INSTITUTIONALIZING THE INFORMATION REVOLUTION: DEBATES OVER KNOWLEDGE INSTITUTIONS IN THE EARLY AMERICAN REPUBLIC

by

George D. Oberle III
A Dissertation
Submitted to the
Graduate Faculty
of
George Mason University
in Partial Fulfillment of
The Requirements for the Degree
of
Doctor of Philosophy
History

Committee:

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_________________________________ Department Chairperson

_________________________________ Program Director

_________________________________ Dean, College of Humanities and Social Sciences

Date: ____________________________ Spring Semester 2016
George Mason University
Fairfax, VA
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University of Maryland, College Park, 2003
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DEDICATION

This dissertation is dedicated to my Grandparents Roy and Madeline White.
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Writing a dissertation seems like a selfish undertaking that has clarified, in my mind, how much we all rely on the generosity of spirit and devotion to spreading knowledge by so many people. I have never even met some of these people. On the other hand, some people assisted me quite regularly providing research, writing, and emotional assistance weekly or even daily. All of them contributed to the completion of this work. My teachers, information professionals, fellow students, colleagues, institutions, and family all deserve special attention. It is particularly humbling, especially as a student of history, to remember the many people that have helped me develop intellectually and personally over the years.

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I could not have finished this project without the steadfast commitment that my family has provided. My Texas family has always been supportive, especially my Father. Thanks Dad! My family in Virginia has put up with a house littered with books, and with my attention diverted to a project that seemed like it would never end. My aunt, Linda White, eagerly read drafts, and helped clean up some of my messy writing while also helping me think through the arguments in the dissertation. I have delighted in watching my son grow and develop such a wonderful sense of humor while always committed to doing the right thing. I am proud of you Mason! “You’re a good kid man. You’re a good kid…man.” Finally, my partner in life and best friend, Heather, I would not have been able to accomplish this without you. Every day, you think of how you can make life easier for our family. Thank you providing me with the time to do this work by taking on
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INSTITUTIONALIZING THE INFORMATION REVOLUTION: DEBATES OVER KNOWLEDGE INSTITUTIONS IN THE EARLY AMERICAN REPUBLIC

George D. Oberle III
George Mason University, 2016
Dissertation Director: Dr. Rosemarie Zagarri

The United States was created in the midst of an information revolution. The leaders of the newly created American republic believed the citizens needed to be educated and informed in order to be effective participants in governing the new republic. A participatory government rested its fortune and authority on the expertise of its citizens to obtain and employ useful knowledge. To address this issue, George Washington proposed that the country establish a national university that attract men from all parts of the country and educate them at public expense in the national capital. Subsequently, every president from Washington to John Quincy Adams witnessed a debate over how the country could best facilitate the creation and dissemination of knowledge. At the heart of these debates were questions about what constituted the most important forms of information in a republican polity, who should have access to this knowledge, and how--in what institutional form--the information should be disseminated.
This dissertation maintains that the debates over the national university are best understood as part of an ongoing information revolution that emerged during the late eighteenth and early nineteenth centuries. Between 1789 and 1860, American political and intellectual leaders engaged in an ongoing, and often contentious, series of debates over a range of possible "knowledge institutions" that would serve the country. They discussed which kinds of institutions would best serve the public good and whether they should be located in the nation's capital or elsewhere.

These debates began during Washington's presidency with a heated conflict over establishing a national university--an institution which never was approved in the form that Washington had proposed. Subsequently, Thomas Jefferson, while president, sponsored the creation of West Point as a national military academy and in his retirement, oversaw the establishment of the University of Virginia. During the early nineteenth century, other leading Americans began to propose other kinds of knowledge institutions. Charles Willson Peale, among others, spearheaded the movement to found museums that democratized knowledge and created open access to the public. Others founded libraries and learned societies, such as the Columbian Institute for the Promotion of Arts and Sciences, that not only created and collected information but would spread information through lectures, public programs, and exhibits to a wide audience.

Finally, with Englishman James Smithson's 1829 bequest to the United States, political leaders engaged a sustained debate about the creation of another kind of knowledge institution that would be headquartered in Washington, DC. Instead of a national university, they created a scientific institute that aimed to produce highly
specialized kinds of knowledge that would lead the country's quest for scientific
advances. Such an institution, however, served only a small elite. It took several more
decades, but by 1881 the Smithsonian Institution opened its doors to become a museum,
which provided access to knowledge to a wide American public. In a form that no one
had anticipated, the country finally had its "national university."
INTRODUCTION

The leaders of new American republic founded in 1789 presumed its citizens would be educated and informed. In a government that was based on the people, every citizen needed to be knowledgeable about history and politics, as well as science and useful knowledge, while willing to contribute to the success of the republican government. From the founding of the early American republic onward, then, the question of creating knowledge and promoting its dissemination represented one of the country’s most crucial intellectual challenges. Every president from George Washington to John Quincy Adams tried to promote the spread of knowledge via the establishment of national knowledge institutions. Each of these early presidents supported the notion that the country should embody the nation’s commitment to knowledge through the creation of a national university at the seat of government in Washington, DC. Nonetheless, political controversy engulfed the issue and no such institution was ever founded. In 1829, however, Englishman James Smithson left his estate to the United States in order to found “at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge.”¹

The United States government learned of the bequest in 1835. This bequest removed the questions of legality related to the sources of funding that had plagued the

participants in the debates over the national university. Subsequently, American leaders found a means of establishing a national institution that would create a vital and dynamic information center in the nation's capital, though different from a university, which would generate new information and disseminate knowledge to the citizens of the republic. Although this proposal, too, encountered much resistance, the Smithsonian Institution eventually became the successor and heir of the ideal of the national university. In fact, the debates over the purpose of the institution resembled those of the national university and resulted in a compromise designed to appease the diverse constituents in the country. The legislators who designed the Smithsonian intended that it would acquire and disseminate various forms of knowledge; however once launched, its leaders, focus on a particular type of scientific knowledge changed the breadth of its mission.

A national institution materialized, finally, in the federal city six decades after Washington had called for it. The institution’s goals however had fundamentally changed. Instead of serving as a means to bind the future leaders of the nation together the institution became dedicated to trying to separate politics from a scientific understanding of the world. Instead of consisting of a staff of the elite thinkers in the nation eager to promote the spread of universal knowledge, the nation's central intellectual organization would now employ teams of natural scientists, and other specialists in the new sciences all dedicated to overseeing the expansion of their particular scientific interests. Instead of linking together students from all parts of the country in a common intellectual project, the Smithsonian would serve as a means of constructing a new scientific identity for Americans based on the curiosities that the
institution publicized and presented in their museum. The collections in the museum served a local museum-going public curious about the natural world while also demonstrating that the United States fully belonged as a promoter of civilization to the world. Both the country's changing politics and shifts in the organization of knowledge itself contributed to the demise of the original ideal of a national university.

The debates about the creation of the nation's premier intellectual institution are about much more than partisan squabbling or sectional conflict. They speak to the status of knowledge and the means of institutionalizing information in the early American republic. Debates over the national university became more focused on what type of knowledge should be studied and privileged in order to promote progress and success in the republic. These discussions reflected a movement away from classical studies and its understanding of the world toward natural sciences. New proposals promoted engineering and practical knowledge instead of the education traditionally obtained in a college. Further, some proponents of a national university rejected the belief in universal knowledge open only to a small elite and accepted the newer notion of specialized knowledge that would be accessible to many people. This democratization of access to knowledge ironically resulted in the construction of new hierarchies of disciplinary knowledge. This dissertation will argue that ongoing debates from 1788 to 1846 reveal not only deep political divisions over the question of learning at a national university, but also more fundamental questions about the function of information in a republican polity.

These divisions are evident in the way that many challenged the very notion of a national university. The diversity of the expanding population and their varied needs for
information led to the creation of many different institutions. Instead of a university, some proposed that a national museum, or a scientific institute, or a national observatory, be created where scientists could engage in primary research. Others sought to establish a specialized institution for engineering for applied knowledge. Some even suggested that a national library would be the best way to spread knowledge to a wide array of citizens. Still others believed that the university should be an institution that prepared teachers to teach and fulfill the expanding need for instructors fueled by the common school movement. In the end, the solutions enacted in the early republic reveal the various ways in which Americans chose to organize and disseminate knowledge in their young country. Accordingly, this dissertation will use the debates over the establishment of a national university to explore the complex relationship between people, government, and the organization of knowledge in the early republic.

Ironically, the institution that Washington hoped would help build common ground for the future leaders of the nation to meet and build national unity became a more highly specialized organization that reflected new ways of organizing and disseminating knowledge. In the end, these new institutions reflected a fragmentation of knowledge that served the interests of a scientific elite while at the same time supposedly democratizing the means of disseminating knowledge to larger audiences.

