax: "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

---

[33] 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), p. 5.
[34] *Ibid*., 8.
[35] *Ibid*.
[36] *Ibid*., 6.
[37] *Ibid*.

Declension of it's [sic] Commerce."[38] 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."[39] This document was obviously very popular, for even though the 1765 edition does not mention it, a 1764 copy of the same work was published in a 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]."[40] 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."[41] Like the others publishing before him during the Seven Years' War, Gee worried about the consequences of relying too heavily on Russia for hemp. 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 Kingdom for Russia.

Although the scale of these concerns increased due to the financial circumstances of the time, they were nothing new for the British. As early as 1724, for example, Peter the Great established a protectionist tariff that, according to one economic historian, "included many restrictions that … protected Russia's commerce,

---

[38] Joseph Gee, *Observations on the Growth of Hemp and Flax in Great-Britain* (Gainsborough, 1765), p. 3.
[39] *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), p. 23.
[40] *Ibid*., 30.
[41] Joseph Gee, *An Abstract of Reasons for Encouraging the Linen Manufactory* (1767), p. 1.

industry and agriculture from foreign competition."[42] The British had no choice but to accept the terms that favored Russia's position, for as one merchant mentioned in 1721, "We buy Hemp, Pitch, Tar, and all sorts of Naval Stores from the East Country. Unless we did this, we could not fit out a single Ship to Sea."[43] As this dependency continued through the mid-century and into the Seven Years' War, the anxiety of Britain's inability to produce enough hemp fiber domestically to sustain the empire increased, eventually resulting in the formation of a transatlantic discourse on the importance of promoting its cultivation.[44]

Around the same time, interest in the public sphere for enlightenment notions of scientific progress and national improvement were on the rise, which drove many noblemen and merchants alike to form a series of learned societies. According to Historian Max Kent, these societies were "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."[45] One of the societies, known as *The Royal Society for the Encouragement of Arts*, *Manufactures, and Commerce*, 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."[46] One of the important agendas was to encourage agricultural improvements and production within the Empire, and to do this

---

[42]Kaplan, *Russian Overseas Commerce with Great Britain,* 32.
[43] Charles King, *The British Merchant or Commerce Preserv'd*, Vo. 1 [1721] (New York: Reprints of Economic Classics, 1968), p. 28.
[44] For a standard account of the 1734 treaty, see Douglas K. Reading, *The Anglo-Russian Commercial Treaty of 1734* (New Have: Yale University Press, 1938).
[45] Max Kent, "The British Enlightenment and the Spirit of the Industrial Revolution: The Society for the Encouragement of Arts, Manufactures and Commerce (1754-1815)," Ph.D. Dissertation (University of California, Los Angeles, 2007), p. 1.
[46] 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), p. 2.

they provided monetary rewards (premiums) and honorable medals to individuals who excelled in cultivating crops that the British imported from foreigner counties. Their reputation was such that, within the first five years of its existence, the number of contributing members steadily increased.[47]

One of the founding members, William Shipley, used his transatlantic connections to promote the society's agenda within some of the North American colonies. In a letter preserved in the series of Guard Books that members created for the society in the late eighteenth century, he wrote:

> As the enclosed Observations (which are abstracted from a Letter which I lately received from my old friend Dr. Alexander Garden of South Carolina) will I believe open a new scene for Improvements in that Province, therefore I copied the whole that he mentioned in his Letter on those Subjects and hope that to a gentleman of your Publick [sic] Spirit the Account will be ____ with the utmost Respect.[48]

One of the observations that he wrote of was 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."[49] To this end, he "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."[50]

As the letter suggests, the society was also interested in coming up with a solution to Britain's problem of gaining control over their hemp supply, and Shipley intended to use his transatlantic connections to get this done. Stemming from a culture rooted in the perception that the lands on the other side of the ocean were an unspoiled

---

[47] Kent, *The British Enlightenment and the Spirit of the Industrial Revolution*, 69.
[48] William Shipley, "The importance of vines, hemp, etc., to South Carolina and to England," 15 July 1755; in *ACRSA*, Guard Book III, Document 19, p. 1. The "__" is used to indicate the inability of the author of this chapter to accurately transcribe the word in the letter. All of the letters in the microfilm are hand written, and some of them are so old and stained that they are illegible.
[49] *Ibid.*, 4.
[50] *Ibid*.

Eden with soil unrivaled in its fertility, Shipley believed that South Carolina was "very agreeable" towards the growth of hemp, and that the only reason it had not become well established there yet had to do with the "ignorance, neglect, and non-encouragement" of colonial farmers.[51] In other words, the colonists were to blame for the lack of hemp production, not the environment; and it was up to the enlightened members of British society to provide them with the necessary incentives and instructions to grow it. This sentiment surfaced in another letter written a decade later, in which society member Edward Bridgen claimed that "[s]uch 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."[52]

These comments expose some of the tensions surfacing within the so-called periphery of the empire, but the society continued to correspond and collaborate with its transatlantic affiliates nonetheless. Known as non-subscribing "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."[53] Edmund Quincy lived in Boston, and the letter Bridgen referred to was written in 1765

[51] 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).
[52] Edward Bridgen, "Urging Premium for Importing Hemp from America," 23 October 1765; in *ACRSA*, Guard Book X, Doc. 26, p. 2.
[53] Bridgen, "Urging Premium for Importing Hemp," p. 1. The "__" is used to indicate the inability of the author of this chapter to accurately transcribe the word in the letter. All of the letters in the microfilm are hand written, and some of them are so old and stained that they are illegible.

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."[54] In it, he instructed the readers on how best to cultivate the hemp plant, and then articulated some familiar reasons why Great Britain needed to adopt them: "The like attention [on hemp cultivation] may be requisite to render her self [sic] absolutely independent of every other power, for the Materials of her Naval Strength."[55]

Quincy's reflections on growing hemp 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."[56] That same year, Quincy published a thirty-one page booklet in Boston with an appendix of a series of transatlantic correspondences attached. Titled *A Treatise of Hemp-Husbandry . . .*, it began 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 [of hemp] itself, and that of [hemp] husbandry in general, has been too long under, to the great disadvantage of these otherwise happy Colonies.[57]

---

[54] 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, p. 1.
[55] *Ibid*., 2.
[56] Brigden, "Urging Premiums for Importing Hemp", 6.
[57] 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*

He claimed that hemp cultivation was of the upmost importance not only because it "is the most extensively useful [crop] of any which can be so easily and generally produced in North-America," but 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."[58]

Echoing the sentiments of some of the society members back in London, Quincy claimed that all this made it 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, he claimed, a hemp farmer 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."[59] Taking up hemp husbandry, then, was not only "of great use and importance to ourselves," it also promoted "the interest of our mother country."[60] This view is also confirmed in a letter Joseph Blaney and Samuel Barton wrote to Quincy, stating that "the raising of Hemp within this province [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."[61]

How are we to interpret Quincy's words? After all, it was widely known that Russian hemp was the most superior at the time, yet he tells us that Americans could

---

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), p. 2.

[58] *Ibid.,* 4.

[59] *Ibid*., 10.

[60] *Ibid*., 5-6.

[61] "Joseph Blaney and Samuel Barton to Edmund Quincy," 28 January 1765; published in *Ibid*., 24.

make it better. Was it a legacy of the unspoiled Eden perception that induced such against-the-grain feelings towards Russian hemp, or did he have empirical evidence to support these comments? At one point he mentioned the "various happy Climates" and "fruitful Soils" of the American colonies as evidence that encouraging hemp cultivation would result in profits "much *greater* [than] may be expected."[62] However, given the fact that the treatise does not provide any solid evidence to support his claim, it is unlikely that these arguments were ever substantiated. His biography suggests that he should have been familiar with the different grades of hemp, for in the 1740s he went into the shipping business with his brother Josiah, and Russian hemp accounted for nearly all of the fiber needed to manufacture key naval stores during that time (see Table 4-1). His biography also tells us that he declared bankruptcy in 1757 and retired to the family estate in Braintree, where he wrote the treatise.[63] Given the tone of his letter to the Society of Arts, it seems likely that he exaggerated the advertisement for self advancement, hoping to make due on his promise to members of the society that, in matters pertaining to hemp cultivation, "a reform in our American husbandry seems to be making very encouraging advances."[64] Revealingly, he ended the letter to the society 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

[62] Quincy, *A Treatise on Hemp*, 3. On the same page, Quincy writes: "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." There are numerous other occasions in which he refers to the richness of American soil as evidence for producing not just hemp, but other important commodities as well.
[63] 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), pp. 688-89.
[64] Quincy, "A Letter from Edmund Quincy," 6.

furnish you with some further hints referring to the growth and productions of these Colonies, with other interesting Circumstances."

Exaggeration or not, no less than a few people seemed to have listened to 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." The following year, an abridged version of Marcandier's treatise, mentioned earlier, surfaced in Boston, which included an advertisement by the publisher who pointed out how the "well adapted soils" of the Americas enabled the colonies "to 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." No author is listed in the document, but the publisher was Edes & Gill, which became a highly successful publication house on Queen Street, where they printed the *Boston Gazette* and later became an outlet for revolutionary activity during the war.[65] Unlike the London version of Marcandier's work, which translated and published the entire treatise, this one is half the size, and the advertisement that accompanies the translated sections begins with a chart documenting the amount of money England lost from their hemp trade annually.

Table 4-1: Great Britain's Hemp Imports from 1764-1783

Years	Total Imports (in tons)	Russian Imports (in tons)	Russian Percentage of Total
1764-66	15,560	14,455	92.9
1767-69	15,473	14,048	90.8
1770-74	19,592	18,796	95.5
1775-79	18,877	18,216	96.5
1778-82	22,434	21,960	97.9
1764-82	18,602	17,771	95.5
1767-82	19,172	18,392	95.9

[65] See Isaiah Thomas, *The History of Printing in America* (New York: American Antiquarian Society, 1874), Vol. 1, pp. 136-140.

Source: The table was compiled and computed by Herbert Kaplan based on reports from the Public Records Office. See Kaplan, *Russian Overseas Commerce*, 67.

The purpose of the document seems to have been to convince the colonists of the need for them to invest time in hemp cultivation. Indeed, hemp had become such an important commodity that, despite the growing propensity to boycott goods imported from the mother country at the time, the colonists continued to import the fiber. Even after the 1768 Boston Non-importation agreement, hemp was one of only ten commodities listed that were exempt from the boycott.[66] In fact, the writers of the Boston abstract noted that "the harmony [between Britain and her American colonies], lately so happily restored, cannot by any means be more firmly established, than by the assiduous application of the Colonists to such an improvement of their well adapted soils [as cultivating hemp.]"[67] In effect, the key to maintaining relations with Great Britain – which the writers of this document seemed to desire in spite of the mounting grievances with the crown – lay in the production of hemp, an idea which at least some living in the colonial world seemed to have adopted as a result of the transatlantic dialog on the importance of its use for the empire.

Nevertheless, despite these rather urgent calls to take up hemp cultivation, production never increased to levels that the British desired. None of the premiums offered by the Society of Arts between 1760 and 1766 were ever rewarded, which suggests that farmers in America had a much more difficult time producing the high

[66] "Boston Non-importation Agreement," 1 August 1768, *Colonial Society of Massachusetts Publications*. For a digital copy of the non-importation agreement that lists hemp as an article to still be imported from Great Britain, see http://avalon.law.yale.edu/18th_century/boston_non_importation_1768.asp.
[67] *An Abstract of the Most of the Most Useful Parts of a Late Treatise on Hemp*, ii.

quality hemp that Quincy claimed could be grown so easily in the colonies.[68] This is not to say that colonial farmers could not grow hemp, for as historian Melvin Herndon pointed out, the plant was "one of a number of crops supplementing tobacco" towards the end of the colonial period.[69] However, because of the manner by which the colonists processed it into raw materials (see chapter 3), the hemp they did produce was markedly inferior to Russian hemp and was therefore inadequate to use for naval stores. Instead, colonial grown hemp was used primarily for canvas, linens, oil, and other domestic products.[70]

For some, the lack of hemp production not only placed pressure on the empire, but it also robbed the metropole of what many considered an excellent opportunity to provide employment to England's poor. Citing the calculations of a Mr. Goodchild for linen imported from abroad as amounting to "upwards of Two Million Sterling *per Annum,* and that the Quality of Cloth thus imported employs at least 338, 020 People," William Bailey argued that hemp and flax production at home would allow for the "better employment and more comfortable support of the poor in workhouses."[71] Joseph Gee echoed this sentiment in his treatise by pointing out that hemp cultivation jobs were needed in England, where various tasks involved in preparing it for the market could be performed "by Women, Boys, and Girls," so there "will be no Misapplication of Strength in this Business, and in Time of Scarcity of Men, there will always be found a sufficient Number of able Hands (incapable of Riots and pernicious Combinations) to carry on the

---

[68] "The American Correspondence and Transaction of the Royal Society of Arts, 1755-1840," in *ACRSA*, p. 2.
[69] G. Melvin Herndon, "A War-Inspired Industry: The Manufacture of Hemp in Virginia During the Revolution," *The Virginia Magazine of History and Biography*, Vol. 74, No. 3 (Jul., 1966): 301.
[70] 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), p. 74. See Also James Hopkins, *A History of the Hemp Industry in Kentucky* (Lexington: The University of Kentucky Press, 1951), chapter 2.
[71] Bailey, *A Treatise*, 43, 49.

weaving Trade, and all other Branches of the Linen Manufacture."[72] Although he claimed that encouraging hemp cultivation in America "is perhaps better than to send such large Sums into Russia on that Account," he pointed out that it "is no otherwise eligible then it is the lesser Evil of the Two: but an Evil it still is and a very great one." He continued:

> It is certainly more advisable to have our Hemp and Flax grow at Home if it were for no other reason than that we shou'd have Commoditys [sic] so Necessary to us as a naval and commercial Power always at Hand and without being Subject as in Time of War we may be to great Rescues and Inconveniencies in the Importation of it – The Bounties upon Hemp and Flax Grown in and imported from our Colonies will utterly discourage if not absolutely put an End to the Growth of them at Home which I have demonstrated to be so Advantageous.

Arguing that the colonists had enough to do "to Employ Ten Times the Number of People we have in all our Colonies," he argued that Britain should expend the same energy in encouraging its cultivation at home, so as to employ the vast amount of poor people.[73]

Similar arguments were being made by officials on the other side of the Atlantic as well. John Rutherfurd pointed out in his treatise that "there are such multitudes of prisoners, servants out of place, highwaymen, robbers, house-breakers, and pickpockets, which must be evident to all who . . . read the daily papers." He planned to rectify this problem as follows:

> [C]onsidering the poor rates, at a time when we are so much necessarily burdened with other taxes, . . . it cannot be deemed unworthy for the British legislature to take these affairs into consideration, to prevent any future want of manufacturers and soldiers; which may be accomplish'd by discouraging and punishing those guilty of idleness and immorality, which it is believed may be done by means of public houses of maintenance and correction in all the large towns in Britain; wherein may be kept to labour all the classes of people before-mentioned.[74]

William Hogarth depicted one of these houses in a copper plate engraving from 1732, which portrayed morally deficient harlots beating hemp as a punishment for their crimes

[72] Gee, *Observations*, 47.
[73] Gee, *Observations*, 18.
[74] Rutherfurd, *The Importance of the Colonies*, 27.

(see Figure 4-1). Finding ways to employ these people, such as cultivating or manufacturing hemp, would not only eliminate the terror of having them on the street and help build character, but also save the state a lot of money: "supposing such poor are sent to houses of maintenance that . . . they are able to earn 6d. a day, and allowing 300 working days in the year, at that rate the produce of their labour would amount to 450,000£ sterling per annum; which would be a clean gain to the nation."[75]

Figure 4-1: *The Harlot Beats Hemp in Birdwell Prison*

William Hogarth (1732): Courtesy of the Harvard Art Museum/Fogg Museum, Object Number M20084

By the time the imperial system in the Atlantic world began unraveling, then, concerns over hemp fiber and its production were being expressed across the British Empire. Although it was a necessary commodity, the British had a difficult time growing

[75] *Ibid.*, 29.

it, so they had to rely on imports to obtain enough quantity. However, despite all efforts to the contrary, the fact that hemp was such an important commodity ensured that they continued attempting to remedy what they considered to be a dangerous imperial handicap. Some sought to promote its cultivation at home to help keep England's poor and "degenerates" busy, while others continued to seek a colonial outlet through which to end the dependency on Russia. In the next section, we shall see how these perceptions impacted the historical trajectory of both the United States of America and the newly transformed British Empire as they continued searching for solutions to their hemp problems.

Hemp and Nation

Such were the circumstances and perceptions regarding hemp fiber in the Anglo-Atlantic world on the eve of the Age of Revolutions: the decades of discourse on the importance of it for the independence and security of the empire left its cultural mark on the colonies and the metropole. Nowhere is this legacy more revealing than in the rope making culture that developed in key areas of the colonies. The British might have had difficulties growing and preparing enough high quality hemp for naval stores, but they certainly had no trouble turning the hemp they imported into rope. Sullivan points out that the British merchants from the Muscovy Company were among the first to manufacture Russian hemp into rope, and William Beable even claimed that "the first ropeworks [in Russia] were founded by the English at Kholmorgy (near Archangel.)"[76] The trading privileges which the company merchants enjoyed in Russia ensured that these factories were supplied with enough high quality hemp to remain in business.[77]

[76] Sullivan, *Russian Cloth Seals*, 1-4; William Henry Beable, *Commercial Russia* (London: Constable & Co., 1918), p. 199.
[77] Paul Bushkovitch, *The Merchants of Moscow,* 35-36.

The situation was little different in France. As anyone who has visited the remains of the rope walk built by Louis XIV at Rochefort knows perfectly well, the French were just as concerned as the English with turning hemp into rope for the 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 in order to ensure that an adequate amount of cordage was manufactured and readily available to the French navy. By the time it was complete, it was the largest building in Europe, and rope-making continued there well into the nineteenth century.[78] France had an easier time producing naval quality hemp, but they still imported a great deal from Russia.[79] Although a detailed study of rope-making in the Atlantic world in general and France in particular is still lacking in Atlantic historiography, there must have been a number of peasants living on the Royal Land who cultivated hemp for the crown. Diderot's *Encyclopedia* mentioned hemp on several occasions and, although no statistics were given, one of the commissioned authors stated that at least an eighth of the land in the entire kingdom was used by peasants to grow it.[80] In his treatise on hemp cultivation referenced earlier, the magistrate of Bourges, M. Marcandier, mentioned specifically that the regions of "Guyenne, Lanquedoc, Provence, Dauphiny, Auvergne, Burgundy, and Berry produce as good Hemp as can be wished."[81]

---

[78] See *Institut national de la statistique et des etudes economiques*. Accessed on September 22, 2012 at: http://www.insee.fr/en/.
[79] Sullivan, *Russian Cloth Seals*, 1.
[80] François Quesnay, "Farmers [abridged];" *The Encyclopedia of Diderot & d'Alembert: Collaborative Translation Project.* Translated by Nelly S. Hoyt and Thomas Cassirer (Ann Arbor: MPublishing, University of Michigan Library, 2003): http://hdl.handle.net/2027/spo.did2222.0000.147 (accessed July 2, 2012). Originally published as "Fermiers [abridged]," *Encyclopédie ou Dictionnaire raisonné des sciences, des arts et des métiers,* 6:528–540 (Paris, 1756).
[81] M. Marcandier (trans.), *A Treatise on Hemp. In Two Parts. Containing Its History, with the Preparations and Uses Made of it By the Antients, The Methods of Cultivating,*

However, 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."[82] The first ropewalk surfaced in New England in 1630, and several of them were in operation in Philadelphia by 1698.[83] Along with rope making, shipbuilding also became an important business in the cultural fabric of the early Anglo-Atlantic world. Initially, the English built ships in America to replace the ones that were wrecked, but it was not long before companies began building them on a larger scale for local use. As early as 1622, the London Company sent Capt. Thomas Barwick to Virginia to open up a shipbuilding business there, and similar plans developed in New England shortly after.[84] During the last decade of the seventeenth century, the Massachusetts colonies alone built over twenty-five thousand tons worth of ships, a good portion of which consisted of hempen rope manufactured in ropewalks on both sides of the Atlantic Ocean.[85]

Manufacturing hemp fiber into rope involved three steps: spinning, tarring, and laying the fibers 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."[86] After the hemp was retted and the fibers

---

Dressing, and manufacturing it, as improved by the Experience of Modern Times [1755] (London: T. Becket and P.A. de Hondt, 1764), p. 30.

[82] Melvin Herndon, "Hemp in Colonial Virginia." *Agricultural History,* Vol. 37, No. 2 (April 1963): 92.

[83] Horace Greeley, et al., *The Great Industries of the United States: Being a Historical Summary of the Origin, Growth, and Perfection of the Chief Industrial Arts of this Country* (Hartford: J.B. Burr Publishing, 1873) pp. 285-287.

[84] Joseph Goldenberg, *Shipbuilding in Colonial America* (Charlottesville: University of Virginia Press, 1976), pp. 7-8.

[85] *Ibid*., 30.

[86] Robert T. Kennedy, *The Ropewalk in the Charlestown Naval Yard* (Boston: Boston Redevelopment Authority, 1974), p. 2.

separated from the stem (see chapter 3), it was combed and twisted or spun into yarn, then stretched out and combined into strands of various widths, depending on the use of the rope and the thickness needed. This process could be done by hand or by using various machines, but it was important to take the yarn and submerge it in tar before spinning it into strands. After heating the substance to above 220 degrees Fahrenheit, the twisted yarn was thoroughly submerged into large buckets of tar, whence it was laid out to dry for several hours and then coiled up and left alone for a few days to harden. After it hardened, the strands were placed in the ropewalks and twisted together by a machine into various sizes of cordage.[87] Various innovations 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 the colonists published their declaration of independence, rope making and shipbuilding had both become integral parts of colonial life. The Boston Tea Party was planned at a ropewalk, and many of the participants were rope makers by trade, which suggests that the industry was well-established by the time the revolution erupted.[88] However, most of the hemp they were using to manufacture rope and rig their ships came from Britain, whose merchants re-exported the fibers into the colonies from Russia. As a result, if the colonists were going to succeed in overthrowing British rule, they would need to find allies from other countries who would be willing to trade with them and recognize their status as an independent country. From this perspective, the document that has been immortalized in American history as the Declaration of Independence was addressed as much to a global audience as it was to the people

[87] An excellent description of this process and the types of machines used in the ropewalks is provided in Robert Chapman, *A Treatise on Ropemaking, as Practiced in Private and Public Ropeyards…* (London: E. and F.N. Spon, 1859), pp. 7-12.
[88] Donald Chidsey, *The Great Separation: The Story of the Boston Tea Party and the Beginning of the American Revolution* (New York: Crown Publisher, 1965), p. 118.

within the thirteen colonies. As historian David Armitage remarks, it "announced the transformation of thirteen united colonies into the 'United States of America,' [and] marked the entry of those states into what would be called international society. Its authors addressed it to 'the Opinions of Mankind' in diplomatic and legal language designed to render it acceptable to its audience beyond America."[89]

In other words, the declaration announced to the world that a new nation was open for business. Although they hoped to establish new trading partners, the Continental Congress still urged farmers to cultivate more hemp. In a diplomatic correspondence document on the measures to be pursued, the Continental Congress resolved as early as 1776 that "Hemp [is] to be encouraged."[90] In one of his resolutions for the encouragement of agriculture and manufacture, John Adams recommended "to the several Assemblies, Conventions, Councils of Safety and Committees of Correspondence and Inspection, that they use their utmost Endeavours [sic], by all reasonable Means to promote the Culture of Flax, Hemp, and Cotton and the Growth of Wool in these United Colonies."[91] And in September of the same year, after the fighting increased, a delegate named William Ellery wrote a letter to the rope maker Nicholas Cooke, describing one of George Washington's successful campaigns and providing information on how many battalions congress would be asking each state to contribute. The author wrote in an urgent tone when he mentioned the hemp that congress was

[89] Davide Armitage, *The Declaration of Independence: A Global History* (Cambridge: Harvard University Press, 2007), pp. 16-17.
[90] "Of the Measures to Be Pursued in Congress," 21 March 1776; in Paul Smith., et al., eds. *Letters of Delegates to Congress, 1774-1789* (Washington: Library of Congress, 1976-2000): 3:218 (hereafter cited as *LDC)*. All 25 volumes are available online at http://memory.loc.gov/ammem/amlaw/lwdc.html.
[91] "For Encouraging Agriculture and Manufactures," 21 March 1776; in Smith, *LDC*: 2: 420.

waiting on: “I could wish to know whether any of the Hemp purchased for the Continental Ships in Providence hath been apply'd [sic] to making rigging for Privateers.”[92]

These types of inquiries and resolutions from Congress continued for over two years, when Robert Morris wrote to John Brown of Congress, asking him to “enquire of Mr. Hahn from who I bought some Hemp when in New York whether he has any more or can get any more & what price he will take for it. Also mention the quantity, or perhaps you may hear of some with some other person.”[93] Perhaps even more revealing is a letter written by a New Hampshire statesman the year prior, which demonstrates the need for hemp if America planned to become a new nation:

> 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 by the Eastern States where all the materials may be procured if proper means are use'd, 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.[94]

Still, although many delegates contemplated how best to promote domestic hemp production, Americans understood from their colonial history that it would be necessary to seek trade with Russia to obtain enough. According to Crosby, they could “slip across the Atlantic to Sweden,” where the few American vessels that were able to sneak past the British “took on board hemp, iron, and linens [from Russia], and returned home by the same scary route.”[95] Faced with a formidable foe in the British Navy, these were the only options Americans had in regards to getting the hemp they needed to become a strong nation.

---

[92] “William Ellery to Nicholas Cooke, “ 21 September 1776; in Smith, *LDC*: 5:216.
[93] “Robert Morris to John Brown,” 5 March 1778; in Smith, *LDC*: 9: 219.
[94] “William Whipple to Josiah Bartlett,” 30 April 1777; in Smith, *LDC*: 6: 666.
[95] Crosby, *America, Russia, Hemp*, 40.

Although Congress continued to encourage cultivation in America, the transatlantic dialog during the colonial era on the necessity of producing the fiber and the over-reliance on Russia for the product taught them that Catherine the Great's dominion had the best hemp. Then, a seemingly promising opportunity presented itself to the burgeoning nation when the empress declared her support for neutral shipping rights in 1780. Once France entered the war, the British started capturing all neutral ships headed to France and confiscating the cargo, a good portion of which belonged to Russia. In response, on February 29, 1780, Catherine formed the League of Armed Neutrality with Denmark, the United Provinces, and Sweden to defend the principles governing the rights of neutral trade.[96] The Americans were excited about this new diplomatic turn of events and considered it an important move towards securing their freedom from the British. In a letter to the President of Congress, Benjamin Franklin commended the treaty, which he considered to be a "great stroke against England." He concluded that the British "have no friends on this side of the water; 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."[97]

Some also considered the treaty to be an example of Catherine's desire to open diplomatic relations with the newly forming American nation. After the fighting began, Franklin mentioned his enthusiasm for congress' plan to send ministers overseas, and

[96] For a copy of the Declaration, see "Catherine's Declaration to the Courts of London, Versailles, and Madrid," 28 February 1780; in Francis Piggot and G.W. Omond, *Documentary History of the Armed Neutralities, 1780 and 1800: Together with Selected Documents Relating to the War of American Independence 1776-1783 and the Dutch War 1780-1784* (London: University of London Press, 1919), 1:198-203 (hereafter cited as *DHAN*).

[97] "Franklin to the President of Congress," 31 May 1780; in Francis Wharton, *Revolutionary Diplomatic Correspondence of the United States*, (Washington: G.O.P, 1889), 3:745 (hereafter cited as *RDCUS*).

stressed that "Russia should not be neglected."[98] Congress agreed with Franklin's assessment, for they appointed Francis Dana "Minister Plenipotentiary" to Russia so that he could "engage her Imperial majesty to favor and support the sovereignty and independence of these United States." Believing that a "friendly intercourse" between Russia and the United States would serve "for the mutual advantage of both nations," they were confident that such support would be easily confirmed upon his arrival.[99] As already mentioned, the colonists imported most of their hemp from Russia through Great Britain, which, according to Crosby, "added to its price the fees of the Englishmen, who unloaded it, stored it in their warehouses, sold it, resold it, loaded it on other vessels and set it on its way."[100]

As a result, cutting out the British and obtaining a treaty directly with Russia seemed logical and advantageous for both sides. In effect, the Americans needed trading partners, and Russia had more than enough hemp to trade. Since the price would no longer include the fees that English merchants charged to make their money off the trade, both parties stood to benefit from such a relationship. After arriving in St. Petersburg for his mission, Dana wrote a letter to the president of Congress, saying that he had made as "full [an] inquiry into the nature of their commerce as circumstances would admit of." His inquiry led him to the conclusion that "[t]he 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." Securing a passageway for trade was no longer an issue, for as Dana mentioned, "An opportunity by water from hence to Amsterdam

---

[98] "Franklin and Deane to Committee of Secret Correspondence," 12 March 1777; in *ibid.*, 288.
[99] "Instructions to Francis Dana, as Minister Plenipotentiary to the Court of St. Petersburgh," 19 December 1780; in Wharton*, RDCUS:* 4:202.
[100] Crosby, *America, Hemp, Russia,* 5.

now presents itself, and this being the safest way."[101] For these reasons, thought Dana, the United States should have no problem securing a trade agreement with Russia.

But as the months passed with Dana waiting patiently in the capital of the Russian Empire, no invitation from Catherine's court appeared. After sending a couple of letters to the French Ambassador in St. Petersburg, Marquis de Verac, enquiring as to the status of his mission, Dana received some rather unfortunate and disappointing news. 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." He assured Dana that, because Catherine did not want to "dissatisfy the court of London," she would "abstain with the greatest possible care from showing any particular inclination for the American cause." It would be doubtful, he concluded, that she would recognize a minister from a country which 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."[102]

Dana had a hard time accepting the fact that Catherine could not see the benefits of recognizing the Americans. As he explained in on letter, hemp 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 don't, he claimed, then the people of

---

[101] "Dana to the President of Congress," 15 September 1781; in Wharton, *RDCUS:* 4:711.
[102] "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 fear for 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 Wharton, *RDCUS*: 4:350.

America, 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." As he explained:

> That Russia can do this by means which may be pointed out, and in the use of which both nations may promote their general interests, is certain. But 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?[103]

Echoing the sentiments of Congress mentioned above, Dana felt that hemp cultivation had the potential to prosper in America, so it was in Russia's best interest to open relations with them. Because he could not understand what the Empress did not understand about this, Dana 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 a 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."[104]

Evidence does exist, though, that Verac's position was legitimate. Catherine had already declined to provide the British with troops to help fight the Americans, and creating the League of Armed Neutrality made it seem like she wanted to undermine

[103] "Dana to Livingston," 28 June 1782; in Wharton, *RDCUS*: 5:530.
[104] "Dana to the President of Congress," 15 September 1781; in Wharton, *RDCUS*: 4:711.

Great Britain's authority.[105] As a result, the Russians had to be careful not to give the British, as the Russian diplomat I.A. Osterman wrote in 1782, "a cause to conclude that we desire to interfere in her affairs with the American colonies."[106] Catherine understood the damage that the British could inflict on Russian maritime commerce, which she feared might interfere with her plans to wage war on the Turks and eventually partition the Ottoman Empire. Russia's victory over the Turks in 1774 never led to peace, for the Ottomans refused to accept the terms of the treaty of Kuchuk Kainardzhi, which forced them to cede most of the Black Sea coast to Russia. Catherine anticipated that these issues would lead to another war, and she wanted to have complete control over the Black Sea. As a result, after securing an alliance with Prussia, she started thinking about how to partition the Ottoman Empire. The British, however, could stand in her way if she were not careful. They already refused to grant her the Turkish *casus foederis* in the First Turkish War, and their powerful maritime position could interfere with her future plans were she to recognize the Americans before the British.[107]

One can imagine, then, the frustration Dana felt while he waited for nearly two years in St. Petersburg, unable to obtain an audience with the empress due to her need to smooth things over with the British. After writing numerous letters, he realized that he needed to take matters into his own hands, so he sought to make an acquaintance with vice chancellor Count Ostermann, one of the high-ranking officials at the court of St. Petersburg. He communicated his mission to Ostermann without consulting Verac, and

[105] In 1775, Catherine decline to provide the British with the 20,000 troops they requested be sent to North America.
[106] "Bezborodko to Osterman," 14 February 1782; quoted in N. N. (Nikolai Nikolaevich) Bolkhovitinov, *The Beginnings of Russian-American Relations, 1775-1815* (Cambridge: Harvard University Press, 1975), p. 22.
[107] For a discussion of Catherine's diplomatic positions during this period, see Isabel de Madariaga, *Britain, Russia, and the Armed Neutrality of 1780* (New Haven: Yale University Press, 1962).

then began a series of communications with him that resulted in Dana coming to the realization that he would not be recognized. On May 8, 1783, after the Treaty of Paris was signed, he sent a document to Ostermann, titled, "Mr. Dana's Memorial to Count Ostermann," in which he responded to the comments that the Russian government made on the conditions that needed to exist in order for Dana to be granted an audience: "It would be ridiculous to 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."[108] He stressed the lack of respect that the Russians displayed for the Americans by demanding they resubmit his credentials after a peace treaty had been accepted.

Ostermann's response did not change the matter, and even went so far as to mention that Dana would have to pay over 6,000 rubles in bribes just for the possibility of receiving an audience.[109] As a result, Dana left St. Petersburg in August 1783, taking with him any possibility of an American representative being recognized at the court of St. Petersburg until the next century. In his last letter to the President of Congress before embarking on his journey home, he mentioned what the Americans needed to do to get revenge: "The interests of this empire are 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."[110]

As one can see, Americans' perceptions of hemp during the revolutionary war had a profound impact on the diplomatic policies of the newly forming republic. Emerging

[108] "Dana to Ostermann," 8 May 1783; in Wharton, *RDCUS*: 6:414.
[109] *Ibid*.
[110] "Dana to Livingston," 17 August 1783; in Wharton, *RDCUS*: 6: 658.

out of a world where the transatlantic discourse on hemp and its importance for imperial sovereignty produced a sense of urgency regarding the need to secure a steady supply of its fiber, members of the Continental Congress sought to promote its cultivation at home as well as obtain trade treaties with Russia to import it without having to rely on Great Britain for re-exportation. Despite these efforts, however, Americans were largely unsuccessful on both accounts and were forced to continue importing it. During the period of the Napoleonic wars, for example, Americans imported nearly all of the hemp they consumed from abroad.[111] In 1801, farmers in Boston tried to grow hemp out of fear that the Russian supply would be cut off because of the war.[112] A decade later, Paul Hamilton of the Navy Department sent an essay to the House of Representatives titled "Culture of Hemp," in which he addressed the problems with the American hemp industry and how to fix them. He pointed out that the American farmers had improved the quality of hemp they produced, but they still "have not yet acquired that extensive information upon the subject which would assure to them all the advantages arising from the culture of this valuable article."[113] Echoing Mercandier, he argued that the manner by which the Americans treated the stocks after chopping them down caused 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,

[111] Crosby, *America, Russia, Hemp, and Napoleon,* 25-29.
[112] *Ibid*., 85.
[113] Paul Hamilton, "Culture of Hemp," January 21, 1811;" in *American State Papers*, House of Representative, 11th Congress, 3rd Session, No. 86, p. 245.

