Crossing Conventional Borders:
Introducing the Legacy of Hemp into the Atlantic World

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Transatlantic history is an analytical tool that enables historians to construct a lens through which to view the past. Leaving the analytical cage of the nation state behind, it seeks connections that span political boundaries and reach into the realm of cultural exchange between one or more groups of people. Ever since the publication of Alfred Crosby’s *The Columbian Exchange*, one fashionable way to reveal the cross-cultural interactions of people on both sides of the Atlantic has been to focus studies on single commodities. According to Jack Greene and Philip Morgan, there are now in process “studies of coffee, mahogany, pearls, a linked study of chocolate and tobacco; and no doubt other trees, plants, and dyes, such as logwood, brazilwood, sarsaparilla, ipecacuanha, jalap root, cinchona, groundnuts, pineapple, and indigo will not be far behind.”

One such study they neglected to mention is hemp’s place in the Atlantic world. In fact, scholarly studies on hemp as a transformative commodity are largely absent. Perhaps due to the countercultural movement for the legalization of marijuana (which comes from hemp), the only studies in recent years about the nature of this crop have been conducted by non-historians with a vested interest in trying to demonstrate the benefits it can bring to modern societies. This is not to say that serious studies have not been conducted by historians in the past. Alfred Crosby’s book *America, Russia, Hemp, and Napoleon: American Trade with Russia and the Baltic, 1783-1812* broke ground in 1965 by tracing the connection this commodity had with American and Russian trade relations in the early national period. John Garland and Melvin Herndon’s articles also contributed significantly to our knowledge of how hemp was cultivated in colonial Virginia and what role it played in revolutionary America. But many questions on the role hemp played in the social, cultural, and political lives of people across the Atlantic have yet to be asked. Why was hemp an important crop during the seventeenth and eighteenth centuries? To what extent were the British colonists in North America concerned with cultivating this crop? How did the transatlantic dialogue in the British Empire over the importance of hemp as a naval store

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1 The term “analytical cage” is borrowed from Daniel T. Rodgers in *Atlantic Crossings: Social Politics in a Progressive Age* (Cambridge: Harvard University Press, 1998), where he states that the narrative field of history “too often shrinks back on the nation; the boundaries of the nation-state become an analytical cage,” 2.


influence the colonists’ perception of this crop? And finally, what cultural legacy did hemp leave behind as the colonists broke away from England to establish their own nation? Although a comprehensive understanding of the political, economic, and cultural history of hemp in many parts of the Atlantic world will require more extensive research on a much broader scale than can be done here, answering the above questions illustrates the contribution that such a comprehensive study will make to transatlantic history.

In 1585, Thomas Heriot, the celebrated mathematician and friend of Sir Walter Raleigh, wrote in his journal that he witnessed hemp (or so he thought) growing wild in the region of North America that would soon be called Virginia. The fact that Heriot mentioned hemp on one of England’s first voyages to the New World is no surprise, for it served a strategic purpose after the dawn of the Age of Discovery. Rope, duck canvas, and sailcloth were essential commodities for a strong naval power, 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 one would inevitably need rope on such long voyages into relatively uncharted territory, massive hawser lines for towing ships were carried on board as well. On one of his voyages around the world, Ferdinand Magellan used what explorers in the sixteenth century referred to as a “hemp-line” lowered into the ocean to a depth of 750 meters in an effort to figure out the depth of the water. 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 hundred tons of hemp aboard. In effect, the European scramble to carve up the New World ensured that hemp remained in high demand; it was essential to transatlantic travel. Said differently, it was the thread binding the Atlantic together.