**Historiography**

To the extent that historians have discussed the question of a national university, it has often been in the context of the lives of the founders, especially presidents such as George Washington, Thomas Jefferson and John Quincy Adams. Washington’s advocacy
on behalf of establishing a national university was well known to his contemporaries, but it has become less important to most historians and scholars. A review of the biographical literature on Washington, for example, reveals that very little attention has been paid to the national university. Stuart Leibiger’s work on the relationship between Washington and Madison argues that the national university was doomed to failure thanks to a stingy Congress and the failed plan to pay for building projects through land speculation within the District of Columbia. Paul Longmore’s work reveals that Washington was interested in education because he felt limited by his own lack of an extensive formal education. Richard Norton Smith’s Patriarch tells of the national university as a plan that was derailed due to political anxieties from the opposition faction that feared the university as a “federal Trojan horse” meant to enhance federal power, as well as appropriating overwhelming authority for the national government.²

Other historians have focused on the failed ideal of a national university as an episode in the history of American education with a focus on partisan politics. Albert Castel’s article published in 1964 describes the university as an institution doomed to

suffer through a series of miscues, failure of vision, or limited political will. The most thorough institutional history published thus far is David Madsen’s 1966 monograph, which argues that the Founders’ vision of a national university was a harbinger of the graduate school program set up by private endowments at Johns Hopkins University. Madsen suggests that a group of petty legislators retarded educational progress for over seventy years. Most of these works imagine the modern university as the pinnacle of education and research amalgamated in one institution. The educational specialist Charles A. Quattlebaum of the Congressional Research Service conducted a literature review in 1965 titled National University Movement in the United States because of a request from Senator Stephen M. Young of Ohio to help Congress manage the copious amount of literature on the topic. This work established a core timeline of events and the major actors in the institutional history of the various attempts to establish a national university. Quattlebaum identified the movement as beginning in the Constitutional Convention in 1787 and followed it through 1828. The movement resurfaced as an educational initiative in 1869 by John W. Hoyt’s address to the National Teachers Association. Hoyt and the NTA attempted to establish a national university through World War II; however this too failed. The last major effort led by the Oscar H. Steiner Foundation between 1961 and the later part of the sixties finished with their goals largely unrealized as well. These three

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5 Now known as the National Education Association.
major movements viewed the national university through the existing institutions of knowledge during their time.\(^6\)

Recently, political scientist George Thomas’s monograph titled *The Founders and the Idea of a National University* published in 2015 suggests that the founders intended for the national university to supplement the institutional structure as a means to construct a national character. He insists that the founders and those that followed mostly agreed, on the national university despite disagreeing over the details. Thomas situates the need for a national university, in the founders’ eyes, as a need to create a national and secular institution where citizens could be educated free from the biases of their regional and sectarian colleges. Ultimately, he suggests that this is why the failure occurred cites a Senate report delivered in 1902 that reached those same findings.\(^7\) Federalism and secularism provided the ultimate foils for the national university in the earliest inception yet hope of creating a proper civic-minded person for the state remained, in the Founders’ view, the means to secure the republic. This security came from the construction of an American mind via the political mental habits of constitutionalism. As a result Thomas


sees a connection between modern debates over education and the value of humanistic and social sciences with that of older debates over useful knowledge.⁸

Yet, universities were not the only educational institutions during the first decades of the early republic. Scholars have recognized the importance of institutionalized knowledge in early America for many years. Libraries, museums, and learned societies often are subjects of institutional histories or studied as nascent proto-professional institutions.⁹ Historians of science and technology such as A. Hunter Dupree and Brooke Hindle both emphasize the distinctions of the American experience from Europe. Hindle suggests that although some similarities existed that “America was a part of Europe but still apart from it” and these differences came from the lack of institutional support for the sciences.¹⁰ The colonies had no extensive libraries, old universities, or wealthy patrons to support the enhancement of learning. Science required institutional resources to advance the latest technologies. As a result, A. Hunter Dupree viewed the

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establishment of the Smithsonian and the naming of Joseph Henry as its head, a man dedicated to the establishment of professional standards for scientists, as an important foundational moment that moved the nation toward a nationally supported science policy.\(^{11}\)

Both museums and learned societies, although exclusively for the elite before the Revolution, illustrate the emergence of a different, and more democratized form of organized knowledge. Museums were locations for the elite. The types of knowledge housed in museums varied to include textual and physical objects; however, the collections in these sites remained locked away for the almost exclusive use of the gentry. During the era of revolutions, access to these collections became democratized by some who challenged the notion that the only the elite ought to have access to this knowledge. Several scholars point to the revolutionary nature of new disciplines of knowledge and learning, such as natural history and natural sciences. Collections of new wonders became visible to regular citizens in museums, and legitimized the work of the specialized scientist and the expansion of the new nation westward. Museums in the republic became “democratic” institutions offering access to nature’s wonders, and places like Peale’s museum openly invited citizens to participate in the categorization and exploration of the new nation’s environment. Museums had traditionally been institutions for the elite to monopolize knowledge; nonetheless many suggested that museums offered a new way to spread knowledge to a community of citizens. Museums became an

institution for the state to house the collections of artifacts collected by the many civilian and military scientific expeditions in the American West, and the notion of national progress and expansion became intricately intertwined with scientific advancement.¹²

Learned societies in Europe elected gentleman scholars to membership, often after demonstrating a sustained career in the public sphere. Such groups offered a means to control access and to legitimize those involved in knowledge production. These societies pondered new objects or scientific questions, founded journals, and published their transactions after vetting that content. Nevertheless, the different conflicts over the democratization of knowledge occurring following the Revolution led to ongoing conflicts over what constituted appropriate knowledge and who should have access to that knowledge. The debate over what was an appropriate pursuit of knowledge became wrapped up in political debates of the time. Linda Kerber’s Federalists in Dissent detected ideological differences that ultimately distinguished the scientific pursuits of scholars who were Federalists from those who were Jeffersonian-Republicans. The

Federalist dominated American Academy of the Arts and Sciences tended to stress mathematics and astronomical sciences while the Republican dominated American Philosophical Society emphasized botany, geology, and paleontology. Kerber sees evidence in their respective publications of these differences and detects an intense level of skepticism by Federalists of the validity of “Jeffersonian Science.” Although it is clear that the two groups differed in the content that they studied, and that the pursuit of types of knowledge itself had become politicized, it is important to note that the Federalist arguments often focused on those people who were participating in the creation of knowledge. Federalists resented new ideas and pretenders who claimed a scientific authority that the Federalists deemed undeserved.13

This expansion to the access of knowledge resulted in a challenge over ideas of authority and questions over the legitimacy in the creation of knowledge. The importance of this challenge increased for a society that relied on the expectation of a participatory citizenry. This happened in a variety of ways and places. The new museum, with public exhibitions, offered a new place for education to occur and introduced new ideas and opportunities for those that could afford admission. Increasingly, these establishments also asked for support for their institutions in a variety of ways including both governmental financial assistance and in-kind donation of collections from citizens.

Additionally, many citizens sent interpretive analysis of these objects to the proprietors or to the existing learned societies to validate their own participation in the construction of new knowledge. Over time, a shift occurred from the limited access learned societies, which had been established to promote universal knowledge to scientific societies that held a wider number of participants but held narrowed interests and specialized collections.14

Few have connected the establishment of the Smithsonian Institution to the debates over the national university.15 This is likely because of the way historians develop themes such as the history of science, or the history of education. A rich institutional literature exists on the Columbian College, established in the District of Columbia, and points to its connection with the goal to establish a national university. Further, scholars have linked the establishment of the Columbian Institute for the Promotion of Arts and Sciences in the federal city to the founding of the Smithsonian. These scholars have studied the development of these institutions, as well as their connections to the federal government, as being isolated. Instead, if we examine at the

15 One reason it is difficult to examine the issue is that there appears to be an end to the discussion of a national university once Andrew Jackson defeats John Quincy Adams in the 1828 election.
development of these institutions, and the conflicts that occurred over their missions, it becomes easier to see the connections that linked to the establishment of the Smithsonian to the debates over the national university. Further, it explains why most newspapers and leading thinkers originally assumed, upon finding out about the Smithson bequest that it would be spent on a national university. One example proclaimed: “we would have one more bond of union, the National University, for which he whom the nation delights to honour left in his dying testament a rich bequest. Can we, Americans, erect to George Washington, a Nobler Monument?” Nevertheless, almost immediately, the arguments over what an institution dedicated for the “increase and diffusion of knowledge” actually meant began anew.

In order to see the connections between these different groups, one must understand that the establishment of the American nation occurred in the midst of an information revolution. This information revolution was analogous to the political and market revolutions of the eighteenth and nineteenth centuries. Some scholars such as Richard Brown and Richard John have focused on the communication and transportation revolutions in the context of the spread of knowledge and demonstrated that these improvements facilitated the spread of knowledge across the republic. Historian Daniel Headrick agrees however he argues that the information revolution has been taken for granted and has not been explored nearly as extensively as the Enlightenment that preceded it. The expanding demand for information was fulfilled by an ever-expanding supply of information. The consumers of this new information included individuals in the traditional elite, government officials and military officers, as well as a growing number of professionals with a need for specialized information. They in turn created new information and fed an expanding information cycle. Further, a dramatic growth of population, production, and trade occurred. The enhancement of the communication and transportation revolutions reinforced this cycle for the construction of new information to enhance wealth, power and status. The emergence of these reinvented institutions of
knowledge offered new opportunities and costs for citizens of the early American republic.\(^{18}\)

Using Headrick’s framework, the debates over the national university are best understood as part of the information revolution. They did not simply focus on issues of federalism or partisan rancor. The debates over the national university demonstrated insecurity over the authority of knowledge caused by the revolutionary moment when more people had access to knowledge and various kinds of information. These changes fueled debates over what constituted valid and significant good knowledge and which groups should be allowed to participate in the creation of that knowledge in the early American republic.\(^{19}\) The larger question was: In an environment where knowledge is power and information can provide riches, how can a republic built upon democratic principles best create and disseminate information?

The dissertation uses a chronological approach and begins in 1787 with Benjamin Rush’s first public mention of the institution and ends in 1846 with the creation of the