> especially as respects durability under water, it will receive and retain a greater portion of tar…"[114]

Hamilton provided samples of Russian and American hemp with his essay to demonstrate that the Americans could produce the same quality if the government 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."[115]

Although Hamilton expressed optimism that Americans would soon take up the culture of water retting, an 1827 document from the Navy Department reveals that good quality American hemp was still relatively scarce more than a decade later. The report claimed that "the American hemp loses nothing in comparison [to Russian hemp when water rotted,]" and concluded that American "water-rotted hemp . . . , its strength and durability, were ascertained to be fully equal to cordage made of the best Russian hemp similarly exposed." Only one problem remained: "the great difficulty has been to procure a sufficient amount of American *water*-rotted hemp to answer the demand of the navy. The habit of dew-rotting has become so fixed that it has apprehended and considerable time will elapse before the American community can be persuaded to change it, and resort to the preferable system of water-rotting."[116] Despite these hopes that Americans would eventually adopt the new technique, though, it never caught on. Even in Kentucky, where hemp cultivation became an important source of income for farmers producing it for the production of cloth and small rope to tie bags of cotton together, farmers preferred to stick to their old ways of producing the fiber. Henry Clay, the United State's most avid

---

[114] *Ibid*., 246.
[115] *Ibid*.
[116] "Experiments on American Water-Rotted Hemp, and Comparison of it with Russian Hemp," 20 December 1827; in *American State Papers, House of Representatives*, 20th Congress, 1st Session Naval Affairs, 3: 88.

hemp farmer, wrote as late as 1842 that, despite his knowledge on the subject, "I have never tried water-retting."[117]

There are a number of reasons cited as to why this was the case. In a report produced by the Department of Agriculture after the Civil War on the possibilities of substituting hemp and flax for cotton products, the authors documented that "eighty-three thousand one hundred and ninety tons" of hemp were produced annually in the States for the year 1864, of which "only three thousand nine hundred and forty-three tons were water-rotted." Although they claimed that there was "a decided preference among the manufacturers for the water-retted material," only a "few of our farmers are willing to take the trouble to adopt this process; indeed few have the necessary skill and appliances."[118] Eventually, the U.S. Navy's preference for water-retted hemp seems to have induced Clay to experiment with the more superior technique by building a long trench on his estate, Ashland, to submerge the plants in. However, according to the report of the commissioner of agriculture for the year 1879, "Henry Clay [tried] the practice in Kentucky, but it was not followed for reasons given above," the most important of which was that "the price . . . for Corday hemp has hardly warranted the expenditure of the extra labor required.[119] Hopkins mentioned in his book that the horrible smell of the rotting stocks was thought to be hazardous to the health of those around it and was poisonous, which also could have worked to prejudice farmers against abandoning their traditional practices. As a result, the United States of America was forced to continue importing its naval hemp from abroad, until other substitutes such as the abaca plant

---

[117] Henry Colman (ed.), *The New Genese Farmer: A Monthly Publication, Devoted to the Improvement of Agriculture and Horticulture, and to Rural and Domestic Economy*, Vol. 3 (Rochester: M.B. Bateham, 1842), p. 52.
[118] "Substituting Flax or Hemp for Cotton," *Report of the Flax and Hemp Commission*, 27 February 1865; located in the Harvard College Widener Library, Econ 7725.3.15.
[119] U.S. Department of Agriculture, *Report of the Commission of Agriculture for the Year 1879* (Washington: Government Printing Office, 1880), p. 592.

from the Philippines and synthetic fibers from cotton were discovered to be viable replacements.

By the end of the Civil War, then, Americans were no closer to securing their own supply of naval stores than the British. Both had to rely on imports to sustain their consumption. However, due to their imperial acquisitions, the British continued to seek a colonial outlet through which to obtain the fiber. Documents from the guard books of the Royal Society of Arts mentioned earlier suggest that, for a time, they attempted to use their territories in Canada to promote hemp cultivation.[120] Surviving documentation suggests that these efforts were successful, at least for awhile. In 1806, for example, members of the Royal Society reported awarding a silver medal to Mr. Philemon Wright, who cultivated ten English statute acres of hemp a year from 1802-1804. In 1804, a drought struck the region of Montreal where he cultivated the plants, but together he produced "about 600 weight of clean [i.e., water-retting] drest [sic] hemp of the first quality per acre."[121] They also reported awarding Mr. Joshua Cornwall and Mr. Frederic Arnold of the River Thames, Upper Canada, with silver medals for hemp cultivation, and Mr. George Ward of the Township of Camden, Upper Canada, was awarded twenty dollars for the same purpose.[122]

Despite these accomplishments, though, production in Canada never came close to reaching levels that were necessary to end their dependence on Russian hemp, which is why, as chapter 5 argues, the British also sought to promote its cultivation in India once they gained more control there. As the next two chapters will demonstrate, the continued

---

[120] I.W. Clark to Charles Taylor, "On the Cultivation of Hemp in Canada," 18 July 1805; in *ACRSA*, LA/F1/68.
[121] W. Roxburgh, Herman W. Ryland, W. Allan, and G. Ward, "Papers in Colonies and Trade," *Transactions of the Society, Instituted at London, for the Encouragement of Arts, Manufactures, and Commerce*, Vol. 24 (1806), p. 159.
[122] *Ibid*.,160-161.

difficulty that both the British and the Americans had with providing themselves with enough supply of hemp to eliminate dependency on foreign countries played an important role in the shift in meaning the plant endured over time.

Conclusion

As one can see, analyzing the transatlantic dialog over the need for hemp fiber that surfaced around the mid-eighteenth century helps illuminate the cultural, economic, and political relationships that developed in response to concerns over the growing dependence on Russia for this vital strategic commodity. Russia had been connected to Europe through trade at least since the twelfth century, when merchants from the Hansiatic League began peddling Russian hemp to eager consumers through the Baltic Sea. By the time Peter the Great came to power, the Age of Exploration increased the demand for hemp, which solidified this connection even further. However, the British quickly realized that relying too heavily on a foreign power for such an important commodity could have disastrous consequences. By the 1730s, perceptions of the American landscape as a fruitful Garden of Eden produced a culture of curiosity that induced many newly established scientific societies to experiment with ways in which to promote hemp cultivation, which in turn influenced the political relationship that colonists in North America had with their mother country. By placing a bounty on hemp cultivated in America, the British hoped to induce the colonists to produce more so that the metropole would not have to rely so heavily on Russia to obtain it.

However, the British also considered the bounty a strategic tool to maintain control over the colonial world, for they felt that encouraging hemp cultivation amongst the colonists would lead them to neglect the manufacturing stage, thereby forcing them to remain reliant on the metropole for manufactured hemp-goods. This strategy led some to publish treatises in the colonies that echoed the London concerns for relying too heavily

on Russian hemp. As a result, after the American Revolution began and Catherine the Great announced her support for the establishment of the League of Armed Neutrality, the American revolutionaries saw an economic opportunity in Russia, which induced them to send a representative to St. Petersburg to establish trade relations. Although Americans thought that Catherine would be willing to open relations with them, the mission failed, primarily because Russia did not want to risk upsetting the British by recognizing the United States as a sovereign nation. Unable to understand why Catherine was not as enthusiastic as they were about the benefits that such a relationship could bring to both parties, Dana assumed that the French were conspiring to thwart U.S. plan's for trade negotiations with Russia, so he by-passed Vergennes and began corresponding directly with the Russian court. What followed was a series of mishaps that resulted in his leaving Russia, taking with him any possibility of opening relations with that country until John Quincy Adams' historic visit in the early nineteenth century.

Like the British, the Americans would continue promoting hemp cultivation at home, but their lack of success meant they had to pay higher prices for the hemp they bought. Unlike the Americans, who were busy trying to consolidate their power and build some cohesion between the colonies, the British were a powerful empire with significant overseas territory, which they attempted to utilize in the same way they attempted to utilize the American colonies for hemp production. Their efforts in Canada were more successful, but production never amounted to levels required to end dependence on Russia, which is why they sought to use India for the same purpose. However, in India, they encountered a different problem; Indians used hemp for entirely different purposes. As we shall see, encountering these new uses had a profound impact on hemp's place in

the Anglo-Atlantic world, for knowledge of them transferred across the Atlantic to influence Americans' perception of the plant as well.

Chapter 5

Reorienting Empire and Transforming Hemp in the Atlantic World

Introduction

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 in 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 perceptions of hemp in the Atlantic world from the late eighteenth to mid-nineteenth century, is the subject of this chapter. During this period, British and American scientists, agronomists, medical practitioners, diplomats, travelers, and merchants understood and described hemp to each other sometimes as a fiber and other times as an intoxicant or a medicine. After the Seven Years' War, as the British started encountering hemp intoxicants 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 hemp 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 intoxicating hemp against Europe's industrial fiber. Some

argued that the Indian plant was a different species, whereas others claimed that the differences were a by-product of an Asiatic condition. All agreed, though, that the eastern uses were deviant.

The Napoleonic Wars, the rise of Industrialization, and medicinal experimentation brought new transformations in the use and meaning of hemp in the Anglo-Atlantic. The need for its fiber diminished slightly after the British discovered that other plants in India could be used as substitutes. Moreover, medicine became a more scientific and reputable profession, and some of its practitioners thought hemp could be useful for such purposes if Europeans came in and took control over the industry. These factors provided incentives for certain EIC men working in India to appropriate hemp's so-called deviant and intoxicating properties into a useful medicine for the empire. Eventually, knowledge of British experiments with hemp intoxicants for medicinal purposes migrated across the Atlantic to influence the way 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 the manner by which they were received in both Great Britain and America. Documenting these transformations provides a more nuanced understanding of how the empire worked to invest hemp with different cultural meanings at different times, but it also reveals the interconnected nature of the plant's cultural development in the English Speaking Atlantic.

Encountering Hemp Intoxicants

The imperial reorientation of the British Empire towards Asia after the American Revolution and its impact on the conceptual distinction between self and other was profound. The North American empire had relied on private entrepreneurship and

colonial agency to function.[1] In India, instead of relying on colonial elites to set up institutional control, British imperial agents conducted business under strict company authority directed from London, and notions of Indian cultural degeneracy were invoked to justify this imperial presence, which became even more prevalent after the Hastings Scandal in 1784.[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 Great Britain could be corrupted by its involvement on the subcontinent, and debate over the British presence in India ensued.[3] These hopes and fears had an important impact on representations and understandings of hemp in the British Empire, which in turn influenced the manner by which Americans on the other side of the Atlantic thought about the plant as well.

As we have seen, hemp for westerners throughout the eighteenth century was primarily considered a vital strategic commodity. It was difficult and tedious to cultivate, which is why both the British and the Americans were unable to produce enough to satisfy their consumption needs. Instead, they imported most of it from Russia. However, eighteenth 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 Americans did not have colonial territories after gaining independence, so they continued to focus solely on improving home production

[1] See Thomas Bender, *A Nation Among Nations: America's Place in World History* (New York: Hill and Wang, 2006), p. 92.
[2] See Tillman W. Netchman, *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).

to replace their imports. The British, on the other hand, continued seeking a colonial outlet through which to promote its cultivation. 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 to sustain the empire. India became the next likely place, but the British encountered Indians cultivating the plant to produce strange and exotic intoxicating substances.

To be sure, the British were aware that hemp could be used for medicinal concoctions and intoxication before reorienting their empire towards India. The sixteenth century Portuguese traveler, Garcie d'Orta, wrote in a document 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] Although he referred to "Bangue" as a plant, the name actually refers to a liquid intoxicant that Indians made from the leaves, stems, and various clippings of the hemp plant. Nevertheless, this source became one of the earliest definitive accounts of hemp and intoxication, 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."[5]

Although James did not mention d'Orta by name, he credited one of his

[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, 2005), p. 29.
[5] Cited in Mills, *Cannabis Britannica*, 27.

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.[6] Both of these sources were travelogues with very little medical or scientific substance, yet they became the most authoritative sources for British knowledge on hemp intoxicants in the early eighteenth century. In fact, James' *Medical Dictionary* was not the earliest eighteenth 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 hemp at all in the book, he claimed that "bang" was "of an Infatuating Quality, and pernicious Use."[7] 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 hemp intoxicants. 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."[8]

These descriptions indicate that the British had little to no experience with hemp intoxicants before the late eighteenth century, and what they did know of them largely came from sources with little understanding of their properties. Indeed, all these observers mistakenly classified bhang as a unique variety of hemp 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 that the "famous Bangue . . . is 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

---

[6] For a discussion of Acosta's work and its influence in Europe, see *Ibid*., 29-31.
[7] 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), p. 22.
[8] Louis Lemery, *A Treatise of All Sorts of Foods, Both Animal and Vegetable: Also of Drinkables*, 3rd Edition (London: W. Innys, 1745), p. 339.

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, "by the Descriptions of it, [Bangue hemp is] not much differing from the common Sort," there was a risk in growing it in Britain, for the plant "is so much used by the *Indians* and *Persians* to promote Venery."[9] The implication is that hemp increased sexual drive, a connection also made by d'Orta, Acosta, and James. Increased sexual drive could be good for hens, but dangerous among people. Given that the intoxicant 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."[10]

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,

[9] 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), p. 52.
[10] John Barrow, *Dictionarium Medicum Universale; Or, A New Dictionary* (London: T. Longman, 1749), p. 121.

like mad dogs. "[11] Again, the underlining assumption is that Indians used a productive plant for nothing more than inducing intoxication. This description was obviously a popular one, for Philip 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."[12]

As the British penetrated further into India and established institutional control over a society with a tradition of using hemp for intoxication, 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 Saba 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 meant that many people would have been exposed to the negative associations he made between hemp intoxication, madness, and the "Asiatics" who used them.[13] The same description made its way into Joseph Huddart's widely circulated work, *The Oriental Navigator*, published in Philadelphia and London. Joseph James inserted it in his publication that went through several editions in New York, suggesting that people on both sides of the Atlantic were reading about the deleterious effects of hemp intoxicants at the time.[14]

As Steel's source indicates, the passage that he, Nemnich, Huddart, and James quoted came from a description provided in a London publication by John Henry Grose.

---

[11] Henry Draper Steel, *Portable Instructions for Purchasing the Drugs and Spices of Asia and the East-indies…* (London, 1779), p. 14.
[12] Philip Andreas Nimnich, *A Universal European Dictionary of Merchandise* (London: J. Johnson, 1799), p. 14.
[13] Mills, *Cannabis Britannica*, 21.
[14] 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 Indian Directory for Purchasing Drugs and Spices of the East-Indies* (New York: John Furman, 1800), p. 110.

For some reason, 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 hemp, referring to it simply as "an intoxicating herb."[15] A decade later, he still had not made the connection, for the slightly altered second edition only added a description of a skirmish between EIC agent Robert Clive and 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."[16] His confusion regarding where bhang derived from is consistent with the other sources that were published at the time, which seems to have been corrected by those who wrote about hemp use in the east at the turn of the century. However, all agreed on the negative impact it had on the easterners who used it for such vile purposes.

Comparing the publications by Grose, Berlu, Lemrey, Barrow, Miller, and Robert James to those produced by Steele, Nimnich, and Joseph James, then, suggests that the British encountered hemp intoxicants more frequently as they reoriented the empire towards India, for even though the latter authors reiterated much of the negative associations cited by those who wrote before them, their descriptions reflect an understanding of the fact that bhang derived from the hemp plant instead of an unknown intoxicating herb. This meant that, the longer the British were in India, the more they associated hemp used for intoxication 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

[15] John Henry Grose, *A Voyage to the East-Indies, with Observations on Various Parts There* (London: S. Hooper and A. Morley, 1757), p. 197.
[16] John Henry Grose, *A Voyage to the East-Indies; Began in 1750; With Observations Continued Till 1764* (London: J. Hooper, 1766), p. 89.

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.[17] 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."[18]

Scott's reference to "Asiatics" smoking hemp is an important one, for it implies that the British were still perplexed about the nature of hemp intoxicants and their use by the supposedly degenerate people they encountered out in the empire. More frequent contact with the various cultures on the subcontinent by the late eighteenth century may have increased the association between hemp and 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 intoxicating hemp preparations, which explains why the sources above simply copied information from previous publications.[19] Without much direct experience with hemp intoxicants, those writing about the eastern uses for the plant

---

[17] Thomas Arnold, *Observations on the Nature, Kinds, Causes, and Prevention of Insanity, Lunacy, or Madness*, Vol. II (Leicester: G. Ireland, 1786), p. 254.
[18] Inayat Allah, *Bahar-danush; or, Garden of Knowledge. An Oriental Romance*. Translated by Jonathan Scott, Vol. 1 (Shrewsbury: J. and W. Eddowes, 1799), p. 111.
[19] Mills, *Cannabis Britannica*, 32.

simply regurgitated the exoticized speculations of highly outdated sources. This helps explain Scott's reference to smoking bhang, which – despite its inaccuracy – gets repeated in other sources from the late eighteenth century as well. Also, one of the earliest references to Ganja is 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."[20] The source has no entry for bhang, and hemp is not discussed at all. Henry Harris did not mention hemp in his dictionary either, but he defined "Bang" as "an intoxicating herb" that also went by the name "ganja."[21]

William Marsden's book, however, mentions all three. In reference 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."[22] His more elaborate description provides further insight into the discourse on hemp intoxication 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 different preparations, for ganja and bhang are two entirely different substances with a long history of use among different social classes in India, yet he portrays them as the same, pernicious substance that easterners used to indulge their

---

[20] John Fergusson, *A Dictionary of the Hindostan Language* (London: T. Cadell, 1773), p. 214.
[21] Henry Harris, *A Dictionary English and Hindostany*, Vol. II (Madras, 1790), p. 26.
[22] 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), p.78.

appetite for delirium. 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.

So, before the advent of the Second British Empire, Britons had a vague understanding of hemp's intoxicating properties and the manner by which they were used. Some were unaware that bhang derived from hemp, while others were under the impression that it was a type of hemp. 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 might have disagreed on whether or not the intoxicants derived from a different species, most accepted that using them was an oriental phenomenon that held no beneficial value. This oriental association was in stark contrast to the more industrial uses that Europeans had for the plant, and the new imperial project that amplified differences between the British and the imperial subjects they sought to control harden this distinction by the turn of the century. As we shall see, this distinction became even more pronounced once the British started promoting hemp 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 stated above, Europeans used hemp primarily for industrial purposes. Encountering hemp intoxicants 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 the Second British Empire 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, these associations would only worsened as the Court of Directors for the EIC sent scouts into India with hopes of extracting the fiber there. What transpired then wove new meaning into hemp's already complicated place in British society. These competing perceptions – the one pertaining to oriental associations with its intoxicating powers, and the other on the economic and national potential of planting it in India for industrial purposes – 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 similar emotions about hemp as the Seven Year' War did regarding the consequences of relying too heavily on foreign imports. William Roxburgh, for example, wrote a letter to the Royal Society in 1799 advising them to promote "experiments for the culture of hemp in India." In it, he stressed the "national importance" of extracting the fiber for home consumption.[23] In another letter, he pointed out 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."[24]

Despite his patriotic enthusiasm, though, Roxburgh's hopes did not turn out as planned, for he reported in the second letter that the experiments "have not, I believe, thrown much additional light on the subject."[25] Though he did not explain why, another

[23] William Nicholson (ed.), *A Journal of Natural Philosophy, Chemistry, and the Arts*, Volume XI (London: Crown Court, 1805), p. 32.
[24] *Ibid*., 34-35.
[25] *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).

correspondence on the same subject by other EIC employees in India 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 Europe, India, the Atlantic, 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."[26] 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."[27] Misspelling bhang might indicate his lack of experience with the preparation, but he 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."[28]

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, which he claimed "grows up very luxuriantly, as a reed in our gardens here." Unfortunately, though, he solemnly reported that "the 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."[29] Lumping all of Asia into the category of those who covet for intoxication objectified the so-called orient and reduced

[26] James Anderson, *Recreations in Agriculture, Natural-History, Arts, and Miscellaneous Literature*, Vol. III (London: T. Bentley, 1800), p. 229.
[27] *Ibid*., 229-230.
[28] *Ibid*., 230.
[29] *Ibid*., 231-232.

their behavior to a form of deviancy, which shifted any blame for the lack of industrial hemp 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."[30] Of course the Indians could not be trusted to care for them properly, for they were too preoccupied with pleasure to see hemp's industrial value.

From Anderson's perspective, then, industrial hemp production in India held promising possibilities, so long as the British stepped in to control the entire 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 intoxicating hemp commodities in India. In his EIC commissioned study on the prospect of growing hemp in India, 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."[31] At the time, the Napoleonic Wars significantly disrupted Great Britain's ability to obtain hemp from the Baltic ports, causing the price to skyrocket from £25 a ton in 1792 to £118 in 1808.[32] A source he printed in the report came from a

[30] *Ibid*., 232.
[31] Robert Wissett, *On the Cultivation and Preparation of Hemp, as Also, of the Article, Produced in Various Parts of India, Called Sunn* (London: Cox and Son, 1804), pp. v, viii.
[32] 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, p. 1.

government document drafted in 1801, which also stated that the Indians were "notoriously wedded to their customs and habits," and were "averse to innovation of any kind."[33] These customs, as Roxburgh pointed out in a letter he wrote to a correspondent during the same year, meant that Indians only cultivated the hemp plant "in small quantities everywhere in India on account of its narcotic qualities."[34]

At the time he made that statement, Roxburgh understood the need to find a suitable replacement for hemp fiber better than 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."[35] His work circulated widely across the empire, showing up in appendixes and large quotations in all the publications on the subject during the time.[36] 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 [of hemp] 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]."[37] The

---

[33] Quoted in Wissett, *Preparation of Hemp*, p. 42.
[34]Anonymous (ed.), *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), p. 15. The only surviving copy of this text is located at Botany Gray Herbarium at Harvard University, Opn.R80.
[35] 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*, Vol. 3, No. 51 (1976): 442-3.
[36] 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*.
[37] 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;

need to replace Russian hemp 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.

After his death, John Forbes Royle took over and continued building on the foundation that Roxburgh established by 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.[38] From the years 1803 to 1810, for example, the British imported an average of 4479.25 cwt per year from India. In 1831, that number jumped to 9472 cwt. These figures were miniscule compared to the 506,803 cwts imported from Russia during the same year, but the numbers increased dramatically the following decade (see Table 5-1), to the point that imports from India nearly equaled those from Russia by 1851.[39] 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."[40] Echoing much of what Roxburgh had pointed out over the years, Royle claimed that, "during the [Napoleonic Wars,] so many attempts were made to find a sufficient substitute for this important plant [hemp]," which "exists in abundance in a wild state [in India], but is only

---

IOR/H/375, pp. 243-261. See both Wissett's books, as well as George Walter Prothero, *The Quarterly Review: September and December, 1812* (London: C. Roworth, Bell-yard, 1813), p. 50.

[38] *Papers Regarding the Cultivation of Hemp in India* (Agra: Secunda Orphan Press, 1855). John Forbes Royle, *Illustration of the Botany and Other Branches of the Natural History of the Himalayan Mountains and of the Flora of Cashmere*, Vol. I (London:W.H. Allen & Co., 1839).

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

[40] *Ibid*., vii.

used for making an intoxicating drug."[41] This, he argued, was why Roxburgh had such an "anxious desire to succeed with [promoting] substitute[s] for hemp and flax," and it was also why, over four decades later, the search continued.[42]

Table 5-1: Fiber Imported in Great Britain from India and Russia (in cwts)

Location	1847	1848	1849	1850	1851
Russia	544,844	540,207	641,548	614,535	672,342
East Indies	185,788	258,239	360,362	399,345	590,923

Source: John Forbes Royle, *The Fibrous Plants of India*, 339.

Evidence from a government publication in 1855 reinforces this view. In it, a letter from Captain H. Huddleston mentioned that the "Bhung" Indians grew for intoxication "does not yield a fibre that can be turned to any use," but "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."[43] 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."[44] In effect, their degenerative nature inclined them to indolence, so company employees needed to continue focusing 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. Indeed, he dedicated the bulk of his report to describing each of these plants and the

[41] Royle, *Illustration of the Botany*, 334, 10.
[42] *Ibid*, p. 335. For information on the persistence of this search throughout the decades, see Royle, *Fibrous Plants of India*, 235-299.
[43] H. Huddleston, "Report on Hemp Cultivation, &c. in British Gurhwal," 14 July 1840; in *Papers Regarding the Cultivation of Hemp in India* (Agra: Secunda Orphan Press, 1855), p. xviii.
[44] *Ibid*., xix.

possibilities for using them to replace hemp. In the year 1854 alone, there were no less than twenty-three memorandums exchanged between EIC employees pertaining to hemp cultivation in India and the need to find other plants to replace it.[45]

For Huddleston, promoting the cultivation of Indian hemp "is of no use whatever, for the very insignificant quantity of 'churrus'[sic] – (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."[46] Another letter from J. H. Bridgman to a colleague who inquired about hemp cultivation in his region stated that the "cultivation of Hemp (Ganja and Bhang), I believe to be entirely unknown [for fiber.] 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."[47] Like their contemporaries and the generation of botanists who came before them, these EIC employees struggled to get Indians to change their hemp cultivating habits.

Just as the search for hemp replacements in India started to improve, Europe experienced a medical revolution. Industrialization had profound social ramifications, not the least of which was the growing need to improve the medical profession.[48] 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

---

[45] *Ibid*.
[46] *Ibid*., xviii.
[47] "From J. H. Bridgma, Esq., to C. Chester, Esq., Collector of Goruckpore," 10 August 1854; in *Papers*, 16.
[48] Roy Porter, *The Greatest Benefit to Mankind: A Medical History of Humanity* (New York: W.W. Norton & Co., 1997), p. 348.

more improvements and innovations, especially in regards to pharmacology. In short, medicine was on the rise, and becoming a more legitimate profession for the bourgeoisie. By the 1830s, the dynamic changes in the medical field provided incentive for imperial subjects stationed in India to experiment with indigenous uses for hemp to see if they could appropriate or transform the narcotic properties into a beneficial medicine for European consumption. Before then, only a few British sources ever mentioned the use of Indian hemp for medicine by the native population, and they were not very scientific. In 1810, 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.[49] Whitelaw Ainslie's book, *Materia Medica of Hindostan* (1813), provided a little more detail under an entry listed as "Ganja, HEMP, CANNABIS SATIVA." Although he started by pointing out that "the leaves are frequently added to Tobacco, and smoaked [sic], to increase its intoxicating power," he also 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."[50]

Ainslie never mentioned the plant's use for fiber, and the medical concoction he referred to was listed as only "sometimes" used. Instead, intoxication seems to be the primary connection he made between hemp and India. Over a decade later, an expanded edition of this work 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*

[49] John Fleming, *A Catalogue of Indian Medicinal Plant and Drugs, with Their Names in the Hindustani and Sanscrit Languages* (Calcutta: Hindustani Press, 1810), p. 12.
[50] Whitelaw Anslie, *Materia Medica of Hindoostan and Artisan's and Agriculturist's Nomenclature* (Madras: Government Press, 1813), p. 80.

> *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.[51]

Although describing these different cultural groups' relationship with hemp 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 the other sources. He even spent some time contrasting the eastern medicines with some of the old European concoctions from the Middle Ages discussed in chapter 3. Moreover, he also added that, "of late years, in some districts of central India, cordage and a course kind of cloth are occasionally prepared with it."[52]

Taken as a whole, Ainslie's entries reflect the sort of discursive hierarchy that imperialism in India projected onto the various uses of the hemp plant, the least civilized and most oriental of which being intoxication. In stark contrast to this meaning was its most productive and industrial use, and the desire to turn India into a source of hemp fiber exacerbated the distinction between the two. Then there were the medical uses, which occupied a sort of middle ground between the other two. As mentioned earlier, the historiographical tradition has been to treat these three uses as isolated or separate topics, which has limited our ability to understand the causal relationship between them all.[53] Instead, when studied together – or synchronically, important connections can be

---

[51] 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. II (London: Longman, 1826), pp. 109-10.
[52] *Ibid*., 109.
[53] In the first chapter of his book, for example, Mitch Earlywine states that hemp's "history as the source of [fiber] is separate from its story as a medicine." A few pages later, he writes that hemp "as a medicine is separate from its role as a recreational drug." See

drawn that reveals the manner by which the discourses on fiber and intoxication converged to form new meanings for hemp in Anglo and Anglo-American culture.

In other words, hemp's transformation into a popular and legitimate medicine during Porter's "age of improvements" cannot be properly understood (historically) outside of the discursive interaction between the plant's other uses (and meanings). The Age of Exploration and the Atlantic warfare it ushered in increased the demand for hemp fiber throughout Europe, which solidified the plant's industrial use as the primary association for Europeans. However, it also increased British anxieties over the need to secure a steady supply, especially after relations with Russia deteriorated following the Napoleonic wars. India seemed to offer a solution, but the lack of progress in promoting its cultivation for industrial use there led the British to experiment with indigenous fiber-yielding plants as substitutes. Only then were the British in a position to imagine new uses for the plant that they could adopt. Before long, hopes of transforming the noxious and degenerative intoxicant into something beneficial for the empire replaced the hopes of getting the Indians to cultivate the fiber. Since the imperial project stressed the need to save India from further decay, appropriating hemp's deviant properties into a useable medicine could prove useful in that regard. As the next section demonstrates, the experiments that followed quickly entered the circuits of knowledge traveling across the Atlantic, and helped transform hemp's place in the Atlantic world.

Mitch Earlywine, *Understanding Marijuana: A New Look at the Scientific Evidence* (Oxford: Oxford University Press, 2002), pp. 9, 17. By and large, those before him have treated the plant the same way. The contemporary debate over legalizing hemp has perpetuated this viewpoint, for proponents of legalizing hemp for industrial purposes have a vested interest in arguing that industrial hemp is entirely separate from intoxicating hemp.

Perceptual Transformations and Atlantic Migrations

To understand how and why hemp became a viable medicine for western consumption, it is necessary to begin in India with a man named William Brooke O'Shaughnessy, an Irishman who graduated MD from Edinburgh University in 1829 and decided to apply 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.[54] Netchman's book points out that working and living in India was viewed with suspicion by Englishmen living in the metropole as early as the late eighteenth century, but the job did provide the young Irish doctor with an opportunity to research and teach upper class Indian and mixed-racial 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 educational 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 ages. 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."[55] After all, these were Indian students that were to be taught at the new college, who, "though intelligent beyond all previous

[54] 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, pp. 124-130.
[55] "From Dr. M. J. Branly, Superintendent of the Medical College, To the General Committee of Public Instruction;" 9 July 1835; in IOR/F/4/1892/80187, pp. 31-32.

anticipation, still require a very different system of instruction from that on which Europeans are taught in their own language."[56]

This patronizing attitude towards the natives 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 as to why O'Shaughnessy experimented with Indian hemp in ways that other scholars have failed to recognize. In his study, for example, 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."[57] 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 the reputation as the savior of the British Empire in India. Granted, Mills' suggestion that high demand for medicine in Europe at the time could result in lucrative fortunes for those who patented new cures is a valid one. In fact, although he does not mention it in *Cannabis Britannica*, another source pointed 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.[58]

However, this need for more income took place over a decade after his experiments with Indian hemp. In fact, according to another source, before he decided to focus on what he dubbed the "wonder-drug," O'Shaughnessy's income had been sufficient enough for him to embark on a self funded project to lay "30 miles of wire at his

---

[56] *Ibid*., 35.
[57] Mills, *Cannabis Britannica*, 45- 46.
[58] Katherine Prior, "Brooke, Sir William O'Shaughnessy (1808-1889)," *Oxford Dictionary of National Biography*, Oxford University Press, 2004. Available at: http://www.oxforddnb.com/view/article/20895. Accessed 22 July 2013.

own expense to prove that the telegraph would work [in India]."[59] Although he published the results of this independent undertaking in the *Journal of the Asiatic Society*, it did not generate significant interest from top officials until much later.[60] Nevertheless, his resume by the time he focused on hemp 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.[61]

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."[62] These words do not reflect the narrative of a desperate scientist in search of fame and finances.

How, then, are we to interpret O'Shaughnessy's experiments at a college with a civilizing mission on a plant that had already gained a reputation for promoting degeneracy among the native people who used it? The answer is through an imperial lens, which his 1839 essay on the hemp intoxicants and their possible use for western

---

[59] *Ibid*.
[60] See *Journal of the Asiatic Society of Bengal*, Vol. 8, p. 714.
[61] "J.M. Branly, Superintendent to the Medical College, to the General Committee of Public Instruction" 9 July 1835; IOR/F/4/1892/80187, p. 34.
[62] "I.C.C. Sutherland, Esq. to G.A. Bushley, Esq.," 28 July 1835; IOR/F/4/1892/80187, p. 30.

consumption reveals. From the very start, O'Shaughnessy began his paper by pointing 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."[63] He mentioned that the narcotic effects were also employed as a medicine in these regions a long time ago, which meant that Europeans needed to step in to bring civilization back to the Indians, whose climate led to degeneration. 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 closet physical resemblance or even identity exists between both plants; - difference of climate seems to me more than sufficient to account for the absence or the resinous recreation, and consequent want of narcotic power in that indigenous in colder countries.[64]

The comments on the environment, the contrast between Oriental and European uses, as well as the seemingly inherent Asiatic drive to consume intoxicants all reflect the imperial paradigm of Indian degradation mentioned earlier.

Although in some respects O'Shaughnessy was correct in observing that warmer climates induced hemp to produce more resinous secretion, more importantly are the cultivation techniques and genetic code of the plant, which both play a larger role than

---

[63] 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), p. 1; located in IOR, Tracts 25 (f).
[64] *Ibid*., p. 2.

environmental factors in determining its most suitable uses. In fact, contemporary research reveals that, if the genetic code of the plant is right, the resinous glands known as trichomes develop most efficiently at temperatures ranging just below 70 degrees Fahrenheit. Indeed, levels of THC begin to degrade in temperatures above 95 degrees Fahrenheit.[65] Of course, the scientific infrastructure at the time would not have allowed O'Shaughnessy to make such observations, so he had to rely on the imperial paradigm of distinction between Asia and Europe to account for the differences. In turn, the natives had to rely on Europeans to bring back an older meaning of the plant that seemed to be lost in the past.[66]

The imperial paradigm influencing O'Shaughnessy's work can also be seen in his descriptions of the various hemp intoxicants and the manner by which they were prepared. "Churrus," he claimed, "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." On the same page, he reported that, "[i]n Nipal, Dr. McKinnon informs me, the leathern attire is dispensed with, and the resin is gathered on the skins of naked coolies."[67] He also mentioned Sacy's etymological

[65] 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).

[66] It is worth noting here that most of the references O'Shaughnessy makes in his essay on the use of India hemp for medicinal purposes refer to a time long gone, before India's civilization began to deteriorate. He does mention a few people who claimed to have still used the medicine, but he portrays them as the exception. He credits these "exceptional" native individuals for helping him learn about the history of the medicine in the East, but the overwhelming majority of the population is portrayed as using the plant for intoxication.

[67] *Ibid*., 6.

argument, and that 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 the liquid forms, which he referred to as "Sidhee, Subjee, and Bang" and described as being prepared with various ingredients, O'Shaughnessy claimed that they were "Chiefly used by the Mahomedans of the better classes."[69] It is interesting that he referred to those "who practice this vice" as being of the upper class, for it suggests a sort of hierarchy in regards to the type of intoxications that the British considered acceptable. At the lowest level were those who smoked Indian hemp, which he described as follows: "Four or five persons usually join in this debauch. The hookah is passed round, and each person takes a single draught. 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, but the person can be readily roused, and is able to discharge routine occupations."[70] He also pointed out that "the habitual smokers of Gunjah generally die of disease of the lungs . . . [or] go mad."[71]

Although the liquid preparations were still described as a "vice," he considered them less detrimental than the other versions, which implies that smoking intoxicants were considered worse than liquid forms. Indeed, with the exception of tobacco, which initially transferred across the Atlantic from the New World as an ingestible medicine that

[68] *Ibid*., 11.
[69] *Ibid*., 7.
[70] *Ibid*.
[71] *Ibid*., 15-16.

produced a liquid substance when chewed, intoxicants were consumed in liquid form.[72] In effect, there were (and still are) acceptable and non-acceptable consumable intoxicants, and the division represented the perceptual distinction between self and other, as exemplified by the contrast between his description of the liquid and the smoke-able substance eroticized by foreign bodies who collected it on their naked skin and then huddled together to participate in the "debauch." Understanding this cultural norm explains why O'Shaughnessy attempted to appropriate the plant's intoxicating properties into a liquid, more acceptable preparation instead of using its more deviant, Oriental form. A similar situation occurred with opium, which Europeans transformed into a liquid substance. In effect, 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 hemp as well, which O'Shaughnessy transformed into a tincture and administered to animals and patients in the 1830s to test its strength as a medicine because using it in the "Asiatic" form was unquestionable.

However, condemning Asiatic uses of hemp for intoxication did not stop O'Shaughnessy from crediting exceptional natives for providing him with valuable knowledge. Revealing how important indigenous guides were for helping Europeans understand medicine, he mentioned a 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

[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 their tendency to view the New World civilizations as inferior and primitive, the humoral theory of medicine that was prevalent during the Renaissance period in which the Age of Exploration took place provided the context for this transfer to take place successfully. For more commentary on the use and acceptance of tobacco smoking in European societies, see chapter 6.

of the subject."[73] Both sources apparently warned about the dangers of indulging in the medicine, and O'Shaughnessy took their words seriously. Learning from 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."[74] Starting with the actual native preparations, he administered doses to several types of dogs, then started using alcoholic extracts on various other animals, all of which led him to the conclusion 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."[75] These cases included patients with Rheumatism, Hydrophobia, Cholera, Tetanus, and Infantile Convulsions.

With the exception of 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."[76] Revealing how important he thought it was for the British civilizing mission to find medicines that Indians could use to improve their society, O'Shaughnessy explained his motives as follows:

---

[73] O'Shaughnessy, *On the Preparation of Gunja*, 11, 10. Interestingly, the name Hakim Mirza Abdul Razes cannot be found documented anywhere other than from 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 hemp medicines in the East, or that he simply mistransliterated 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 linger, however faintly.
[74] Ibid., 19.
[75] *Ibid*., 20.
[76] *Ibid*., 36.