Heriot’s observations on the ability to raise large quantities of hemp in the New World did not go unnoticed. As historian Brent Moore documented in his work on the hemp industry in Kentucky, the desire to obtain the necessary amount for naval stores “seems to have been acted on later by the Virginia Company, who [sic] required that one of the ‘commodities which these people are directed principally to apply (next their own necessary maintenance)’ should be ‘cordage, for which . . . directions is [sic] given for planting of [hemp] that grows naturally in those parts in great abundance, which is approved to make the best cordage in the world.’” The perceived fruitfulness of New World soil enticed policy makers who were concerned with relying too heavily on the Baltic region for such a valuable naval store. Since trade in this region was not always accessible, images of a land suited for hemp cultivation caused the English to instruct the Jamestown colonists in 1611 to make a concerted effort to grow hemp. In 1633, the Virginia Assembly enacted a law that forced “every planter as soone as he may, [be] provided seede of flaxe and hempe and sowe the same.” The law of 1673 is perhaps more revealing, for

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5 Thomas Heriot, Narrative of the First Plantations in Virginia (London, 1588).
8 Brent Moore, A Study of the Past, the Present, and the Possibilities of the Hemp Industry in Kentucky (Lexington: Press of James E. Hughes, 1905), 11.
10 William Waller Hening, Henig’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, 218; the transcription of these laws can be obtained at http://www.vagenweb.org/hening/.
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 supplied 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 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.”\footnote{Ibid., vol. 2, 306.}

By the end of the seventeenth century, colonial governments in Virginia, Maryland, Pennsylvania, and New England had all heeded the call from their mother country to encourage hemp cultivation over tobacco.\footnote{Hopkins, \textit{A History of the Hemp Industry in Kentucky}, 6-9.}

Hemp production in colonial America never outpaced tobacco or increased to the level that the English hoped. Although the reason for this requires a detailed study of its own, the call to increase hemp cultivation never ceased. Constant war between the Atlantic empires over territorial dominance in the New World increased British wariness over relying too heavily on one country for the importation of such a necessary crop, and Russia supplied the English with virtually all their hemp. Ever since Peter the Great embarked on a path towards modernizing his empire, Russia began opening up to the West. According to Crosby, Russia exported about 60,000 tons of hemp annually, most of which was grown in Ukraine.\footnote{Alfred W. Crosby, \textit{America, Russia, Hemp, and Napoleon: American Trade with Russia and the Baltic, 1783-1812}, (Columbus, OH: Ohio State University Press, 1965), 28.}

Labor was cheap in the Russian empire, and the vast river systems made it possible to transport goods from the farthest regions to the western ports near St. Petersburg. If a Russian noble wanted to consume sugar from Jamaica or wear English woolens or drink coffee from South America, one of the most important ways to do it was trade hemp.

Russia’s best customer, Great Britain, badly needed naval stores and so consumed from one-half to two-thirds of St. Petersburg’s entire exports annually – the most important commodity of which was hemp, which was to Russia’s advantage.\footnote{Ibid. 36.} Because this trade was so disadvantageous for the British, a series of treatises appeared in the metropole of England that urged farmers to become hemp cultivators. As one author pointed out, increasing the cultivation of hemp within English territory would decrease the “vast Quantities we still take of it from foreign Nations.”\footnote{William Bailey, \textit{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), 43.}

The potential “danger” that could arise from allowing hemp cultivation to “fall totally into the Hands of Foreigners” led Baily 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
This occurrence would result in immediate disaster for England, because “our naval Strength . . . arises from our national Trade, [which leaves] an almost intolerable Burthen upon our Estates.” As a result, Bailey hoped that the “utmost Efforts will be made to promote and establish [the cultivation of hemp] throughout the Kingdom.”

The sense of urgency in finding an alternative supply of hemp increased when Russia did in fact ally with the French during the Seven Years’ War. John Rutherfurd, Esq. of North Carolina, was distressed by the fact that “this nation cannot subsist as a maritime power without importing materials from manufactures, such as hemp.” According to Rutherfurd, in the year 1759 alone about 25,000 tons of hemp entered the British Empire from Russia. He argued that unless England addressed the issue of dependence on Russia with “all imaginable care” and quickly figured out “how to provide so necessary an article independent of them,” the nation would be subjected to the same fate as in 1703, during the early stages of the Great Northern War between Sweden and Russia over trade access to the Baltic, 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.” 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.”