Smithsonian Institute. Chapter 1 discusses how many of the early founders envisioned an institution designed to forge proper citizens inculcated with the right kind of knowledge. This national university offered a means to secure lasting fraternal attachments for the future leaders of the republic who traveled from different states to the nation’s capital. Chapter 2 examines the dilemma for Thomas Jefferson, and other Democratic-Republicans, over the authority inherent in the organization and dissemination of knowledge. Despite desiring a wholesale transformation of college curriculum to more relevant and vibrant scientific disciplines, Jefferson remained suspicious of the kinds of national institutions proposed to accomplish these goals. The power of a fusion of the sectarian collegiate with secular learned societies in a large national institution provided a threat if it fell into the hands of unscrupulous characters. Fearing both the centralization of power and the federal government’s lack of constitutional authority over such matters, he decided to pursue other avenues toward the preservation, dissemination, and transmission of knowledge including supporting the establishment of the U.S. Military Academy at West Point and emphasizing the importance of learned societies. Chapter 3 introduces the competing notions for a new kind of knowledge institution to serve the citizens of the republic. Eschewing the traditional colleges that catered to the elite, some leaders embraced the democratic messages of the revolution and designed new types of museums meant to collect and display useful knowledge to a diverse set of citizens. Many of these consumers expected that with hard work they would also create new and useful knowledge and take their own place to help improve the condition of all in the new nation. Conflict between different visions of who should collect and disseminate
knowledge emerged and resulted in disagreements and the division of knowledge into distinct domains. One emphasized aesthetics and the affective domain while the other emphasized “real” practical knowledge. Real knowledge came from authority and that authority could not be trusted with the ignorant masses. Chapter 4 displays the public debates over the purpose of the national institution. The founders of the newly established Columbian College and many members of the newly established Columbian Institute to Promote Arts and Sciences disagreed over the purpose of such a national institution while other leaders, such as John C. Calhoun, advocated for a proliferation of military academies throughout the disparate geographic regions of the country. The concluding chapter examines the political debates over the disposition of the James Smithson funds and demonstrates that the establishment of the Smithsonian serves as a watershed that provided a far-reaching change in the ways in which Americans sought to promote the diffusion of knowledge throughout the United States. The Smithsonian’s establishment meant that the older, more democratic idea of the citizen-scientist yielded to the notion of the highly trained scientific specialist. Knowledge generated based on standards deemed to be scientifically exacting became the only type of knowledge that would be acceptable. The hope was to eliminate party partisanship from the process of creating knowledge and also eliminate access to the public sphere to quacks. The goal was to enable these new scientists to advance humanity without dealing with nonessential studies. This led to the final destruction of the older notion of universal knowledge available to all and paved the way toward a trend toward scientific specialization. Ironically, as the nation finally created an institution to promote knowledge, this national institution became the province
of and for the elite. Finally, the Epilogue suggests wider implications of the debates over the national university for the information revolution occurring in our own day.
Upon his death, George Washington established an endowment for the creation of a national university to be the center and focus of higher education for the entire country. A national university would be used as a tool to centralize knowledge and learning for the republic. As a national institution, the university would help diminish both factional and sectional differences and encourage the creation of fraternal bonds among the youth of this new nation. The national university that Washington hoped to found in the nation’s capital would serve as a national institution of knowledge designed to forge the new nation’s citizen leaders.

One of Washington’s most fervent wishes was to leave behind to the new republic a legacy that would cement the unity of a fledgling nation. The legacy, presented in the form of an endowment of fifty shares of the Potomac Canal Company, which had been a gift from the Virginia House of Delegates, intended to honor the service of Washington to his country during the Revolution.¹ Washington himself had purchased an additional twenty-four shares in the company between 1784 and 1797 valued at £100 each. These shares that were a gift to him were meant to serve as the financial bedrock for

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¹ Virginia and Virginia (Colony), *The Statutes at Large; Being a Collection of All the Laws of Virginia, from the First Session of the Legislature in the Year 1619*, vol. 11 (Charlottesville: Published for the Jamestown Foundation of the Commonwealth of Virginia by the University Press of Virginia, 1969), 525-26.
Washington’s vision for an institution of learning to be founded within the limits of the District of Columbia “under the auspices of the General Government, if that government should incline to extend a fostering hand towards it.”²

Washington’s advocacy on behalf of establishing a national university was well known to his contemporaries, but it has become anecdotal to most historians and scholars. A review of the biographical literature on Washington reveals that very little attention has been paid to the national university. Stuart Leibiger’s work on the relationship between Washington and Madison argues that the national university was doomed to failure thanks to a stingy Congress and the failed plan to pay for building projects through land purchases within the District of Columbia. Paul Longmore’s biography reveals that Washington was interested in education because he felt limited by his own lack of an extensive formal education. Richard Norton Smith’s *Patriarch* tells of the national university as a plan derailed due to political anxieties from the opposition faction that feared the university as a “federal Trojan horse” meant to enhance federal power, and appropriating authority that was not proper for the national government to wield.³

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Other studies of the national university include John W. Hoyt’s *Memorial in Regard to a National University* published in 1892, whose work establishes a core timeline of events and the major actors in the institutional history.\(^4\) Albert Castel’s 1964 article describes the university as an institution doomed to suffer through a series of miscues, failure of vision or limited political will.\(^5\) The most thorough institutional history thus far is David Madsen’s monograph produced during a third failed movement to establish a national university in the nineteen-sixties.\(^6\) Arguing that the Founders’ vision of a national university was a harbinger of the graduate school program set up by private endowments at Johns Hopkins University, Madsen suggests that a petty group of legislators retarded educational progress for over seventy years.\(^7\)

Yet, an exclusive focus on Washington diminishes the larger significance of an enterprise to establish a state supported university of the entire nation. For this chapter, the most significant set of scholarly literature focuses on the organization and dissemination of knowledge in the early American republic. The early American republic supported a diversified landscape of learned societies. These societies proliferated across the republic, and they were just as mixed as they were numerous.

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Some of this diversity resulted from the difficulty that traveling from one region to another posed. Moreover, people had rich and diverse information needs, therefore many groups became focused on developing better methods for agricultural or mechanical pursuits, while others resembled the literary reading groups that were commonly associated with aristocrats or classically trained men of letters. Some have argued that following the Revolution there was no place for these types of societies yet those in power continued using government to control these groups by forcing institutions to become incorporated.\footnote{Johann N Neem, Creating a Nation of Joiners: Democracy and Civil Society in Early National Massachusetts, (Cambridge, Mass: Harvard University Press, 2008).}

People gathered together to discuss new ideas in many diverse settings. Some of these groups became vibrant and effective ways to disseminate knowledge. Historians point out that nascent learned societies were early information systems. For example, Historian A. Hunter Dupree writes, “…the business of the learned society was in the late eighteenth century, and has remained, the gathering, processing, and dissemination of information.”\footnote{A. Hunter Dupree, “The National Pattern of American Learned Societies, 1769-1863,” in Pursuit of Knowledge in the Early American Republic: American scientific and learned societies from colonial times to the Civil War (Baltimore: Johns Hopkins University Press, 1976), 21. Dupree makes it clear that we need to distinguish between modern information theory pioneered by Claude Shannon.} Understanding the fundamental purpose of the learned society as a way to share information with its membership on worthy subjects of inquiry was crucial to understanding the expansive nature of discourse in early America. On some levels, a transatlantic discourse occurred prior to the formation of these learned societies. Yet it
was only after these formal systems were created that information systems could be formed, standardized, and diffused over vast and diverse spaces.

These institutions were part of an information revolution that was just as significant as the political and market revolutions of the eighteenth and nineteenth centuries. Daniel Headrick argues that this information revolution has been taken for granted and not explored with the same level of attention as that given to the leading Enlightenment thinkers and their ideas. The expanding demand for information was fulfilled by an ever-expanding supply of information. The consumers for this new information included the traditional elite individual, government officials and military officers, as well as a growing number of professionals with a need for specialized information. They in turn created new information and fed into an expanding information cycle. Further, a dramatic growth of population, production, and trade occurred. Last, Headrick points out that we should “…not forget curiosity. This period saw a substantial increase in the number of educated people,…who judged one another by their conversations, their wit, their knowledge of the world and the latest news.”

Information possessed a social and cultural power to those who had access to the right information. Headrick’s work shows that the development of a diverse range of information systems helped to lay a foundation for a diverse information environment.

Despite the American desire to be a center of knowledge creation, historians have typically argued that the early American republic, although different in certain respects,

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Looked very much like the wealthier parts of Western Europe. Americans had no rich libraries, economic support from centralized government or patronage from rich aristocrats in order to promote scientific learning and new knowledge. Nevertheless they sought to establish a cultural nationalism to distinguish them from the old world. Historian David Tyack observes that this nationalism is evident in the three educational programs and ideologies expressed by Thomas Jefferson, Benjamin Rush and Noah Webster. Tyack suggests that these men shared a desire to create a common identity for their patriotic citizens that was a critical consumer of information. Ironically, this common definition required conformity as the price of liberty. The newly created American character was defined negatively as a rejection of European ideas and institutions.  

This chapter will focus on the idea of a national university as a centerpiece of a new system of knowledge designed to forge a national identity based upon shared understanding of information. The organization, creation and dissemination of knowledge offered opportunities but also threats for people in power. By examining the distinctive debates over the national university over time, this work will show that the proposed institution never reflected a single vision. The debates over the university indicate that leading political figures held differing opinions about the institutions that created and organized knowledge. They argued about the nature of what constituted

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useful knowledge and who should control it. The failure to create a national university offers an extended opportunity to examine this problem in detail.

In 1787 Benjamin Rush became the first person to publicly mention the idea of the national university. Rush, a tireless patriot and advocate for learning and the expansion of knowledge, became a leader in influencing the mindset of early leaders. Rush’s stature as the leading expert in chemistry and medicine, presented supporters with a champion that was renowned on both sides of the Atlantic as well as throughout the new nation. Rush, in addition to being a leading intellectual figure and political leader of the time, was also advocated that the new nation establish a free, expansive, and comprehensive education system for all in the new country.\textsuperscript{13}

Rush corresponded with many people, such as Richard Price, on the importance of education on both sides of the Atlantic. Price was an influential English philosopher and political supporter of expansive political liberties and a member of several scholarly societies and political societies. He avidly supported the Americans in the Revolution as well as in the idea of a radical expansion of political liberties. Price believed that the purpose of education was to teach people how to think, but with the expansion of learning and new information specialization he observed that

All parties and sects think that they have discovered truth and are confident that they alone are its advocates and its friends. …the greater their confidence the greater is the reason for distrusting them. Such observations have a particular tendency to shew that education ought to be an initiation into candour, rather into systems of faith, and

that it should form a habit of cool and patient investigation rather than an attachment to any opinions.\textsuperscript{14}

To Price the spread of knowledge and information allowed for opportunities for improvements to the human condition. However, the uncontrolled diffusion of information could lead to a debasing of knowledge by acolytes passing themselves off as instructors.\textsuperscript{15}

Rush hoped that Price would publicly support the case for a national university in the United States. In a letter written in May 1786 Rush implored Price to once again take up a pen in order to make the case, to “…call upon the rulers of our country to lay the foundations of their empire in knowledge as well as virtue.”\textsuperscript{16} Knowledge as well as virtue was critical to the new republic. Later in the same letter Rush spelled out a plan that emphasized the need for an education system that would move a heterogeneous set of citizens away from their state-based institutions into a national university where “…the youth of all the states may be melted (as it were) together into one mass of citizens.”\textsuperscript{17} In the development of a perfected educational system, the republic could forge strong republican citizens inside this crucible of knowledge. That same year Rush created a work that called for the establishment of a public school system in Pennsylvania. This

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\textsuperscript{17} Rush, Letters.
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work stated his belief that it was “…possible to convert men into republican machines” so that they would be better able to participate in the governing of the republic.