> [W]ere individual reputation my object, I would let years pass by, and hundreds of cases accumulate before publication; and in publishing I would enter into every kind of elaborate detail. But the object I have proposed to myself in these inquires is of a very different kind. To gather together a few strong facts, to ascertain the limits which cannot be passed without danger, and then pointing out these to the profession, to leave their body to prosecute and decide on the subject of discussion, such seems to me the fittest mode of attempting to explore the medicinal resources which an untried Materia Medica may contain.[77]

Compare these words to those he wrote in the preface of his *Manual of Chemistry* published shortly after, and his imperial mindset becomes clear: "The following pages have been compiled with the view of supplying the Native Student with such a Manual of Practical Chemistry as will, in some measure, prove a substitute for the costly and unattainable class-books of Europe."[78] Indeed, the entire preface is designed to demonstrate the great value of his book to the novice native students, who were deprived of the real knowledge of the substances around them by their degenerative medical traditions. "In every bazaar in India," he claimed, "the raw material is to be found from which all these valuable remedies, from the use of which the population is now debarred, can, I repeat, be easily prepared. But we require practical chemists to accomplish this national object." He went on to proclaim that "I look with confidence to the indigenous material medica for" substitutes to the expensive European imported medicines, which were "unattainable by the poor inhabitants of this country."[79] Consequently, "if a class of native practical chemists be brought into existence," India would become "almost independent of any other country for the remedies required in the practice of medicine."[80]

---

[77] *Ibid*., 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), p. i; located in the British Library, IOR/8907.aaa.33.
[79] *Ibid*., xxi.
[80] *Ibid*., xxi-xxii.

Before long, O'Shaughnessy's sentiments regarding Indian hemp's potential value as a medicine for European consumption made their way back to the empire's metropole. In 1842, he published *The Bengal Dispensatory* in London, which included more detailed remarks on new trials he conducted with the plant after his initial experiments proved successful.[81] 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."[82] The same year, another journal published an article by an M.D. 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 Indian hemp as a medicine] before the public."[83] Picking up where O'Shaughnessy left off, Clendinning reported sixteen successful cases in which he used an extract of Indian hemp that he referred to as Squire's Extract. The result 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.[84]

The extract that he referred to in this article was manufactured by Peter Squire. According to multiple sources, O'Shaughnessy brought Indian hemp back with him on his

[81] William Brooke O'Shaughnessy, *The Bengal Dispensatory and Companion to the Pharmacopoeia* (London: Allen, 1842).
[82] Jacob Bell (ed.), *Pharmaceutical Journal and Transactions*, Vol. II (London: John Churchill, 1843), p. 594.
[83] John Clendinning, "Observations on the Medical Properties of the Cannabis Sativa of India," *Medico-Chirurgical Transactions*, Vol. 26 (London: Longman, Brown, and Green, 1843), p. 190.
[84] *Ibid*., pp. 209-210.

visit to London and gave it to Squire, who then made an extract of it to sell to others. One of these sources was a paper read by Mr. Ley to the Royal Medico-Botanical Society in 1843. After repeating some of the familiar oriental associations with the plant's intoxicating preparations, he 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."[85] Indeed, O'Shaughnessy had been present at the talk, and an excerpt from his original 1839 essay was published in the same volume. At the meeting, scholars asked about how he came to experiment with the plant, to which he responded that "he had been led to investigate [the plant's medicinal properties] 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."[86] The implication is that Orientals used the plant for degenerative purposes, but if properly supervised by Europeans, the beneficial qualities of the medicine used by the ancients could be rediscovered and put to proper use. For Ley and the rest of the members of the Royal Botanical Society, O'Shaughnessy's experiments were worthy of a diploma that designated him corresponding member, which conferred epistemological authority upon his work, thereby increasing his reputation and opening his studies up to a wider audience.

Not long afterwards, Squire's extract and Indian hemp in general began showing up in other 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

---

[85] M. Ley, "Observations on the Cannabis Indica, or Indian Hemp;" in Hennis Green and Streeten (eds.), *Provincial Medical Journal, and Retrospect of the Medical Sciences*, Vol. V (London: Henry Renshaw, 1843), p. 487.
[86] *Ibid*., 437.

"Mr. Squire begs to inform the Profession generally that he has just received a small supply [of the extract] from Dr. O'Shaughnessy, who has prepared it in India by the process suggested by Mr. Squire." He also mentioned that O'Shaughnessy visited him last spring and brought the plant then, seeking Squire's help on how to extract the resin more efficiently.[87] 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 on Indian hemp from the very start and continued to follow his progress with the tincture.[88] 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 [in Great Britain]" towards the Indian hemp "introduced in this country by Dr. O'Shaughnessy," which had by then also been used on patients with neuralgia, rheumatism, cholera, and in cases requiring a direct sedative."[89] And *The Lancet* published a review of Dr. Neligan's book on medicines that year, which quoted his favorable opinion of the "Indian hemp used in Persia, and throughout India, for many hundreds of years, for producing inebriation," which had "only very recently [been] introduced into British medicine, through the exertions of Dr. O'Shaughnessy."[90]

References such as these continued to appear in various books and journals in London, but they also migrated across the Atlantic and surfaced in publications all over the United States. To be sure, Americans seemed to have at least some idea that hemp could be used medicinally before reading about O'Shaughnessy's work. There were certainly references to the use of hemp seed and the hemp plant for purposes other than

[87] John Forbes Royle (ed.), *The British and Foreign Medical Review*, Vol. IVX (London: John Churchill, 1844), p. 14.
[88] *Ibid.,* Vol. X, p. 225.
[89] W. Ranking, "Address Delivered at the Annual Meeting of the Suffolk Branch of the Provincial Medical and Surgical Association," *Provincial Medical and Surgical Journal*, Vol. 8, No. 14 (Jul. 3, 1844): 204.
[90] Thomas Wakley (ed.), *The Lancet*, Vol. I (London: J. Churchill, 1844), p. 100.

fiber before the nineteenth century, but they were not numerous or significant. Then, in 1833, a source published in Philadelphia by William Barton described "Cannabis sativa" as a plant with "leaves narcotic" before regurgitating what Ainslie Whitelaw wrote in his earlier book.[91] 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.[92] However, neither of these sources mentioned the word hemp, indica, or any of the eastern intoxicants made from the plant. Barton credited Ainslie, which means he would have been aware of the connection if he actually 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 a number of occasions.[93]

Despite their value for revealing the transatlantic connections in medicine at the time, then, neither of these sources proves that Americans were experimenting with the hemp plant for medicinal purposes before O'Shaughnessy. However, within 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 for discovering how well hemp operated as a remedy for tetanus and

[91] 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), p. 84.
[92] Jacob Jeanes, *Homeopathic Practice of Medicine* (Philadelphia: A. Waldie, 1838), pp. 186, 192, 238, 258, 264-65, 280, 286, 298, 342.
[93] For a discussion of Hahnemann's work, see O'Shaughnessy, *On the Preparation of Gunja*, 17.

other convulsive disorders.[94] Much of the materials on O'Shaughnessy in these articles seems to have come 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."[95] The date indicates how quickly Ley's comments travelled across the Atlantic, but even before then, *The New York Journal of Medicine* reported that the "subject [of Indian hemp] has recently attracted much attention in the various journals of the day, both professional and non-professional, we propose giving a view somewhat in detail."[96] 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 actually migrated across the Atlantic with the plant and showed up to one of their meetings to discuss its potential uses.[97]

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

---

[94] J. V. C. Smith (ed.), "New Remedy for Tetanus and Other Convulsive Disorders by W.B. O'Shaughnessy," *The Boston Medical and Surgical Journal*, Vol. XXIII, No. 10 (October, 1840): 153–155; 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): 517–519; J. B. Biddle and W. W. Gerhard (eds.), "New Remedy for Tetanus and Other Convulsive Disorders. By W.B. O'Shaughnessy," *Medical Examiner*, Vol. III, No. 33 (August, 1840): 530–531. I am in debt to Adam Rathge, Ph.D. Candidate at Boston College, for bringing these articles to my attention.
[95] Isaac Hayes (ed.), *The American Journal of the Medical Sciences* (Philadelphia: Lea & Blanchard/ London: Wiley & Putnam, 1843), p. 188.
[96] Samuel Forry (ed.), *The New York Journal of Medicine, and the Collateral Sciences*, Vol. I (New York: J & H. G. Langley, 1843), p. 390.
[97] *Ibid*., 397.

a formula devised by a Mr. Savary on how to extract the medicinal resin more efficiently. The same paper was also published in a journal out of Cincinnati that year as well.[98] 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."[99] 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.[100] 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.[101]

Clearly, Americans during the mid-nineteenth century were seeking medical knowledge from abroad.[102] Nowhere is this transatlantic component to the American

---

[98] Augustine Duhamel, "Some Account of Gunjah, or Indian Hemp and its Preparations;" in Joseph Carson and Robert Bridges (eds.), *American Journal of Pharmacy*, Vol. 9 (1844), p. 259; L.M. Lawson (ed.), *The Western Lancet: Devoted to Medical and Surgical Science*, Vol. 3 (Cincinnati: Sparhawk Printing, 1844), pp. 32-33.

[99] Paul F. Eve and I. P. Garvin (eds.), *Southern Medical and Surgical Journal*, Vol. I (Augusta: James McCafferty, 1845), pp. 194, 196, 216, 627-9 655-659; J. Harrison,W. M. Carpenter, and A. Hester (eds.), *The New Orleans Medical and Surgical Journal, Devoted to Medicine and the Collateral Sciences*, Vol. IV (New Orleans: S. Woodall, 1848), p. 81.

[100] Isaac Hayes (ed), *The American Journal of Medical Sciences*, Vol. 23 (Philadelphia: Lea & Blanchard/Lodno: Wiley & Putnam, 1852), p. 260. J.V.C. Smith (ed.), *Boston Medical and Surgical Journal*, Vol. 44 (Boston: David Clapp Publishing, 1851), p. 288.

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

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

pharmacopeia more recognizable than in the American Provers' Union.[103] 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."[104] 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 the effects of drugs through self observation. The first two pages of the publication lists 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 seems 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

[103] There is an interesting problem in the historiography on medicinal hemp 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, *Marijuana: the First Twelve Thousand Years* (New York: Plenum Press, 1971), p. 182, in which he cites T.F. Allen (ed.), *The Encyclopedia of Pure Materia Medica* (New York: Boericke and Tafel, 1875), p. 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 apparently neither has anyone else who cited the source after him over the years, 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 hemp 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), p. 139; Martin A. Lee, *Smoke Signals: A Social History of Marijuana-Medical, Recreational, and Scientific* (New York: Scribner, 2012), p. 25.

[104] American Provers' Union, *Suggestions for the Proving of Drugs on the Healthy* (Philadelphia, 1853), p. 5.

name, but much of the writing describes similar experiments and lists the extract's 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 essay also described "Bayard Taylor's experience with Cannabis," which documented his encounters with hashish while traveling through Africa and the Middle East in the 1840s.[105] Although Taylor's work is more valuable when analyzed as a literary source depicting hemp intoxication as an eastern trope (see chapter 6), it's important to mention the Provers' use of it as a source for 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 hemp's resin. This in fact became a trend during the latter half of the nineteenth century, which helped endow the plant with meaning that would have an impact on its place in the Atlantic world.

Nevertheless, despite the successful transatlantic migration of Indian hemp as a medicine, many of those who used it reported mixed results. 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, "[i]n a few cases, the patients are violent; in many, highly aphrodisiac; in all that I have seen, voraciously hungry."[106] Consequently, even articles that professed support for O'Shaughnessy's experiments, such as the *The New York Medical Journal* mentioned above, pointed out that "a proper exercise of caution surely demands the frequent repetition of these experiments."[107]

---

[105] *Ibid*., 12-15.
[106] O'Shaughnessy, *On the Preparation of Gunja*, 36.
[107] Samuel Forry (ed.), *The New York Journal of Medicine, and the Collateral Sciences*, Vol. I (New York: J & H. G. Langley, 1843), p. 390.

Indeed, many of the articles indicate some form of skepticism with the medicine's effectiveness. 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."[108] 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."[109] The article in the *American Journal of the American Sciences* reported similar failures with the medicine, arguing that the hemp "sent to this country from Calcutta, and not immediately used, has been deteriorated by age."[110] Certainly, modern research on hemp tinctures indicates that the product deteriorates with time and exposure to heat and light, which suggests that the author's observations were correct.

Recognition of this fact may have led some in America 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 hemp, the affects of which led him to conclude that it "does contain an appreciable quantity of the resinous active principles."[111] His descriptions were rather sensational, even claiming that the intoxicating experience lasted several days. However, the effects

[108] American Provers' Union, *On Cannabis Indica*, 11.
[109] Bell, *Pharmaceutical Transactions*, 190.
[110] Hayes, *The American Journal*, 189.
[111] Horatio C Wood, "On the Medical Activity of the Hemp Plant, as Grown in North America," *Proceedings of the American Philosophical Society*, Vol. 11, No. 81 (Jan., 1869): 229.

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."[112] These new drugs made more and more people throughout the nineteenth century familiar with hemp used for purposes other than fiber, but the plant's medicinal properties continued to remain largely a mystery.

In sum, the transatlantic discourse on hemp medicine that developed after O'Shaughnessy's experiments indicate that Americans were keenly aware of and influenced by contemporary medical research taking place in the British Empire. It also reflects the important role that knowledge produced in the so-called periphery of the British Empire had on the practices and cultures in the metropole. Despite the fact that Britons in London viewed India and the people working there with suspicion, information gathered there had an impact on policies and life in Great Britain. In effect, the scientific knowledge that imperialism in India produced made its way into London, and then transferred across the Atlantic and into the American pharmacopeia; and it happened quickly. Once his work entered the American scene, it rapidly spread to various publications in different regions of the country, but the medicine's lack of consistency and effectiveness 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.

Conclusion

This chapter has documented how hemp transmogrified into a medicine in Anglo-Atlantic culture. After the American Revolution, the British started encountering hemp intoxicants more frequently in Asia, where they reoriented their empire and transformed their justifications for imperialism. Since the British attempted to promote the cultivation

[112] See, among others, Edward Parrish, *A Treatise on Pharmacy*, 4th Edition (Philadelphia: Henry C. Lea, 1874), p. 661.

of hemp for fiber in the Americas for so long before the revolution to fuel the steady demand that exploration and discovery required, they needed a new place to do so after agreeing to accept American independence. India became that place. The degeneracy paradigm of the Second British Empire promoted the argument that India's environment had deteriorated a once great civilization, and that the British needed to penetrate into the subcontinent to save them from further decay. One way to do this was to focus on the manner by which hemp was consumed in India, which contrasted markedly with the manner by which hemp was cultivated and consumed in Great Britain (and Europe, for that matter).

Faced with difficulties in getting the Indians to abandon their traditional uses for hemp, the British began experimenting with the intoxicating preparations to determine whether or not they could be used for the benefit of the empire. Basically, they planned to teach the Indians the proper way to use hemp – as a fiber – but instead ended up bringing the Indian uses – as an intoxicant – back to the metropole, in the guise of a medicine. The experiments they conducted transferred across the Atlantic and entered into the American Pharmacopeia, along with the knowledge that Asians used it for intoxication to satisfy their cravings for indulgence. Whether a particular individual writing about Indian hemp supported its use as a medicine or pointed out the inconsistency of its affects, all noted that Asians used it for centuries as a powerful intoxicant. O'Shaughnessy mentioned it from the start, and all those who quoted him did the same. As a result, when knowledge of hemp medicines transferred across the Atlantic, perceptions of its use by the so-called degenerative Orientals went with it. This negative association complicated the fact that the medicine did not always work as effectively as many thought it should, which had a profound impact on the use and meaning of hemp as a medicine. As we shall see, these problems combined over the years to gradually

invest the entire plant with a more noxious meaning (intoxication) at the expense of the other two (fiber and medicine), and the transatlantic exchange of knowledge created under British imperialism in India that travelled to London and then the United States played an important role in the discourse.

Chapter 6

Hemp, Intoxication, and Orientalism in the Atlantic World

Introduction

As the previous chapters have demonstrated, by around the middle of the nineteenth century, various people throughout the Atlantic world thought of hemp in three different yet connected ways. As a fiber, it was extremely useful but very hard to process. The same plant produced a medicine in India as well, where knowledge of its value travelled to England, and then across the Atlantic into the United States. However, it did not always work properly, which exacerbated the debate over the usefulness of the medicine and nature of the plant grown in the east versus the one grown in the west. Moreover, hemp's association with noxious Asiatic intoxicants that induced insanity and violence complicated the discourse even further. Indeed, many pharmacological descriptions of the medicine came with some commentary on its deleterious effects upon those who used it in the east. Many even contrasted the use of hemp for such purposes in the East with its more productive western use. The British, who were culturally inclined to perceive Indians in terms of the degeneracy narrative perpetuated by the imperial paradigm, encountered hemp intoxicants within the context of the Second British Empire, which helped determine the manner by which they came to understand them. As perceptions of intoxication became more critical during the course of the nineteenth century, negative reports between hemp and insanity began surfacing more frequently in government reports, medical journals, and travel writings. Literary works describing firsthand accounts of what happened to westerners who "played eastern" by experimenting with hemp for intoxicating purposes surfaced in France, Great Britain, and the United States, and most of them exacerbated the negative associations between

hemp and the so-call Orient, which was a term used to describe cultural groups in India, Persia, Turkey, and Arabia as a monolith.

As this chapter argues, once hemp entered the British and American pharmacopeias, oriental associations with the plant started to overshadow the unreliable medical ones. With the rise of the transatlantic temperance movement and growing concerns over the so-called "opium menace" in Great Britain and the United States, hemp intoxicants became tropes to identify oriental vice, thereby contributing to the process by which the entire plant transformed from a strategic commodity to a banned intoxicant in Anglo-Atlantic cultures. The continued difficulty that Britons and Americans had with producing hemp fiber, the discovery of cheaper substitutes, and the general lack of consistency in the effects of the medical preparations all contributed to accelerating this process. Although it would take several decades for the transformation to run its course, documenting the discourse on hemp medicine and intoxication during the latter half of the nineteenth century reveals just how bad many felt the problem had become.

By investigating the discourse on hemp intoxication from the mid to late nineteenth century, then, this chapter examines the historical and cultural conditions under which the perceptions of hemp as a problem were constructed. In other words, it illuminates the foundations upon which hemp as a plant fell out of favor in Anglo-Atlantic culture. Using elements of Michele Foucault's work on discursive formations and the process by which cultural norms get established in western culture, it analyzes how the discourse on hemp as a problem operated gradually to invest the plant with more of one meaning at the expense of the other two. As we shall see, this meaning cannot be separated from the perception of empire at the time, which denoted the Orient and the behavior of so-called Orientals as deviant and degenerative. In effect, power and knowledge worked together to solidify a discourse that normalized particular aspects of

human behavior in Anglo-Atlantic culture, and hemp was a part of this discursive formation.

Drugs, Discourse, and Intoxication

Drugs are complex pharmacological substances that operate in different ways; some stimulant 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 recognize as such today, as seen in part by the use of the popular phrase "Drugs *and* Alcohol." Europeans have been consuming "drug foods" since before recorded history. In fact, as Michael Pollan pointed out, "[w]ith the solitary exception of the Eskimos, [whose 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."[1] Each region has different types of plants that produce different substances, so the Age of Discovery and the encounters with Native Americans that ensued introduced many new drug plants to Europeans (tobacco and cocoa, for example). Encounters with Asia also introduced new drugs (hemp), and each was adopted into European cultures in unique ways.

Interestingly, as historian David Courtwright observes, many of the drugs that are considered harmful and dangerous today "began their careers as expensive and rarefied medicines, touted for a variety of human and animal ailments."[2] These two different perceptions of drugs – the one holding negative connotations of abuse and addiction, the other connoting medicinal value – are perhaps as old as the drugs themselves. In fact,

---

[1] Michael Pollan, *Botany of Desire: A Plant's-Eye View of the World* (New York: Random House, 2001), p. 139.
[2] David Courtwright, *Forces of Habit: Drugs and the Making of the Modern World* (Cambridge, Mass.: Harvard University Press, 2001), pp. 3-4.

the duality is recognizable in the translation of the Greek word *pharmacon*, which means 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 . . .[3]

The use of the word drug in the English language today reflects this dichotomy quite well. On the one hand, doctors prescribed "drugs" to patients who need remedies for illnesses or relief from pain. However, countries also spend billions of dollars each year trying to curb the use of "drugs" on the black market (hence the dubious use of the phrase, "War on Drugs").

Take, for example, the difference between licit and illicit drugs. In both British and American culture, there exists an inclination to accept certain drug use and prohibit others. Yet the dividing line does not clearly separate the medicinal drugs from the recreational, for there are acceptable and non-acceptable drugs that overlap in both categories. Alcohol, tobacco, and caffeine, for example, are all acceptable drugs for recreational consumption in Anglo-Atlantic culture today, whereas hemp and opium are not. On the other hand, in certain forms, opium is considered an acceptable drug for medicinal use, whereas most people would not attempt to rationalize smoking tobacco for medicinal purposes anymore. To complicate the situation even further, some of the drugs that are acceptable for recreational use in these societies are more detrimental to the health of those who consume them than are some of the ones classified as illegal.

---

[3] Jacque Derrida, *Dissemination* (London: The Athlone Press, 1981), p. 70; quoted in Beatriz Acevedo*, Understanding Cannabis Reclassification in the United Kingdom, 2002-2005*. Dissertation Submitted for the Degree of Doctor in Management (University of Hull, United Kingdom, 2007), p. 17.

Each year, for example, thousands of people die from alcohol and tobacco use, whereas no deaths are ever reported stemming from the use of hemp intoxicants. For some reason, as anthropologists Ross Coomber and Nigel South mentioned, "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."[4]

How can this be? Why are the perceptions of drugs in these societies so complicated or seemingly contradictory? The answer lies in the fact that, as William Jankowiak and Daniel Bradburd pointed out, "drugs are embedded in systems of meaning and of power that affects the ways they are distributed and used."[5] Take, for example, the British cultural perception of intoxication as it applied to alcohol. Culturally, alcohol consumption played a vital role in English society, for it served as an important source of calories for the populace.[6] As such, ales, beers, and wines were important goods, 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 much 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-seventeenth century, which increased the availability of rum from the Caribbean and made it cheaper to consume, perceptions of intoxication as a problem

[4] Ross Coomber and Nigel South (eds.), *Drug Use and Cultural Contexts 'Beyond the West'* (Warren Street: Free Association Books, 2004), p. 16.
[5] William Jankowiak and Daniel Bradburd (eds.), *Drugs, Labor, and Colonial Expansion* (Tucson: The University of Arizona Press, 2003), p. 8.
[6] Kristen Burton, a Ph.D. Candidate at the University of Texas at Arlington, is in the process of completing a dissertation on the transformation perceptions of alcohol consumption endured in the Atlantic world, and a good portion of her research focuses on the use of alcohol for an important source of calories in the Early Modern Period.

skyrocketed. Before long, members of parliament were arguing that consumption of "deleterious" spirits was depleting the health and morality of the people, so it needed to be stopped.[7] William Hogarth's 1751 lithograph *Gin Lane* depicts this perception quite well, demonstrating how notions of intoxication were increasingly associated with the so-called degenerative behavior of the poor (Figure 6-1).

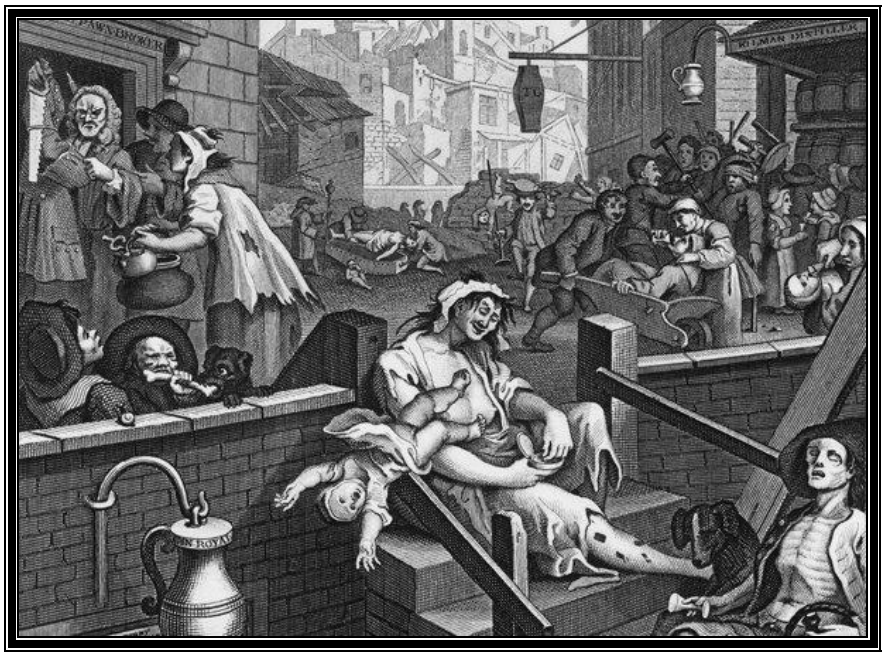

Figure 6-1: *Gin Lane*

William Hogarth (1751); located at The British Museum. The author is in debt to Kristen Burton for introducing this print as a valuable source depicting the perceptions of intoxication in mid-eighteenth century British society.

Like alcohol, tobacco use in Great Britain had a long history before widespread acceptance of its intoxicating properties was perceived as a social problem. Even though James I and others vehemently opposed its use as early as 1603, the plant was still very popular in England, which helped secure its place as one of the first cash crops they

[7] For a discussion on the fear of intoxication produced by over consumption of spirits – particularly gin – in British society, see Brian Inglis, *The Forbidden Game: A Social History of Drugs* (London: Hodder and Stoughton, 1975), chapter 5.

cultivated in the colonies for transatlantic consumption. Unlike alcohol, however, Europeans discovered the plant through contact with the New World, which meant that it had to go through a process of trans-acculturation or intercultural transfer before the English could accept its use.[8] Historian Peter Mancall articulated this process well when he wrote that, "[c]ontrary 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."[9] One might ask how it is that tobacco use became an acceptable practice in spite of the warnings by many important people that it was dangerous and needed to be curtailed, while smoking hemp did not? It is certainly a legitimate question, and the answer may tell us something about how intoxicating commodities cross cultural thresholds.

As Mancall reminds us, "[t]he 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."[10] For one, the ability to successfully accomplish this translation had a lot to do with historical context, for tobacco entered the European scene first as a medicine, and was associated with exoticism at a time when images of the New World captivated the European imagination. Secondly, tobacco was new and not associated with any other uses; granted, it could be chewed, smoked, mixed with sugar, taken as an enema, or (more likely) snuffed up the nose, but

[8] Scholars have referred to the process by which European commodities get adopted into native societies as Commodity Indigenization, but it seems relevant to apply this same process to the manner by which Europeans adopted native commodities as well. For a discussion over this process, see Susan Parrish, *American Curiosity: Cultures of Natural History in the Colonial British Atlantic World* (Chapel Hill: The University of North Carolina Press, 2006). For a definition of the term intercultural transfer, see Thomas Adam, *Intercultural Transfer and the Making of the Modern World* (New York: Palgrave, 2012).
[9] Peter C. Mancall, "Pigs for Historians: Changes in the Land and Beyond," *William and Mary Quarterly*, 67 (April 2010): 374.
[10] *Ibid.*

the meaning of all these uses was mostly the same, in that they were substances one took to affect the body. Hemp was entirely different. As we have already seen, Europeans considered it an important strategic commodity well before they had any idea it could be used for intoxication. Since the British had a difficult time cultivating enough of it to satisfy their consumption needs, they relied on imports and sought to promote its cultivation in the colonies. After the American Revolution, India became the source from which they planned to extract the fiber, but they encountered the natives using the plant for intoxication. The new imperial paradigm portrayed Indians as a people whose tropical climate led to their degeneration, so it stood to reason that the climate affected the hemp plant deleteriously as well.

For these reasons, hemp intoxicants had no place in British society, whereas tobacco did. As the British started to discover new fibers to replace hemp, though, EIC employees working in Calcutta thought they could create a market for Indian hemp by attempting to transform it into a viable medicine. However, their ability to translate the benefits of the plant's resin into European society and convince people of its value was complicated by the inconsistency of the preparations. Granted, shortly after O'Shaughnessy published his experiments, knowledge of the medicine's potential uses spread quickly throughout medical and intellectual circles in the Atlantic world, but their use never became as widespread as opium, which had already become an important medicine for European consumption by then. Indeed, opium consumption for medicinal purposes in Great Britain dates back at least to the seventeenth century, when English physicians touted its virtues as a pain reliever.[11] Once the German pharmacist Friedrich Sertürner isolated its principle alkaloid (morphine) in 1805, new medicinal preparations

[11] Geoffrey Harding, "Constructing Addiction as a Moral Failing," *Sociology of Health and Illness*, Vol. 8, No. 1 (March, 1986): 77.

became even more widespread. Laudanum – an extract made with raw opium, water, alcohol, and mercury – was cheap, unrestricted, and widely available. It was more effective and reliable than the hemp tinctures, and – like tobacco – essentially had no other uses besides medicinal. As a result, unlike hemp, it became one of the most definitive substances in European medicine.

However, opium was more addictive. No matter how it was consumed, people seemed to become dependent on it more frequently. It is unclear exactly which region of the world first used the plant – theories range from Southwestern Europe to western China – but it is clear that its association with medicine and psychoactivity dates back to at least 1600 B.C.[12] Although physicians recognized the plant's ability to induce dependence on those who used it, opium intoxication was not considered a problem until much later.[13] Thomas De Quincy's book, *Confessions of an English Opium Eater*, represents the point at which this transformation began in British society. Initially published in the *London Magazine* in 1821, it became an instant success. The first book version came out the next year, with copies surfacing in *The Saturday Magazine* as well, published in both New York and Philadelphia. In it, De Quincy revealed that he, along with an "immense" portion of the population, belonged to the diverse range of people from various classes in Britain who indulged in the "habit of opium-eating."[14] He made it a point to contest those who would accuse him of acquiring the habit through indulgence by narrating how he began consuming it to mitigate a searing pain that developed in his stomach when he was 28. His extensive commentary about the trials and tribulations of

[12] Courtwright, *Forces of Habit*, 31.
[13] Harding, "Constructing Addiction as a Moral Failing," 77-78.
[14] Thomas De Quincy, *Confessions of an English Opium-Eater*, 3rd Edition (London: Taylor and Hessey, 1823), pp. 7-9, 13.

his childhood that led him to the point in which he needed the medicine served almost to justify the habit.[15]

Indeed, the fact that he felt this needed to be such an extensive component of the book demonstrates the negative associations with indulging in intoxication that existed in British society at the time, as contemporary reviews of the book attest. In the *Eclectic Review*, for example, critics referred to De Quincy's "debauchery" with opium as an "object of pity and scorn," claiming that, despite his attempt "to make some atonement for the misspent, … the seductive picture he presents, is but too likely to tempt some of his readers to begin the practice."[16] *The British Review* started its evaluation of the book by claiming 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."[17] The authors did claim that the work, at times, expressed great "dazzle" and "affectionate humor," but their perception of the negative affects of over intoxication was clear. Indeed, many praised De Quincy's work for its originality and the mild curiosity which it invoked, but the problem most seemed to be unable to get over was, as the *Asiatic Journal* mentioned, the excessive use of a "baneful drug," which the editors pointed out was "common among the Turks and Asiatics of all classes." Similar sentiments were published in reviews across the Atlantic as well.[18]

---

[15] *Ibid*.. 15.
[16] William Hendry Stowell, *The Eclectic Review*, Vol. 19 (London: J Holdsworth, 1823), p. 371.
[17] *The British Review and London Critical Journal*, Vol. 20 (London: J. Hatchard and Son, 1822), p. 471.
[18] *The Asiatic Journal and Monthly Register for British India and its Dependencies*, Vol. 14 (London: Kingsbury, Parbury, & Allen, 1822), p. 679. Regarding the reception of this book with "mild curiosity," see Harding, "Constructing Addiction as a Moral Failing," 78. Reception of the book across the Atlantic seems to have been similar. For reviews of De Quincy's book published in the United States, see, among many others, Jared Sparks,

By the 1840s, public concern over the effects of opium consumption increased, especially for purposes other than medical use. That year, Dr. Thompson wrote an article for the *Medical Times* claiming that opium consumption for non-medical purposes "acted as an aphrodisiac and subverted all morality' affecting, particularly, all that was good and virtuous in women."[19] British involvement in the Opium Wars did not help this image, and notions of Chinese degeneracy associated with opium smoking became more frequent, eventually migrating across the Atlantic into U.S. society as well.[20] These perceptions of eastern degeneracy and intoxication had an impact on hemp, which many started mentioning alongside opium in their descriptions of the intoxicants used by exotic easterners. As Beatriz Acevedo pointed out, "opium and cannabis, which had been part of the cultural traditions in China and India, respectively, became subject to moral suspicion."[21] As we shall see, the discourse that developed around hemp used for such purposes left a lasting mark that helped transform the plant into a banned intoxicant later on.

Indian Hemp and Insanity

Such were the perceptions of intoxication in Great Britain and the United States when Indian hemp began surfacing in medical pharmacopeias. Medical use in certain forms was tolerated, whereas recreational indulgence was considered an eastern vice. As the nineteenth century increased, opium became more suspect, and so did Indian

---

Edward Everett, Russel Lowell, and Henry Cabot Lodge, *The North American Review*, Vol. 17 (Boston: O. Everett, 1824), pp. 94-98; Robert Carruthers (ed.), *Chamber's Cyclopaedia of English Literature,* Vol. 7, 3rd Edition (New York: American Book Exchange, 1830), pp. 190-192.

[19] Quoted in Louise Foxcroft, *The Making of Addiction: The 'Use and Abuse' of Opium in Nineteenth Century Britain* (Burlington: Ashgate Publishing Company, 2007. p. 140.

[20] 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 Opium Addiction in America* (Cambridge, Mass. and London: Harvard University Press, 2001).

[21] Acevedo, *Understanding Cannabis Reclassification in the United Kingdom,* 48.

hemp, which was less useful than opium. Although using certain preparations of Indian hemp for medicinal purposes became fashionable after O'Shaughnessy, publications still warned of its use. We have already seen how, well before transforming the plant into a medicine, the British considered recreational hemp intoxication a degenerative act that induced immorality; but even after O'Shaughnessy began his experiments and circulated the results across the Atlantic, notes on the potential dangers of taking too much or using it for recreational purposes abound.

At first, these warnings referred to the so-called "oriental" uses of hemp for intoxication. In 1842, for example, 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, focusing particularly on the "baneful influence on the health and morals of the population."[22] 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 affects 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."[23] Kean worked at the insane asylum in the region, and he reported that "ganja is given secretly to their victims by evil disposed persons when their

[22] "Public Letter No. 21 of 1842 from the Government of Bengal;" 6 July 1842; located in the *British Library Indian Office Records Asian and African Reading Room* (hereafter IOR), IOR/F/4/2015/90072, p. 1.
[23] *Ibid*., 5-6.

object is to violate the person to obtain possession of the person or effect to cause death."[24]

Apparently, these so-called "evil disposed" people were becoming a problem in British governed India, for complaints over increased ganja smuggling surfaced as early as 1826. In a letter from Fort St. George that year, for example, an EIC employee provided recommendations on how to secure "the prevention of illicit traffic," hoping to make legitimate medical dealers of "Betel, Tobacco, and ganja . . . free from the dangers of abuse" caused by smuggling.[25] The complaints continued, so the government finally acted ten years later by establishing Act XIV to help prevent "smuggling in the Articles of Gunjah and Bang at Madras."[26] In his study, *Cannabis Britannica*, historian James Mills dedicated an entire chapter to ganja smuggling in India. Although the sources he used only date back to the 1870s, his argument that this illicit trade linked hemp intoxicants to criminality is an important one, for it demonstrates that the plant, as he put it, "was taking on criminal associations in the minds of the British in the empire."[27] The fact that these associations were taking place much earlier than Mills' source material reveals only strengthens the argument that the British associated hemp in India with degeneracy and criminality, but it also helps contextualize Kean's aversion to ganja cited above, which he sought to regulate in part due to the criminal connection. However, despite the government's sympathy towards 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

[24] *Ibid*., 7.
[25] "Letter to the India Office from Fort St. George, Madras," 11 September 1829; IOR/E/4/360, paragraph 19.
[26] Board of Control's Board's Collections for 1838; IOR/F/4/1747 No. 71081.
[27] James H Mills, *Cannabis Britannica: Empire, Trade, and Prohibition* (New York: Oxford University Press, 2003), p. 68.

prohibition of these drugs by the government, as suggested by Mr. Kean, would not be effective or expedient."[28] Indeed, as Mills' book and the records at the British Library demonstrate, 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.[29]

Whether or not Kean's observations that ganja consumption promoted insanity and criminality were valid is less relevant for this study than the actual fact that he made the connection.[30] Like Acevedo did with her study on cannabis reclassification in the U.K. at the turn of the twenty-first century, this study utilizes Foucault's notion of how power relations get constructed through the dynamics of discourse.[31] From such a perspective, collecting knowledge about a particular problem – in this case, the use of hemp intoxicants causing insanity – does not require an investigation into whether or not these associations are true or false. In fact, such questions merely serve to distract from the more important task, which is to investigate how this knowledge operates to create meaning in a society – or, as Foucault would put it, establish power relations.[32] To understand how hemp got invested with particular meanings that led to its transformation into a banned intoxicant, then, we must place what Foucault referred to as the

---

[28] "Court of Director to Mr. Kean," 25 October 1843, IOR/E/4/776, p. 285.
[29] Mills, *Cannabis Britannica,* chapter 3. According to some of 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, p. 531.
[30] This is a crucial point that separates this study of the hemp plant from those that have come before it. Mills' study, for example, which is the most objective account of the plant's relationship with empire available today, examines the evidence on the connection between hemp intoxicants and insanity to "demonstrate that this evidence was in fact deeply flawed" (page 69). Unlike most of the others that attempt to do this, Mills provides significant documentation and remains as unbiased as a historian can be, but the purpose remains the same.
[31] Acevedo, *Understanding Cannabis Reclassification in the U.K*., 26, 29.
[32] Michel Foucault, *The Archaeology of Knowledge and the Discourse on Language*, trans. A.M. Sheridan Smith (New York: Pantheon Books, 1972).

archaeology of knowledge collected on its association with insanity into the material context within which the discourse arose (genealogy), which in hemp's case would be Orientalism and the Second British Empire.