The vast amount of territory that England acquired as a result of the Treaty of Paris in 1763 renewed the interest of policy makers in England for providing bounties to farmers growing hemp in colonial America. Previous attempts by the British government early in the eighteenth century to provide payment to colonial farmers for well-prepared hemp were not very successful, but many argued that a renewal of these bounties would encourage hemp production and discourage the colonists from manufacturing hempen goods on their own. As a result, Parliament renewed the bounty on hemp in 1764, which provided colonists with a subsidy for producing it to import into England. Although many were moved by arguments that the newly conquered territory was suitable for hemp cultivation, others continued to express anxiety about the deficiency of trade with Russia. As the treatises reveal, Joseph Gee’s fear of the “Evils and Inconveniences arising from the Importation of Hemp and Flax from Foreign Countrys” was a prevalent concern among English merchants at the time. Three years later, Gee published another article, expressing 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.” In effect, Gee worried about the consequences of relying too heavily on Russia for hemp.

Although more research needs to be done to quantify the impact, the expressed anxiety in these documents over the need to produce hemp within the empire had an influence on the culture of hemp cultivation in late colonial British North America. As one historian pointed out, colonial Virginia experienced “[in the 1760s] something close to a ‘hemp boom’.” At the same

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16 Ibid., 45.  
17 Ibid., 49.  
18 Bailey, A Treatise, 43.  
20 Ibid., 6.  
22 Joseph Gee, Observations on the Growth of Hemp and Flax in Great-Britain (Gainsborough, 1765), 3.  
23 Joseph Gee, An abstract of Reasons for Encouraging the Linen Manufactory (1767), 1.  
time, word of a discovery in France of a superior way to prepare the product for manufacturing made its way to England. In 1755, the intendant of the French Province of Berry, M. Dodart, collaborated with the magistrate of Bourges, M. Marcandier, to publish a treatise on the history and cultivation of hemp, in which he laid out a new method on how to prepare the crop more suitably for commercial use. According to the established method, this “vegetable,” as he called it, is pulled from the ground towards the end of July, placed in small bundles, and allowed to dry in the sun. The problem with allowing the hemp to cure in the sun, though, was that, “besides that it multiplies toil and work, it also exposes the hemp to many accidents when the season happens to be rainy. The water, which falls upon the Hemp before it is dry, makes it of a blackish color, and full of spots.”25 Instead, if the hemp were placed in water as soon as it pulled, the gum that filled the core of the stem would dissolve quicker, eliminating the rot that occurred when it was left to dry immediately after pulling. This gum, however, is extremely thick, for it bonds the sturdy fibers together in a manner that gives hemp the durability it is so prized for. As a result, according to Marcandier, one watering was not sufficient enough to produce the best quality. As he claimed,

As the physical effect of watering was not formerly enquired into, [hemp cultivators] fell into some mistakes, the consequences of which were not perceived. The watering of hemp producing only a proportional dissolution of a certain quantity of the gum, which joins all the fibers of the hemp together, and attaches them to the stems; it is of some consequence to observe where, when, and how this dissolution is affected. The finest and clearest water is always best. Some [cultivators] made a kind of ditch on the edge of a river, where the water, being more still and warm, ferments easily, and penetrates more quickly the parcels of hemp that are laid in it.

He went on to instruct that, after allowing the bundles of hemp to soak in a ditch for the allotted amount of time, one must “wash them in the current of the river, which will carry off all the gum and mud that would otherwise cleave to them.” This new 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.”26

News of this new method somehow made its way to England, where Rutherfurd stressed the potential it had for reducing England’s dependence on foreign hemp. He pointed out in 1761 (three years before the translated version was published) that “the manner of preparing hemp for the use of the manufacturers is little understood even in England.” To remedy this, he turned to the work of M. Marcandier, whose “observations and experiments made under the direction and by the advice of the governor [of Berry], has discovered an easy method of giving all the qualities it may require.”27 It appeared to him that the “second watering” allowed the fibers of

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25 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), 54.