Rush expanded on these thoughts over the course of the next few years as he called for a new institution of national knowledge. In his first public statement, published in *The American Museum* in January 1787, Rush was soliciting support for substantial changes to the structure of the American government in the upcoming Constitutional Convention. His essay entitled “Address to the People of the United States” argued that “THE REVOLUTION IS NOT OVER!” and stressed the paramount need to create a national identity. As Rush observed “…to conform the principles, morals, and manners of our citizens to our republican forms of government it is absolutely necessary that knowledge of every kind, should be disseminated through every part of the united states.”¹⁸ This statement begins an open acknowledgement of a significant problem for those who sought to create a culturally independent and self-reliant nation. The fledgling nation had twenty colleges but no universities. The distinction was especially important to the elite, which emphasized the need for advanced training in the sciences and medicine. The current system seemed completely inadequate for the new republic with its high hopes to be an example of republican virtue and knowledge. As a result, if the republic wanted its children to receive advanced education, they had to travel to Europe, consequently creating a significant and ironic problem for a people who were focused on establishing their identity in opposition to the corrupt motherland.

Rush’s most important written contribution to the national university movement was a pseudonymous piece in the *Federal Gazette*, 29 Oct. 1788. This essay was widely reprinted in publications such as the *American Museum* and was ascribed to Rush.\(^{19}\) This piece spelled out a full proposal for the establishment of a national knowledge creating institution. Rush identified the need for broad liberal education with an emphasis on natural philosophy and natural history. He also advocated for the establishment of a great museum and garden to support this educational enterprise.\(^{20}\) This establishment would serve as home base for missions of exploration both to the old world as well as within their own country. Rush wrote, “it is in the consequence of the discoveries made by young gentleman employed for these purposes that Sweden, Denmark, and Russia have extended their manufactures and commerce, so as to rival…the oldest nations in Europe.”\(^{21}\) These men would return to the university with their collections and they would organize and classify these findings “…for the benefit of our country…”\(^{22}\) In Rush’s view the national university would also serve as a vetting ground for the future leadership of the country. Congress should establish a law that prevented people from serving in either elected or appointed positions in the national government without first finishing a degree from the university. This means of control was seen as a way to keep

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\(^{19}\) Rush, *Letters*, 495. In the editorial note number 1 Butterfield writes that the ascription is almost unnecessary since the paper is characteristic in tone and style of Rush.

\(^{20}\) This appears to be the first public mention of an institution that would be like what the Smithsonian would become.


\(^{22}\) Ibid.
inappropriate people out of positions of importance and to assure that new systems of
knowledge were used in order to promote the proper types of right thinking, republican
citizens in the United States.

Members of the Constitutional Conventions discussed the idea of establishing a
national university several times during the Constitutional Convention. As the
Convention neared its conclusion, no formal agreement had emerged on the issue. On
September 14, 1787, Charles Pinckney and James Madison submitted a compromise draft
that enumerated the authority of Congress to, among other things, establish a national
university in the federal district. James Wilson from Pennsylvania supported the measure
while other members of the Convention, like Gouverneur Morris, opposed the proposal as
unnecessary. Morris argued that Congress would already have exclusive jurisdiction over
the federal district. Six states: New Hampshire, Massachusetts, New Jersey, Delaware,
Maryland, and Georgia were against adding this power, leaving Pennsylvania, Virginia,
North Carolina, and South Carolina in favor while Connecticut was divided. Ultimately
the states split over the issue, but the reason is unclear. The specific concerns of the
opposition are unknown because their opinions were not captured in the remaining
sources. With only three days left in the session possibly many agreed with Morris that it
was an irrelevant issue and did not need a vote be the membership. Other scholars have
made the point that this defeat seemed to represent an opinion about the enumeration
being unnecessary rather than a fear of vesting the federal government with this power.  

Education For the Year 1898-1899 (Washington [D.C.]: U.S. Govt. Print. Off., 1900);
Roger Sherman went on record as opposed to the measure during the Convention. While a member of the House of Representatives in May 1790, Sherman declared that the proposal in the Convention was voted down because these powers “should be exercised by the states in their separate capacity.” This suggests that the national university was an issue that became wrapped up in larger debates about the proper role of the national government.

After his election as the President of the United States George Washington became the leading champion for the creation of a national university. As President, George Washington was well aware of the need for an educated citizenry and saw the importance of supporting and spreading useful knowledge in the new republic. He was also concerned about a world in which the next generation might be misled and would degenerate into worldly sophisticates, corrupted by the influences of monarchical decadence, corruption, and idleness.

His public support for the expansion of knowledge and learning was stated clearly in his first message to Congress on 8 Jan 1790. Washington stated that there is...

\[\ldots\text{nothing, which can better deserve your patronage,}\]
\[\text{[sic] than the promotion of Science and Literature.}\]
\[\text{Knowledge is in every Country the surest basis of public happiness. \ldots Whether this desirable object will be best promoted by affording aids to Seminaries of Learning already established—by the institution of a national University—or by any other expedients, will be well worthy of a place in the deliberations of the}\]

Castel, “The Founding Fathers and the Vision of a National University.”; Madsen, *The National University, Enduring Dream of the USA.*

24 *Annals of Congress*, 1st Cong., 2nd sess., 1551
Legislature.  

Washington was cautious in this first pronouncement of support because he did not want to give the impression of usurping power from the Congress. Nevertheless, he explicitly mentioned the importance of the national university to Congress. Others in Washington’s administration supported the university. Henry Knox issued a report to Washington to aid his writing of the Annual Message to Congress that includes a section about the need for an establishment of a national institution of learning. This “…institution while it assisted in diffusing light and knowledge would be attended with the best political effects in cementing the several states of this extended Republic, and preventing a practice of sending American youth to different parts of Europe for their education.” As the Secretary of War, Knox saw a need for this institution as a matter of national security and for the long-term viability of the military.

Congress acknowledged Washington’s message a few days later and confirmed the value of learning by stating “Literature and science are essential to the preservation of a free constitution; the measures of Government should therefore be calculated to strengthen the confidence that is due to that important truth.” This reply is curious

27 Richardson, A Compilation of the Messages and Papers of the Presidents. 1789-1897, 1:68.
especially in light of the actions of the Congress. In May 1790, William Loughton Smith of South Carolina made a motion to act on the part of the President’s speech that promoted the encouragement of science and literature, and he asked that the matter be sent to committee for consideration. Michael Stone from Maryland argued that no enumerated power existed for Congress to take part in these affairs. Stone stated, “We have encouraged learning by giving authors an exclusive privilege of vending their works.” Stone is speaking of the recently enacted bill to promote the progress of Science and the Useful Arts which is also known as the Copyright act of 1790.

Rather than focusing on institutions of learning established by the national government, Stone and others including Roger Sherman, encouraged states to develop their own institutions of learning. The measure received no action and the fate of the national university remained unaddressed, on a national level, again for several years.

While the legislature focused on other legislative matters, Washington continued to work with several people behind the scenes in order to establish the groundwork that would encourage positive legislative action in favor of the university. As President of the United States, Washington had been given significant latitude in order to plan the details of the new federal city that would serve as the national capital. Washington worked closely with the appointed Commissioners for Public Buildings for the federal district. Samuel Blodget laid out lots in the District designed to raise money to fund special projects like the national university and other public buildings. In 1793, Washington received a letter from the Commissioners that stated we “…refer you to Mr. Blodget on
the subject of the National University to which in general we have the most friendly disposition, and the site pointed out by him we entirely approve.”

An 1804 map of the District shows this parcel of land is still clearly marked and titled “University.”

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Figure 1 Map of Washington D.C. 1802. A location is reserved for the national university overlooking the river 2 blocks from the President’s House.\textsuperscript{30}

This map shows the university in a key spot near the President’s House. L’Enfant originally planned to make this ground a fort because of the location on the high ground atop of Peter’s Hill. William Thornton convinced the President that this site was better

\textsuperscript{30} Moore, S. S.. The traveller’s directory, or, A pocket companion : shewing the course of the main road from Philadelphia to New York, and from Philadelphia to ... Philadelphia, 1802. 23
suited for the university and it would “…add much to the grandeur of the city.”

Blodget’s zeal for holding land lotteries caused significant problems for the administration. The lotteries were not particularly successful and many began to question Blodget’s motives. By the end of the year, the commissioners publicly disavowed his actions. Ironically, Blodget’s zeal for speculation seems to be partially motivated by his desire to raise money in order to build the university which was now seen as part of the President’s dream for the new capital.

By February 1795, the national university received no action. In a letter dated February 23, 1795, Thomas Jefferson outlined a scheme to Washington that would transplant the faculty of the University of Geneva to America. Jefferson’s letter to Washington provided a supportive description of a group of faculty sympathetic toward republican government, but threatened by the turmoil unleashed in the French Revolution. Jefferson further emphasized the virtues of the expertise and knowledge of the Geneva faculty in the sciences. One historian insists that Jefferson attempted to “dazzle Washington with the brilliance of the Geneva faculty.”

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http://rotunda.upress.virginia.edu/founders/GEWN-05-14-02-0365 [accessed 06 Apr 2011]
33 Arnebeck, *Through a Fiery Trial*.
34 Neil Mcdowell Shawen, “Thomas Jefferson and a ‘national’ University: The Hidden Agenda for Virginia,” *Virginia Magazine of History & Biography* 92, no. 3 (June 1984): 319. This article deftly shows Jefferson’s complex and changing ideas about establishing a national university. Ultimately, Shawen shows that Jefferson was more interested in his “hidden agenda” to establish a university in Virginia rather
Washington to accept this offer since it would instantaneously give the United States access to the premiere scientific educators in Europe.\(^{35}\) Jefferson continued, in the letter that outlined the costs for transplanting the group, and suggested that the canal shares given to Washington by the state of Virginia might serve as a foundation to achieve Washington’s great purpose. Jefferson’s final maneuver was to propose that this new institution be located in Virginia instead of the new federal city. “A question would arise as to the place of the establishment. As far as I can learn, it is thought just that the state which gives the revenue should be most considered in the uses to which it is appropriated.”\(^{36}\) Jefferson’s reasoning to locate the institution in Virginia focused on the fact that Virginia paid for the shares. Finally, Jefferson also believed that establishing a university within the federal city would create distractions for the nation’s youth, who would then become corrupt.