To configure the full extent of the problem to be contextualized, though, requires a significant collection of the statements or discourses pertaining to it, of which for hemp and insanity there were many on both sides of the Atlantic in the nineteenth century.[33] One source described the affects of hemp drugs such as "Bhang, charras, and ganja" as follows: "his hands and feet 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."[34] The journal also recounted a story in which 12 "hashish-takers" were found dead the next morning in a building where they spent the night having an "orgie." The same text appeared in a journal in New York that year.[35] In 1850, a missionary described witnessing the effects of hemp drugs in the following passage:

> 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 later 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.[36]

Dr. Thomas Wise 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

---

[33] In the most historical account of the plant available today, Isaac Campos found a similar discourse on hemp intoxicants inducing insanity or violent outbursts abound in Mexico as well. See Isaac Campos, *Home Grown: Marijuana and the Origins of Mexico's War on Drugs* (Chapel Hill: The University of North Carolina Press).
[34] William and Robert Chambers (eds.), *Chambers's Edinburgh Journal*, Vol. XI (Edinburgh and London: Chambers Brothers, 1849), p. 63.
[35] *The Gazette of the Union, Golden Rule, and Odd-Fellow's Family Companion*, Vol. X (New York: Crampton and Clark, 1849), p. 152.
[36] Anonymous, *The Home and Foreign Record of the Presbyterian Church in the United States of America*, Vol. 1 (Philadelphia: Presbyterian Board of Publication, 1850), p. 200.

pernicious influence on the mental faculties than opium or spirits."[37] He even included statistics from insane asylums, and vividly described what he considered long term detrimental effects produced from using all forms of the hemp plant's resin.

Much of what Wise had to say about these preparations showed up in the sixth edition of a popular book on medicine in America. Published by James Johnston, the volume included an elaborate fourteen page description of the plant that cited authorities from both sides of the Atlantic – including O'Shaughnessy. After detailing the old story of Hassan Saba 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."[38] 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 of the descriptions of hemp intoxication during the 1850s.[39] Perhaps the most blatant example of how important the transatlantic connections with British imperialism were in contributing to the scientific knowledge on hemp in the states, however, can be seen in an article published in *The Saturday Magazine*, which had this to say about "hasheesh":

> 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

[37] Thomas A. Wise, "Insanity as it Occurs among the Inhabitants of Bengal," *London Journal of Medicine*, Vol. 4, No. 43 (July: 1852): 661.
[38] James Johnston, *Chemistry of Common Life*, Vol. II (New York: D. Appleton and Co., 1856), p. 100.
[39] "Hashish," *The Living Age*, Vol. 56, No. 717 (February: 1858): 449-512.

> have had Algeria their insane hospitals have been filled with the victims of hasheesh.[40]

Much can be deduced from this statement, not the least of which is that the degeneracy narrative of the Second British Empire clearly had an impact on the writers' perceptions of the Orient and hemp intoxication. However, instead of the British asylums in India, the author cited France's presence in Algeria, which indicates a wider circulation of knowledge about hemp intoxication in the Atlantic world. Indeed, perceptions of hashish and hemp intoxication in general had by this time occupied an important space in French society, which will be discussed further in the next section. For now, it suffices to point out that, if anyone read these publications at the time, Indian hemp would have been looked upon with a curious sense of suspicion.

Despite these associations, however, medical doctors continued using extracts of hemp resin for their patients. From 1840-1890, for example, nearly two hundred articles mentioning Indian hemp for medicinal purposes appeared in the British medical journal, titled *The Lancet*, and the overwhelming number of them either recommended the drug for various ailments or attested to its medicinal value.[41] Nevertheless, documents indicating skepticism with the effects of these drugs continued to surface on both sides of the Atlantic. 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 for the degree of

---

[40] "Hasheesh and Its Smokers and Eaters," *Scientific American*, Vol. XIV, No. 7 (Oct.: 1858): 49.

[41] 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. 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.

MD on “Cannabis Indica,” which he referred to as “one of the most wonderful, the most useful, and the most dangerous [medicines] that Botany has furnished us.”[42] He claimed it was wonderful and useful because of all the positive reports that testified to its powers as a remedy in various ailments, but that it was dangerous because it was poisonous. If using it did not lead to death, he argued, then “the allurement of and desire to return to the awful grandeur and unearthly scenery its employment” induces will surely degenerate the soul. According to him, he knew this from first-hand experiments with the drug, which took him “so nearly to Heaven and Hell.” The “strong set of mental phenomena” he described “cannot and never will be experienced by any but a Hasheesh eater.”[43] After detailing his frightening experiences, he mentioned O’Shaughnessy’s experiments, its prevalence in “Arabia” as an intoxicant to replace wine, and even went so far as to suggest that the “Miamis and other tribes of Indians” used the hemp plant for their ceremonial rituals before ending with 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” experimenting with Indian hemp.[44]

As the evidence suggests, Americans were getting this information from the British, whose growing negative associations with hemp drugs were linked to their increased presence in India, where these substances were primarily used. After 1857, parliament dissolved the East India Company, which placed more control over the region in the hands of the British government. To be sure, this process gradually began as early as the late eighteenth century, when rumors connecting excessive wealth accumulation by EIC employees with immoral behavior started to surface in parliamentary debates.

---

[42] Thomas Hayes Jackson, “Uncertain Actions of Cannabis Indica,” *British Medical Journal,* Vol. 1, No. 1 (Jan., 1857): 15; Francis Marion Nye, *On Cannabis Indica* (MD Thesis for the Medical College of the State of South Carolina, 1858), p. 3.
[43] *Ibid*., 4.
[44] *Ibid*., 18.

After the Hastings scandal of 1784, the government no longer allowed EIC officials stationed in India to correspond with their superiors in London without supervision, so they created the Board of Controls to monitor the exchange of information. In effect, if the Board of Directors for the company wanted to get something done, it needed approval from the government appointed Board of Controls, which signed off on and wrote their own summary of all transactions between London and each of the Presidencies in India.[45]

Upon officially taking control over the company, parliament passed Act XXXVI, which provided the legal means for the British to incarcerate members of the native population they considered lunatics. Like the Calcutta Medical College established twenty years earlier, the more than twenty insane asylums erected after this act was passed were designed to normalize indigenous behavior through institutionalized control.[46] By 1871, the statistical data collected in these asylums linked the use of hemp drugs with insanity so frequently that Allen Hume, Secretary to the Government of India's Department of Agriculture, Revenue and Commerce, sent the following letter out to each of the Presidencies of British India: "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

[45] The author is in debt to Richard Morel, Research Consultant on the East India Company at the British Library, for providing excellent instructions on how to use the archives and understand the correspondences that took place between London and India during the eighteenth and nineteenth centuries. 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), introduction.

[46] For a series of letters that detail the purpose and scope behind 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, and IOR/F/4/2200, No. 107906. For a study on the creation of the insane asylums in India and their impact, see James H. Mills, *Madness, Cannabis, and Colonialism: the 'Native-Only' Lunatic Asylums of British India, 1857-1900* (New York: St. Martin's Press, 2000).

directed to ascertain the extent to which the use of the drug produces insanity," he stated that the Governor General in Council desired a complete inquiry from each of the nine 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."[47]

In response to this letter, a series of correspondences occurred between the provinces over a three year period, each detailing information that civil servants gathered on the use of all these drugs by the native populations. The responses 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]."[48] 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.[49] 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."[50] Many of the reports mentioned "hemp grows wild" in the region they worked in, and that "intoxication is much more a vice of the Asiatic than the

---

[47] "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," 10 October 1871; published in Arthur Godley, *Copies of the Following Papers Relating to the Consumption of Ganja and Other Drugs in India* (London: House of Commons, 1893), p. 7.

[48] *Ibid*., 12,15.

[49] *Ibid*., 10. For the entire list of correspondence that took place between 1871-73, 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.

[50] *Ibid*., 62.

Englishman," which would make attempts to ban the substances entirely futile.[51] 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 before they could legally grow the crop.[52] In order to obtain a better understanding of the extent of the trade and ensure the new law functioned properly, the government relieved deputy collector Baboo Hem Chunder Kerr from his regular duties for nearly four months so he could travel to the centers of hemp production in the Bengal region to conduct research. After returning, he sent the Secretary to 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 included a great deal more than just information about ganja. Indeed, it turned out to be the most comprehensive study of the hemp plant and all 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 use of the plant in India for fiber, medicine, and intoxication. However, he still pointed out "the vile propensities of those who indulge in" the drug, and "the grotesque behaviour of the *Genjels* of India [who smoke ganja]."[53] 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 discussed in chapter 3 of this work.[54] Although evidence suggests that Indians had their own complex cultural understandings of hemp intoxication, those working for the British such as Kerr were at least partly influenced by occidental interpretations.

---

[51] *Ibid*., 77, 86.
[52] *Ibid*., 115.
[53] *Ibid*., 97, 101.
[54] *Ibid*., 98.

In the decades that followed, perceptions of Indian hemp as a dangerous and inconsistent drug in medical journals became more prevalent. 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 did not explain why, but another article provided a possible answer: "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."[55] A more widely available 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 went on to report 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."[56] Robert Edmund Jackson's description of the medicine is almost identical, claiming that the natives use it to produce a "kind of mirthful or extravagant delirium" which sometimes makes them "ill-tempered, violent, and pugnacious." He also reported over a dozen illnesses that westerners used it as a remedy against, but stated "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."[57]

In his 1882 article on the detrimental effects of abusing "narcotics," Henry Barnes referred to Indian hemp as a "poison," and an article in *The Lancet* over ten years later

---

[55] 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*, Vol. 2, No. 762 (August, 1875): 176; "Action and Inaction," *The British Medical Journal*, Vol. 1, No. 784 (Jan., 1876): 46.
[56] Alexander Wynter Blyth, *A Dictionary of Hygiene and Public Health* (London: Charles Griffin & Co. 1876), p. 311.
[57] Robert Edmund Scoresby-Jackson, *Note-Book of Materia Medica, Pharmacology and Therapeutics*, 3rd Edition (Edinburgh and London: Maclachlan & Stewart, 1875), p. 523.

claimed that using it produces "much misery, poverty, insanity and moral deterioration."[58] Henry Cayley argued in another article that Indian hemp was worse than opium, hoping to convince those who had recently embarked on their campaign against the latter that this "far more deleterious nerve stimulant" would "takes its place."[59] These sources only reflect a small portion of the vast array of articles that surfaced in both *The British Medical Journal* and *The Lancet* in this time period. As the next section will demonstrate, these perceptions began to reach a wider audience as they continued to travel across the Atlantic and surface in literary works, which ensured that hemp, harm, and oriental imagery infiltrated the minds of people who read them in the Atlantic world, thereby laying the foundation for the perceptual shift in the way westerners understood the plant.[60]

Hemp Intoxication and Atlantic Orientalism

By the mid-nineteenth century, descriptions of hemp intoxicants and their effects on those who used them became a source of interest for literary figures "playing eastern" on both sides of the Atlantic. By then, intoxication had become both a source of literary inspiration and an indulgent vice associated with sin, deviancy, and the working class poor.[61] These two opposing views – the one denouncing intoxication as a moral vice and the other embracing drugs as a source of inspiration – reflect the binaries in operation in

---

[58] Henry Barnes, "On the Abuse of Narcotics," *The British Medical Journal*, Vol. 2, No. 1143 (November, 1882): 1032-33; "Notes in Parliament," *The Lancet*, Vol. 141, No. 3625 (Feb, 1893): 394.
[59] Henry Cayley, "The Opium Question," *The Lancet*, Vol. 139, No. 3589 (April, 1892): 833.
[60] This historical account of the discourse between hemp and insanity intersects with the scholarship on insanity and asylums. See, for example, Michel Foucault, *Madness and Civilization: A History of Insanity in the Age of Reasons*, trans. Richard Howard (New York: Vintage Books, 1965); David Rothman, *The Discovery of the Asylum: Social Order and Disorder in the New Republic* (Boston: Little, Brown, 1971); Andrew Scull, *Madhouses, Mad-Doctors, and Madmen: The Social History of Psychiatry in the Victorian Era* (Philadelphia: University of Pennsylvania Press, 1981).
[61] See 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); Courtwright, *Dark Paradise*.

Orientalism. There has been significant debate on the subject since Edward Said's influential book with that title came out in 1978. For purposes of this study, the term refers to a way of thinking about the east that both attracted and repulsed westerners to various degrees. As a set of beliefs, associations, and perceptions projected onto people and cultures in the east, Orientalism operated to construct differences between "self" and "other" that were used by some to justify and critique imperialism (the British), attack immigrants, or embrace them particularistically (Americans). However, the Orient also represented a space of pure fascination. Countless travelers entered this space and wrote travelogues of their experiences that enthralled public audiences.[62] European artists and cartographers represented the Orient in alluring ways.[63] Nabobs consumed material culture in India and brought it back with them to London. Porcelain, silk, tea, and stories from the *Arabian Nights* all became important commodities for different classes of people. And Americans dressed up to "play eastern," which captivated public attention and influenced notions of the American dream.[64] These perceptions perpetuated an exotic sense of difference or "otherness" that defined what it meant to be European.

All this reflects the diverse and myriad ways in which Orientalism functioned, which also helped to invest the hemp plant with a variety of meanings in the Atlantic world. After all, despite the negative associations between hemp intoxication and the Orient, use of the plant for such purposes became somewhat fashionable to a small group of artists, poets, travelers, and doctors who were attracted to exotic

---

[62] 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).
[63] See John Crowley, *Imperial Landscapes: Britain's Global Visual Culture* (New Haven: Paul Mellon Centre, 2011).
[64] See Susan Nance, *How the Arabian Nights Inspired the American Dream, 1790-1935* (Chapel Hill: The University of North Carolina Press, 2009).

representations of Eastern landscapes. Their experiments with the drug they called hashish produced a unique blend of scientific inquiry and artistic expression that fed in to the already wide ranging discourse on perceptions of hemp intoxication and medicine. These publications, which circulated in France, Great Britain, and the United States, all described the peculiar effects of the drug, which they reported as both inspiring creativity and inducing frightful hallucinations. As we shall see, these different experiences brought on by the same plant over time helped transform hemp into a banned intoxicant and reinforced notions of difference between east and west.

The story begins in France during the 1840s, where the Romanticism of the post-Napoleonic Era produced a small group of artists, poets, and doctors who decided to experiment with the famous "drug of the east," known as hashish. By then, a number of articles had been published in France that warned of the deleterious effects that hashish consumption produced. Silvestre de Sacy's article on the etymological description of the word hashishin linked the drug to the mythologized story of the assassins in 1809, and word spread of the negative effects of hemp intoxication as Europeans penetrated into the hinterlands of the subcontinent.[65] However, the counter-cultural movement that emerged during the post Napoleonic period produced a class of artists who sought to defy conventional social norms through the introspective lens that drug use provided, so they disregarded these warnings and started experimenting. One of the most popular examples came from the poet Theophile Gautier, who published an article titled "Vaudeville" in 1843. In it, he described the "Orientals, to whom the use of wine is

[65] M. Silvestre de Sacy, "Memoir on the Dynasty of the Assassins, and on the Origin of their Name;" published in J. von Hammer-Purgstall (ed.), *The History of the Assassins*, trans. Oswald Charles Wood. London: Smith and Elder, 1835), p. 235. A year after Sacy's essay appeared, an apothecary to Napolen's troops published a paper on hemp intoxication as well. See Eric T Carlson, Cannabis Indica in 19th-Century Psychiatry," *American Journal of Psychiatry*, Vol. 131, No. 9 (Sept. 1974): 1004.

forbidden by their religion."[66] After describing the drug as an "extract of flowers of hemp [which] 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 Assassin, i.e., hashashin or eater of hashish," Gautier proceeded to describe the dual effect of the drug, which he claimed both "raises you to heaven" and induced "a fit of madness."[67]

Three years later, Gautier published another essay, "Le Club des Hachichin," in which he described his first encounter with a group of artists of the same name 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 their oriental fantasies. In a ceremony designed to mimic the actions of the Old Man in the Mountain from the assassin's legend, Gautier mentioned a doctor dressed in Oriental garbs, 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.[68] Gautier did not mention the doctor by name, but claimed that he made several lengthy trips to the "Orient," where he encountered the drug and studied its affects. Evidence suggests that at least two doctors attended these meetings, one of which was a man named Louis Aubert-Roche, who travelled to Egypt in the 1830s and experimented with hashish there as a cure for the plague.[69] The other,

---

[66] Theophile Gautier, "Hashish;" in Maurice Stang (trans.), *Hashish, Wine, Opium, Theophile Gautier and Charles Baudelaire* (London: Calder & Boyars, 1972), p. 57.
[67] *Ibid*., 58, 61.
[68] Theophile Gautier, "Le Club des Hachichins," *Revie deux Mondes* (Paris: Au Bureau de la Revenue des Deux Mondes, 1846), p. 522. The reference to Japanese porcelain is yet another indication of how broadly monolithic Europeans perceived the east: Japanese, Chinese, Indian, and Arab were all the same thing – Orientals.
[69] 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).

Jacques Joseph Moreau, also travelled 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 the hemp plant.[70]

Specific references to the Hashish Club in Britain and the United States during the mid-nineteenth century were rare, but they did exist. As early as 1846, *The Quarterly Review* in London ran an advertisement that listed a location where interested parties could go to buy Gautier's "Le Clubs de Hachichins."[71] Four years later, a book titled *The Pillars of Hercules* included about 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."[72] He only picked one to describe, which he did not name, but it most certainly came from Gautier, for the passage claimed that "his 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."[73] Although this passage is written from the narrator's perspective of witnessing another person's hashish-induced intoxication, 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

[70] Hélène Petters and Gabriel Hahas (eds.), Gordon Barnet (trans.), Moreau, Jacques Joseph, *Hashish and Mental Illness* (New York: Raven Press, 1973), p. 11.
[71] *The Quarterly Review*, No. CLIV (London: John Murray, 1846), p. 25.
[72] David Urquhart, *Pillars of Hercules, or, A Narrative of Travels in Spain and Morocco in 1848* (London: B. Bentley, 1850), p. 88.
[73] *Ibid*., 89.

perfectly clearly within my breast the hashish I have consumed, in the form of an emerald which was emitting millions of little sparks."[74]

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 dialog on hemp intoxication by mid-century, for the book immediately made its way across the Atlantic and was published months later in New York by Harper & Brothers.[75] Much of what Urquhart had to say about hemp intoxication in general was designed for an audience eager to consume the images of Orientalism that this genre of writing provided, but another source published the same year reveals how complicated the discourse had become. In the *Medical Times*, an article titled "Indian Hemp in a French Café" provided a similar description of hemp intoxication as Urquhart, claiming that the effects varied from "strange hallucinations," "tranquil sleep," "hysterical laughter," and inducing a propensity towards violence. The author went on to describe an important trial with the drug: "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 highly varied, though, with the majority of the "adventurous tasters" feeling "repaid for their curiosity."[76]

---

[74] Stang, *Hashish, Wine, Opium*, 59.
[75] David Urquhart, *Pillars of Hercules, or, A Narrative of Travels in Spain and Morocco in 1848*, Vol. II (New York: Harper & Brothers, 1850), p. 88.
[76] 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), p. 137.

All of these sources indicate how the lines between medicine and literature were blurred when it came to hemp resin. Especially Moreau, whose book on hashish and his involvement with *Les Club des Hachichins* reflects how sources pertaining to medical knowledge of hemp were connected to literary perceptions of the plant as an intoxicant. Urquhart's book reveals the same tendency in Great Britain and the United States, but Bayard Taylor's article in one of the 1854 issues of *Putnam Magazine* is even more suggestive, for the magazine frequently published articles pertaining to science, literature, and the arts. Titled "The Vision of Hasheesh," the piece reveals 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 about 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." In India, "an infusion of the same plant gives to the drink called *bhang*," which, like the preparation used by the "Hashasheens," was "a more fierce and fatal stimulant than the [hemp] paste of sugar and spices" that he took while in Damascus.[77]

The experience he reported having with this "milder" preparation, the "habitual use" of which "attended with ultimate and permanent injury to the system," was a lurid one indeed:

> The spirit (demon, shall I not rather say?) of Hasheesh had entire possession of me. I was cast upon the flood of illusions, and drifted helplessly whithersoever they might choose to bear me. . . 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

[77] Bayard Taylor, "The Vision of Hasheesh," *Putnam's Monthly Magazine of American Literature, Science, and Art*, Vol. III, Issue 16 (April: 1854): 402.

> 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.[78]

Here Taylor constructed an oriental landscape, where the "sand was made of grains of gold," and the air "was radiant with excess of light" and "the most delicious perfumes." He had 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."[79] However, 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."[80]

These two opposing experiences, described by Taylor as both the "paradise" and "hell" of hashish, reflect the duality at work in Orientalism. For Taylor, whose *Ex Oriente Lux* approach to "playing eastern" attracted audiences searching for insider accounts of western travelers having "gone native," the orient represented a fresh, untapped environment where westerners could go to become inspired and replenished. He claimed to be attracted to hashish because of the "insatiable curiosity which leads me to prefer the acquisition of all lawful knowledge through channels of my own experience," yet he also feared the drug for the "demons" it brought out of the soul. He also demonstrated the sense of shame that could arise from indulging in eastern intoxicants when he described the two English companions who experimented with him as having expressed fear that the drug would "betray them into some absurdity in the presence of other travelers."[81] Much can be inferred from these statements, not the least important of which is the struggle between satisfying one's oriental curiosity and portraying a sense of

[78] *Ibid*., 404.
[79] *Ibid*., 404-405.
[80] *Ibid*., 406.
[81] *Ibid.*, 402-403.

respectability and dignity in front of other western travelers. The motif is one of adventurous experimenters flirting with danger by "playing oriental" for awhile, and then encountering visions of terror and fear, which induce them to abandon the "oriental" practice to realign their moral compass for western society.

Despite its obvious literary quality, however, Taylor's work became a rather popular source of scientific information pertaining to the use of hemp resin in general. Not even a year after appearing in *Putnam*, *The Anthenaeum* in London published a favorable review of Taylor's work. The article did not mention hemp with hashish, but references and reprints of Royle's work on fiber and Johnston's *The Chemistry of Common Life* within the same edition did.[82] Another year later, 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.[83] The volume also included two other articles that referenced hemp and "haschish," but neither specifically made the connection between the two words. *The American Provers' Union* did, though, and their publication on "Cannabis Indica" cited Taylor as an authority for understanding the medical properties of the drug.[84] *The Eclectic Magazine* made the connection as well, citing Taylor, Moreau, Pereia's London-based *Materia Medica*, and Johnston's *The Chemistry of Common Life*, among others, to conclude that "hemp (that is, hashish)" was an eastern, Oriental, and Asiatic "narcotic" of the most dangerous type.[85] This is only a slice of the types of publications that surfaced after Taylor's narrative on hashish use

---

[82] James Buckingham, et. all (eds.), *The Athenaeum Journal of Literature, Science, and the Fine Arts* (London: J. Francis, 1855), pp. 481, 428-29, 402.
[83] 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*, Volume 4(New York: William Rade, et all, 1856), pp. 262-271.
[84] The American Provers' Union, *Provings of Cannabis Indica* (Philadelphia: King & Baird, 1859), pp. 12-15.
[85] W. H. Bidwell (ed.), *The Eclectic Magazine of Foreign Literature, Science, and Art* (New York: Beekman Street, 1858), p. 306.

came out, but they reflect the transatlantic nature of knowledge pertaining to hemp in the Atlantic world at the time and demonstrate the importance of literary sources for medical knowledge of hemp intoxication.

By the 1850s, then, the line between hemp medicine and intoxication had become nearly indistinguishable, with knowledge of the former being influenced by knowledge of the latter. One source that reinforced this ambiguity even more was Fitzhugh Ludlow's *The Hasheesh Eater* (1857). Given the title of the narrative, Ludlow could not even attempt to mask the influence of De Quincy's work upon his, which he gladly confessed to from the very start. However, he also acknowledged how important Taylor's essay was in sparking his interest in writing about hashish. After encountering a substance labeled "Tilden's Extract of Cannabis indica" at the local apothecary shop in his hometown of Poughkeepsie, New York, Ludlow searched the medical textbooks to verify the shop owners claim that "that stuff is deadly poison!" He read through Johnston's *Chemistry of Common Life* and Pereia's *Materia Medica*, and learned that the extract he was so eager to consume in his friend's medicine cabinet 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."[86] Interestingly, Ludlow then proceeded to refer to the extract as hashish instead of Cannabis extract, thereby blurring the lines between medicine and intoxication. He even cited O'Shaughnessy and other medical works on Indian hemp, claiming that "A series of experiments [were] made with it by men of eminent attainment in the medical profession, principally at Calcutta."[87] However, neither

[86] Fitz Hugh Ludlow, *The Hasheesh Eater: Being Passages from the Life of a Pythagorean* (New York: Harper & Brothers, 1857), pp. 18-19.
[87] *Ibid*., xxii.

the Irish doctor, nor any of the other medical sources he references referred to the substance they were experimenting with as hashish.

Coupled with the general tone of the entire book, it seems that Ludlow decided to call it hashish as a way of "playing eastern," which we have seen was a rather fashionable literary genre at the time. Indeed, the entire book is filled with references towards the author's oriental imaginings. From the very start, he confessed that "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." Clearly attracted to the so-called Orient, he continued by pointing out 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; our highest soarings are still on an atmosphere which feels heavy with the reek and damp of ordinary life."[88] He explained this difference as follows:

> We are all of us taught to say, 'The children of the East live under a sunnier sky than their Western brethren: they are repositors of centuries of tradition; their semi-civilized imagination is unbounded by the fetters of logic and the schools. . . [However,] the difference can not [sic] be accounted for by climate, religion, or manners [alone]. . . .I unlocked the secret, not by a hypothesis, not by processes of reasoning, but by journeying through those self-same fields of weird experiences which are dinted by the sandals of the glorious old dreamers of the East. . . The secret lies in the use of hasheesh.[89]

Echoing Taylor's comments mentioned earlier, Ludlow effectively reduced eastern art and experiences to the expression of a hemp "high." This was condescending at the very least, yet he was attracted to the semi-civilized oriental landscape he constructed nonetheless.

[88] *Ibid*., vix.
[89] *Ibid*., x.

One of the reasons he seems to have continued taking "hasheesh" for such a long time after his initial experiments was due to the drug's ability to take him to this Oriental landscape without ever having to leave New York. "I stood in a remote chamber at the top of a colossal building," he wrote of one of his hashish-induced hallucinations, "Higher than the topmost pinnacle of Bel's Babylonish temple – higher than Ararat."[90] On another occasion, he wrote the following:

> Slowly I floated down to earth again. There 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.[91]

As Ludlow explained, such experiences made him "glow like a new-born soul," for they allowed him to "realize all our youthful dreams of travel." He portrayed this "Orient" as a monolithic unit of "strange and beauteous countries" with "glorious scenes" such as those on the "banks of primeval Asian rivers" and "the peaks of Himmaleh [sic]."[92] This theme of traveling to what he also described as "grand old Asia" through taking hashish is persistent throughout the narrative. At one point he mentioned his mind taking him "beyond Thibet [sic], as with clairvoyant eyes," so that he could "look straight through and over Hindoo Koosh, and beheld Cashmere [and] the fountains of the Punjab," which he claimed was an ancient place with "Old-world freshness of heart, [inhabited by] children of a primitive race whom prodigal nature had put beyond the necessity of labor." He also mentioned China, Turkey, Persia, and other places and images he associated with the Orient.[93]

---

[90] *Ibid*., 31.
[91] *Ibid*., 42-44.
[92] *Ibid*., 51-52.
[93] *Ibid*., 53-54.

As this description indicates, Ludlow appropriated more from De Quincey's narrative than just the intoxicating literary element. Indeed, notions of imperialism echo throughout both sources, as depicted through the drug-induced visions of travel across the "Asiatic world" in each of them.[94] This transatlantic phenomenon both reflected and perpetuated a discourse that intermingled intoxication and the Orient, and with Ludlow the lines between hemp as a medicine and hemp as an intoxicant became twisted and crossed. To be sure, these lines were blurred from the very start of the plant's introduction into Western medicine by O'Shaughnessy, but the inviolable boundary that Ludlow constructed between "the hemp plant" that "grows almost entirely to fibre" for Europeans but that "loses its fibrous texture [and] secretes . . . an opaque and [intoxicating] greenish resin" for "Orientals," clouded those lines even further.[95] In effect, becoming intoxicated by an Asian plant used in an Asian way – and through the intoxication being transported experientially to the "primitive" East, yet without becoming an Asian – reinforced his Occidentalism and essentialized hemp used for such purposes into an eastern trope. As we shall see, this trope became a transatlantic phenomenon that created a questionable discourse around the hemp plant, thereby paving the way for its eventual transformation into a plant associated primarily with danger and undesirability.

At Once a Curse and a Blessing

When Ludlow's book came out, waves of social and political reform were crashing upon the shores of both sides of the Atlantic. Industrialization was on the rise, voting rights were extending, women's rights and abolitionism were becoming more

[94] For a comparative treatment of De Quincey's narrative to that of Ludlow's see Susan Ziegar, "Pioneers of Inner Space: Drug Autobiography and Manifest Destiny," *PMLA*, Vol. 122, No. 5 (October, 2007): 1531-1547.
[95] Ludlow, *Hasheesh Eater*, xi.

popular, and people were experiencing with alternative forms of living. Although the association between hemp intoxication, medicine, and Oriental deviancy already existed before *The Hasheesh Eater*, the book was a powerful example of how, through literature and oriental adventurism, the medicine literally and figuratively transformed into an intoxicant in America. Perceptions of Indian hemp as an eastern trope were already present in the British Empire by then as well, but pharmacopeias on both sides of the Atlantic continued listing the medicine, and practitioners continued experimenting with it. These experiments often produced mixed results, and even though hemp fiber was also still used, neither the British nor the Americans were any closer to finding a more efficient and desirable way to supply their own. As a result, hemp as an intoxicant increasingly became the predominant association with the plant. The other two meanings never entirely dissipated, but this more sinister one started to overshadow the other two, which helped lay the foundation upon which the plant would transmogrify into a banned intoxicant during the twentieth century.

Soon after its publication, *Harper's Monthly* published a review of Ludlow's book that compared it to "the intensely interesting 'Confessions of an English Opium Eater,'" which they claimed was "unequal to De Quincy in literary culture" but "compares favorably with him in the passion for philosophical reflection, in the frankness of his personal revelations, and in preternatural brilliancy of fancy." The author seems to have been attracted to Ludlow's exoticism, but still felt the need to warn the audience not "to be tempted to verify the accuracy of the representations in either case by personal experience." As they continued:

> The use of such drugs of enchantment is one of the most fatal of all diabolic illusion. If any of our readers are ignorant of the deadly herb whose infernal power is here recorded, let them know that hasheesh is the juice of the Indian hemp, the southern branch of the same family which, in northern climes, grows almost totally to fibre, producing materials from mats to cordage. Under a tropical sun the plant loses it

> fibrous texture, and secretes profusely an opaque and greenish resin. This 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.[96]

Both Ludlow and De Quincy were consuming westernized medicinal versions of their respective plants, yet the descriptions here do not make the distinction. Instead, they reinforce the difference between east and west that Ludlow and others perpetuated, stigmatizing the Orient as a monolithic region of self gratifying Asiatics.

A much longer and more detailed review appeared in the same magazine nearly a year later, and it depicted how important literary descriptions were to the scientific understanding of hemp. "The substance known to us as hasheesh exudes from the pores of the hemp plant of India," wrote the reviewer. The article went on to name Persia and Egypt as well, echoing O'Shaughnessy by claiming that men obtained the resin by going "naked through the fields, receiving the precious gum upon their bodies." The article then proceeded to provide an overview of all the different preparations of the hemp plant used "in the East," which also included a detailed rendition of the assassin story.[97] Afterwards, Moreau, Taylor, and a French "savant" named M. Berthault were cited, and their experiences with the drug were juxtaposed with Ludlow's, indicating that the practice of self experimentation was considered a valid form of knowledge creation for hemp intoxication at the time. A review published in *The Knickerbocker* indicates the same: "Everybody knows what opium is," claimed the reviewer, "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 drug." The article summarized the book as follows: "How the narrator came to eat Hasheesh; what

[96] Anonymous, "Literary Notices," *Harper's New Monthly Magazine*, Vol. 15, No. 90 (Nov. 1857): 834-35.
[97] Anonymous, "Hasheesh and Hasheesh-eaters," *Harper's New Monthly Magazine*, Vol. 16, No. 95 (April 1858): 654.

were its effects; what joys and pains he felt' and in what manner he relinquished the use of this soul-exciting, soul-subduing drug, forms the subject-matter of the volume under notice." His passion for "patent-medicine[s]" and "new drug[s]" helped make this book, according to the reviewer, one "of the highest order of the great 'Opium-Eater's simulators."[98]

Another review in *Russell's Magazine* provided a detailed synopsis of Ludlow's work as well, referring to him as "a student of medicine" who tells the fascinating story of his "Hasheesh deliriums." By recounting the same story that Ludlow told of himself swallowing the extract of *Cannabis indica* for the first time at the apothecary shop in Poughkeepsi and labeling it "Hasheesh," the reviewer crossed the lines between hemp medicine and intoxication as well.[99] Ludlow's book also made its way across the Atlantic, and an 1858 edition of the *Saturday Review* indicates how quickly knowledge of it travelled. The review is rather critical of the "Transatlantic Pythagorean," who was "ready to adopt anything, from a creed to a medicine;" but the article perpetuated the same discursive blend of medicine, intoxication, literature, and Orientalism that invested the hemp plant with such thick meaning.[100] Then, four years later, an article titled "Narcotics" appeared in *The North American Review*. It included extensive commentary on Both De Quincy's and Ludlow's books, but also added a review of M.C. Cooke's *Seven Sisters of Sleep*. The article's main three concerns were tobacco, opium, and hemp consumption in England and the United States, which the author claimed was large and increasing.[101]

---

[98] Anonymous, "Literary Notices," *The Knickerbocker: Or, The New York Monthly Magazine*, Vol. 51 (Feb. 1858):197-98.
[99] Paul H. Payne, *Russell's Magazine*, Vol. II (Charleston: Steam Power Press of Walker, 1858), p. 397.
[100] Anonymous, "Hasheesh," *Saturday Review,* Vol. 5, No. 120 (Feb. 1858): 166-67.
[101] The article provides various statistics but no ability to verify them. There were apparently no statistics on the amount of hemp consumed (though the author claimed it was a lot), but the article lists forty-two thousand pounds for home consumption of opium

The reviewer provided various statistics that suggest the amount of hemp and opium imported and used in England and the United States was on the rise, but offered no citations to allow readers to corroborate the data. However, the narrative provided yet another example of the peculiar blend of meaning surrounding the hemp plant.

According to the author, the "Caucasian races" were increasingly making their way to "the doors of the Eastern nations," which made them begin "to crave and use the stronger narcotics . . . of Oriental habits." One of these was identified as hemp, which the "Asiatic nations" use to "stimulate the imagination to frenzy."[102] Like so many of the publications before this one, the author went on to describe 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."[103] Echoing Ludlow and Taylor, the article also asserted that the *Arabian Nights* were "the product of an Eastern mind under the influence of hemp."[104] Subsequent pages involved brief descriptions of the different uses and effects of opium and hemp on the Tartars, Indian fakirs, Ottomans, Persians, Arabs, Chinese, and "Asiatic" Turks. The author also went into detail about the nature of these narcotics, and for hemp repeatedly cited O'Shaughnessy (British), Moreau (French), and Johnston (American) as authorities, which demonstrates its transatlantic nature.[105] The lines between medicine and literature are clearly blurred in

---

in England for 1857, compared to seventy thousands pounds in the United States. Many other statistics are provided of the "big three" in general, one of which is that hemp for intoxication 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 hemp in this context were taking place. See Anonymous, "Narcotics," *The North American Review*, Vol. 95, No. 197 (Oct. 1862): 375.

[102] *Ibid*.