26 Quoted in 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), 65.

27 Rutherfurd, The Importance of the Colonies, 38.
the hemp to “be disengaged like so many threads of silk, and will be cleared, divided, refined, and whitened.” Whether or not Rutherfurd was the first person in England to discover the importance of the “second watering” is unknown, but there is no doubt that the word spread because Marcandier’s entire treatise was translated and published in London in 1764.

Two years later, an abstract of Marcandier’s work emerged in Boston, Massachusetts. This one is half the size of the London version and accompanied by an advertisement written by the publishers, which begins with a chart demonstrating the amount of money England lost from its hemp trade annually. Edes & Gill decided to publish Marcandier’s work because “some judicious persons who have seen it . . . have manifested their opinion, that a Re-publication might afford singular encouragement to the Farmers in general, to increase their Hemp-fields, in expectation of the produce of their labor becoming more beneficial than they had heretofore conceived it to be.” According to the document, his “proposed method of preparing Hemp” produced “the softest and best Hemp manufactured into cordage,” and the publishers attributed this to “the undersigned second watering.” Since “the British nation in general is so remarkable for readily copying many of the fashions of France, we may hope, there will be no objection started by British Americans against an imitation of so profitable a mode of preparing Hemp.”

Unfortunately for the colonists, though, this hope was never realized, for American hemp continued to be inferior to the hemp produced in Russia. According to Crosby, this inferiority was due to the fact that Americans continued to produce hemp by “dew-rotting,” which is the exact method Marcandier advised against. However, this did not stop other farmers from attempting to transfer Marcandier’s method to the colonies. Almost a decade after the Boston publication surfaced, an anonymously published treatise argued that hemp production “is a subject of so great a consequence to this country.” The author discussed Marcandier’s “second watering” and how it “appears to have been practiced with success in many parts of France.” The author concluded, “From this process [of watering], than which nothing can be easier, and which differs in no essential point from the directions given by M. Marcandier, most of the difficulties formerly attending the preparation of Hemp are removed, and, what is of more consequence, its qualities appear very much improved.” Observations such as these make one wonder why colonists did not employ the technique that experts thought would improve the quality of hemp and decrease the amount of labor needed to produce it. In his book *Buying Respectability*, Thomas Adam suggests that the cultural transfer of an idea from one

28 Ibid., 39.
29 *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, Manufacturers, &c. Being Much Recommended to the Growers and Manufactures 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).
30 Ibid., 1.
31 Ibid., 22, 25.
32 For a discussion of the American aversion to water hemp after it has been pulled, see Crosby, *America, Russia, Hemp, and Napoleon*, 19-20.
34 Ibid., 44-45.
country to another can be hindered by a feeling of inferiority within the receiving society.\textsuperscript{35} Were the colonists too set in their ways to adopt a new technique from France, or did the perception that hemp was too labor-intensive to produce have a lasting effect on their minds? We certainly know that colonists had no problem adopting French fashion (among other things), but further research into the nature of hemp cultivation in France and the connection that French agricultural knowledge had with British knowledge of the subject is needed to accurately determine the cause.

Although the colonists never adopted Marcandier’s ideas, the transatlantic dialogue on hemp cultivation within colonial America had some impact on Americans after the revolution. Taking up where the British government left off, the revolutionary congress resolved as early as 1776 that “Hemp [is] to be encouraged and the Manufacture of Duck.”\textsuperscript{36} Moreover, 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.”\textsuperscript{37} 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 for from each state. The author wrote in an urgent tone when he mentioned the hemp that congress was waiting on: “I could wish to know whether any of the Hemp purchased for the Continental Ships in Providence hath b[een] apply’d to making rigging for Privateers.”\textsuperscript{38} Six months later, a New Hampshire statesman expressed his belief that the “means of protection” for the newly forming nation was directly connected to “Hemp, & Iron, the former is as profitable an article to the farmer as any thing [sic] he can raise.”\textsuperscript{39}