Washington firmly replied to Jefferson in March 1795 indicating that he had already promised the Commissioners of the District of Columbia the shares from the Potomac Canal Company that would provide for an endowment to the national university.

Washington adamantly preferred that the federal district for this institution. He countered than holding to any consistent philosophical stance for or against the establishment of a national university.

\(^{35}\) Upon the solicitation of advice from a friend, Jefferson described the Geneva faculty as the best in Europe. See “From Thomas Jefferson to John Banister, Jr., 15 October 1785,” Founders Online, National Archives (http://founders.archives.gov/documents/Jefferson/01-08-02-0499 [last update: 2015-12-30]).


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Jefferson’s concerns about youth being corrupted, writing “…this seminary is contemplated for the completion of education, and study of the sciences (not for boys in their rudiments).”\textsuperscript{37} Washington also noted that his primary purpose for supporting a national university was to eliminate the need of sending youth abroad for education and to bring together the leaders of the new republic so that they could develop friendships that would diminish the factional and sectional divisions that he observed in the republic.

It seems likely that Jefferson’s obsession with the Geneva scheme had an influence on the sponsorship by the American Philosophical Society (APS) of a contest to discern the optimal way to develop the best “system of liberal education, and literary instruction, adapted to the genius of the government, and best calculated to promote the general welfare of the United States.”\textsuperscript{38} The APS was the key learning society associated with Jefferson and his political and ideological followers.\textsuperscript{39} This contest was one of a host of challenges initiated by the APS, each of which focused on developing knowledge in the early republic. The development of a system of education for the new country was an imperative that many leaders hypothesized would be necessary to construct a good citizen. One historian called it the “Great Contest” because it sought to fulfill a dream for

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\textsuperscript{38} “Advertisement,” Transactions of the American Philosophical Society 4 (January 1, 1799): iv. These advertisements were made across the republic starting in May 1796.
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creating a flawless structure of society that was encapsulated in their perfectly constructed government.\textsuperscript{40}

The leading contenders for the prize, Samuel Harrison Smith, Samuel Knox, and Anonymous, often called number 3, all called for a tiered system of education. The students were to progress up the educational ladder shaped like a pyramid. The elite scholars would end up at the top in the national university and presumably due to their expertise would assume leadership roles in the republic. Despite the fact that these essays shared this common factor, in the end, they did not lead to the establishment of a national university. Still, the contest did promote discussion across the new nation and certainly among the elites.\textsuperscript{41}

The third essay is intriguing because it alone emphasized the importance of developing a connection between morality and religion within the educational process. Ultimately, two years later in December 1797, the Society announced that Smith and Knox would share the prize, but this was a somewhat ambiguous victory, more the result of surviving through the system of attrition than on the merits of the essay. Historian Benjamin Justice writes, “The society deliberated and picked two winners from the three viable candidates. The selection was not as straightforward as one might think, however.


\textsuperscript{41} Archives, American Philosophical Society, Series III.1 Manuscript communications. This series is organized alphabetically by the name of the sender and contains several responses to the APS call for a national education system.
The APS membership believed that none of the essays had satisfactorily answered the question.\textsuperscript{42} In the end, it is unclear why the membership was not satisfied with the essays delivered, but it is clear that the participants were struggling with the right balance between practical knowledge and liberal education. Ultimately this contest reveals the extent to which learned individuals disagreed about what the university would actually look like.\textsuperscript{43}

Washington's last major push for the national university occurred as he was nearing the end of his administration. Although many people seemed to support the notion of creating a national university, different opinions prevailed about how the university should be structured. William Thornton, who served both Washington and Jefferson, wrote to Jefferson about an idea from the French philosophe Constantin-François de Chasseboeuf Volney. Volney's travels throughout the world brought him to the United States and he conversed with Thornton about the importance to establish a national university modeled after the National Institute of Arts and Sciences in France. This institution would incorporate “...in the University a Philosophical Society, upon an extensive Scale,...” that would centralize the knowledge creating institution of the republic.\textsuperscript{44} Washington's vision of the national university remained focused on the

\textsuperscript{42} Ibid., 206.
\textsuperscript{43} Although there were several entries to the contest only Smith and Knox's essays survive today. This is due to the virtue of being the shared winners of the Great Contest. Significant portions of number 3's essay survive thanks to quotes in the evaluation notes made during the Society's review.
development of “Education generally as one of the surest means of enlightenment and giving just ways of thinking to our Citizens.” Washington, like Rush earlier, was particularly concerned with the need to emphasize bonds that tied together the youth from across the nation.

Washington spent a considerable amount of time working with Alexander Hamilton trying to hone and clearly articulate his view of the importance of his vision for a knowledge creating institution. Five letters were exchanged between the two men between September and the end of November. Washington initially wanted to include a statement about the university in his Farewell Address to the American people. Instead, Hamilton convinced him that it was an inappropriate forum and that he should make the case for the university directly to Congress. The finished product of this work appears in his final address to Congress given on December 7, 1796. Ultimately Washington’s vision for the institution focused on the need to inculcate students with a shared set of knowledge in order to help them forge relationships to bridge their differences.

Washington stated “…the more homogeneous our citizens can be made in these

47 Alexander Hamilton to George Washington, September 4, 1796, Ibid. 316
particulars the greater will be our prospect of permanent union; and a primary object of
such a national institution should be the education of our youth in the science of
government.”\textsuperscript{48} This vision speaks to the idea that there was a need for uniformity in the
type of knowledge received. The university was less a knowledge creating institution and
more of an institution that organized and diffused knowledge to the future leaders of the
republic. Washington envisioned that the university would be the best way to promote
this ideal.

The Senate responded with an unanimously approved message on December 10\textsuperscript{th}
that stated, “…A national university may be converted to the most useful purposes; the
science of legislation being so essentially dependent on the endowments of the mind, the
public interests must receive effectual aid from the general diffusion of knowledge.”\textsuperscript{49} It
seemed to be the perfect time to make the final push in order to finally pass this
legislation. Nevertheless, unlike the Senate, the House saw a protracted debate over the
response to the President’s message. The final message to the president was approved on
December 16\textsuperscript{th}, but it did not include a specific response regarding the university. Instead,
referred to Washington’s message generally and stated, “…the various subjects of your
communication will respectively meet with the attention that is due to their

\textsuperscript{48} Richardson, A Compilation of the Messages and Papers of the Presidents. 1789-
1897, 1:199-204.
\textsuperscript{49} Annals 4\textsuperscript{th} Cong.,2\textsuperscript{nd} Sess., 6:1694.
importance.” In absence of instructions to the contrary, the Commissioners decided to proceed with their proposal.

The Commissioners of the District of Columbia worked to help assure that the university became a monument to Washington. Alexander White, one of the commissioners, wrote to James Madison to help shepherd the measure through an increasingly factious Congress. Madison, although a long-time friend and confidant of Washington had recently experienced a strained relationship with his old friend nevertheless, Madison decided to try to assist the outgoing President. The Commissioners, led by White, submitted a memorial on Wednesday December 21, 1796. A core part of the memorial was outlining the purpose of the institution. The Commissioners stated the national university would promote

…the preservation of the morals, and of the political principles of our youth; the saving of expense of foreign education; the drawing to our shores the youth of other countries, particularly those attached to republican government; and the proportionate accession of wealth, the removal, or at least the dimunition of those local prejudices, which at present exist in the several states, by uniformity of education, and the opportunity of free interchange of sentiments and information among the youth, from all various parts of the union, which would consequently take place, may, with certainty, be accounted among the benefits of such an institution.  

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51 Leibiger, Founding Friendship, 215-216.
52 Commissioners of the District of Columbia. Memorial of the commissioners appointed under the act “For establishing the temporary and permanent seat of the government of the United States,” and on so much of the president’s speech as relates to the establishment of a national university. 12/12/1796. (National Archives Microfilm Publication M-371 Roll4.)
The Commissioners report essentially argued that the institution should have a set of core values. These values emphasized the need for an American education system focused on useful and virtuous knowledge in order to promote national identity. Still, the Commissioners seemed to anticipate some political resistance to the measure because the proposal did not request federal appropriation of monies to endow the new institution. Instead, the memorial called for the establishment of an organization that would receive private donations from the community. The memorial also publicly declared Washington’s intention to leave his Potomac shares to the university.

This was not the first public mention of Washington’s intention to leave the shares for this purpose. A year earlier two New York newspapers *The Herald: A Gazette for the Country* and *American Minerva and the New-York Advertiser* reported on a resolution by the Virginia General Assembly approving the use of the Potomac shares for “the University intended to be erected in the Federal City.” Nevertheless, it is likely that part of the reason that the Commissioners decided to include Washington’s intention was to minimize the opposition to the university that sprang from financial concerns. Another strategic move was to refrain from using the phrase national university, opting instead to call for the “establishment of a university in the District of Columbia.” Once submitted to the House of Representatives the memorial was referred to a committee led by James Madison, which promptly returned the proposal a few days later with no changes.

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54 National University in the District of Columbia, 21 December 1796, American State Papers: MISC 1; ASP037 Misc.91: 153-154.
suggested. Madison must have anticipated that there would be significant opposition to the measure.

In fact, the House of Representatives debated this proposal for two full days. Some members of the House opposed to the establishment of a national university because they felt that this institution would be a directly challenge the separation of national and state powers. Others feared a loss of distinctive state identities. John Nicholas, a representative from Virginia who was elected as an anti-administration candidate, spoke against the proposal, arguing that “…there was no Federal quality in knowledge, and no federal aid was necessary to the spreading of it.” Nicholas believed that localities were more than capable of providing a proper education to their citizens. A national university would be an expensive proposition that would yield “…much evil.” Another opponent, William Lyman an anti-administration representative from Massachusetts, asserted that the people of the United States would not send their children to this institution. Instead of being an institution that would bring citizens together in the spirit of brotherhood it would serve as a magnet for discord. Lyman argued, “It will be a natural source of discontent to them to pay their money merely for others to obtain advantage.” Instead, Lyman thought that local “…small academies are as useful as this institution for a University.” Although financial issues played a part in this discourse it seems clear that the anti-administration members feared the implications of a supreme national institution responsible for the dissemination of knowledge in the republic.