[103] *Ibid*., 380. The phrase to "run amok" is an interesting one that Isaac Campos demonstrates has been linked to hemp intoxication since at least the seventeenth century. See Isaac Campos, *Home Grown*, 26-28.

[104] *Ibid*., 382.

[105] *Ibid*., 404.

the text as well, and although the article described some of the benefits of having these "narcotics" as medicines, their use for indulgence ultimately always culminated in either "insanity, death, or abandonment."[106] Granted, as he claimed, "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 would eventually succumb to the drug's peculiar "mysteries" if they consumed it for long enough.[107]

This kind of Orientalism followed the plant into various types of medical publications on both sides of the Atlantic. Francis Nye's MD thesis mentioned earlier is an excellent example, but another candidate for the degree of Doctor of Medicine at Albany Medical College produced a work just like it over 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 Orientalism, literature, and personal experience or experimentation that combined to create medical knowledge of hemp. The thesis contains a familiar description of the botany, distinguishes between eastern and western uses, and faithfully regurgitates the story of the assassins.[108] Humphrey's justified the value of his "research" as follows: "It being thus extensively used, it's almost romantic history, its curious and terrible influence upon the mind and body when taken

---

[106] *Ibid*., 407.
[107] *Ibid*., 386, 408. The issue of how drugs affect individuals who take them have 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. See, for example, Howard Becker, "History, Culture, and Subjective Experience: An Exploration of the Social Bases of Drug-Induced Experiences," *Journal of Health and Social Behavior*, Vol. 8, No. 3 (Sep. 1967): 163-176. See also Richard DeGrandpre, *The Cult of Pharmacology: How American Became the World's Most Troubled Drug Culture* (Durham: Duke University Press, 2006); and Campos, *Home Grown*, chapter 1.
[108] James L Humphrey, *Hashish or Indian Hemp* (Dissertation for Albany Medical College, 1866).

excessively, its therapeutic qualities, invest it with interest of no ordinary character."[109] His sources were transatlantic in nature as well, for he cited Moreau, an English account that attributes the Indian Mutiny of 1857 to hemp 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.[110]

Another source published in Boston the following year contained similar descriptions. Titled *The Guide to Clairvoyance*, it indicates just how multifaceted the discourse on hemp resin 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." In fact, the only reason he claimed to spend so much room on describing what he called "Oriental hemp" and its use was because "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."[111]

---

[109] *Ibid*., 3.
[110] *Ibid*., 14.
[111] Paschal Beverly Randolph, *The Guide to Clairvoyance, and Clairvoyant's Guide* (Boston: Rockwell & Rollins, 1867), p. 32.

The author was an eccentric African American man named Paschal Beverly Randolph, who had gained a rather popular reputation by the 1860s in occultist circles on both sides of the Atlantic.[112] Interestingly, just seven years before he published the skeptical account of hemp quoted above, he attached an appendix to another publication that included an advertisement for "Oriental hemp" that reads as follows:

> 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.[113]

Taken together, these two sources indicate how the boundaries of science and literature were still rather unclear, especially as they pertained to the use and understanding of hemp resin. But they also reveal the unique blend of meaning associated with these uses for the plant, which seem to have been increasing. Randolph seems to have tapped into hemp's medico-intoxicating properties through a series of travels across the Atlantic in the 1850s, and the relationship he described with preparations interchangeably referred to in the text as "fantasia," 'hashish," "Extasia, "Oriental Hemp," and – among

---

[112] 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), pp. 73, 111.

[113] Paschal Beverly Randolph, *The Unveiling: Or What I Think of Spiritualism* (Newburyport: William H. Huse & Co., 1860), pp. 66-67.

others – "*dowam meskh*," is perhaps the best example we have of the duality of Orientalism mentioned earlier.[114]

According to his own account, "I first learned of [hashish] in France, but in Egypt I studied it perfectly."[115] In between these destinations he travelled 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 America's most enthusiastic importers of hemp intoxicants, often prescribing the "medicine" to cure "nervous exhaustion" and increase "passional excess, onanism, etc." However, he frequently altered his stance on the drug, often times reflecting a sense of anxiety about its affects.[116] As he explained: "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.[117]

Randolph's involvement in occult practices no doubt wove new meaning into the hemp plant, at least for anyone who would have encountered one of his descriptions or seen one of the self proclaimed "sex magicians" demonstrations. However, his descriptions of the plant also provide evidence of the influence that oriental associations made by Ludlow and others had on hemp's place in the medicinal world, for his writings also reveals the unique blend of science and literature that characterized the discourse

---

[114] *Ibid*., 70-72.
[115] Randolph, *Guide to Clairvoyance*, 32.
[116] For a detailed account of Randolph's changing views of Indian hemp, see Deveney, *Paschal Beverly Randolph*, 69-72.
[117] Randolph, *Guide to Clairvoyance*, 35-36.

on hemp medicine. A more subtle example of this blend came in an article published in *Popular Science* by Mary C. Hungerford, which explained her trials with "Indian hemp (hasheesh), in the hope of holding my intimate enemy [of headaches] in check."[118] Although her description is not tinged with Orientalism like the others, the love/hate, good/evil dichotomy she describes indicates an influence on at least some level, as does her use of the word "hasheesh" to describe the medicine. Moreover, the fear, dread, and hallucinations she reported having under the drug's influence, as well as the lack of consistency with the preparations all serve as yet another example of how suspect the plant's medicinal value had become.

Indeed, by the time *Popular Science* published her article, the dichotomy had become rather popular in the discourse on hemp medico-intoxication. One edition of *The Dial*, for example, published an article on opium and "hemp, or hasheesh" in 1860 that pointed out that, although both were detrimental to the health of the user, the latter, after being endowed with "supernatural attributes," experiences "horrible convulsions of fear."[119] The author went on to cite Taylor and Ludlow extensively, and used the familiar word "fantasia" in the same manner as Randolph. Fourteen years later, Alfred Stillé published an extensive description of the plant in his book, *Therapeutics and Materia Medica*. Under the heading "hemp," he provided the history of its use for medicine and intoxication, citing O'Shaughnessy, Moreau, Aubert, Christison, H.C. Wood, along with many others. He also included a description of the assassin story, and used the words "haschisch" and "hemp" interchangeably throughout the text, concluding that both "CANNABIS INDICA" and "CANNABIS AMERICANA," depending on the "natural

[118] Mary C. Hungerford, "An Overdose of Hasheesh," *Popular Science*, Vol. 24 (February, 1884): 509.
[119] Anonymous, "Psychology of Opium and Hasheesh," *The Dial*, Vol. 1, No. 9 (Sept. 1860): 557, 609.

disposition of the person, and his existing state of mind, the quantity of the drug, and the combination in which it is taken," either "enlivens or saddens, excites or depresses, fills with tenderness, or urges to brutality, imparts vigor and activity, or nauseates and weakens."[120] These examples, along with various others published in the last quarter of the nineteenth century, indicate that – although useful as a fiber and occasionally as a medicine – hemp had increasingly become more associated with intoxication. It was at once a curse and a blessing, but its cursed qualities seemed to be overpowering the others in both the American and British Anglo imagination.

Conclusion

As this chapter demonstrates, the meanings of hemp as a medicine and intoxicant were multilayered and intertwined. British imperialism in India brought awareness of the plant's medico-intoxicant properties to the EIC employees working out in the empire, and knowledge of its use for such purposes circulated around the Atlantic, where doctors, literary figures, and occult leaders experimented with its use. At the same time, intoxication for recreational purposes increasingly came under fire by temperance advocates and social reformers, and hemp's association with the Orient made it a prime target of enquiry. The duality of Orientalism ensured that curious writers and travelers experimented with the plants "deviant" properties, but the discourse still constructed the east as a category of other*ness* that helped define Western identity. Some were entirely repulsed by these uses, while others attempted to appropriate them for western consumption. Although these appropriations were successful and the medicine continued to be included in pharmacopeias across the Atlantic throughout the second half of the nineteenth century, negative associations continued to abound. The transatlantic

[120] Alfred Stillé, *Therapeutics and Materia Medica: A Systematic Treatise on the Action and Uses of Medical Agents, Including their Descriptions and History*, Vol. I, 4th Edition (Philadelphia: Henry C. Lea, 1874), p. 959.

network of knowledge exchange between Britain, France, and the United States helped circulate these associations, and perceptions that consuming Indian hemp induced insanity were wide spread by the 1876. The Government of India decided to pass new legislation designed to enforce stronger regulations on the traffic of hemp drugs in India, while the use of hemp medicine in the Atlantic continued. The large-scale attack on intoxicating substances that followed opened another chapter in the story of hemp's transformation from an important strategic commodity to a banned intoxicant, and understanding the plant's history before then helps us better understand how it became a prime target.

Chapter 7

Conclusion:

From Rope to Dope – The Hemp Truth-Seeking Project and its Aftermath

By the turn of the century, a complicated discourse on the hemp plant existed in the Anglo-Atlantic world. Advancements in pharmacology helped isolate a number of active principles that Europeans and Americans used for medicine, but THC was not one of them. Although the British civilizing mission in India certainly transformed the degenerative Oriental substances into promising medicines for western consumption, lack of consistency in the effects and associations with oriental vice led many to question the plant's usefulness for such purposes. Hemp fiber was still used and held in high regard, but several replacements had been found that were cheaper to import or less cumbersome to process. These are critical aspects of hemp's history in the Atlantic world, for they demonstrate how a negotiation process or struggle for meaning was taking place in regards to the plant as a whole. As this struggle played out, hemp for intoxication began to overshadow the other two uses, slowly transforming the plant into something Westerners considered menacing and dangerous. This concluding chapter will briefly survey some of the perceptions of hemp intoxication that circulated across the Atlantic during the late nineteenth and early twentieth centuries, highlighting the plant's already negative reputation by the time the word marijuana/marihuana began surfacing alongside the word hemp in published works in the English language. Over time, Oriental associations converged with perceptions of degenerative Mexicans consuming the invasive so-called "locoweed" to create a new public menace and transform hemp into a banned intoxicant.

As we have already seen, there were a number of sources by the 1870s that mentioned or described hemp used for such "pernicious" purposes. The discourse was

transatlantic, and it surfaced in publications ranging from medical journals to exotic literary depictions of the Orient. By 1876, negative associations led the British to investigate the nature of hemp use and cultivation in India, and their findings indicated that an entirely new plan of action needed to be implemented if they wanted to control distribution and minimize the deleterious effects associated with its consumption.[1] Over the course of the next two decades, criticism from British reformers over imperial policies towards drug trafficking in particular and intoxication in general increased. In April 1891, one of these moral reformers addressed this issue in the House of Commons, calling for the Indian government to end its licensing of opium cultivation for nonmedical purposes.[2] Two months later, a member of Parliament stood before the House of Commons to speak out against the sale of ganja, which he claimed was rumored to be "far more harmful than opium."[3] He was fully aware, of course, that ganja was a substance that came from hemp, which Indians used for entirely different purposes than Europeans.

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 underway "regarding the extent and consequences of the consumption of various preparations of hemp (cannabis Indica)."[4]

---

[1] Hem Chunder Kerr, "Report of the Cultivation of, and Trade in, Ganja in Bengal;" in *Papers Relating to the Consumption of Ganja and Other Drugs in India* (Calcutta, 1877).
[2] Virginia Berridge, *Opium and the People: Opiate Use and Drug Control Policy in Nineteenth and Early Twentieth Century England*, Revised Edition (New York: 1Free Association Books, 1999), p. 185. See also John F. Richards, "Opium and the British Indian Empire: The Royal Commission of 1895," *Modern Asian Studies*, Vol. 36, No. 2 (May 2002): 386.
[3] "Enclosure No. 1: House of Commons Question," 16 July 1891; reprinted in William Caine, *East India Consumption of Ganja* (London: Eyre & Spottiswoode, 1893), p. 3.
[4] Anonymous, "The Hemp Drugs Commission," *The British Medical Journal*, Vol. 1, No. 1741 (May 12, 1894): 1040.

In fact, the one on "cannabis Indica" would be published that same year as the Indian Hemp Drugs Commission (IHDC), and the other surfaced a year later as the Royal Commission on Opium. These strikingly similar government sanctioned commissions are excellent examples of what socio-anthropologists Ronen Shamir and Daphna Hacker referred to as "investigative modalities" of the British civilizing mission in India.[5] Granted, support for the commissions reflected growing concerns among temperance campaigners and policy makers over intoxication within the empire, but the reports themselves represent "dramatic performances of forceful authority . . . through 'officializing' procedures that established and extended [Britain's] capacity to govern [India]."[6]

Historian James H. Mills has done an excellent job investigating the politics behind the origins of these two connected commissions, so there is no reason to revisit them here. He also pointed out how neither of them produced conclusions that pleased the temperance campaigners who asked for the investigations in the first place, but that the conclusions need to be taken with a "healthy dose" of skepticism because the Government of India had a vested financial interest in promoting regulation instead of prohibition.[7] In regards to the IHDC in particular, he also pointed out how it was established as a diversionary tactic by the Government of India to take heat off of the

---

[5] Ronen Shamir and Daphna Hacker, "Colonialism's Civilizing Mission: The Case of the Indian Hemp Drugs Commission," *Law & Social Inquiry*, Vol. 26, No. 2 (Spring, 2001): 436.
[6] *Ibid.*
[7] James H. Mills*, Cannabis Britannica: Empire, Trade, and Prohibition, 1800-1928* (Oxford: Oxford University Press, 2003), pp. 99-133. The historiography of the IHDC is rather shallow. Besides Mills and a handful of others, the tendency has been to accept the report's conclusion at face value. Especially since the rise of the legalization movement in the 1960s, those writing about this report have cited its conclusion as evidence of a blatant cover-up by governments. See, for example, John Kaplan, *Marijuana: Report of the Indian Hemp Drugs Commission, 1893-1894* (Silver Springs: Thomas Jefferson Publishing, 1969).

opium trade, which was a far more lucrative business for the British than hemp. Indeed, his work is an immensely important contribution to our understanding of the IHDC, but it is largely concerned with demonstrating how politics functioned to create "exaggerated, ill-founded, and downright mistaken perceptions" of hemp intoxicants.[8] As stated in chapter 6, this study is less concerned with validating or discrediting interpretations of hemp used for such purposes than it is with demonstrating how the interpretations were formed. In other words, using a Foucaultian approach to the emergence of hemp intoxication as a problem allows us to see the IHDC as yet another example of the British colonizing mentality towards the Indians and their "deviant" uses for the plant. Even though the report concluded that hemp intoxication was not "deleterious" enough to warrant prohibition, it nevertheless perpetuated a discourse that normalized certain uses at the expense of others, which in turn validated the British civilizing mission in India.

As Shamir and Hacker pointed out, 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."[9] Hemp is perhaps the best plant to study in relation to this form of imperialism because the colonizers used it for strikingly different purposes than their colonized subjects. When the British first encountered Indians cultivating the plant for intoxication, for example, they contrasted their seemingly more productive uses with the deviant "Asiatic" ones. In a way, the images they constructed of the plant reinforced their sense of cultural superiority, which in turn provided justification for their presence in the subcontinent. Initially they tried to teach Indians how to use the plant "properly," but this proved more difficult than the British

[8] Mills, *Cannabis Britannica*, 218. For an excellent review of Mills' book, see Beatriz Acevedo, "Cannabis Britannica: A History of the Present," *Ephemera*, Vol. 6, No. 2 (2006): 208.
[9] Shamir and Hacker, "Colonialism's Civilizing Mission," 436.

anticipated. The next plan was to transform it into a useful medicine, but Indians still consumed the intoxicants, so the British attempted to control and regulate them. East India Company records indicate that, by the 1840s, British bureaucrats in India were expressing concern over the use of hemp intoxicants and the manner by which they were being distributed (see chapter 5). Licenses granting permission to producers and distributers were established as early as 1793, but it was not until around mid-century that the trade became seriously associated with criminality.[10] 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 hemp caused insanity.[11]

By the time the IHDC was established, then, the issue of whether or not hemp drugs were a serious problem had not been settled. Swirling rumors of their pernicious effects made the Government of India vulnerable to attacks by the moral crusaders against intoxication, so they made answering this question a priority for the commission. Question 45f, for example, asked whether hemp drugs "deaden the intellect or produce insanity?"[12] 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 in their responses. Since much of the evidence suggesting a link between hemp and insanity emanated from the asylum statistics, "[e]very 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

[10] Mills, *Cannabis Britannica*, 67.
[11] James H Mills, *Madness, Cannabis, and Colonialism: the "Native" Only Lunatic Asylums of British India, 1857-1900* (New York: St. Martin's Press, 2000).
[12] Indian Hemp Drugs Commission, *Report on the Indian Hemp Drug Commission 1893-1894* (Simla: Government Central Printing Office, 1894), Vol. 4, p. iii. Reprinted by New York: Johnson Reprint Corporation, 1971. Hereafter cited as *IHDC*.

every case of insanity attributed to the use of hemp drugs for a given period."[13] 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 witness responses ranged from denial of the insanity thesis to wholehearted belief that hemp 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.[14]

The majority opinion of the commission included four British and one Indian member, and they strung the evidence together in such a way that suggested moderate use of hemp drugs had no ill effect on the consumers, while excessive use could lead to insanity. Two of the three Indian representatives on the committee vehemently disagreed with this conclusion, using the same body of evidence to argue that "hemp drugs are very deleterious in their effects."[15] Both wrote lengthy dissenting opinions to support their claims, which included massive statistical data of the evidence with the witness accounts and various charts revealing a strong link between certain hemp drugs and moral decay. Although these conclusions were attached to the final document, the majority opinion argued that much of the evidence was based on speculation and hearsay.[16] However, the fact that this speculation existed in such large quantities and was even shared among

---

[13] *Ibid*., Vol. 1, p. 7.
[14] Shamir and Hacker, "Colonialism's Civilizing Mission," 443.
[15] Raja Soshi Sikhareswar, "Note of Dissent by Raja Soshi Sikhareswar Roy from Opinions Expressed in the Report;" in *IHDC*, Vol. 1, p. 369. In particular, both dissenters pointed out the pernicious effects of ganja, which was used predominately by the lower classes. Interestingly, only three of the witnesses actually reported using ganja, and none of them came from the lower class. See Shamir and Hacker, "Colonialism's Civilizing Mission," 445.
[16] *IHDC*, Vol. 1, pp. 363-477. Shamir and Hacker eloquently point out in their article 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.

the majority of medical experts who were interviewed is far more important for our purposes than the legitimacy of the claims, for it reveals how, as Shamir and Hecker put it, "popular beliefs, through the medium of bureaucratic imperatives, were transformed into statistical-scientific data, which in turn fed back into the convictions of both law persons and medical experts."[17] In other words, despite the self-interested attempt by the IHDC majority to downplay the negative perceptions associated with consuming hemp intoxicants, scientific knowledge about the plant in particular and India in general was constructed through an imperialist lens, which colored the way the British and their aspiring colonial elites perceived and understood Indian society and the things they used.[18]

The majority opinion of the IHDC seems grounded in a firm belief in the degenerate nature of the so-called Indian "nation." 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.[19]

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, which is why the British needed to step in and pass laws that regulated consumption and controlled distribution. Prohibiting them from using the substance entirely was a lost

---

[17] Shamir and Hacker, "Colonialism's Civilizing Mission," 445.
[18] For an excellent essay 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*, Vol. 45, No. 1 (Summer 2004): 147-169.
[19] *IHDC*, Vol. 1, p. 202.

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." After all, "India abounds with plants, growing wild, from which drugs can be procured which are more deleterious in their effects than ganja."[20] The IHDC seems to imply that Indians were naturally inclined to consume intoxicants, so there was nothing that could be done except to contain the behavior. For the majority opinion, then, Indians and their culture were to blame for this, not the hemp plant. Again, here we see the imperial lens through which the British saw India: an overabundant and spontaneous environment that transformed productive commodities into intoxicants, which could be dangerous to the population if left unchecked.

Although the IHDC purported to be a truth-seeking mission about hemp drugs, the British position seems to have used the evidence selectively to achieve the results needed to promote regulation instead of prohibition. For one, they accepted the answers of witnesses who emphasized moderate use at face value, but called the witnesses who argued for the insanity thesis in for a follow-up interview to scrutinize their position. 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.'"[21] This allowed the British to play up the use of hemp drugs in Indian religious ceremonies and social customs. In the section of the questionnaire titled "Consumption or Use," for example, question thirty-two asked the witnesses to "[m]ention any customs, social or religious, in regard to the consumption of any of these drugs. Give an account of every such custom." Question thirty-three asked whether there was "any custom of worshipping the hemp plant on certain occasions by certain sects of the people," and

[20] *Ibid*., 268.
[21] Shamir and Hacker, "Colonialism's Civilizing Mission," 447.

wanted the witnesses to emphasize how "the consumption of each of these drugs [is] generally regarded?"[22]

After describing various answers given by some of the witnesses, the majority opinion came to the following conclusion:

> [T]he 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. . . The Commission have [sic] little doubt that 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.[23]

The detailed descriptions that the commission included of hemp used in festivals such as Diwali, Chait Sankranti, Pous Sandranti, Sripanchami, Sivachaturdasi, Ramnavami, and the religious usage of ganja by worshipers of the god Siva were all designed to reinforce this view, but they also served to establish a sense of "otherness" between the colonized and the colonizers. One of the witnesses who wrote a lengthy note that figured prominently as evidence for the commission, for example, was a British collector of land revenue and opium customs in Bombay who pointed out how "[t]o the Hindu the hemp plant is holy." He went on to describe in detail many of the ceremonial rituals and superstitious customs in which Indians used hemp, such as "to see in a dream the leaves, plant, or water of bhang is lucky," or that "taken in the early morning such bhang cleanses the user from sin, frees him from the punishment of sins, and entitles him to reap the fruits of a thousand horse-sacrifices."[24] He also vividly depicted various rituals in

---

[22] *IHDC*, Vol. 4, p. 11.
[23] *Ibid*., 166.
[24] "Note by Mr. J. M. Campbell, Collector of Land Revenue and Customs and Opium, Bombay, on the Religion of Hemp;" in *IHDC*, Vol. 3, p. 250.

which 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 the consumption of hemp drugs 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 a herb as hemp would cause widespread suffering and annoyance and to the large bands of worshipped ascetics deep-seated anger."[25]

In sum, this position provided the IHDC with a justification for promoting regulation instead of prohibition, and it demonstrated how the British Empire was an enlightened one that respected the cultural customs of the Indian people they governed. In their minds, Indians came from a lush environment that sporadically produced all kinds of intoxicants, so consuming them was part of their identity. There was no way to end such practices, but the British could minimize their deleterious effects and make money for the empire in the process. Of course the Indian minority members vehemently disagreed, arguing that the majority position relied primarily "upon the evidence of European gentlemen" to constructed a false image of an Indian tradition that grossly exaggerated the use of drugs in religious and social customs.[26] Shamir and Hacker pointed out that both the minority reports included evidence that went far beyond witness responses to "derid[e] ganja as a vice and ganja smokers as a menace to society," but

[25] *Ibid*., 251-252.
[26] "Note of Dissent by Lala Nihal Chand;" in *IHDC*, Vol. 1, p. 403.

that their conclusions need to be taken with a heavy dose of skepticism as well.[27] After all, both of the minority members were part of the aspiring colonial elite who considered themselves members of the enlightened class of Indians who knew the true nature of Indian culture. They too had been influenced by the British colonial civilizing mission in India, but for them the plant was to blame for the problem of intoxication, not Indian culture. As such, it needed to be eradicated in order 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 accounts given by those who actually consumed the "menacing" substance.[28]

Nevertheless, despite the bias nature of the concluding positions, the report is still a rich source that reveals the struggle for meaning that was taking place within the British Empire in regards to the hemp plant. The Indian Hemp Drugs Commission failed to gain much interest once it came out, but like the Royal Commission on Opium, it contributed to what Virginia Berridge referred to as "a decade of stagnations for the movement" to ban the British drug trade in the east, not to be revived again until in the early 1900s.[29] However, the negative effects associated with hemp drug use in the so-called Orient that many of the witnesses testified against continued to circulate. Some of the publications pointed out how general opinion did not line up with the report's

---

[27] Shamir and Hacker, "Colonialism's Civilizing Mission," 453. For discussion of the minority members' attempt to "assert their own authoritative elite position," see *Ibid.*, 454-459.

[28] In the randomly generated sample that Shamir and Hacker generated for analyzing the report, only 3 actually admitted to ever consuming ganja, and all three were Brahmins. One of them, described as a "native doctor," reported to "have 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.

[29] Berridge, *Opium and the People*, 188.

conclusions, such as one article in the *British Medical Journal* that pointed out how "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."[30] The same year, the *Lancet* reported the "result of the inquiry [into the effects of hemp drugs is that] it appears that there are no such marked ill-effects," 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."[31]

Across the Atlantic, the *American Journal of Insanity* published a similar article the following year, in which the author reported various links between "hashish and insanity," but also ended by suggesting that the "relation between the drug and insanity 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 that it demonstrated that "Indian hemp drugs are regarded as causing insanity more rarely than has popularly been supposed."[33] All of these articles were part of the transatlantic network of knowledge exchange

---

[30] "The Indian Hemp Drugs Commission," *British Medical Journal*, Vol. 1, No. 1791 (April 27, 1895): 938.
[31] Quoted in Mills, *Cannabis Britannica*, 144.
[32] G. Alder Blumers, Henry M. Hurd, and Richard Dewey (eds.), *The American Journal of Insanity*, Vol. 53, (Chicago: Rand, McNally & Co., 1896), p. 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. XXI, (Detroit: William M. Warren, 1897), p. 460.

pertaining to hemp drugs discussed in chapters 5 and 6 of this work, and they demonstrate that – despite the conclusions derived at by the IHDC – popular belief continued to associate hemp intoxication with insanity. They also demonstrate that the knowledge created by British imperialism in India continued to reverberate across the Atlantic to influence the way Americans understood the hemp plant.[34]

The discourse connecting hemp intoxication to insanity and violence continued to surface on both sides of the Atlantic over the course of the next two decades.[35] Attempts to isolate the active pharmacological substance of the hemp plant also continued, but to no avail, which often times led people to question the efficacy of the drug even more.[36] Although some physicians continued to tout the benefits of consuming hemp for medicinal purposes, most joined in what some scholars have referred to as the "cannabinomania" that circulated more frequently across the Atlantic at the turn of the century; especially as more and more occult groups began using hemp intoxicants for nonmedical purposes.[37] Around the same time, the discourse became even more complicated when a new word surfaced to describe hemp intoxication. At first, knowledge that the substance known as "marihuana" derived from the hemp plant seems to have been minimal at best. In fact, stories published in newspapers across America at the turn of the century indicate that many people were very confused by the drug. Most agreed, however, that its origins lay in Mexico, and Isaac Campos' excellent book on the

---

[34] 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), pp. 130-145.

[35] See in Isaac Campos, *Home Grown: Marijuana and the Origins of Mexico's War on Drugs* (Chapel Hill: The University of North Carolina Press, 2012), pp. 18-22; Mills, *Cannabis Britannica*, 140-151.

[36] Mills, *Cannabis Britannica*, 146-149.

[37] 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*, Vol. 80, No. 1 (Spring 2006): 102.

subject reveals just how much Americans associated the new "menacing drug" with their neighbors south of the border, where marijuana had a long and troubled history well before rumors of its deleterious effects traveled north.[38]

However, there are a few sources from this period that demonstrate how at least some in America were aware that the drug came from the hemp plant. The *American Journal of Pharmacy and Science*, for example, 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."[39] Even earlier, 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.'"[40] There is no further description included, but it is clear that the author took "marihuana" to be a substance that derived from the hemp plant.

A little later, though, a more detailed description appeared in an essay titled "The Hashish Plant in Arizona and Mexico," in which the author narrated his "cause to become familiar with a plant known as 'marijuana.'" The story is an excellent example of how Orientalist perceptions of hemp intoxication converged with negative associations of Mexicans to exacerbate hemp's already ailing reputation, and as such deserves a bit more attention here. The author, Herbert Brown, worked for a prison in the southwest region, where he claimed to have firsthand knowledge of this "exceedingly dangerous"

---

[38] Campos, *Home Grown*, 203-215. See the earlier chapters of the book for the most definitive source available on hemp use for intoxication throughout Mexican history.
[39] John M Maisch (ed.), *The American Journal of Pharmacy*, Vol. LVIII (Philadelphia: Royal Printing Co., 1886), pp. 156, 21.
[40] 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. X (Boston: University Press, John Wilson and Son, 1883), p. 155.

drug causing users to "become bloodthirsty, trebly daring, and dangerous to an uncontrollable degree." Unaware of what plant could produce a substance with such "hypnotic power for evil," he sought help from his botanist friend, who to his astonishment "identified the plant as a species of hemp, Cannabis indica."[41] 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, [marijuana] is generalized under that of *Cannabis sativa*," which had been used in "India and China, from times most remote." He then proceeded to regurgitated 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."[42]

At some point, knowledge of this substance made its way across the Atlantic, where sources published in London mentioned it was a preparation of hemp as early as 1896.[43] Like in the United States, some seem to have been aware that "marihuana" derived from hemp, whereas others missed the connection.[44] However, the word did not

---

[41] Herbert Brown, "The Hashish Plant in Arizona and Mexico," *The Plant World: An Illustrated Monthly Magazine of General Botany*, Vol. 10, No. 1 (January, 1907): 180-181.
[42] *Ibid*., 181-182.
[43] Peter Squire, *Companion to the Latest Edition of the British Pharmacopeia*, 17th Edition (London: J. & A. Churchill, 1899), p. 180.
[44] The Society of Arts*, Journal of the Society of Arts*, Vol. XLIV (London: George Bell and Sons, 1896), pp. 409-414, 417, 425, 684, and 801. This same article was published in

figure prominently in the growing British discourse over the negative effects of hemp drugs in Great Britain. In fact, even after the Progressive Era ushered in another wave of drug regulations across the Atlantic, the various international commissions that mentioned or investigated hemp drugs and the need to prohibit them did not use the word marijuana.[45] Americans did though, and evidence suggests that those in charge of making policy understood that it derived from hemp. The first volume of *The Medical Bullitin* published by the United States government, for example, mentioned that "Marijuana" was a "Mexican weed probably belonging to the *Cannabis indica* or Indian hemp group."[46] Moreover, the Canal Zone Report (1925), the Cummings Report (1929), as well as Harry Anslinger and the others involved in the hearings that led to the Marijuana Tax Act of 1937, all demonstrated an understanding that the hemp plant produced marijuana.[47]

This suggests that, as Campos points out in *Home Grown*, the United States was not "merely grafting older ideas [of hemp intoxication] onto emerging marijuana discourse," but rather developing new ones that combined the negative "marijuana lore" emanating from Mexico with racist assumptions Americans constructed of the Mexican migrant workers who consumed the drug.[48] However, the evidence above demonstrates that we cannot dismiss the Orientalist connection entirely, for the transatlantic nature of knowledge exchange circulating across the Anglo-Atlantic world continued into the twentieth century, and Harry Anslinger referred to the discourse that British imperialism

---

America that year as well. See Anonymous, "The Production of Pulque in Mexico," *Scientific America*, Vol. LXXV, No. 20.
(Nov., 1896): 359.

[45] For a discussion over the international nature of the drug reform movement during the first quarter of the twentieth century, see Mills, *Cannabis Britannica*, chapter 7.

[46] The United States Veterans' Bureau, *The Medical Bulletin*, Vol. 1 (U.S. Government Printing Office, 1926), p. 26.

[47] See Bonnie and Whitebread, *The Marijuana Conviction*, chapter 8.

[48] Campos, *Home Grown*, 216, 223.

produced about hemp in his diatribes against the plant's resin. Moreover, a plethora of sources in both the United States and Great Britain began describing various preparations of hemp intoxicants as the "dope" that was used by outsiders or "others" in their respective societies, which exacerbated the connection between hemp, crime, and so-called marginalized people.[49] In this way, it seems that Mexico became for the US what India was for the UK, a touch stone for constructing one's identity in opposition to a perceived "other" that used a productive plant for degenerative purposes. In other words, in this age of transatlantic global imperialism, British perceptions of the Orient migrated across the Atlantic and were projected onto Mexicans by the United States.

In America, then, new perceptions of Mexicans consuming marijuana converged with Orientalist associations to draw attention to the plants' dangerous qualities. Although the hemp industry continued to exist during this process, it had been on the decline since the end of the Civil War, and the 1937 legislation made an already complicated and cumbersome fiber industry even more difficult for hemp farmers.[50] Many continued touting its benefits, and a variety of technological innovations promised to turn the plant into a "Billion Dollar Crop," but the discourse on the plant's intoxicating properties proved too powerful to overcome.[51] Plus, reports from all over the United

[49] For sources that reference hemp drugs as "dope," see Bonnie and Whitebread, *The Marijuana Conviction*; Mills, *Cannabis Britannica*, chapter 8; See also James H Mills, *Cannabis Nation: Control and Consumption in Britain, 1928-2008* (Oxford: Oxford University Press, 2013). See also David F. Musto, *The American Disease: Origins of Narcotic Control*, 3rd Edition (New York: Oxford University Press, 1999).

[50] For an account of the hemp industries decline after the Civil War, see James F. Hopkins, *A History of the Hemp Industry in Kentucky* (Lexington: The University Press of Kentucky, 1951), chapter 6.

[51] "New Billion-Dollar Crop," *Popular Mechanics*, February 1938, p. 238 ff. Available online at: http://www.cifas.us/sites/g/files/g536796/f/BillionDollarCrop.pdf. Accessed 7 March 2014. Although many hemp activists use this article today to promote a conspiracy theory version of hemp's history, it is important to point out that this article states that "Another obstacle is that the blossom of the female hemp plant contains marijuana, a narcotic, and it is impossible to grow hemp without producing the blossom."

States started to surface that pointed out how fast the plant grew and how difficult it was to eliminate.[52] As a result, by mid-century, the entire hemp plant had become illegal to cultivate, transforming it from an important strategic commodity to a banned intoxicant. And the situation in the British Empire was little different. Although knowledge of the deleterious effects of hemp drugs travelled from British India to London, consumption of them for intoxication remained primarily associated with India, where the lush environment supposedly made drug use a part of Indian identity. Negative associations between use and degeneracy abound, but the British pursued a policy of tolerance towards consumption. That is, until a variety of different migrant workers from the colonies began bringing hemp drugs with them into the UK, which brought more attention to the plant's problems and eventually led to prohibition there as well.[53] By mid-century, hemp production in Great Britain for fiber virtually disappeared, and the world trade in hemp fiber began its drastic decline.[54]

It is beyond the scope of this project to go into detail on hemp's history in the twentieth century Atlantic world, and it is only mentioned briefly here to highlight the significance of the Orientalist discourse on the plant throughout the eighteenth and nineteenth centuries in contributing to its transformation from a strategic commodity to a

---

The article goes on to say that the "drug . . . can be found on vacant lots and along railroad tracks in every state." Although the author attempted to downplay the connection between the drug and hemp, it is clear from the article that popular understanding associated hemp with marijuana, and that this was considered a problem for the hemp industry that needed to be overcome.

[52] Zachary Falck, *Weeds: An Environmental History of Metropolitan America* (Pittsburgh: University of Pittsburgh Press, 2010), chapter 2.

[53] Mills, *Cannabis Nation*, chapter 4.

[54] Valerie L. Vantreese, *Industrial Hemp: Global Operations, Local Implications* (Department of Agricultural Economics: University of Kentucky, 1998). Available at: http://www.uky.edu/Classes/GEN/101/Hemp/HEMP98.PDF; Michael Karus, "European Industrial Hemp 2001 till 2204: Cultivation, Raw Materials, Products, and Trends," *European Industrial Hemp Association* (February, 2005). Available at: http://www.eiha.org/attach/10/05-02_EU-EIHA_e.pdf.

banned intoxicant. As this study demonstrates, the history of hemp's three main uses were connected and intertwined, and the transatlantic nature of knowledge formation pertaining to it in the Anglo-Atlantic imagination ensured that British imperialism and Orientalism both played an important role in constructing the cultural lens through which the British and Americans would see the entire plant. Of course, as is the case with all cultural transfers, the perceptions took on a life of their own once they crossed the Atlantic; but the connections remained nonetheless, and focusing on them helps to fill some important gaps in the historiography of hemp that explains how it came to be considered such a problem by so many people. In short, focusing on the dynamic interplay between the three main uses for hemp illuminates how they were connected through a complicated discourse that endowed the entire plant with new meaning over time and transformed it from a useful commodity into a fearful substance. This process was highly subjective and, as British Orientalist Edward Browne summed up at the end of a speech he gave to medical students about hemp at the turn of the century, reflects how, "if there is romance in history, there is also romance in the Materia Medica."[55] In other words, scientific knowledge of the plant was produced through the "investigative modalities" of British imperialism, the legacy of which has been with us ever since.

[55] Edward Browne, "A Chapter from the History of Cannabis Indica," *Saint Bartholomew's Hospital Journal*, Vol. IV, No. 42 (March, 1897): 86.