Americans never produced enough hemp to supply the demand during the Revolutionary war, and this played a decisive role in their decision to try to open relations with Russia after Catherine the Great shocked the world with her Declaration of Armed Neutrality, which basically demanded that England stop blockading Russian ships from trading with belligerent powers. Although members of Congress continued to urge Americans to grow more hemp for commercial use, they felt Catherine would be sympathetic to their cause because of the advantages American independence would bring to the Russian hemp-trade. As the documents reveal, the Revolutionary Congress was concerned with how it was going to replace the amount of Russian hemp Americans had imported annually through Britain before the revolution, so Congress pushed Americans to cultivate it. When that did not work, Congress turned directly to Russia – the primary exporter of this crop. Unfortunately for America, the plan was unsuccessful, for Catherine could not risk upsetting the British by recognizing the United States as a sovereign nation while Russia was at war with Britain and its powerful navy. As a result, the man sent by Congress (Francis Dana) to St. Petersburg to open diplomatic relations with Catherine waited in Russia for two years before returning home. He never even received an


\textsuperscript{37} “For Encouraging Agriculture and Manufactures,” 21 March 1776; in Smith, \textit{LDC}: 2: 420.

\textsuperscript{38} “William Ellery to Nicholas Cooke, ” 21 September 1776; in Smith, \textit{LDC}: 5:216.

\textsuperscript{39} “William Whipple to Josiah Bartlett,” 30 April 1777; in Smith, \textit{LDC}: 6:666.
audience with the Empress. The ordeal produced such animosity that, despite the increase in trade between Boston merchants and Russian promyshlenniki in the 1780s, formal diplomatic relations between the two countries would not emerge until the next century.40

An examination of the transatlantic dialogue concerning the importance of hemp, then, illuminates how Americans developed their perceptions of the political and economic advantages to be gained from this crop. Convinced that it was vital to the establishment of a strong navy, many in the metropole attempted to motivate the colonists on the other side of the Atlantic to cultivate hemp. After the colonists were given independence, the perception of its strategic importance transferred to the new nation, leading the Americans to try to open relations with Russia in order to secure a constant supply of hemp. One question that remains unanswered, however, is why the Americans never produced enough good quality hemp to meet the demand. The answer will require more extensive research, especially into the culture of hemp cultivation in colonial and post-colonial America and the conditions necessary for the plant to thrive. However, one must not be misled by the limited amount of hemp that Americans imported because hemp cultivation continued to occupy an important place in the lives of many settlers and slaves. What type of people engaged in hemp cultivation, and how much did slave labor account for its production and manufacturing? A study on the various types of rope and techniques used to make it needs to be done, for it might reveal the extent to which slaves contributed to this industry, which is an emerging research trend in African Diaspora studies. And from Virginia, it might be possible to trace a slave culture into Kentucky, where the bulk of this crop is known to have grown throughout the years. Even when cotton was king, American hemp was needed to make and tie the bags of picked cotton together. According to one historian, the perception in Kentucky was that slaves had a natural affinity for working with this crop.41 Could slaves have been sought out by middlemen of the slave trade for their rope making skills? If so, one could trace this knowledge back to Africa, where Professor Al Howard at Rutgers says he has encountered documents that mention the use of vine bridges in West Africa.42 At the very least, however, a study on the culture of hemp cultivation in America and the impact that this culture had throughout the nineteenth century is one that would highlight the transatlantic nature of this crop.

For now, however, it suffices to show that hemp circulated back and forth across the Atlantic, connecting ideas on the nature of this crop and most likely shaping Americans’ later perceptions of hemp. This is the primary advantage of commodity history: it highlights the dynamics behind the interactions between people on both sides of the Atlantic, thus revealing the interconnectedness of national histories.

40 See the author’s unpublished seminar paper, titled “A Difficult World for a Developing Nation: Russian/American Relations during the War for Independence” (Fall 2009). For an account of the trade between Russia and America during the 1780s, see Mary E. Wheeler, “Empires in Conflict and Cooperation: the ‘Bostonians’ and the Russian-American Company,” Pacific Historical Review, vol. 40, no. 4 (Nov., 1971): 419-441.


42 The author has been in contact with Al Howard through email on the possibility of doing research in Sierra Leone.