55 ibid.
57 Ibid., 6:1699
As the session began on the second day, the House voted on the matter. No record of a role call vote exists. Only a short statement in the Annals of Congress indicates “the question was put and negatived by a great majority.”\(^{58}\) Those in favor of the university were exasperated and surprised at both the scale and the vehement objections of the opposition. William Vans Murray, a Federalist representative from Maryland, was surprised at the decision of the house and was convinced that his colleagues must have misunderstood the issue at hand. Murray reminded the opposition that the proponents of a university were only seeking the authority for a set of men to incorporate for the purpose of receiving donations like the one already designated to the purpose by the president. Proponents saw this as a worthy and necessary mission that only Congress could accomplish. William Craik, a Federalist representative from Maryland, argued that the state of Maryland would not legislate on this matter because it did not want to interfere in any matters that would extend beyond the year 1800 when the transfer of legal authority on the land ceded to the federal government would be in effect. As a result, Congress was the appropriate authority in the matter.

Throughout the debate the proponents of the university realized that their opposition focused on the evils of creating a national university. Therefore, they tried to redirect the debate from a focus on the Congress creating a national institution to being a simple matter of local governance that established an institution for the citizens of the district. This was not successful. Members opposed to the university established connections to the President’s stated wishes of a national university, and they explicitly

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\(^{58}\) Ibid., 6:1701.
linked the granting of nineteen acres of federal land by Washington and his Commissioners as evidence of the great subterfuge that was being perpetrated on the Congress. Edward Livingston from New York had argued that the Commissioners’ powers were to lay out public lands for public use and not to give away lands for private enterprises. Livingston stated, “Such institutions are not public, but private concerns.” Ultimately the opponents to the university were consistently able to justify their logic by attacking the motivations of their opposition.

Evaluating the different political sides in the debates on the university in the House of Representatives proves complicated. First, no record exists of the individual votes that members cast on the issue. In fact rather than an official tally of the vote that called the question, there is only a tally of the vote to postpone the measure until after the Christmas holiday. On that question, the House voted 37-36 to postpone the matter. This vote is difficult to use to measure the tenor of the House. The opponents of the university measure should have been against postponement so they could finish off the matter, since they apparently had the votes in hand. Conversely, supporters should have favored postponement in order to live to fight another day. However, the record shows a more complicated story. John Swanwick, Republican from Pennsylvania indeed opposed postponement because he disliked the measure. On the other hand, William Giles, a Republican from Virginia, was in favor of postponement even though he was “ready to vote against it… because the advocates of the measure wished it.”

59 Ibid.
60 Ibid., 1711
61 Ibid., 1710
an illustrative example of the heated opposition to the matter. Venable, a Republican from Virginia, opposed the university and was against postponement because he was greatly suspicious that a Federalist dominated “Maryland legislature was then sitting, and the Commissioners might apply to it, and get their business done; for, whatever might have been said to the contrary he believed they could incorporate them, as foreigners to hold lands…”62 The result would effectively grandfather this institution into existence which he believed would undermine the values of the republic.

Further complicating the matter was the timing. These debates occurred following the dramatic results of the 1796 election in which John Adams, representing the Federalists, won the presidency and it became clear that the incoming members of the House would prove to be Federalist. However, they would not be seated until March 1797. In the meantime, in the closing days of the 4th Congress, the Republicans controlled the House. Based upon the recorded debates it appears that it was the Republicans, minus James Madison, who overwhelmingly opposed the proposal.

The House did not consider a measure on the national university again until 1811.63 Still discussions about the proper purpose of knowledge institutions in the republic continued. Meanwhile the growing rift between Federalists and Republicans continued. Historian Linda Kerber observes in her work, *Federalists in Dissent*, that Federalists during this period “…concluded that an ordered world was disintegrating, and that this disintegration was encouraged by an organized group of men who joined

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62 ibid., 1711
63 Although the Senate did consider the question in 1803 which also failed to lead to a national university but it did result in the creation of the Military Academy at West Point.
opposition to the politics of George Washington with a skepticism of established patterns of inquiry in the arts and sciences. While Federalists saw the increasing dismantling of the ties of deference and the ordering of society, the Republicans seemed focused on efforts by their adversaries, such as the national university, that looked like a power grab in order to centralize power. This sparked fears of a return to an aristocratic society filled with the intrigues of a corrupt centralized government that resembled the court life of the old world.

After Washington’s death, the nation mourned their leader while newspapers across the republic published his will. People across the country must have wondered what would happen to the shares left as a gift to the people of the United States. As years passed the details surrounding the national university began to fade, but the fragments of memories of the bequest left by Washington remained. Many thought the stock had been overlooked and lost forever within the internal improvement booms and busts of the early nineteenth century. Some suggested the U.S. Treasury stock held the stock when the British Conflagration in Washington in 1814. Others speculated that the funds became included as an endowment to the Columbian College, which would eventually become George Washington University. The reality is that stock simply lost value over time and

ultimately became worthless when the Potomac Company was forced to give up its charter, because the high debts that the company possessed, to the Chesapeake and Ohio Canal Company in 1828.\textsuperscript{66} Regardless, the shares had become consumed into the ethereal world of memory like Washington’s vision itself.

Joel Barlow wrote to Jefferson from Paris in September 1800 that he had seen Washington’s legacy in his Will. Barlow offered to Jefferson an idea to use Washington’s memory in order to create “…an institution of much more extensive and various utility than anything of the kind has hitherto existed.”\textsuperscript{67} Barlow’s detailed letter to Jefferson identified the deficiencies of the colleges and universities in the United States and pointed to the superiority of European learning institutions. Barlow made the case that the new university needed to be one where “…the twofold object of collecting and disseminating knowledge should be wrought into the system, the Institution to be called the Polysophic Society, or some such comprehensive name by which the variety of its labors should be designated.”\textsuperscript{68}

This is vision is similar to what William Thornton described to Jefferson in May 1796: Barlow’s proposal is admittedly more detailed. It is interesting to note that Barlow did not point to the needs of developing a sense of national identity or brotherhood in order to minimize factionalism. His focus was on the collecting and dissemination of

\textsuperscript{66} George Washington University. Office of the University Historian, \textit{The Fate of Washington’s Bequest to a National University}. (Washington, 1968).


\textsuperscript{68} ibid
knowledge. The product of this action would yield better inventions and productive citizens, which in turn would expand commerce and security for the state. Jefferson was interested in these examples, and he continued to correspond and discuss the idea of a university with Barlow for many years. Ultimately, Jefferson chose a different route, preferring to establish an university in and for his home state of Virginia, rather than for the nation as a whole.

Washington’s vision for the national university was that it would serve as an institution promoting the proper set of knowledge to the future leaders of the republic. Using a national university assured that the youth of the nation became educated in an institution designed to forge a unified homogenous national identity. This plan would offer an opportunity for early leaders to create and disseminate knowledge to all right-thinking citizens. However, this vision was irreconcilable with the revolutions during the first decades of the republic’s existence. Ultimately, arguments about the nature of what constituted useful knowledge and who should control that knowledge doomed one of Washington’s most cherished ideals.
During the early years of the republic, Americans were engaged in many important discussions about what types of institutions were appropriate to organize and disseminate knowledge in the new nation. These debates extended beyond the institutions themselves and often included the types of knowledge that they privileged. The debates discussed in the first chapter during the Washington administration were just one example of this struggle to determine the most effective means of providing access to information for the republican citizenry. Earnest concerns existed over what constituted suitable knowledge for citizens. Serious contention also emerged over what type of knowledge was superior for the leaders in the republic. Many disputed the ideal that all people could, and should have access to the highest levels of knowledge. In fact, many began to redefine what the pinnacle of learning really was and how to attain that knowledge. It became crucial for the new nation to determine the answers to these questions and how much power a national institution of knowledge ought to possess.

Thomas Jefferson’s frequently shifting opinions on the authority inherent in the organization and dissemination of knowledge exemplified the uncertainty of many leading citizens in the republic. Jefferson spent a significant part of his life trying to determine the best way for the republic to provide access to education and learning to its
citizens. These questions extended the types of functions appropriate for these knowledge institutions to execute. Many in the republic viewed the existing institutions as stale and obsolete with too many ties to the British system. Skeptics saw the British educational practices as an extension of the corrupted system of governance that favored those of aristocratic birth. Many looked at the national institutions established in France as a progressive option. These citizens favored the revolutionary institutions established by the French that embraced modern scientific learning. This issue remained a major sticking point for many throughout the early years of the new nation and it caused political tensions between Federalists and Republicans that manifested themselves in the different types of organizations to which educated citizens belonged. Jefferson, and many Republicans viewed the importance of embracing their notion of science as paramount to their educational goals. Specifically moving away from traditional curriculum taught in America’s colleges to the applied sciences needed in a modern world. Yet Jefferson’s leadership on the issue of creating new educational institutions and disseminating information represented a key point of departure within the larger public debate over the nature and location of learned institutions in the early American republic.¹

From an early date, Thomas Jefferson was committed to the mission of public education. His attempt in 1779 to create a public education system in the Commonwealth of Virginia reveals his early zeal to reform the educational system to make it more

appropriate for the citizens of a new republic. Jefferson’s well known Bill 79: *The Bill for the More General Diffusion of Knowledge* sought to create a statewide educational system that consisted of three levels. The purpose of this bill was to establish a base-line level of knowledge that all citizens would be able to acquire and to remove all economic, social, or other barriers that would prevent citizens from achieving their full potential. In short, this would be a public education system designed to transmit the knowledge of the previous generation to the youth in order to preserve and spread the spirit of the American Revolution.²