Chapter 8

Epilogue

In recent years, hemp seed and the oil made from it have received a lot of attention from health food enthusiasts. A simple trip to an upscale grocery store will reveal a number of products recently developed for the consumer wishing to add more variety to his or her 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, creams, lotions, and candles with similar advertisements. Also in recent years, a surge of literature over the value of reintroducing industrial hemp has surfaced. "DISCOVER THE BENEFITS OF HEMP," claims 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 to 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 was to American history in the past. To be sure, people have been continuously promoting the benefits of hemp for a range of industries ever since the plant began to take on a more sinister meaning in American society, only now it seems that people are finally listening.

---

[1] "Hemp Hearts," Pamphlet of products from Rocky Mountain Grain and Ancient Tribal Foods for Health.
[2] "Discover the Benefits of Hemp," *Hemp History Week Brochure*, May 2-8, 2011. Information on this movement can be found at: www.HempHistoryWeek.com.

There are undoubtedly a host of fascinating reasons behind this radical shift that seems to be taking place in the way Americans perceive the plant as a whole, but I cannot help but hark back to Sidney Mintz' study of sugar and the process of intensification versus extensification discussed earlier in the introduction to this work. Just recently, landmark legislation in certain states of the Union pertaining to the use of hemp intoxicants has surfaced as well. When combined with the trends mentioned above, they reveal how applicable this same process is to hemp's history in the Atlantic world, for now Medical Marijuana dispensaries, paraphernalia shops, and even recreational venues are sprouting up all over. The marketing behind these new businesses and the popular support for them reflect the unique cultural mosaic that surrounds the plant today, which is a byproduct of the struggle for meaning and the negotiation process this entailed over the course of the last three centuries. Indeed, the plant has been adapted and readapted to so many different cultural milieus during this period that the process Mintz describes for sugar becomes an overlapping web of historical entanglement when applied to hemp.

In short, as Europeans discovered and encountered new uses for the plant, new meanings were created that often times extended into other branches of society, but over time old meanings intensified and were appropriated for new causes. After nearly a half century of demonization, for example, the counter cultural movement of the 1960s evoked what they considered an ancient and sacred meaning of hemp intoxication to attack the negative discourse that had developed around the plant. In the same way, medicinal practitioners and hemp farmers today look to a past long ago when hemp's healing properties and industrial strengths were prized and talked about within the transatlantic circuits of knowledge this study has identified and relied so heavily upon for evidence. These meanings never entirely faded away over the course of history, and the

environmental movement as well as growing anxieties over the conduct of pharmaceutical companies during the second half of the twentieth century unquestionably contributed to their reemergence. Of course new images, perceptions, and associations have been added to the older meanings, and the growing realization of the nonsensical and disproportionately destructive nature of America's drug policies on young minorities and members of low-income communities certainly appears to have played a part in the shift as well. The negative images have not faded entirely away, though, and they likely never will; they too are part of the saga of hemp's history, which is grounded in the dynamic interplay between use and meaning.

Although it is happening across a much larger geographical area, the Amsterdam scene described at the beginning of this work seems to be recreating itself in the United States, where growing hemp for any purpose remains illegal under federal law. One could picture Boston or Kentucky, for example, where the old hemp industry once prospered, becoming scenes upon which the negotiations of meaning between the different uses for hemp play out the same way they are in Amsterdam. The battleground for legitimacy is already well underway in Colorado, and the way it has been taking place so far is a testament to the power of culture to embed meaning into the things we use. According to psychologist Ethan Watters, we have yet to fully appreciate "how deeply culture shapes human cognition." Sure, a modern liberal education at most universities tends to emphasize cultural diversity, but "[c]hallege liberal arts graduates on their appreciation or cultural diversity and you'll find them retreating to the anodyne notion that under the skin everyone is really alike." However, recent research demonstrates that, American culture, for example, reflects a "psychological tendency shared with people in other industrialized countries that had been refined and handed down through thousands of generations in ever more complex market economics," which suggests that "the mind's

capacity to mold itself to cultural and environmental settings was far greater than had been assumed."[3] Hemp's history in the Atlantic world is an excellent example of this. Its different uses, the way westerners reacted to encountering these different cultural uses, and the struggle for meaning that has taken place ever since all indicate how culture deeply molds our perception and contributes significantly to our understanding of the world and the things people use within it.

Much more needs to be done no doubt, especially in regards to hemp. For one, this study has largely focused on how the British developed new perceptions of hemp through imperial encounters, and how those perceptions shaped American ones; but surely this was not a one way street, especially after the rise of American cultural imperialism in the twentieth century and its role in the Transatlantic War on Drugs that emerged a little after the end of World War I. Moreover, much still needs to be done on the Russian hemp industry, especially in terms of the impact that the Bolshevik Revolution had on the global hemp trade. For now, though, it suffices to say that culture has played a vital role in determining hemp's place in both British and American history. It promises to play a similar role in the future as well, and more studies of this kind can better help us understand why.

[3] 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.

Appendix A

Culturally Significant Images of Hemp in the Anglo-Atlantic World

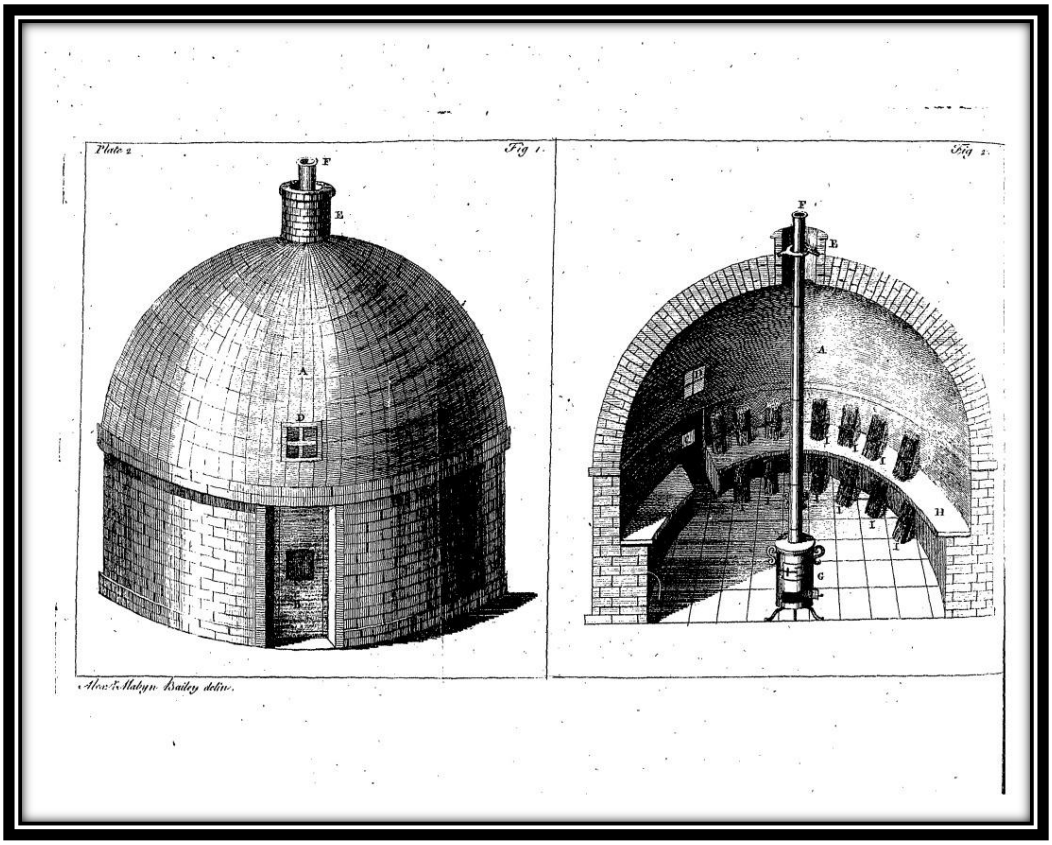

Figure 1: A Perspective Draught of a Dome for Drying of Flax, Hemp, Mail, Hops, Madder, &c. (1758)

In 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: W. Bailey and J. Dodsley, 1758, p. 75. This eighteenth century copper engraving of a dome designed to ret fiber was published in part to instruct prospective hemp and flax farmers on how to best handle the stocks after harvest. The image includes letters next to various parts that correspond to instructions that were published with descriptions on the details of each part.

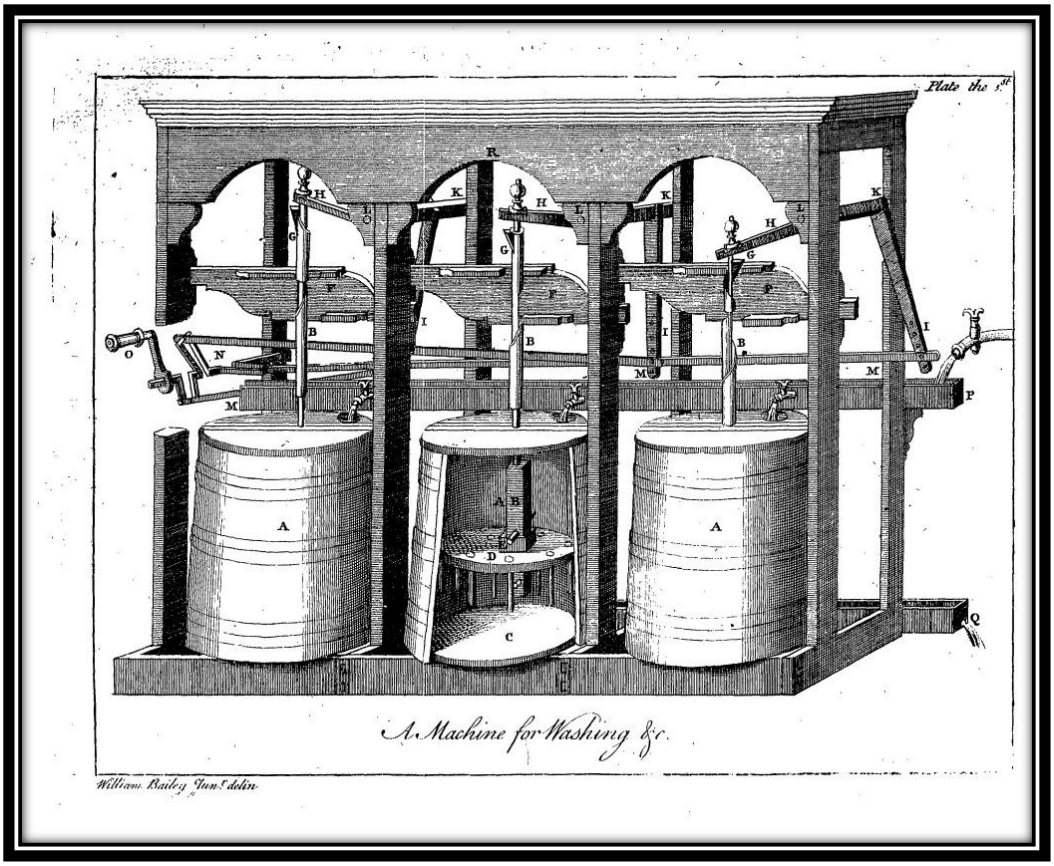

Figure 2: A Machine for Washing (1758)

In *Ibid*., 77. The three letters labeled "I" are designed for the sheaves of hemp or flax. This image was published at a time when enlightenment principles were circulating across the Atlantic. Notions of progress, rationalism, and the supremacy of science led many to develop new technology designed to improve industries that needed help. The hemp industry was certainly one of these, for the vast majority of rope in Great Britain at the time was made from hemp imported from Russia because the British had such a hard time transforming the stocks into high quality fiber. Technological innovations designed to improve the hemp industry began surfacing regularly hereafter. Thomas Jefferson even patented a hemp break machine, as did many others throughout the nineteenth century. However, none of them had much of an impact, and hemp production for naval stores never fully caught on.

Figure 2: The Ropemaker: From a Life Begun to a Life That's Spun (1903)

Located at The Hash, Marihuana, and Hemp Museum. Amsterdam, Display # 27. This illustration from the English publication, *The Graphic*, depicts a woman with bundles of hemp fiber at her hips as she gets ready to spin it into rope. Hemp had already begun its transformation into a banned intoxicant by this date, but the image is a clear indication that the old meaning was still prevalent.

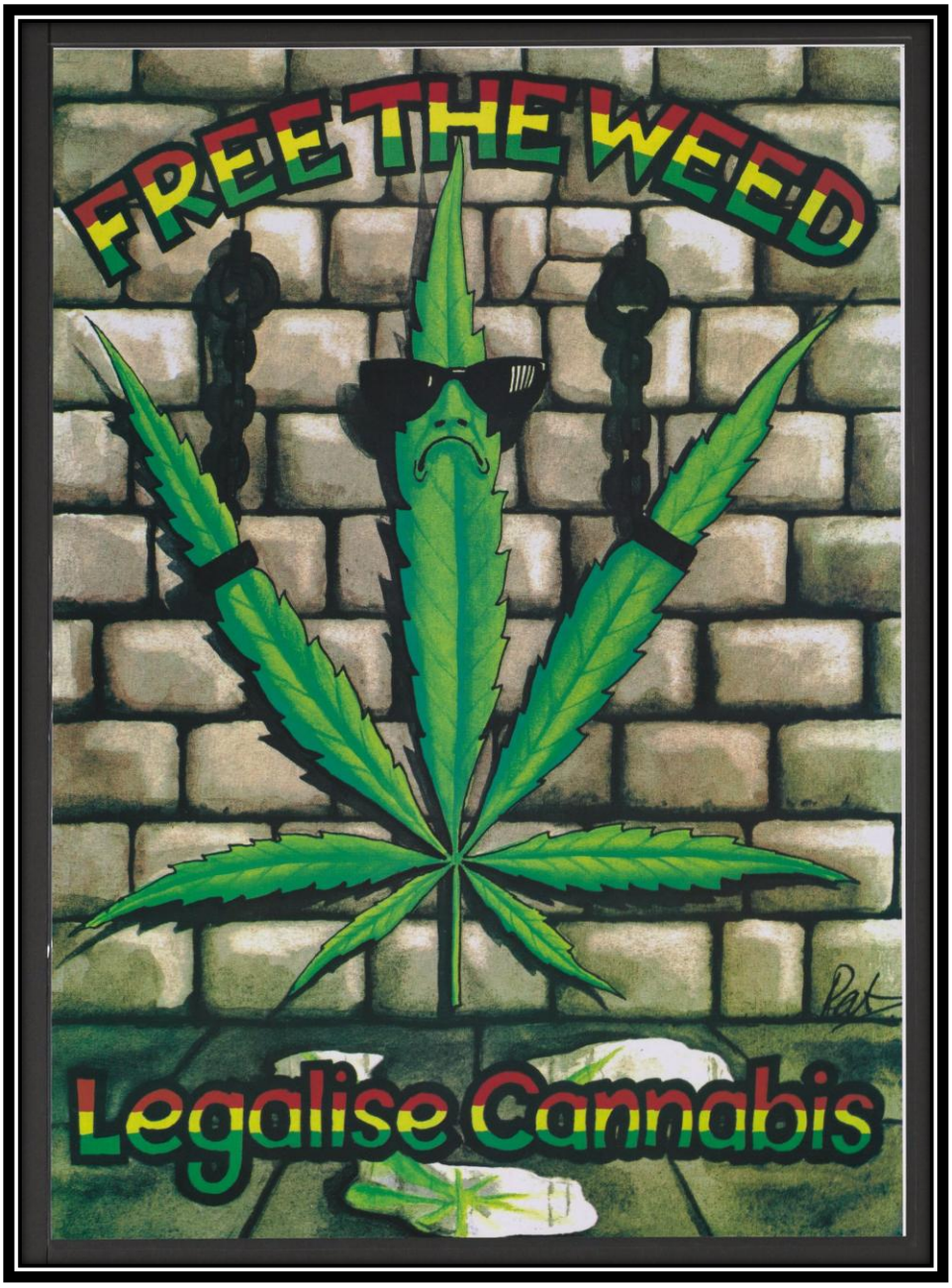

Figure 3: Free The Weed. Legalize Cannabis (ca. 1980-2004)

In The Thomas Hill Poster Collection, Widener Library, Harvard University. Hill/22/0001, Box 022. Over the course of the second half of the twentieth century, the leaf of the hemp plant has been appropriated by a number of activist groups to support their cause.

Figure 4: Hemp Skin Products

A number of new products have been developed recently that use the symbolic leaf for advertisement purposes. This iconic symbol has been used in a number of very different marketing campaigns. The image here serves as a striking contrast to the one in figure 3.

Figure 5: Nubian Heritage Shea Butter

Indian Hemp is a term that has been applied to a diverse array of plants and commodities. After Lamarck used it to refer to the "Oriental" hemp plant as a different species, a taxonomic debate began that continues to this day. The British certainly used the term more frequently throughout the nineteenth century to describe various intoxicating preparations they encountered in India, and this usage migrated across the Atlantic where it was appropriated by Americans for similar purposes. However, the phrase had already been in use in the Americas since the eighteenth century to refer to fibrous plants used by Native Americans that in fact were not hemp at all. This is an interesting advertisement, for it claims that the cream is infused with Indian hemp, yet lists *Cannabis sativa* in the ingredients. This company has various other products with this so-called Indian hemp advertised in the same manner, but nowhere do they provide an explanation for this linguistic usage. It seems likely this is an attempt to exoticize their products as a marketing tool, which says a lot about how loaded the word hemp is with meaning. Indeed, the phrase Indian hemp is still being used today to refer to a product that does not contain Indian hemp.

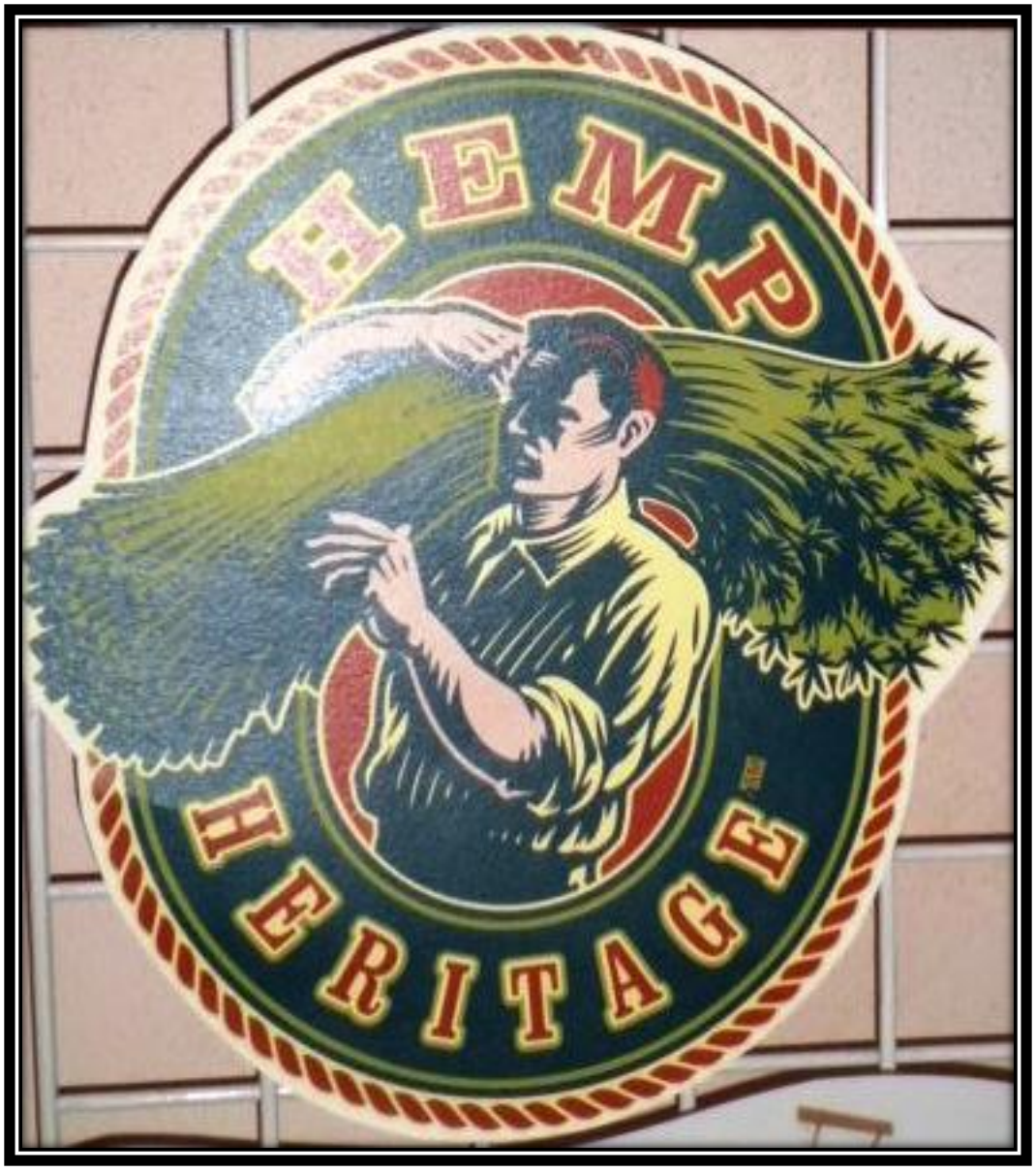

Figure 6: Hemp Heritage

This poster is on display at the Santa Fe Hemp Shop in New Mexico. It is another indication of the diverse ways in which the hemp leaf has been used to express meaning. Encased within a rope-shaped frame, the Anglo hemp hauler sternly marches forth with the plant that can save the world. The older meaning symbolizing European imperial and American national sovereignty is quite recognizable, making this image a perfect example of what Sidney Mintz referred to as intensification.

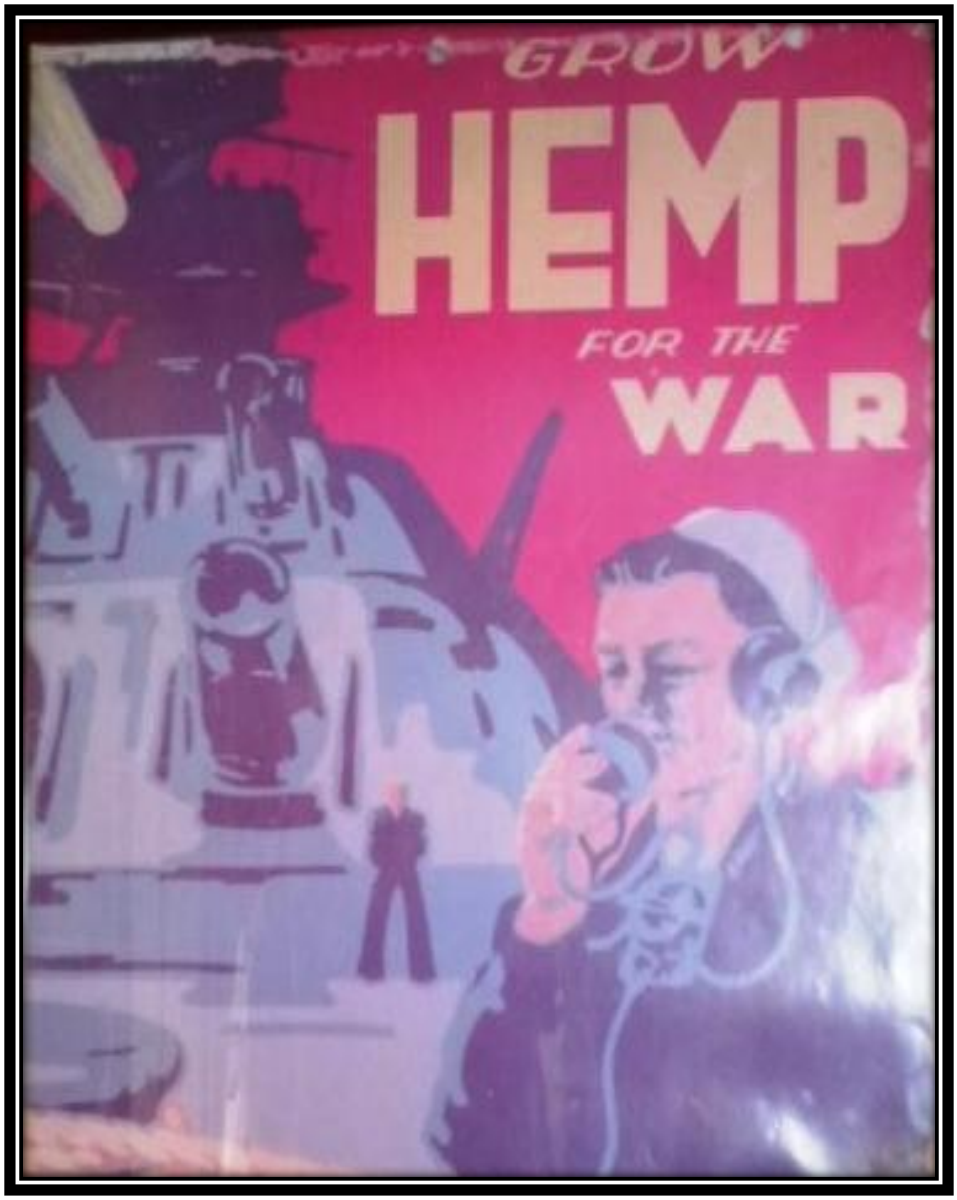

Figure 7: Hemp for Victory (1943)

Located at the Hash, Marihuana, and Hemp Museum. Amsterdam, Display # 35. By the time World War II broke out, Americans had replaced much of their hemp fiber with jute and a plant they called “Manila hemp,” despite its lack of botanical relationship to hemp. Much of this was imported from the Philippines, but the Japanese cut off the American supply after bombing Pearl Harbor, so the United States government hastily established a pro-hemp campaign in order to secure enough fiber for the war. This image and the film that produced it also reflect a form of intensification.

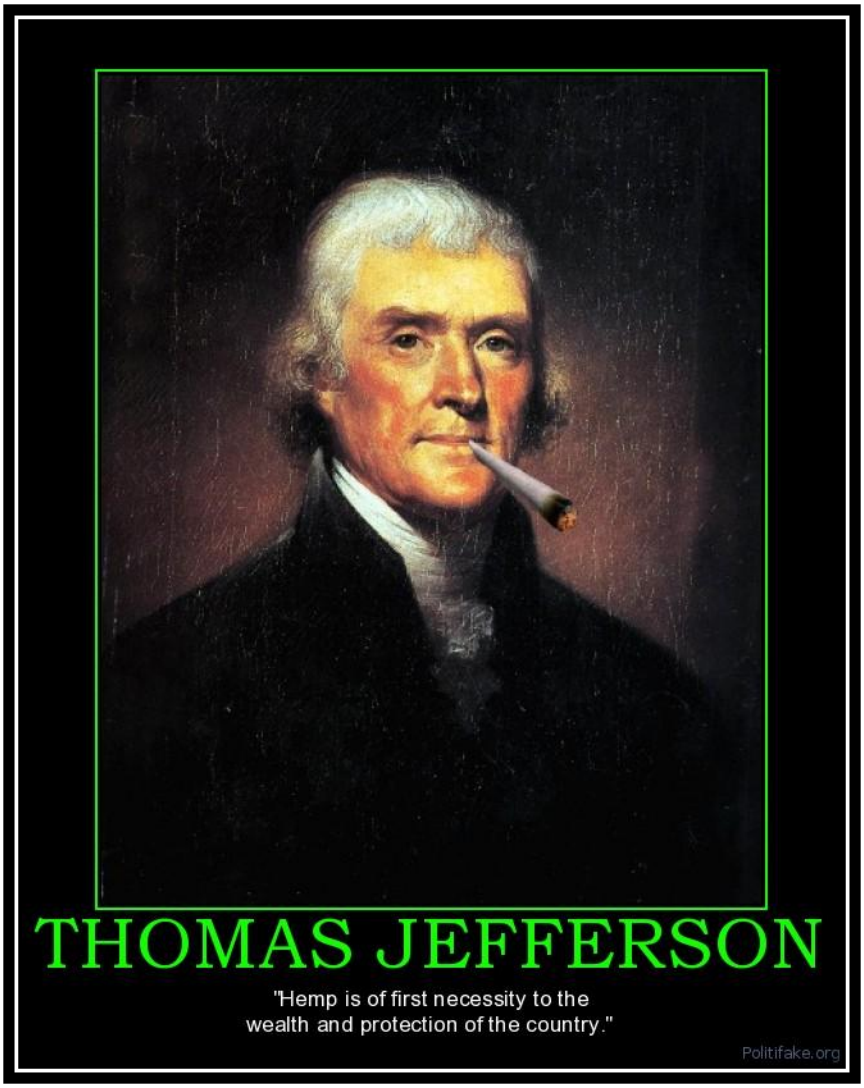

Figure 8: Thomas Jefferson Smoking Hemp

In Anonymous, “Freedom: Hemp, the Perfect Plant,” *Revolt of the Barbarians Blog*, July 5, 2012. http://revoltofthebarbarians.wordpress.com/?s=thomas+jefferson. Accessed March 27, 2014. Many pro-legalization Americans think that both George Washington and Thomas Jefferson smoked hemp because they farmed the plant. Jefferson did of course grow hemp, but so did nearly every colonial farmer at some point, only it was for dew-retted fiber or hemp seed. There were also references to the plant’s pungent smell, but this does not equate to intoxication the way we understand it today. Tobacco of course was smoked, and it is certainly not impossible that he experimented with hemp for a number of purposes, but there is no evidence to support these claims. Like so often happens, the uses for hemp are being muddled, confused, and infused with falsehoods, contributing even further to the cultural misunderstanding that exists today.

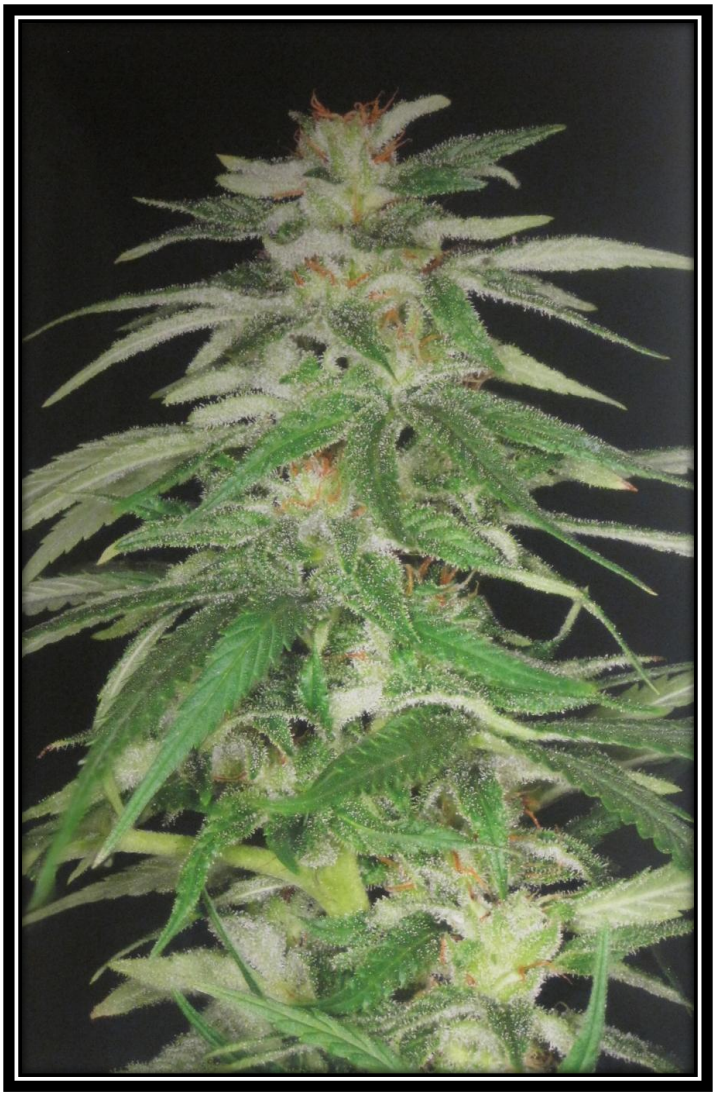

Figure 9: The Female Hemp Flower

Located at The Hash, Marihuana, and Hemp Museum. Amsterdam, Display # 3. This image depicts the female flower of a hemp plant in the latter stages of development that has not been exposed to any male plants. Deprived of the pollen, the flowers become much larger and, in genetically specific varieties, produce more of the trichomes that contain the molecule (THC) that is primarily responsible for the so-called “high” individuals experience after consumption. The hydroponic industry that developed during the late twentieth century allowed producers to grow indoors and care for the plant in ways that dramatically increased its resinous excretion. At the top level of the market, this has created a sort of connoisseurship for marijuana, where consumers and distributers describe highly nuanced differences in the taste, smell, and mind-altering affects of each variety.

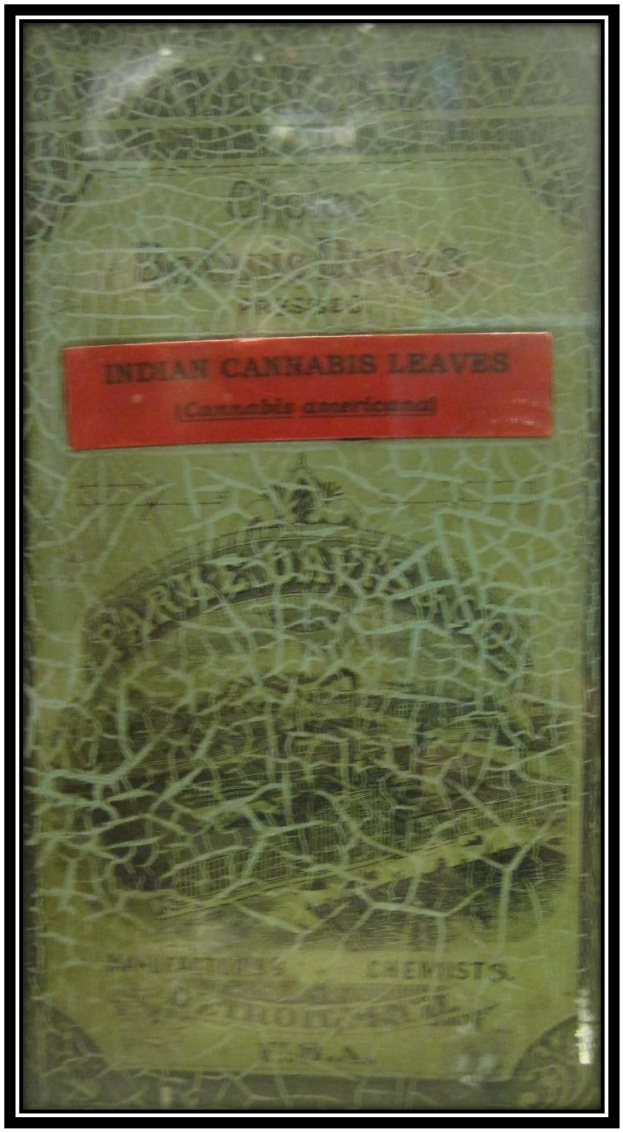

Figure 10: Medicinal Hemp Tincture Package

Located at the Hash, Marihuana, & Hemp Museum. Amsterdam, Display # 34. This late nineteenth/early twentieth century product sold by Parke Davis & Co. lists Indian hemp leaves as the ingredient, but then refers to it as *Cannabis americana*. By this time, medical practitioners had experimented with the hemp they found growing in America to see if it had the same pharmacological properties as the "Oriental" versions. By then, it seems likely that intermingling over the course of centuries between various *sativa* and *indica* strains produced a variety of different genetically coded plants, some of which had no intoxicating properties. This, along with the type of preparations they were producing and the manner by which they stored the product, contributed to the mixed results that professionals reported with the drug's effectiveness.

Figure 11: W. B. O'Shaughnessy, M.D.

Located at The National Library of Medicine, *Images from the History of Medicine Collection*, Lithograph Print, n.d., Order No. B020160. This image of the Irish doctor who first experimented with Indian hemp as a medicine in Calcutta does not have a date, but the style of penmanship suggests that it is a twentieth century invention rather than a nineteenth century one. O'Shaughnessy did indeed become a recognized individual towards the end of his life, but it was due less to his contributions as a chemist than it was to his work on the telegraph system in India. There certainly were a number of publications over the course of the nineteenth century that cited his work with Indian hemp, but his national biography failed to even mention this part of his life, which took place in the early stages of his career as an East India Company employee. Today, there is a sort of cult following around his memory, with often fantastical descriptions of his accomplishments and intellectual capabilities accompanying the descriptions of his work with the hemp plant. An excellent example of this cult following is the online publication, *O'Shaughnessy's Online*, which can be accessed at: http://www.beyondthc.com/about/.