The Bill for the More General Diffusion of Knowledge was only one of a trio of bills packaged together as unified educational framework for the Commonwealth. The two lesser-known companion bills sought to establish a public library and more importantly, to reform the educational curriculum at the College of William and Mary.³

As a whole, the legislative package sought to provide a diverse and a public purpose for

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the various educational institutions in the state through the establishment of publically created and managed knowledge institutions. The intent of the legislation of the Revisors and this educational framework was crucial in Jefferson's mind to the destruction of the aristocratic and monarchical ties to their British past. The establishment of a public education system provided a means to assure that citizens were adequately educated in order to provide legitimate consent when participating in civil life. This consent was a necessary step to transforming a society structured upon birth to one built upon the idea of merit and independent reason.⁴

Jefferson viewed the existing College of William and Mary as a surrogate of the Anglican Church, and as such, beholden to religious convictions. Jefferson’s goal was to transform the college from a parochial establishment to a diverse knowledge institution with a public purpose. Religious denominations established all early American institutions of higher education. The colonists followed the practices of Europeans that dated from the medieval period when founding their colleges. These educational institutions served both as a part of the traditional social order and as beacons of British civilization.⁵ Still a diverse set of institutions existed in English North America. Some establishments such as William and Mary required professors to be from the same denomination that founded the institution while others, such as the College of New Jersey at Princeton did not. These establishments were not simply religious outposts that

⁵ As such, there were no colonial colleges had been established by Roman Catholics or Judaism.
focused on religious doctrine also aimed to enhance moral virtue through liberal 
education.\(^6\)

Despite the appearance of diversity, these institutions tended to teach a similar 
curriculum. They designed the curriculum to prepare young men for a life in the ministry 
or to be learned gentleman. This required an emphasis on classical learning, like the study 
of Latin and Greek. Fearing that Americans would fall behind in the study of sciences, 
Jefferson and others worried that religious institutions would limit the free study creation 
and spread of knowledge. As a result, they were especially concerned that reliance on the 
existing educational institutions associated with religious institutions threatened the very 
liberty that they were supposed to help reinforce. Further, the quality of the education 
needed to be improved. Through reforming the institution of William and Mary, Jefferson 
believed that the Commonwealth would assure that “those who are to be the future 
guardians of the rights and liberties of their country may be endowed with science and 
virtue, to watch and preserve the sacred deposit.”\(^7\) This required an expansion in the 
course offerings for students and a different set of instructors.\(^8\)

Although not personally acquainted with Jefferson at the time Samuel Stanhope 
Smith, future president of Princeton College, wrote to him that the religious leaders in

\(^6\) Frederick Rudolph, *The American College and University, a History* (New York: 

\(^7\) To Thomas Jefferson from Samuel Stanhope Smith, March? 1779, *The Papers of 
(Charlottesville: University of Virginia Press, Rotunda, 2008–2015.) 
http://rotunda.upress.virginia.edu/founders/TSJN-01-02-02-0094 [accessed 06 
Sep 2015].

\(^8\) Kevin J. Hayes, *The Road to Monticello: The Life and Mind of Thomas Jefferson* (New 
most institutions, including William and Mary were a “disgrace of science and would to Heaven it were possible utterly to banish them from the society of men. But such is our misfortune; they exist; and they exist in considerable force.”

Smith, who devoted his life’s work to the reconciling of religion and science, warned Jefferson that without structural changes to the institution the faculty and existing administration would resist the curricular changes that Jefferson sought to impose. Jefferson’s Bill 80 proposed eliminating three of the four existing schools within the College of William and Mary and establishing eight new professorships that would focus on the modern languages, political sciences and the new sciences of the Enlightenment. Ultimately this change would have diversified the mission of the College of William and Mary by reducing the church’s influence over the academic affairs of the College. This would allow the state to create a public higher education system to assure a means to good and lasting governance.

Jefferson envisioned the legislation as a bulwark against institutions and traditions that limited freedom. The goal was to eliminate any trace of aristocratic privileges from the government. Jefferson recalled the plan later in a letter to revolutionary supporter, British scientist Joseph Priestley. Jefferson’s letter to Priestley, written on January 27, 1800, was part of an ongoing conversation with many of the leading thinkers of the day regarding what constituted the best way to disseminate knowledge in the republic. Jefferson’s proposed system would have culminated a reformed William and Mary. The

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university’s curriculum would emphasize applied mathematics and sciences instead of Latin and Greek. The existing members and supporters of the contemporary educational institutions had something to lose and they did resist the proposed changes by using their positions as instructors to inculcate students with their brand of knowledge. Further, these changes undercut their expertise thereby challenging the foundation of their core beliefs. Jefferson’s concerns with the institutional resistance toward the shift to a new type of scientific curriculum provided space for speculating about utilizing different institutions to promote his goal to advance scientific learning.

While in Europe Jefferson had developed a new appreciation for the extensive institutions that organized and disseminated information as a means to of relationships between learned people. Learned societies, which were particularly characteristic of the enlightenment era and associated with scientific advancement, offered a mechanism to spread and create new knowledge. They William Short sent Jefferson a report on plans before the national assembly in France in 1791. In 1796 William Thornton, the renowned architect and an avid supporter of establishing a national university, had described to Jefferson a conversation that he had with Comte de Volney regarding the plan to develop a national university in the federal capital. Volney, a French political philosopher and anthropologist, was renowned for adamantly opposing to the special privileges of nobility and dogmatic teachings of the church. He was also an early supporter of Napoleon. Like many intellectuals, he believed that supporting Napoleon

would protect freedom.\textsuperscript{12} Thornton happily reported that Volney supported the idea to
establish a national university; moreover the “thought of incorporating in the University a
Philosophical Society, upon an extensive Scale, and of having in its Bosom a Select
Committee is much approved of by Mr. Volney.”\textsuperscript{13} He also indicated that Volney
discussed a new institution contemplated in France that was undoubtedly the newly
established National Institute of Arts and Sciences. Alexandre Lerebours, a French
scientist elected into the American Philosophical Society (APS) in April 1796, also
reported this news in a letter to Jefferson.\textsuperscript{14} The new institution aimed to remove the
aristocratic privilege associated with acquisition and creation of scientific knowledge and
transform it to an institution for the people. It would educate the “best students selected
from the lower echelons of the system and to oversee the continued progress of letters,
sciences, and the arts.”\textsuperscript{15} The National Institute consisted of a well-developed and
maintained infrastructure including laboratories, libraries, museums, botanical gardens,
communication networks and the other necessary apparatus needed to expand the arts and

\textsuperscript{12} Maurice Mauviel, “Volney, Constantin-François De Chasseboeuf,” ed. Alan Charles
Kors, \textit{Encyclopedia of the Enlightenment}. (Oxford University Press, 2005),
\textsuperscript{13} William Thornton to Thomas Jefferson 22 May, 1796. \textit{The Papers of Thomas
Charlottesville: University of Virginia Press, Rotunda, 2008. 29:110-111
http://rotunda.upress.virginia.edu/founders/TSJN-01-29-02-0075 [accessed 04
Aug 2012]
\textsuperscript{14} Alexandre Lerebours to Thomas Jefferson May 17, 1796. \textit{The Papers of Thomas
http://rotunda.upress.virginia.edu/founders/TSJN-01-29-02-0069 [accessed 11
\textsuperscript{15} Roger Hahn, \textit{The Anatomy of a Scientific Institution: The Paris Academy of Sciences,
sciences. The institution also was a place where authority of information was established and maintained.¹⁶

Scientific institutions offered freedom from ignorance, and many Americans hoped that if properly supported and constituted these institutions offered freedom from dependence from European expertise. Scholars suggest that many of the leaders in the United States believed that the progress of civilization required the establishment of an institutional base. This institutional base would serve as an information system meant to both control and disseminate scientific and useful knowledge for the good of the nation. This new intellectual order established for the good of the community and served as an information system dedicated to collecting, categorizing and disseminating information between the members. The American Philosophical Society (APS) in Philadelphia was the oldest society and viewed themselves as the primary national learned society despite the establishment by the citizens of Boston of their own society, the American Academy of Arts and Sciences, in 1780. These societies, once chartered, were free to operate relatively independently and sought to promote the interests of their membership. This freedom to perform and sponsor research activities, publish and hold lectures provided an alternative to the older models of education tied to clerical traditions and instead offered

¹⁶ Ibid., 159–251. Talleyrand conducted a Herculean effort by synthesizing the ideas of the leading French thinkers in his *Rapport sur l’Instruction Publique*. This grand synthesis of the leading experts across France proposed a new system of education based upon the political organization of the new republican government. The apex of this hierarchical institution would be established in Paris and its purpose was to collect knowledge from all parts of France in order to promote the expansion of knowledge in all branches of learning and arts.
opportunities to explore a variety of scientific activities that their members agreed would benefit the state as a tool of progress and means of the security for the new nation.\textsuperscript{17}

The preamble to the Constitution of the United States declared one significant purpose of the new Union was to be to “provide for the common defense.”\textsuperscript{18} Jefferson and many early leaders of the republic believed that the new nation needed applied scientific expertise to defend it. Early American leaders faced a challenge in developing and disseminating military knowledge under a republican form of government. The officers from the American Military Academy became renowned as the leading experts in the form of applied scientific knowledge in the first half of the nineteenth century; however, this had not always been the case. The establishment of the Military Academy at West Point illustrated the disputes among many of the leaders in the republic over the purpose of the nation’s lone national educational institution. Further, prior to the establishment of the Academy, no American institution taught the advanced mathematics and scientific concepts necessary to build bridges, roadways, canals and perform other civil engineering feats instrumental to the expansion of business and industry in the nineteenth century.

Typically, historians have used three main interpretations to explain the importance of the Military Academy. Each of these explanations concentrated on the irony that the

academy was founded during Jefferson’s administration. Jeffersonian scholars have pointed out that the Academy was a shrewd plan to remake the membership of the office corps from the aristocratic leaning Federalists into a cadre of officers with republican values.\(^{19}\) Other scholars have seen West Point in the context of advancing the cause of education through curriculum reform.\(^{20}\) Recently a third interpretation suggested that republicanism and education reform were complementary and served “as the end and the means of Jefferson’s ambitions for the West.”\(^{21}\) Useful though these interpretations may be, they do not consider the issue of the cultural authority of knowledge creation in shaping Jefferson's attitudes toward the dissemination of knowledge. Further, they do not recognize Jefferson’s changing views on the power of national institutions especially in light of the rise of Napoleon from a military education system in France and his own use of centralization of power using institutions of knowledge.