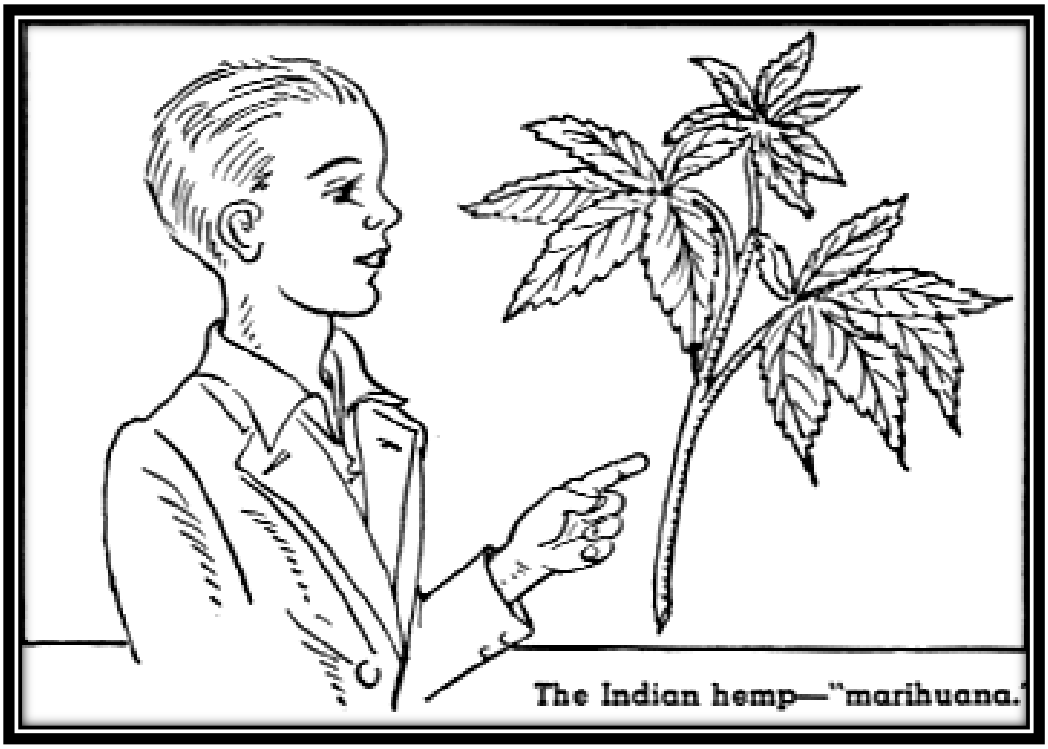

Figure 12: "Joe's Story" (1939)

In John C. Almack, *Fact First on Narcotics: Alcohol, Tobacco, Opium, and Cocaine* (Mountain View, Cal.: Pacific Press Publishing Association, 1939), p. 96. This image and the story that accompanied it is a clear indication of the connection drawn between marihuana and hemp during the so-called "Reefer Madness" campaign in the United States before World War II. Although many Americans were confused about the origins of marijuana, with many associating it with Mexico, a long tradition of associating hemp intoxication with the so-called Orient existed as well, thereby complicating the discourse even further.

Figure 13: Fly Up to a New Vocation as a Marijuana Farmer (1961)

Located in the Hash, Hemp, and Marijuana Museum, Amsterdam, Display # 28. This curious poster is filled with a number of interesting perceptions of the hemp plant, blending and connecting the industrial uses for hemp with the intoxicating ones. The poster uses a number of words pertaining to intoxicating preparations, but the message seems to be promoting the industrial ones. By this time, smoking marijuana was part of a growing subculture, yet the industrial meaning of the plant had not entirely dissipated.

Figure 14: "Reefer Madness"

Located at the Hash, Marihuana, & Hemp Museum. Amsterdam, Display # 30d. This display case includes various primary sources from the 1930s anti-marijuana campaign in the United States. Although it is difficult to read in this photo, the book displayed to the right of the "GO NORML" license plate reads “The Lone Reefer” and includes both the words “marijuana” and “hemp” in the title. These types of sources were designed to instill fear in the minds of parents so they would instruct their children to stay away from the dangerous drug that, according to Harry Anslinger - head of the Federal Bureau of Narcotics, was addictive and “produces in its users insanity, criminality, and death.” This was similar to the Orientalism rhetoric used against hemp intoxicants for over a century in the Anglo-Atlantic world.

References

Primary Sources

Unpublished Manuscripts:

House of Representatives. *American State Papers*. House of Representatives, 11th Congress, 3rd Session, No. 86/20th Congress, 1st Session.

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.

"Substituting Flax and Hemp for Cotton." *Report of the Flax and Hemp Commission*. 27 February 1865. The Harvard College Widener Library, Econ 7725.3.15.

The British Library, London. *Indian Office Records*. IOR: 8907.aaa.33, E/4/435, E/4/360, E/4/392, E/4/776, E/4/777, E/4/791, E/4/806, E/4/829, E/835, E/4/840, E/4/843, E/4/909, E/4/913, E/4/914, E/4/916, E/4/940, E/4/955, E/4/957, E/4/962, F/4/1754/71645, F/4/1747/71081, F/4/1892/80187, F/4/2015/90072, H/375, L/MIL/9/383, V/27/625/4.

Published Documents:

A Farmer. *An Essay on the Culture and Management of Hemp.* Annapolis: Anne Catherine Green & Son, 1775.

A Merchant. *The True Interest of Great Britain, with Respect to Her American Colonies, Stated and Impartially Considered.* London: G. Kearsley Press, 1766.

Affleck, Thomas, ed. *The Western Farmer and Gardener, Devoted to Agriculture, Horticulture, and the Rural Economy.* Volumes I & II. Cincinnati: Charles Foster Publishing,1841.

Ainslie, Whitelaw. *Materia Indica: Or, Some Accounts of Those Articles Which are Employed by the Hindoos, and Other Eastern Nations, in Their Medicine, Arts, and Agriculture.* London: Longman, Reese, and Green, 1826.

_____. *Materia Medica of Hindoostan and Artisan's and Agriculturist's Nomenclature*. Madras: Government Press, 1813.

Albin, Eleazar. *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. 2nd Edition. London: R. Ware Printing, 1742.

Allen, James Lane. *The Reign of Law: A Tale of the Kentucky Hemp Fields.* New York: The Macmillan Co., 1900.

Allen, John. Dr. *Allen's Synopsis Medicinae*, Volume 2. London: J. Pemberton, 1730.

Allen, T. F., ed. *The Encyclopedia of Pure Materia Medica*. New York: Boericke and Tafel, 1875.

Allen, William. *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.

American Provers' Union. *Suggestions for the Provings of Drugs on the Healthy: Report of the Committee Appointed for that Purpose by the American Provers' Union*. Philadelphia: King & Baird Printers, 1853.

_____. *Provings of Cannabis Indica*. Philadelphia: King & Baird Printers: 1859.

Anderson, James. *Recreations in Agriculture, Natural-History, Arts, and Miscellaneous Literature*, Volume III. London: T. Bentley, 1800.

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.

Anonymous. "Action and Inaction." *The British Medical Journal*, Volume 1, No. 784 (January 1876): 46.

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*, Volume II. London: J. Dodsley, 1764.

Anonymous. "Flax, Hemp, etc. – Improvements in their Treatment." *The Working Farmer*, Volume XI. New York: Frederich McCready, 1858.

Anonymous. "Hasheesh and Hasheesh-eaters." *Harper's New Monthly Magazine*, Volume 16, No. 95 (April 1858): 654.

Anonymous. "Hasheesh and Its Smokers and Eaters." *Scientific American*, Volume XIV, No. 7 (October 1858): 49.

Anonymous. "Hashish." *The Living Age*, Volume 56, No. 717 (February: 1858): 449-512.

Anonymous. "Hasheesh." *Saturday Review,* Volume 5, No. 120 (February 1858): 166-67.

Anonymous. "Improvements in Treating Flax and Hemp." *The Farmer's Magazine*, Volume 11. London: Rogerson & Tuxford, 1857.

Anonymous. "Indian Hemp in a French Café." *Medical Times: A Journal of Medical and Chemical Sciences, Literature, Criticism, and News*, Volume 21. London: John Churchill, 1850.

Anonymous. "Literary Notices." *Harper's New Monthly Magazine*, Volume 15, No. 90 (November 1857): 834-35.

Anonymous. "Literary Notices." *The Knickerbocker: Or, The New York Monthly Magazine*, Volume 51 (February 1858):197-98.

Anonymous. "Narcotics." *The North American Review*, Volume 95, No. 197 (October 1862): 342-375.

Anonymous. "Notes in Parliament." *The Lancet*, Volume 141, No. 3625 (Feb, 1893): 394.

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.

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.

Anonymous. "Psychology of Opium and Hasheesh." *The Dial*, Volume 1, No. 9 (September 1860): 557 – 609.

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.

Anonymous. *Territorial Enterprise Extra Containing a Full Account of "Frank Leslie" and Wife*. Virginia City, Nev., 1878.

Anonymous. *The Gazette of the Union, Golden Rule, and Odd-Fellow's Family Companion*, Volume X. New York: Crampton and Clark, 1849.

Anonymous. *The Home and Foreign Record of the Presbyterian Church in the United States of America*, Volume 1. Philadelphia: Presbyterian Board of Publication, 1850.

Anonymous. "The Hemp Drugs Commission." *The British Medical Journal*, Volume 1, No. 1741 (May 1894): 1040.

Anonymous. "The Production of Pulque in Mexico." *Scientific America*, Volume LXXV, No. 20. November, 1896.

Anonymous. "The Story of the Old Man of the Mountain." *The Christian Journal*, Volume V, No. 9. New York, 1821.

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

_____. *Materia Indica: Some Accounts of those Articles Which are Employed by the Hindoos, and Other Eastern Nations, in their Medicine, Arts, and Agriculture*, Volume II. London: Longman Press, 1826.

Arnold, Charles Henry. *The New and Impartial Universal History of North and South America, and the Present Trans-Atlantic War*. London, 1782.

Arnold, Thomas. *Observations on the Nature, Kinds, Causes, and Prevention of Insanity, Lunacy, or Madness*, Volume II. Leicester: G. Ireland, 1786.

Asiatic Researches, *Transactions of the Society Instituted in Bengal for Inquiring into the History and Antiquities, the Arts, Sciences, and Literature of Asia*, Volume 6. London: John Murray, 1818.

Aubert-Roche, Louis Rémy. *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.

Athenaeum: Journal of English and Foreign Literature, Science, and Fine Arts. London: J. Francis, 1833.

Bailey, William. *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: Bailey and Dodsley, 1758.

Balfour, John Hutton. *The Plants of the Bible*. London: T. Nelson & Son, 1866.

Bancroft, Hubert Howe. *The Works of Hubert Howe Bancroft*. San Francisco: A.L. Bancroft & Co., 1882.

Barnes, Henry. "On the Abuse of Narcotics." *The British Medical Journal*, Volume 2, No. 1143 (November, 1882): 1032-33.

Barrow, John Sir. *Travels into the Interior of Southern Africa*, Volume II. London: T. Cadell and W. Davies, 1806.

_____. *Dictionarium Medicum Universale; Or, A New Dictionary*. London: T. Longman, 1749.

Barton, William P.C. *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.

Baudelaire, Charles. *The Flowers of Evil.* New York: M. Mathews & J. Mathews, 1861.

Bell, Jacob. "On the Haschish or Cannabis Indica." *Boston Medical and Surgical Journal*, No. 56, 209-216.

_____. *Pharmaceutical Journal and Transactions*, Volume II. London: John Churchill, 1843.

Berlu, John J. *The Treasury of Drugs Unlocked or a Full and True Description of Drugs, Chymical Preparations Sold by Druggists*, 3rd Edition. London: S. Clark, 1733.

Biddle, John B. and W. W. Gerhard, eds. "New Remedy for Tetanus and Other Convulsive Disorders. By W.B. O'Shaughnessy," *Medical Examiner*, Volume III, No. 33 (August, 1840): 530-531.

Biddle, John B. *Materia Medica for the Use of Students*. 3rd Edition. Philadelphia: Lindsay and Blakiston, 1869.

Bidwell, W. H., ed. *The Eclectic Magazine of Foreign Literature, Science, and Art*. New York: Beekman Street, 1858.

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

Blyth, Alexander Wynter. *A Dictionary of Hygiene and Public Health*. London: Charles Griffin & Co. 1876.

Boerhaave, Herman. *Herman Boerhaave's Materia Medica*. London, 1755.

Boyce, Sidney Smith. *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.

Boyd, John E. *The Berkeley Heroine and Other Stories.* Berkeley: Berkeley Printing Co., 1899.

Boyle, Robert. *Medicinal Experiments: or, a Collection of Choice and Safe Remedies for the Most Part Simple, and Easiely Prepar'd: Very Useful in Families, and Fitted for the Service of Country People.* 6th Edition. London, 1718.

Brigham, A. "Review of Moreau de Tours, J: 'Du Hachisch et de l'Alienation Mentale.'" *American Journal of Insanity,* 2 (1846): 275-81.

Browne, Edward. "A Chapter from the History of Cannabis Indica." *Saint Bartholomew's Hospital Journal*, Volume IV, No. 42 (March, 1897): 79-886.

_____. *A Literary History of Persia*. Bethesda, Md: Iranbooks, 1997.

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

Brown, Herbert. "The Hashish Plant in Arizona and Mexico." *The Plant World: An Illustrated Monthly Magazine of General Botany*, Volume 10, No. 1 (January, 1907): 180-181.

Buckingham, James, eds. *The Athenaeum Journal of Literature, Science, and the Fine Arts*. London: J. Francis, 1855.

Buffon, Georges Louis Leclerc, comte de. *Natural History of Birds, Fish, Insects and Reptiles. Embellished with Upwards of Two Hundred Engravings. In Five Volumes,* Volume 2. London,1793.

Burnett, Gilbert T. *Outlines of Botany: Including a General History of the Vegetable Kingdom,* Vol. II. London: John Churchill, 1835.

Burnaby, Andrew. *Travels Through the Middle Settlements of North America in the Years 1759 and 1760 with Observations on the State of the Colonies*. 3rd Edition. London: T. Pain, 1798.

Burns, Robert. *The Works of Robert Burns; with an Account of His Life, and a Criticism on His Writings. To Which are Prefixed, Some Observations on the Character and Condition of the Scottish Peasantry*, Volume 3. Liverpool, 1800.

Burrow, Edward. *A New and Compleat Book of Rates; Comprehending the Rates of Merchandize,* Volume 1. Glasgow, 1774.

Caine, William. *East India Consumption of Ganja*. London: Eyre & Spottiswoode, 1893.

Calkins, Alonzo. *Opium and the Opium-Appetite: With Notices of Alcoholic Beverages, Cannabis Indica, Tobacco and Coca, and Tea and Coffee, in Their Hygienic Aspects and Pathologic Relations*. Philadelphia: J. B. Lippincott & co, 1871.

Carpenter, Harrison and A. Hester, eds. *The New Orleans Medical and Surgical Journal, Devoted to Medicine and the Collateral Sciences*, Volume IV. New Orleans: S. Woodall, 1848.

Carruthers, Robert, eds. *Chamber's Cyclopaedia of English Literature,* Volume 7. 3rd Edition. New York: American Book Exchange, 1830.

Carson, Joseph and Robert Bridges, eds. *American Journal of Pharmacy*, Volume 9. Philadelphia: Merrihew & Thompson, 1844.

"Cash Given for Hemp, by Fisher & Sutten. Who Wish to Hire 16 Negro Boys from 12-16 Years Old, for a Term of Years." *Kentucky Gazette*, 25 April, 1809, Volume XXII, Number 1226.

Cayley, Henry. "The Opium Question." *The Lancet*, Volume 139, No. 3589 (April, 1892): 833.

Chalmers, George. *An Estimate of the Comparative Strength of Great-Britain, During the Present and Four Preceding Reigns; and of the Losses of Her Trade from Every War Since the Revolution.* London: John Stockdale,1786.

Chambers, John*. A Pocket Herbal; Containing the Medicinal Virtues and Uses of the Most Esteemed Native Plants; with Some Remarks on Bathing, Electricity, &c. By John Chambers, M. D. of East Dereham,* Norfolk: Bury Press, 1800.

Chambers, William and Robert, eds. *Chambers's Edinburg Journal*, Volume XI. Edinburgh and London: Chambers Brothers, 1849.

Chapman, Robert. *A Treatise on Ropemaking, as Practiced in Private and Public Ropeyards, with a Description of the Manufacture, Rules, Tables of Weights, etc.* London: E. and F.N. Spon, 1858.

Chardin, John, Sir. *A New and Accurate Description of Persia, and Other Eastern Nations. Containing The Natural History of those Countries; the Religion,*

Temper, Manners and Customs of their Inhabitants; their Apparel, Exercises and Games; Arts, Trades, Manufacture, and Commerce. With Genuine Copies of the Instructions given by the English, French, and other European Powers, to their Respective Embassadors at that Court, and at those of China, Japan, and other Neighbouring Empires; no less Useful and Instructive for carrying on the Commerce in those Parts, than Entertaining to the Curious, Volume 2. London, 1724.

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

Colman, Henry, ed. *The New Genese Farmer: A Monthly Publication, Devoted to the Improvement of Agriculture and Horticulture, and to Rural and Domestic Economy*, Volume 3. Rochester: M.B. Bateham, 1842.

Colonial Society of Massachusetts Publications. "Boston Non-importation Agreement." 1 August 1768. Accessed at: http://avalon.law.yale.edu/18th_century/boston_non_importation_1768.asp

Cooper, Mary. *The Adventures of Mr. Loveill, Intersper'd with Many Real Amours of the Modern Polite World*, Volume I. London: M. Cooper, 1750.

Cornford, Philip Henry. *Missionary Reminiscence, or Jamaica Retraced*. Leeds: J. Heaton and Son, 1856.

Crosse, Edward. "Indian Hemp. *Provincial Medical Journal and Retrospect of the Medical Sciences*, Volume 6, No. 139 (May 1843): 171.

Dennie, Joseph and John Elihu Hall, eds. *The Port Folio*, Volume II. Philadelphia: Harrison Hall, 1827.

De Quincy, Thomas. *Confessions of an English Opium-Eater* [1822]. Reprint. New York: Dover, 1995.

_____. *Confessions of an English Opium-Eater*. 3rd Edition. London: Taylor and Hessey, 1823.

Deveney, John Patrick. *Paschal Beverly Randolph: A Nineteenth-Century Black American Spiritualist, Rosicrucian, and Sex Magician*. New York: State University of New York Press, 1997.

Dibdin, Charles. *Sea Songs and Ballads*. London: Bell and Daldy, 1863.

Dodge, Robert. *A Report on the Culture of Hemp in Europe.* Washington: United States Department of Agriculture: Office of Fiber Investigations, 1898.

Dow, Alexander. *The History of Hindustan*. London: T. Becket & P.A. De Hondt, 1772.

Dunsany, Edward John Moreton Drax Plunkett, and Sidney Herbert Sime. *A Dreamer's Tales*. Freeport, N.Y.: Books for Libraries Press, 1969.

Eberle, John. *A Treatise on the Practice of Medicine*, Volume II. Philadelphia: John Griggs, 1830.

Eve, Paul F. and I. P. Garvin, eds. *Southern Medical and Surgical Journal*, Volume I. Augusta: James McCafferty, 1845.

Fairbanks, E. A. *Compilation of Articles Relating to the Culture and Manufacture of Hemp in the United States Selected Principally from Newspaper and Journals Devoted to the Interest of Agriculture.* England, 1829.

Farmer. *An Essay on the Culture and Management of Hemp More Particularly for the Purpose of Making Coarse Linens.* Annapolis: Printed by Anne Catharine Green, and Son, 1775.

Fergusson, John. *A Dictionary of the Hindostan Language*. London: T. Cadell, 1773.

First Report of the Commissioners for Revising and Digesting the Civil Affairs of His Majesty's Navy. London, 1806.

Fitzgerald, Edward, trans. *Facsimile of the First Edition of Fitzgerald's Rubaiyat of Omar Khayyam, the Astronomer Poet of Persia*. London: Bernard Quaritch, 1859.

Fleming, John. *A Catalogue of Indian Medicinal Plants and Drugs, With Their Names in the Hindustani and Sanscrit Languages*. Calcutta: Hindustani Press, 1810.

Folkard, Richard Jr. *Plant Lore, Legends, and Lyrics: Embracing the Myths, Traditions, Superstitions, and Folklore of the Plant Kingdom*. London, 1884.

Forry, Samuel, ed. *The New York Journal of Medicine, and the Collateral Sciences*, Volume I. New York: J & H. G. Langley, 1843.

Franklin, Benjamin. *The Interest of Great Britain Considered with Regard to Her Colonies and the Acquisitions of Canada and Guadaloupe: to Which are Added, Observations Concerning the Increase of Mankind, Peopling of Countries, etc*. London: T. Beckett, 1760.

Gay, John. *Poems by John Gay: Containing Rural Pleasures, Shepherd's Week, Epistle, Elegies, Songs, Fables, Epitaphs, &c &c. To which is prefixed, A Sketch of the Author's Life.* Manchester, 1797.

Gautier, Theophile. "Le Club des Hachichins." *Revie deux Mondes*. Paris: Au Bureau de la Revenue des Deux Mondes, 1846.

Gee, Joseph. *Observations on the Growth of Hemp and Flax in Great-Britain*. Gainsborough, 1765.

_____. *An Abstract of Reasons for Encouraging the Linen Manufactory*. Gainsborough, 1767.

Ginguene, M. "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*, Volume 4. Belfast: Smyth & Lyons, 1810.

Godley, Arthur. *Copies of the Following Papers Relating to the Consumption of Ganja and Other Drugs in India*. London: House of Commons, 1893.

Greeley, Horace. *The Great Industries of the United States: Being a Historical Summary of the Origin, Growth, and Perfection of the Chief Industrial Arts of this Country*. Hartford: J.B. Burr Publishing, 1873.

Green, Hennis, ed. *Provincial Medical Journal, and Retrospect of the Medical Sciences*, Volume V. London: Henry Renshaw, 1843.

Griffiths, Ralph. *The Monthly Review; Or Literary Journal, Enlarged*. London: T. Becket, 1806.

Grigor, J. "Indian Hemp as an Oxytoxic." *Monthly Journal of Medical Science*, 15 (1853): 124-125.

Grose, John Henry. *A Voyage to the East-Indies, with Observations on Various Parts There*. London: S. Hooper and A. Morley, 1757.

_____. *A Voyage to the East-Indies; Began in 1750; With Observations Continued Till 1764*. London: J. Hooper, 1766.

Hamilton, J., ed. *Poems by Robert Burns, with His Life and Character*. Edinburgh: Oliver & Co. Press, 1801.

Hammer-Purgstall, Joseph von. *Histoire de l'Ordre des Assassins*. Paris: Paulin, 1833.

_____. *The History of the Assassins*. Translated by Oswald Charles Wood. London: Smith and Elder, 1835.

Hare, H.A. and Edward Martin, eds. "Hasheesh (Cannabis Indica) as a Cause of Insanity." *The Therapeutic Gazette: A Monthly Journal of General, Special, and Physiological Therapeutics*, Volume XXI. Detroit: William M. Warren, 1897.

Harris, Henry. *A Dictionary of English and Hindostany*, Volume II. Madras, 1790.

Hayes, Isaac, ed. *The American Journal of the Medical Sciences*. Philadelphia: Lea & Blanchard/ London: Wiley & Putnam, 1843.

_____. *The American Journal of Medical Sciences*, Volume 23. Philadelphia: Lea & Blanchard/Lodno: Wiley & Putnam, 1852.

Heilbroner, Robert L., ed. *The Essential Adam Smith*. New York: W. W. Norton, 1986.

Hening, William Waller. *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*. Torrance: Freddie L. Spradlin, 2009. Accessed at: http://www.vagenweb.org/hening/.

Hogarth, William. *The Harlot Beats Hemp in Birdwell Prison*, 1732. Harvard Art Museum/Fogg Museum, Object Number M20084.

_____. *Gin lane*. England: Published according to Act of Parliament, 1751.

Honourable the Society of Improvers in the Knowledge of Agriculture in Scotland. *A Great Number of the Nobility and Gentry Having Come to a Resolution to Encourage the Wearing of Homemade Linnen [sic] Cloth, the Honourable Society for Improving in the Knowledge of Agriculture have Advised the Publishing of the Following Rules for Propagating and Dressing of Lint and Hemp, and for Bleaching and Whitning [sic] of Linnen [sic] Cloth.* Edinburgh, 1726.

Hooper, Robert. *A New Medical Dictionary*. Philadelphia: Griggs & Co. Printers, 1817.

Humphrey, James L. *Hashish or Indian Hemp.* M.D. Dissertation: Albany Medical College, 1866.

Hungerford, Mary C. "An Overdose of Hasheesh." *Popular Science*, Volume 24 (February, 1884): 509.

Indian Hemp Drugs Commission. *Report of the Indian Hemp Drugs Commission, 1893-1894*. [1894] 1971, Volumes 1-9. Reprint. Ney York: Johnson Reprint Corporation. (Originally Issues by the Government of Indian Central Printing Office in Simla)

Jeanes, Jacob. *Homeopathic Practice of Medicine*. Philadelphia: A. Waldie, 1839.

Jackson, Thomas Hayes. "Uncertain Actions of Cannabis Indica." *British Medical Journal*, Volume 1, No. 1 (January, 1857): 15.

James, Joseph. *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, &c. Published for the Editors.* New York: John Furman, 1800.

James, R., Samuel Johnson, Thomas Osborne, and James Roberts. *A Medicinal Dictionary: Including Physic, Surgery, Anatomy, Chymistry, and Botany, in All Their Branches Relative to Medicine: Together with a History of Drugs.* London: T. Osborne, 1743.

Jeanes, Jacob. *Homeopathic Practice of Medicine*. Philadelphia: A. Waldie, 1838.

Johnston, James F. *Chemistry of Common Life.* New York: Appleton and Co., 1856.

Katz, Susa. "Indian Hemp;" in *A Revolutionary Field Trip: Poems of Colonial America*. New York: Simon & Schuster. 2004.

Kane, H.H. *Drugs that Enslave: The Opium, Morphine, Chloral, and Hashisch Habits*. Philadelphia: Presley Blakiston, 1881.

Keir, Archibald. *Thoughts on the Affairs in Bengal*. London, 1772.

Kerr, Hem Chunder. "Report of the Cultivation of, and Trade in, Ganja in Bengal." *Papers Relating to the Consumption of Ganja and Other Drugs in India*. Calcutta, 1877.

King, Charles. *The British Merchant or Commerce Preserv'd*, Volume I [1721]. New York: Reprints of Economic Classics, 1968.

King, Jason. *The Cannabible 2.* Berkeley: Ten Speed Press, 2003.

Latham, Ronald, trans. *The Travels of Marco Polo*. New York: Penguin Books, 1958.

Lamarck, Jean-Baptiste Pierre Antoine de Monet de. *Dictionnaire Encyclopedique de Botanique,* Volume I. Paris: Panckoucke, 1789.

Lawson, L.M., ed. *The Western Lancet: Devoted to Medical and Surgical Science*, Volume 3. Cincinnati: Sparhawk Printing, 1844.

Lemery, Louis. *A Treatise of All Sorts of Foods, both Animal and Vegetable: Also of Drinkables*. 3rd Edition. London: W. Innys, 1745.

Lowe, William. "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*, Volume 2, No. 762 (August, 1875): 176.

Ludlow, Fitz Hugh. *The Hasheesh Eater: Being Passages from the Life of a* Pythagorean. New York: Harper & Brothers, 1857.

Macintosh, William. *Remarks on a Tour through the Different Countries of Europe, Asia, and Africa*. 2 Volumes. Dublin, 1786.

Maisch, John M., ed. *The American Journal of Pharmacy*, Volume LVIII. Philadelphia: Royal Printing Co., 1886.

Marcandier, M. *Traite du Chanvre*. Paris, 1758.

_____, trans. *A Treatise on Hemp. In Two Parts. Containing Its History, with the Preparations and Uses Made of it by the Antients [sic], 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.

Marsden, William. *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.

_____. *The Travels of Marco Polo: A Venetian*. London: Cox and Baylis, 1818.

McMeens, R. R. "Report of the Committee on Cannabis Indica." *Transactions of the 15th Annual Meeting of the Ohio State Medical Society*. Columbus: Follett, Foster & Co., 1860.

Mercy, E. E., John Peters, William Holcombe, and Henry Preston, eds. *The North American Journal of Homeopathy: A Quarterly Magazine of Medicine and the Auxiliary Sciences*, Volume 4. New York: William Rade, 1856.

M'Mahon, Benjamin. *Jamaica Plantership.* London: E. Wilson, 1839.

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

Miller, Philip. *Figures of the Most Beautiful, Useful, and Uncommon Plants Described in The Gardener's Dictionary, Exhibited on Three Hundred Copper Plates*, Volume 1. London, 1760.

Monceau, M. Duhamel du. Translated by Philip Miller. *The Elements of Agriculture. By M. Duhamel du Monceau, In Two Volumes.* London, 1764.

Moreau, Jacques Joseph, *Hashish and Mental Illness* [1845]. Translated by Gordon Barnet and edited by Hélène Petters Gabriel Hahas. New York: Raven Press, 1973.

Musto, David F. *Drugs in America: A Documentary History*. New York: New York University Press, 2002.

"New Billion-Dollar Crop." *Popular Mechanics*, February 1938.

Nicholson, William, ed. *A Journal of Natural Philosophy, Chemistry, and the Arts*, Volume XI. London: Crown Court, 1805.

Nimnich, Philip Andreas. *A Universal European Dictionary of Merchandise*. London: J. Johnson, 1799.

Nye, Francis Marion. *On Cannabis Indica*. M.D. Thesis for the Medical College of the State of Carolina, 1858.

O'Shaughnessy, W.B. "Indian Hemp." Provincial *Medical Journal and Retrospect of the Medical Science*. Volume 5, No. 124 (February 1843): 397-398.

_____. "Case of Tetanus, Cured by a Preparation of Hemp (the Cannabis indica)." *Transactions of the Medical and Physical Society of Bengal*, No. 8 (1839): 462-469.

_____. *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.

_____. *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.

_____. *The Bengal Dispensatory and Companion to the Pharmacopoeia*. London: Allen, 1842.

Papers Regarding the Cultivation of Hemp in India. Agra: Secundra Orphan Press, 1855.

Parkinson, John. *Theatre of Plants*. London, 1640.

Parrish, Edwards. *A Treatise on Pharmacy*, 4th Edition. Philadelphia: Henry C. Lea Son & Co., 1884.

Payne, Paul H. *Russell's Magazine*, Volume II. Charleston: Steam Power Press of Walker, 1858.

Pereira, Jonathan. *The Elements of Materia Medica and Therapeutics*. Philadelphia: Lea & Blanchard, 1843.

Philips, Henry. *The Companion for the Kitchen: History of Cultivated Vegetables, Comprising their Botanical, Medicinal, Edible, and Chemical Qualities; Natural Histories*, Volume 1. London: Henry Colburn and Richard Bentley Press, 1831.

Pierce, A. and Alton S. Donnelly, eds. *A History of the Russian American Company: Documents*. Kingston: The Limestone Press, 1979.

Piggot, Francis and G.W. Omond. *Documentary History of the Armed Neutralities, 1780 and 1800: Together with Selected Documents Relating to the War of American Independence 1766-1783 and the Dutch War 1780-1784*, Volume 1. London: University of London Press, 1919.

Postlethwayt, M. *The Universal Dictionary of Trade and Commerce.* London, 1766.

_____. *Great-Britain's Commercial Interest Explained and Improved: In a Series of Dissertations on the Most Important Branches of Her Trade and Landed Interest: With an Essay, Shewing the Great Advantages Which Would Certainly Accrue to England, from an Union with Ireland : Also a Clear View of the State of our Plantations in America, Their Constitution, Trade, and Revenues, with a Certain Method to Encrease their Commerce and Strength*. London: W. Owen, 1759.

Prothero, George Walter. *The Quarterly Review: September and December, 1812*. London: C. Roworth, Bell-yard, 1813.

Oliver, J. "On the Action of Cannabis Indica." *British Medical Journal* (Jan. to June 1883): 905-906.

Quesnay, François. "Farmers [Abridged.]" The Encyclopedia of Diderot & d'Alembert: Collaborative Translation Project. Translated by Neyy S. Hoyt and Thomas Cassirer. Ann Arbor: MPublishing, 2003. Available at: http://hdl.handle.net/2027/spo.did2222.0000.147. Accessed 2 July 2012.

Quincy, *Edmund. 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.

Rakestraw, Joseph. *The Evening Fire-side, or Literary Miscellany*, Volume 2. Philadelphia, 1806.

Randolph, Paschal Beverly. *The Guide to Clairvoyance, and Clairvoyant's Guide*. Boston: Rockwell & Rollins, 1867.

_____. *The Unveiling: Or What I Think of Spiritualism.* Newburyport: William H. Huse & Co., 1860.

Ranking, W. "Address Delivered at the Annual Meeting of the Suffolk Branch of the Provincial Medical and Surgical Association." *Provincial Medical and Surgical Journal*, Volume 8, No. 14 (Jul. 3, 1844).

Reed, Joseph. *A Rope's-End for Hempen Monopolists, Or, A Dialogue Between a Broker, a Rope-Maker, and the Ghost of Jonas Hanway, Esquire In Which Are Represented the Pernicious Effects of the Rise in the Price of Hemp*. London: J. Sewell, 1786.

Report of the Indian Immigrants Commission, 1885-1887. Pietermaritzburg: Printed by P. Davis & Sons, 1887.

Reynolds, J.R. "On the Therapeutic Uses and Toxic Effects of Cannabis Indica." *Lance*t, 1 (1890): 637-638.

Roberts, G.M. 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.

Roxburgh, William, et al. *Transactions of the Society, Instituted at London, for the Encouragement of Arts, Manufactures, and Commerce*, Volume 24. 1806.

Royal Asiatic Society of Great Britain and Ireland. *Journal of the Royal Asiatic Society of Great Britain & Ireland*. Cambridge: Cambridge University Press for the Royal Asiatic Society, 1834.

Royle, John Forbes. *Illustrations of the Botany and Other Branches of the Natural History of the Himalayan Mountains and the Flora of Cashmere,* Volume 1. London: William H Allen & Co., 1839.

_____, ed. *The British and Foreign Medical Review*, Volume IVX. London: John Churchill, 1844.

_____. *The Fibrous Plants of India*. London: Smith Elder & Co., 1855.

Ruffin, Edmund, ed. *The Farmer's Register: A Monthly Publication Devoted to the Improvement of the Practice, and Support of the Interests of Agriculture*, Volume III. Petersburg: Edmund Ruffin, 1836.

Rutherfurd, John. *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 Press, 1761.

Scoresby-Jackson, Robert Edmund. *Note-Book of Materia Medica, Pharmacology and Therapeutics*. 3rd Edition. Edinburgh and London: Maclachlan & Stewart, 1875.

Scott, Jonathan. *Translation of Inayat Allah's Bahar-danush; Or, Garden of Knowledge. An Oriental Romance*, Volume 1. Shrewsbury: J. and W. Eddowes, 1799.

Smith, J.V.C., ed. "New Remedy for Tetanus and Other Convulsive Disorders by W.B. O'Shaughnessy," *The Boston Medical and Surgical Journal*, Volume XXIII, No. 10 (October, 1840).

_____. *Boston Medical and Surgical Journal*, Volume 44. Boston: David Clapp Publishing, 1851.

Smith, Nathaniel. *Observations on the Present State of the East India Company; and On the Measures to be Pursued for Ensuring its Permanency, and Augmenting its Commerce*. London: J. Nourse, 1771.

Smith, Paul, et al., eds. *Letters of Delegates to Congress, 1774-1789*, Volumes 1-25. Washington: Library of Congress, 1976-2000. Available at: http://memory.loc.gov.ammem/amlaw/lwdc.html.

Smith, William. *Four Dissertations, On the Reciprocal Advantages of a Perpetual Union Between Great-Britain and her American Colonies.* Philadelphia: W. and T. Bradford, 1766.

Smithers, Leonard C., ed. *The Book of the Thousand Nights and a Night*, Volume 1. Translated by Captain Sir Richard F. Burton. London: H. S. Nichols & Co., 1894.

Smollet, Tobias, ed. *The Critical Review; Or, Annals of Literature; Extended and Improved*, Volume 36. London: S. Hamilton Printing, 1802.

Sparks, Jared, Edward Everett, Russel Lowell, and Henry Cabot Lodge. *The North American Review*, Volume 17. Boston: O. Everett, 1824.

Squire, Peter. *Companion to the Latest Edition of the British Pharmacopeia*. 17th Edition. London: J. & A. Churchill, 1899.

Stang, Maurice. *Hashish, Wine, Opium, Theophile Gautier and Charles Baudelaire*. London: Calder & Boyars, 1972.

Steel, Henry Draper. *Portable Instructions for Purchasing the Drugs and Spices of Asia and the East-Indies: Pointing out the Distinguishing Characteristics of Those that are Genuine, and the Arts Practised in their Adulteration. With Practical Directions for the Choice Of Diamonds, And an Accurate Account of the Chinese Touch-Needles, OR, The Method Of Judging Of The Fineness Of Gold By Its Colour. To which is Prefixed, a Table of the Custom-House Duties at London.* London, 1779.

Stille, Alfred. *Therapeutics and Materia Medica: A Systematic Treatise on the Action and Uses of Medicinal Agents, Including Their Description and History,* Volume 1. 4th Edition. Philadelphia: Henry C. Lea, 1874.

Stowell, William Hendry. *The Eclectic Review*, Volume 19. London: J Holdsworth, 1823.

Taylor, Bayard. *A Journey to Central Africa*. New York: G.P. Putnman, 1854.

_____. "The Vision of Hasheesh." *Putnam's Monthly Magazine of American Literature, Science, and Art*, Volume III, Issue 16 (April, 1854): 402-412.

Taylor, John. *The Praise of Hemp-seed*. London: E. Wright, 1623.

Tooke, William. *View of the Russian Empire, During the Reign of Catherine the Second, and to the Close of the Eighteenth Century*. Volumes 1-3. London: G. Woodfall Printing, 1800.

Tikhmenev, P. A. *A History of the Russian-American Company*. Translated by Richard A. Pierce and Alton S. Donnelly. London: University of Washington Press, 1978.

The American Provers' Union. *Provings of Cannabis indica*. Philadelphia: King & Baird, 1859.

_____. *Suggestions for the Proving of Drugs on the Healthy.* Philadelphia, 1853.

The Angler's Pocket-book; Or, Complete English Angler: Containing Everything Necessary in that Art. To Which is Prefixed, Nobb's Celebrated Treatise on the Art of Trolling. Norwich: J. Payne, 1800.

The Asiatic Journal and Monthly Register for British India and its Dependencies, Volume 14. London: Kingsbury, Parbury, & Allen, 1822.

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.

The Boston Directory, Containing the Names of the Inhabitants, Their Occupations, Places of Business, and Dwelling-houses. Also, a List of the Town Officers; Public Offices, Where and By Whom Kept, Banks, &c. &c. To Which is Prefixed, a General Description of Boston. Ornamented with a Plan of the Town, Taken from Actual Survey. Boston, 1796.

The British Review and London Critical Journal, Volume 20. London: J. Hatchard and Son, 1822.

The British Spiritual Telegraph: Being a General Record of Spiritual Phenomena. London: E. Pitman, 1859.

The Foreign Review, Volume 1. London: Treuttel and Wurtz, 1827.

The Museum of Foreign Literature and Science, Volume XIII. Philadelphia and New York: E. Littell and G. & C. Carvill, 1828.

The Monthly Review; Or Literary Journal, Enlarged, Volume 31. London: A. Straban Printing, 1800.

The Quarterly Review, No. CLIV. London: John Murray, 1846.

The Society of Arts. *Journal of the Society of Arts*, Volume XLIV. London: George Bell and Sons, 1896.

The United States Veterans' Bureau. *The Medical Bulletin*, Volume 1. U.S. Government Printing Office, 1926.

Thirsk, Joan, and J. P. Cooper. *Seventeenth-Century Economic Documents*. Oxford: Clarendon Press, 1972.

Thomas, Isaiah. *The History of Printing in America,* Volume 1. New York: American Antiquarian Society, 1874.

Thompson, George. Hashish Candy! *The Oriental Exhilirant and Nerive Compund*. Cambridge, Mass.: R. C. Getchell, 1863.

Tusser, Thomas. *Five Hundred Points of Good Husbandrie*. London, 1580. Edited and Revised by W. Payne and Sidney Herrtage. London: English Dialect Society, 1878.

United States Department of Agriculture. *Report of the Commission of Agriculture for the Year 1879*. Washington: Government Printing Office, 1880.

Urquhart, David. *Pillars of Hercules, Or, A Narrative of Travels in Spain and Morocco in 1848*. London: B. Bentley, 1850.

_____. *Pillars of Hercules, Or, A Narrative of Travels in Spain and Morocco in 1848*. New York: Harper & Brothers, 1850.

Von Bibra, E. *The Narcotic Luxury: Hemp and Humans*. Lohrbach: Werner Piper's Medien Xperimente, 1855.

Wakley, Thomas, ed. *The Lancet*, Volume I. London: J. Churchill, 1844.

Watson, Sereno. "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*, Volume X. Boston: University Press, John Wilson and Son, 1883.

Watt, George. *A Dictionary of the Economic Products of India*. Calcutta: Government Printing, 1889.

Wharton, Francis et al. *The Revolutionary Diplomatic Correspondence of the United States*. Washington: G.O.P, 1889. Volumes 1-6.

Wise, Thomas A. "Insanity as it Occurs among the Inhabitants of Bengal," *London Journal of Medicine*, Volume 4, No. 43 (July: 1852): 661-691.

Wissett, Robert. *On the Cultivation and Preparation of Hemp, as also, of the Article, Produced in Various Parts of India, Called Sunn*. London: Cox and Son, 1804.

_____. *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: Printed by Lane, Darling & Co, 1808.

Whittier, John Greenleaf. *The Compleat Poetical Works of John Greenleaf Whittie*r. Boston: Houghton Mifflin, 1854.

Wood, George B. and F. Bache. *The Dispensatory of the United States*. Philadelphia: Lippincott, Brambo & Co., 1854.

_____. *Dispensatory of the United States of America*, 8th Edition. Philadelphia: Elliot Grigg and Co., 1849.

_____. *Dispensatory of the United States of America*, 11th Edition. Philadelphia J.B. Lippincott and Co., 1858.

Wood, H. C., and Reginald Heber Fitz. *The Practice of Medicine*. Philadelphia: J. B. Lippincott Co., 1897.

_____. "On the Medical Activity of the Hemp Plant, as Grown in North America," *Proceeding of the American Philosophical Society,* Volume 11, No. 81 (Jan. 1869): 226-232.

Wood, Oswald Charles. *The History of the Assassins*. London, 1835.

Zenkovsky, Serge A., ed. *Medial Russia's Epics, Chronicles, and Tales*. New York: Penguin Books, 1973.

Secondary Sources

Abel, Ernest. *Marijuana: The First Twelve Thousands Years*. New York: Plenum Press, 1980.

Acevedo, Beatriz. *Understanding Cannabis Reclassification in the United Kingdom, 2002-2005*. Dissertation Submitted for the Degree of Doctor in Management. University of Hull, United Kingdom, 2007.

_____. "Cannabis Britannica: A History of the Present." *Ephemera*, Volume 6, No. 2 (2006): 208.

Adam, Thomas. *Buying Respectability: Philanthropy and Urban Society in Transnational Perspective, 1840s to 1930s*. Indiana: Indiana University Press, 2009.

_____. *Intercultural Transfer and the Making of the Modern World.* New York: Palgrave, 2012.

Aldrich, Michael-Ray. *Cannabis Myth and Folklore*. Ph.D. Dissertation. Buffalo: Faculty of the Graduate School of State University of New York, 1971.

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

Anonymous. "Cannabis Sativa' and Traditions Associated with it." *Kentucky Folklore Record*, Volume 18, Issue 1 (1972): 1-4.

Ansley, Hamid. *The Ganja Complex: Rastafari and Marijuana*. Lanham: Lexington Books, 2002.

Armitage, David. *The Declaration of Independence: A Global History*. Cambridge: Harvard University Press, 2007.

Ash, Anne L. "Hemp: Production and Utilization." *Economic Botany.* Volume 2, No. 2 (April-June, 1948): 158-169.

Axelby, Richard and Savithri Nair. *Science and the Changing Environment in India, 1780-1920*. London: The British Library, 2010.

Bartlett, W. B. *Assassins: The Story of Medieval Islam's Secret Sect*. Stroud: The History Press, 2001.

Bayly, C.A. *The New Cambridge History of India: Indian Society and the Making of the British Empire*. New York: Cambridge University Press, 1988.

_____. "Knowing the Country: Empire and Information in India." *Modern Asian Studies*. Volume 27, No. 1 (Feb., 1993): 3-43.

Beable, William Henry. *Commercial Russia*. London: Constable & Co., 1918.

Beazley, C. Raymond, Nevill Forbes, and G. A. Birkett. *Russia from the Varangians to the Bolsheviks*. Oxford: Clarendon Press, 1918.

Becker, Howard. "History, Culture, and Subjective Experience: An Exploration of the Social Bases of Drug-Induced Experiences." *Journal of Health and Social Behavior*, Volume 8, No. 3 (Sep. 1967): 163-176.

Behdad, Ali. *Belated Travelers: Orientalism in the Age of Colonial Dissolution*. Durham: Duke University Press, 1994.

Bender, Thomas. *A Nation among Nations: America's Place in World History*. New York: Hill and Wang, 2006.

_____, ed. *Rethinking American History in a Global Age*. Berkeley: University of California, 2002.

Berridge, Virginia. *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.

Bey, Hakim and Abel Zug. *Orgies of the Hemp Eaters: Cuisine, Slang, Literature & Ritual of Cannabis Culture*. New York: Autonomedia, 2004.

Bidwell, Percy Wells. *History of Agriculture in the Northern United States, 1620-1860*. New York: Peter Smith, 1941.

Blyden, Nemata. *West Indians in West Africa, 1808-1880: The African Diaspora in Reverse*. New York: University of Rochester Press, 2000.

Bole, P.V. "Review of Flora Indica or Descriptions of India Plants by William Roxburgh, William Carey." *The Quarterly Review of Biology*, Volume 3, No. 51 (1976).

Bolkhovitinov, Nikolai. *The Beginnings of Russian-American Relations, 1775-1815*. Cambridge: Harvard University Press, 1975.

Bonnie, Richard J. and Charles H. Whitebread. *The Marijuana Conviction: A History of Marihuana Prohibition in the United States*. New York: The Lindesmith Center, 1999.

Bonnie, Richard. *The Forbidden Fruit and the Tree of Knowledge: An Inquiry into the Legal History of American Marijuana Prohibition*. Charlottesville, VA: Virginia Law Review Associations, 1970.

Booth, Martin. *Cannabis: A History*. New York: St. Martin's Press. 2003.

Boon, Marcus. *The Road of Excess: A History of Writers on Drugs.* Cambridge, Mass: Harvard University Press, 2002.

Bourie, Mark. *Hemp: A Short History of the Most Misunderstood Plant and its Uses an Abuses*. New York: Firefly Books, 2003.

Brecher, E.M. *Licit and Illicit Drugs: The Consumers Union Report on Narcotics, Stimulants, Depressants, Inhalants, Hallucinogens, and Marijuana – Including Caffeine, Nicotine, and Alcohol*. Boston: Little, Brown, 1972.

Bridges, R.C 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.

Brown, David T., ed. *Cannabis: The Genus Cannabis*. Amsterdam: Harwood Academic Publishers, 1998.

Bushkovitch, Paul. *The Merchants of Moscow, 1580-1650*. New York: Cambridge University Press, 1980.

Campos, Isaac. *Home Grown: Marijuana and the Origin of Mexico's War on Drugs*. Chapel Hill: University of North Carolina Press, 2012.

Canizares-Esquerra, Jorge and Erik Seeman. *The Atlantic in Global History, 1500-2000*. New Jersey: Pearson, 2007.

Castle, David, Robin Murray, and Deepak D'Souza, eds. *Marijuana and Madness*. 2nd Edition. New York: Cambridge University Press, 2011.

Carlson, Eric T. "Cannabis Indica in 19th Century Psychiatry." *American Journal of Psychiatry*, Volume 131, No. 9 (September 1974): 1004-1007.

Carrier, Lyman. *The Beginnings of Agriculture in America.* New York: Johnson Reprint Co., 1962.

Cervantes, Jorge. *Marijuana Horticulture: The Indoor/Outdoor Medical Grower's Bible*. Singapore: Van Patten Publishing, 2006.

Chang, Kwang-chih. *The Archeology of Ancient China.* New Haven: Yale University Press, 1968.

Chidsey, Donald. *The Great Separation: The Story of the Boston Tea Party and the Beginning of the American Revolution*. New York: Crown Publisher, 1965.

Clarke, Robert Connell. *Hashish!* Los Angeles: Red Eye Press, 1998.

_____. *Marijuana Botany*. Berkeley, Calif.: Ronin Publishing, 1981.

_____ and Mark Merlin. *Cannabis: Evolution and Ethnobotany*. Berkeley: University of California Press, 2013.

Clark, Thomas Dionysius. *The Trade between Kentucky and the Cotton Kingdom in Livestock, Hemp, and Slaves*. Lexington, 1929.

Coe, Sophie D. and Michael D. Coe. *The True History of Chocolate*. New York: Thames and Hudson, 1996.

Cooney, Jerry W. "A Colonial Naval Industry: The 'Fabrica de Cables of Paraguay.'" Revista *de Historia de America*, No. 87 (January-June 1979): 105-126.

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

Courtwright, David T. *Forces of Habit: Drugs and the Making of the Modern World*. Cambridge, Mass.: Harvard University Press, 2001.

_____. *Dark Paradise: A History of Opiate Addiction in America*. Cambridge: Harvard University Press, 2001.

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

Crosby, Alfred W. *America, Russia, Hemp, and Napoleon: American Trade with Russia and the Baltic, 1783-1812*. Cleveland: Ohio State University Press, 1965.

_____. *The Columbian Exchange: Biological and Cultural Consequences of 1492*. Greenwood Press, 1972.

_____. *Ecological Imperialism: The Biological Expansion of Europe, 900-1900*. 2nd Edition, Cambridge University Press, 2004.

Crowley, John. *Imperial Landscapes: Britain's Global Visual Culture.* New Haven: Paul Mellon Centre, 2011.

Davis, Donald E*. Southern United States: An Environmental History.* Santa Barbara: ABC-CLIO, 2006.

DeGrandpre, Richard. *The Cult of Pharmacology: How America Became the World's Most Troubled Drug Culture*. Durham: Duke University Press, 2006.

Derrida, Jacque. *Dissemination*. London: The Athlone Press, 1981.

Du Toit, Brian M*. Cannabis in Africa*. Rotterdam: Balkema Press, 1980.

Dulchinos, Donald P. *Pioneer of Inner Space: The Life of Fitz Hugh Ludlow, Hasheesh Eater*. Brooklyn, N.Y.: Autonomedia, 1998.

Earleywine, Mitch. *Understanding Marijuana: A New Look at the Scientific Evidence*. Oxford: Oxford University Press, 2002.

Ebadi, Manuchair S. *Pharmacodynamic Basis of Herbal Medicine*. Boca Raton: CRC Press, 2002.

Ehrensing, Daryl T. "Feasibility of Industrial Hemp Production in the United States Pacific Northwest." *Department of Crop and Soil Science*, Agricultural Experiment Station: Oregon State University, 1998.

Ecott, Tim. *Vanilla: Travels in Search of the Ice Cream Orchid*. New York: Grove Press, 2004.

Escohotado, Antonio. *A Brief History of Drugs.* Trans. By Kenneth A Symington. Rochester, Vt.: Park Street Press. 1999.

Falck, Zachary. *Weeds: An Environmental History of Metropolitan America*. Pittsburgh: University of Pittsburgh Press, 2010.

Foxcroft, Louise. *The Making of Addiction: The 'Use and Abuse' of Opium in Nineteenth Century Britain*. Burlington: Ashgate Publishing Company, 2007.

Foucault, Michele. *The Archaeology of Knowledge and the Discourse on Language*. Translated by A. M. Sheridan Smith. New York: Pantheon Press, 1972.

_____. *Madness and Civilization: A History of Insanity in the Age of Region*. Translated by Richard Howard. New York: Vintage Books, 1965.

_____. *The Order of Things: An Archaeology of the Human Science*. New York: Vintage Books, 1994.

Francaviglia, Richard V. *Go East Young Man: Imagining the American West as the Orient*. Logan: Utah State University Press, 2011.

Frank, T. *An Economic Survey of Ancient Rome*. Patterson: Pageant Books, 1956.

Franzius, Enno. *History of the Order of Assassins*. New York: Funk & Wagnalls, 1969.

Games, Alison, Jane Landers, Douglas Egerton, Kris Lane, and Donald Wright. *The Atlantic World: A History, 1400-1888*. Wheeling: Harlan Davidson, 2007.

Garland, John H. "Hemp; A Minor American Fiber Crop." *Economic Geography*, Volume 22, No. 2 (April 1946): 126-132.

Gately, Iain. *Tobacco: A Cultural History of How an Exotic Plant Seduced Civilization.* Grove Press, 2001.

Gerber, Rudolph J. *Legalizing Marijuana: Drug Policy Reform and Prohibition Politics*. Westport, Conn: Praeger, 2004.

Ginsberg, Allen. "The Great Marijuana Hoax: First Manifesto to End the Bring Down." *The Atlantic Monthly* (November 1966): 107-112.

Goldenberg, Joseph A. *Shipbuilding in Colonial America*. Charlottesville: University Press of Virginia, 1976.

Goode, Erich. "Marijuana and the Politics of Reality." *Journal of Health and Social Behavior*, Volume 10, No. 2 (1969): 83-94.

Goodman, Jordan. *Tobacco in History: The Cultures of Dependence*. London: Routledge, 1993.

Goodman, Jordan, Paul E. Lovejoy, and Andrew Sherratt. *Consuming Habits: Global and Historical Perspectives on How Cultures Define Drugs*. 2nd Edition. London: Routledge, 2007.

Gray, Lewis C. *History of Agriculture in the Southern United States to 1860*. Gloucester, Mass.: Peter Smith Press, 1958.

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

Green, Jonathon. *Cannabis*. New York: Thunder's Mouth Press, 2002.

Green, Jack P. and Philip Morgan. *Atlantic History: A Critical Appraisal*. New York: Oxford University Press, 2009.

Greenfield, Amy Butler. *A Perfect Red: Empire, Espionage, and the Quest for the Color of Desire*. New York: HarperCollins, 2005.

Grinspoon, Lester. *Marijuana Reconsidered*. Cambridge: Harvard University Press, 1971.

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

Hamid, Ansley. *The Ganja Complex: Rastafari and Marijuana.* Lanham: Lexington Books, 2002.

Harding, Geoffrey. "Constructing Addiction as a Moral Failing." *Sociology of Health and Illness*, Volume 8, No. 1 (March 1986): 75-85.

Hart, Carl. *High Price: A Neuroscientist's Journey of Self-Discovery that Challenges Everything You Know About Drugs and Society*. New York: HarperCollins, 2013.

Hayward, John. *The Oxford Book of Nineteenth-Century English Verse*. Oxford: Clarendon Press, 1964.

Helle, Knut, Halfdan Wiber, and Espen Bowitz Andersson, *Bryggen: The Hanseatic Settlement in Bergen*. Bergen: Det Hanseatiske Museums Skrifter Nr 24, 1982.

Henning, C. G. *The Indentured Indian in Natal, 1860-1917*. New Delhi: Promilla & Co, 1993.

Herndon, Melvin. "A War-Inspired Industry: The Manufacture of Hemp in Virginia during the Revolution." *The Virginia Magazine of History and Biography*, Volume 74, No. 3 (July, 1966): 86-93.

_____. "Hemp in Colonial Virginia." *Agricultural History.* Volume 37, No. 2 (April 1963): 90-107.

Herer, Jack. *Hemp & the Marijuana Conspiracy: The Emperor Wears No Clothes*. Van Nuys: Queen of Clubs Publishing, 1992.

Hillig, Karl William. *A Systematic Investigation of Cannabis.* Ph.D. Dissertation in Biology, Indiana University. Bloomington: Indiana University, 2005.

Holland, Julie, ed. *The Pot Book: A Complete Guide to Cannabis*. Rochester: Park Street Press, 2010.

Hopkins, James F. *A History of the Hemp Industry in Kentucky*. Lexington: University Press of Kentucky, 1951.

Hoyt, Nelly S and Thomas Cassirer. *The Encyclopedia of Diderot & d'Alembert Collaborative Translation Project*. Ann Arbor: MPublishing, 2003.

Hutchins, John. *The American Maritime Industries and Public Policy, 1789-1914: An Economic History*. Cambridge: Harvard University Press, 1941.

Inglis, Brian. *The Forbidden Game: A Social History of Drugs*. London: Hodder and Stoughton, 1975.

Iverson, Leslie. *The Science of Marijuana*. Oxford: Oxford University Press, 200.

Institut national de la statistique et des etudes economiques. Available at: http://www.insee.fr.ed/. Accessed 22 September 2012.

Janick J and A Whipkey, eds. *Trends in New Crops and New Uses*. Plexandria, Va.: ASHS Press, 2002.

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

Jacquette, Dale. *Cannabis: Philosophy for Everyone: What Were We Just Talking About?* Malden, MA: Wiley-Blackwell, 2010.

Jenkins, Keith. *Re-Thinking History*. New York: Routledge Press, 1991.

Joyce, C.R. B. and S. H. Curry, eds. *The Botany and Chemistry of Cannabis.* Baltimore: Williams & Wilkins Co., 1970.

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

Kaplan, John. *Marijuana: Report of the Indian Hemp Drugs Commission, 1893-1894*. Silver Spring: Thomas Jefferson Publishing, 1969.

Karus, Michael. "European Industrial Hemp 2001 till 2004: Cultivation, Raw Materials, Products, and Trends." *European Industrial Hemp Association* (February, 2005).

Kent, Max L. *The British Enlightenment and the Spirit of the Industrial Revolution: The Society for the Encouragement of Arts, Manufactures and Commerce, 1754-1815.* University of California, Los Angeles, 2007.

Kennedy, Robert. *The Ropewalk in the Charlestown Naval Yard*. Boston: Boston Redevelopment Authority, 1974.

Kerner, Robert J. *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.

Klooster, Wim and Alred Padula. *The Atlantic World: Essays on Slavery, Migration, and Imagination*. New Jersey: Prentice Hall, 2005.

Kondratenko, Alexsei. *Zolotoi vek konopli: istoriko-kraevedcheskie ocherki [Golden Age of Hemp: A History]*. Tip: Trud, 1998.

Kurlansky, Mark. *Cod: A Biography of the Fish That Changed the World*. New York: Penguin Books, 1998.

_____. *Salt: A World History*. New York: Penguin Books, 2002.

Latour, Bruno. *Science in Action: How to Follow Scientists and Engineers through Society.* New York: Harvard University Press, 1987.

Laws, Bill. *Fifty Plants That Changed the Course of History.* Richmond Hill: Firefly Books, 2010.

Lee, Martin. *Smoke Signals: A Social History of Marijuana-Medical, Recreational, and Scientific*. New York: Scribner, 2012.

Lenson, David. *On Drugs*. Minneapolis: University of Minnesota Press, 1995.

Lingelbach, Gabriele. "Cultural Borrowing or Autonomous Development: American and German Universities in the Late Nineteenth Century." In Thomas Adam and Ruth Gross, eds. *Traveling between Worlds: German-American Encounters*. College Station: Texas A&M University Press, 2006, pp. 100-123.

Lucas, Marion. *A History of Blacks in Kentucky: From Slavery to Segregation, 1760-1891*. Lexington: University Press of Kentucky, 2003.

Lyashchenko, Peter. *History of the National Economy of Russia to the 1917 Revolution*. New York: Macmillan Co., 1949.

Lyman, Michael. *Drugs in Society: Causes, Concepts, and Control*. 5th Edition. Newark: Anderson Publications, 2007.

MacKenzie, David. *A History of Russia, the Soviet Union, and Beyond*. 6th Edition. Belmont: Wadsworth Publishing, 2002.

MacKenzie, John M. *Orientalism: History, Theory, and the Arts*. Manchester: Manchester University Press, 1995.

Macmillan, David S. *The Russia Company of London in the Eighteenth Century: The Effective Survival of a "Regulated" Chartered Company*. London: Corporation of London, 1973.

Madariaga, *Isabel. Britain, Russia, and the Armed Neutrality of 1780.* New Haven: Yale University Press, 1962.

Maeer, Alistair. *The Cartography of Commerce: The Thames School of Nautical Cartography and England's Seventeenth Century Overseas Expansion*. Ph.D. Dissertation, University of Texas at Arlington, 2006.

Mancall, Peter C. "Pigs for Historians: Changes in the Land and Beyond." *William and Mary Quarterly,* Volume 67, No. 2 (April 2010): 247-375.

Mathre, M.L., ed. *Cannabis in Medical Practice: A Legal, Historical and Pharmacological Overview of the Therapeutic Use of Marijuana.* London: McFarland, 1997.

Mathew, K.S. *Portuguese Trade with India in the Sixteenth Century*. New Delhi: Manohar Publications, 1983.

Matthews, Patrick. *Cannabis Culture: A Journey through Disputed Territory*. London: Bloomsbury, 1999.

Mavor, James. *An Economic History of Russia*. New York: Russell & Russell, 1965.

McAllister, W. *Drug Diplomacy in the Twentieth Century*. London: Routledge Press, 2000.

Mills, James H. *Cannabis Britannica: Empire, Trade, and Prohibition*. New York: Oxford University Press, 2003.

_____. *Madness, Cannabis and Colonialism: The 'Native Only' Lunatic Asylums of British India, 1857-1900*. New York: St. Martin's Press, 2000.

_____ and Patricia Barton. *Drugs and Empires: Essays in Modern Imperialism and Intoxication, C.1500-C.1930*. Basingstoke: Palgrave Macmillan, 2007.

_____. *Cannabis Nation: Control and Consumption in Britain, 1928-2008*. Oxford: Oxford University Press, 2012.

_____. "Cannabis in the Commons: Colonial Networks, Missionary Politics, and the Origins of the Indian Hemp Drug Commission, 1893-4." *Journal of Colonialism and Colonial History*, Volume 6, No. 1 (Spring 2005).

Mintz, Sidney. *Sweetness and Power: The Place of Sugar in the Modern World*. New York: Penguin Books, 1985.

Michell, Robert, and Nevill Forbes. *The Chronicle of Novgorod, 1016-1471*. Hattiesburg: Academic International, 1970.

Michell, Robert. *The Chronicle of Novgorod, 1016-1471*. London: Offices of the Society, 1914.

Mitchell, Martine. *The Maritime History of Russia, 849-1948*. London: Hazell Watson & Viney, 1948.

Morgans, James Patrick. *The Underground Railroad on the Western Frontier: Escapes From Missouri, Arkansas, Iowa and the Territories of Kansas, Nebraska and the Indian Nations 1840-1865.* Jefferson, N.C.: McFarland & Co, 2010.

Mosk, Sanford A. "Subsidized Hemp Production in Spanish California." *Agricultural History*, Vol. 13, No. 4 (October 1943): 154-189.

Musto, David F. *The American Disease: Origins of Narcotic Control*, 3rd Edition. New York: Oxford University Press, 1999.

Nance, Susa. *How the Arabian Nights Inspired the American Dream, 1790-1935*. Chapel Hill: University of North Carolina Press, 2009.

Nash, Elizabeth Gee. *The Hansa*. New York: Barnes & Noble, 1995.

Nechtman, Tillman. *Nabobs: Empire and Identity in Eighteenth Century Britain*. New York: Cambridge University Press, 2010.

Nordlander, David. *For God & Tsar: A Brief History of Russian America*. Anchorage: Alaska Natural History Association, 1994.

Norton, Marcy. *Sacred Gifts, Profane Pleasures: A History of Tobacco and Chocolate in the Atlantic World*. Ithaca: Cornell University Press, 2008.

Nowell, Charles E. "The Old Man of the Mountain." *Speculum*, Volume 22, No. 4 (Oct. 1947): 497-519.

O'Connell, Mark, Raje Airey, Richard Craze, Mark O'Connell, and Richard Craze. *The Complete Illustrated Encyclopedia of Symbols, Signs & Dream Interpretation: Identification and Analysis of the Visual Vocabulary and Secret Language That Shapes Our Thoughts and Dreams and Dictates Our Reactions to the World.* London: Lorenz, 2007.

Ogborn, Miles. *Indian Ink: Script and Print in the Making of the English East India Company*. Chicago: University of Chicago Press, 2007.

Parrish, Susan Scott. *American Curiosity: Cultures of Natural History in the Colonial British Atlantic World*. Chapel Hill: University of North Carolina Press, 2006.

Pincus, Steven. *1688: The First Modern Revolution*. New Haven: Yale University Press, 2009.

Platonov, S.F. *The Time of Troubles.* Translated by John T Alexander. Kansas: University of Kansas Press, 1985.

Pollan, Michael. *The Botany of Desire: A Plant's Eye View of the World*. New York: Random House, 2001.

Porter, Roy. *The Greatest Benefit to Mankind: A Medical History of Humanity*. New York: W.W. Norton & Company, 1997.

Postnikov, Alexei. *Russia in Maps: A History of the Geographical Study and Cartography of the Country*. Nash Dom: L'Age d'Homme Publishing, 1996.

Potter, Beverly and Dan Joy. *The Healing Magic of Cannabis*. Oakland: Ronin Publishing, 1998.

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

Racine, Karen and Beatriz Mamigonian, eds. *The Atlantic World, 1500-1850*. New York: Rowman & Littlefield, 2010.

Rainy, G. *Report on the Manufacture and Smuggling of Ganja*. Calcutta: Bengal Secretariat Press, 1904.

Ranalli, Paolo, ed. *Advances in Hemp Research*. New York: The Haworth Press, 1999.

Reading, Douglas K. *The Anglo-Russian Commercial Treaty of 1734*. New Haven: Yale University Press, 1938.

Reinhartz, Dennis. *Exploration and Encroachment: English, French, and Russian Mapping of California, 1596-1846*. Unpublished Manuscript.

Richards, John F. "Opium and the British Indian Empire: The Royal Commission of 1895." *Modern Asian Studies*, Volume 36, No. 2 (May 2002): 386.

Rodgers, Daniel T. *Atlantic Crossings: Social Politics in a Progressive Age*. Cambridge: The Belknap Press of Harvard University Press, 1998.

Rodger, N. A. M. *The Command of the Ocean: A Naval History of Britain, 1649-1815.* New York: W.W. Norton, 2005.

Robbins, Bruce. "Commodity Histories." *PMLA*, Volume 120, No. 2 (March, 2005): 454-463.

Robinson, Rowan. *The Great Book of Hemp: the Complete Guide to the Environmental, Commercial, and Medicinal Uses of the World's Most Extraordinary Plant.* Rochester: Park Street Press, 1996.

Ronimois, H.E. *Russia's Foreign Trade and the Baltic Seas*. London: Boreas Publishing Co., 1946.

Roopnarine, Lomarsh. "East Indian Indentured Emigration to the Caribbean: Beyond the Push and Pull Model." *Caribbean Studies*, Volume 31, No. 2 (Jul.-Dec. 2003): 97-134.

Rosenber, Charles E. *The Trial of the Assassin Guiteau*. Chicago: University of Chicago Press, 1968.

Rothman, David. *The Discovery of the Asylum: Social Order and Disorder in the New Republic*. Boston: Little, Brown, 1971.

Rubin, Vera, ed. *Cannabis and Culture.* Chicago: Mouton Publishers, 1975.

Russell-Wood, A.J.R. *The Portuguese Empire, 1415-1808*. Baltimore: John Hopkins University Press, 1998.

Sackett, Guy W, and Merrill H. Hobbs. *Hemp, Cannabis Sativa: A War Crop*. New York, 1942.

Said, Edward W. *Culture and Imperialism*. New York: Knopf Press, 1993.

_____. *Orientalism*. New York: Pantheon Books, 1978.

Schiebinger, Londa L. *Plants and Empire: Colonial Bioprospecting in the Atlantic World*. New York: Harvard University Press, 2004.

_____ and Claudia Swan, eds. *Colonial Botany: Science, Commerce, and Politics in the Early Modern World*. Philadelphia: University of Pennsylvania Press, 2005.

Scull, Andrew. *Madhouses, Mad-Doctors, and Madmen: The Social History of Psychiatry in the Victorian Era*. Philadelphia: University of Pennsylvania Press, 1981.

Sen, Sudipta. *Distant Sovereignty: National Imperialism and the Origins of British India*. New York: Routledge, 2002.

Seth, Vanita. *Europe's Indians: Producing Racial Difference, 1500-1900*. London: Duke University Press, 2010.

Shamir, Ronen and Daphna Hacker. "Colonialism's Civilizing Mission: The Case of the Indian Hemp Drug Commission." *Law & Social Inquiry*, Volume 26, No. 2 (Spring 2001): 432-467.

Shannon, Timothy. *Atlantic Lives: A Comparative Approach to Early America*. New York: Pearson, 2004.

Sibley, David. *The Sibley Guide to Trees.* New York: Alfred A. Knopf, 2009.

Sires, Ronald V. "Sire Henry Barkly and the Labor Problem in Jamaica, 1853-1856." *The Journal of Negro History*, Volume 25, No. 2 (April, 1940): 199-221.

Snelders, Stephen, Charles Kaplan, and Toines Pieters. "On Cannabis, Chloral Hydrate, and Career Cycles of Psychotropic Drugs in Medicine." *Bulletin of the History of Medicine*, Volume 80, No. 1 (Spring 2006): 95-114.

Sullivan, John. *Russian Cloth Seals in Britain: Trade, Textiles, and Origins*. Oxford: Oxbow Books, 2012.

Sudan, Rajani. "Mud, Mortar, and Other Technologies of Empire." *The Eighteenth Century*, Volume 45, No. 1 (Summer 2004): 147-169.

Summer, Benedict. Humphrey. *Peter the Great and the Emergence of Russia*. London: English University Press, 1951.

Sires, Ronald V. "Sir Henry Barkly and the Labor Problem in Jamaica, 1853-1856." *The Journal of Negro History*, Volume 25, No. 2 (Apr., 1940): 216-235.

Small, Ernest and Arthur Cronquist. "A Practical and Natural Taxonomy for Cannabis." *Taxon,* Volume 25, No. 4 (1976): 405–435.

_____, Allan Chan and H.D. Beckstead. "The Evolution of Cannabinoid Phenotypes in Cannabis." *Economic Botany*, Volume 29, No. 3. (July-Sept. 1975): 219-232.

Spear, Thomas. *The Nabobs: A Study of the Social Life of the English in Eighteenth Century India*. London: Oxford University Press, 1963.

Steinberg, Michael K., Joseph J. Hobbs, and Kent Mathewson. *Dangerous Harvest: Drug Plants and the Transformation of Indigenous Landscapes.* Oxford: Oxford University Press, 2004.

Sullivan, J. *Russian Cloth Seals in Britain: Trade, Textiles and Origins*. Oxford: Oxbow Books, 2012.

Szasz, Thomas. *Ceremonial Chemistry: The Ritual Persecution of Drugs, Addicts, and Pushers*. Revised Edition. Syracuse: Syracuse University Press, 2003.

Taylor, Arnold. *American Diplomacy and the Narcotics Traffic 1900-1939*. Durham: Duke University Press, 1969.

Taylor, Charles. *Modern Social Imaginaries*. Durham: Duke University Press, 2004.

Thistlethwaite, Frank. *America and the Atlantic Community: Anglo-American Aspects, 1790-1850.* New York: Harper & Row, 1963.

Tuma, Jimmie Lee. *Longevity, Germination, and Emergence of Wild Hemp, (Cannabis Sativa L.)*. M.A. Thesis, Kansas State University, 1972.

Turner, Jack. *Spice: The History of a Temptation*. New York: Vintage Books, 2005.

Tyrrell, Ian. *Transnational Nation: Unites States History in Global Perspective Since 1789.* New York: Palgrave Macmillan, 2007.

Vantreese, Valerie L. *Industrial Hemp: Global Operations, Local Implications.* Department of Agricultural Economics: University of Kentucky, 1998.

Vaughan, J. G., and Patricia A. Judd. *The Oxford Book of Health Foods.* Oxford: Oxford University Press, 2003.

Walter, Benjamin. *On Hashish*. Cambridge, Mass.: Belknap Press, 2006.

Wiener, Philip. *Dictionary of the History of Ideas: Studies of Selected Pivotal Ideas*. New York: Scribner, 1973.

Wilford, John Noble. *The Mapmakers*. New York: Vintage Books, 1981.

Watters, Ethan. "We Aren't the World." *Pacific Standard Magazine*, 25 (February 2013).

Wood, Juliette. "The Old Man of the Mountain in Medieval Folklore." *Folklore*, Volume 99, No. 1 (1988): 78-87.

Wollons, Roberta, ed. *Kindergartens and Cultures: The Global Diffusion of an Idea.* New Haven: Yale University Press, 2000.

Ziegar, Susan. "Pioneers of Inner Space: Drug Autobiography and Manifest Destiny." *PMLA*, Volume 122, No. 5 (October, 2007):1531-1547.

Zimmern, Helen. *The Hansa Towns*. New York: G. P. Putnam's Sons, 1889.

Zohary, Daniel. *Domestication of Plants in the Old World: the Origins and Spread of Cultivated Plants in West Asia, Europe, and the Nile Valley.* 3rd Edition. New York: Oxford University Press. 2004.

Biographical Information

Bradley J. Borougerdi has been a student at the University of Texas at Arlington since 2002, where he earned a B.A. in History, a B.A. in Philosophy, and an M.A. in World History. He has received a number of fellowships and presented at many conferences as a Ph.D. student and a full-time faculty member at Tarrant County College. His research interests and areas of teaching include Transatlantic History, Drugs and Culture, Russia, and the Atlantic World. He is now revising his dissertation into a book, and has a number of projects in mind that focus on cultural connections spanning across the Atlantic Ocean.