The emerging modern nation states, especially on the European continent, increasingly established military schools as a means to enhance the expertise of their citizens and to help establish national bonds. This transformation required a reworking of scale to assure that more students received expert training from a limited pool of instructors. Historian Don Higginbotham points out that in the eighteenth century military


education was going through a transformation “between a growing emphasis on institutional learning and a tutorial tradition.”\(^{22}\) The French, in particular, were pioneers of these new institutions. Especially anxious to enhance their military expertise, especially after their defeat in the Seven Years War, the French wished to acquire expertise in the use of artillery, engineering, and new ways to deploy infantry. French mathematics became renowned especially for advancements in precision in the creation of maps. These sciences required exacting methods in order to collect, organize and display information. As a result, the new methods of study required discipline and uniformity. They created specialized institutions of educational academies and learning institutions that focused on science and engineering.\(^{23}\)

These new centralized institutions reinvented the French officer into a single-minded servant of the state trained in the new sciences. They also served as a key to the growth of the burgeoning centralized military machines of the nation state. Mathematics, statistical analysis and calculations were viewed as a defense from the corrupting and decadent study of *belles-lettres*. Further, mathematics served as a way to hone an approach to problem solving. These engineers were not automatons but instead became trained to used mathematical models to help inculcate the “judgment of young officers


and orient their approach to practical problem-solving.”

This systems way of thinking about problems encountered in the field was well suited for the mass education that the modern nation state needed for large armies. The English, on the other hand, were slow to create centralized institutional military educational facilities and they relied on traditional strategies to train officers. They did establish the Royal Military Academy at Woolwich in 1741, however; it remained a middling institution and offered little in the way of advanced mathematics or training in the languages that would allow students to read about the new sciences.

The distinctions between these experiences of the French and the English are part of the complex history of the founding of the American Military Academy. Military leaders during, and immediately after the Revolutionary War discussed the many options for the training of American citizens since the American army relied on foreigners, mostly French and other continental Europeans, to help carry out their necessary engineering tasks. The debates over the appropriate methods and the evolution of the mission of specialized military units resulted in an amalgamation of these two European experiences and the result of a complex experience during the American Revolution. Underlying all of the debates was a comprehension of the American deficiency that added to an anxiety over their standing in the ‘civilized’ world. This failing led many

24 Alder, Engineering the Revolution, 69.
political leaders to emphasize the urgency for developing the needed expertise among American citizens.\textsuperscript{26}

Many leaders during the founding era saw the establishment of a military fighting force with the requisite expertise to defend the republic as a crucial condition to establishing a lasting state. These men of science offered a defense from the threats of aggressive imperial powers from Europe, dangers from the frontier, and internal discord. Most scholarship that examined the military and the founding of West Point focused on the debates between federalists and anti-federalists over the need for a standing army. Historian Max Edling’s work confirmed such a discussion, but he also demonstrated, that as a compromise the legislators proposed a small standing army that consisted of “…about 3,000 men. Part of the force would be made up of a corps of engineers…[and] attached to the corps of engineers would be instructors in mathematics, chemistry, natural philosophy, and civil architecture.”\textsuperscript{27} In addition to the diffusion of appropriate knowledge to construct and maintain a modern military force, some believed it was necessary to ensure future military capacity by preserving the “military skills and traditions acquired by the Continental Army.”\textsuperscript{28} Despite others worries regarding a standing army supporters of a strong Federal government argued the nation was too poor

\textsuperscript{28} Ibid.
to support that type of institution. Instead the development of a small core of educated officers would serve as a means to prevent American dependence on foreign expertise and knowledge in science in future wars.29

Many Americans viewed the needed expertise through the lens of the English experience, and they saw the primary need for building and enhancing the leadership skills of the man rather than by enhancing knowledge of the sciences. Before the establishment of any academic institutions that specialized in military knowledge, most American officers learned their craft on the job and by reading treatises on military training and strategy as well as the biographies and the exploits of great generals in history.30 Henry Knox, the former Bostonian bookseller, self taught military scholar and Revolutionary War General, as well as Alexander Hamilton framed their understanding of military knowledge on the expertise gathered from their readings of English works.

President Washington also thought extensively about the need for the practical expansion and organization of military knowledge. Washington’s annual address to Congress in 1793 devoted a significant amount of care to the idea of establishing a “uniform militia” for the United States. Further, he called for the creation of a centralized national academy to “...afford an opportunity for the study of those branches of the

Military art, which can scarcely ever be attained by practice alone.” 31 Washington’s commitment to establishing a Military Academy rested in part on his own respect for the military expertise of military leaders from other nations during the American Revolution. Others worried about the establishment of a military academy altogether. The English pedagogy for officers relied on access to expensive print materials and the tutelage of a mentor while most of the British engineers were not highly educated. This was a distinct difference from the French.

The British founded their own institution at Woolwich, focused on artillery, instead of working within existing educational institutions. Although its students were among the elite, they typically were more likely to work with their hands and more aligned with the artisans who did manual work exemplified by the group known as the corps of artificers. These specialist craftsmen created and repaired the necessary equipment of the army and enhanced its manufacturing capacity. The British tradition focused on the artisan and building traditions as well as on the practical application of mathematics. As a result, this tradition produced a curriculum that emphasized broad skills for a military officer who was destined to work with carpenters, metal workers, and who had expertise in repairing military equipment or creating siege equipment. 32

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Secretary of State Thomas Jefferson recorded his opposition to the proposal for the establishment of a military academy in a note after a cabinet meeting. Jefferson recalls, “It was proposed to recommend the establishment of a military academy. I objected that none of the specified powers given by the constn. to Congress would authorize this.”33 Jefferson’s concern was in part a legal matter. The lack of explicit power was an argument that he used again, when many of his friends proposed establishing a national university in Washington D.C. Still, Jefferson’s concern seemed less with the principle of establishing a military academy and more with the overall anxiety toward Hamilton, Knox and other Federalists who in his opinion, had a propensity toward a British style monarchy. In a letter to Priestly written on January 18, 1800 Jefferson argued that traditional military education would create a class of aristocratic gentlemen who would use their place in a standing army to undermine republicanism.34

President Jefferson, despite his earlier reservations, realized that the republic needed men trained in the new sciences as professionals and approved the founding of the Military Academy on March 16, 1802. Significant differences can be seen between the curricular focus that the Federalists proposed and what Jefferson insisted on installing. These distinctions point to a difference in the type of knowledge each group valued. Moreover, they indicate an ideological revolution based on the faith that the republic needed to embrace the new sciences instead of the traditional learning for an officer and a gentleman. It was particularly important for both Jeffersonians and Federalists to prepare officers that made America competitive with European nations. This was especially the case for the exploration and exploitation of new lands that was at the heart of Jefferson’s plans. Jefferson’s missions to explore the West were scientific expeditions and the journeys required scientifically trained men to execute the task of providing systematic scientific information about the expansive continent. Their method required extensive observation and cataloging of data. He was particularly interested in promoting change in educational institutions that would emphasize learning and scholarship in natural history.35

As president, Jefferson was also interested in promoting knowledge about the natural history of America’s vast new territories acquired from France in 1803. The

American Philosophical Society (APS) served as a scientific and educational institutional nexus for the western expeditions meant to explore North America. One historian explains “the Society in those early years of the republic often served as national library, museum, and academy of sciences.”\textsuperscript{36} The Lewis and Clark expedition is well known but two other major scientific exploratory expeditions ventured into the unknown zones of the continent at the same time. These expeditions always relied on military leadership and soldiers. Nevertheless, officers did not always have the scientific training needed to do the work assigned to them. Additionally, there were no other scientific institutions to prepare men for the mission. Jefferson’s military academy would fill the void in the army for men to lead these expeditions. Clearly the military remained reliant on organizations, such as the APS, to secure the needed expertise for those officers commissioned to make the early western explorations. It was crucial for them to learn astronomy, mathematics, surveying and advanced mapmaking from APS member Andrew Ellicott. In addition, they learned natural history and preservation strategies from Charles Willson Peale and Benjamin Smith Barton. It is also noteworthy that the APS was the only group at the time that brought together experts in North America to conduct a serious study of Native Americans. As a result, the American government relied on the institution to help train both the leaders of and participants in these expeditions.\textsuperscript{37}


\textsuperscript{37} McDonald and McDonald, “West from West Point: Thomas Jefferson’s Military Academy and the ‘Empire of Liberty.’”; William Ragan Stanton, American Philosophical Society, and Library., American Scientific Exploration, 1803-1860:
Yet the definition of what constituted valuable information or scientific knowledge remained controversial. Even as Jefferson encouraged such endeavors, Federalists made these expeditions a political target. Many scoffed that the trips to the West represented a waste of time and money. Even worse, many Federalists saw these schemes as a ploy hatched by mediocre men with designs to participate in the intellectual discourse within the public sphere. Federalists like Timothy Dwight viewed these men as false scientists who were

authors of vain and deceitful philosophy; of Science falsely so called; always full of vanity in their discoveries: Scoffers walking after their own lusts, and alluring others, through the same lusts, to follow them; promising them liberty, as their reward, and yet being themselves, and making their disciples, the lowest and most wretched of all slaves, the slaves of corruption. Philosophical pride, and the love of sinning in security and peace, are, therefore, the two great causes of Infidelity, according to the scriptures.\(^{38}\)

The dissociation with the Holy Scripture offended Federalists enough; however, when adding the threat of Jeffersonian pandering to those deemed as uneducated citizenry these men became intolerable. Several cases exemplify the animosity between Federalists and those associated with the APS.\(^{39}\)

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\(^{38}\) Timothy Dwight, *A discourse on some events of the last century, delivered in the Brick Church in New Haven, on Wednesday, January 7, 1801.* Early American Imprints, Series 2, no. 428 20-21.

Despite being a target of the Federalists, individuals who trained in the latest scientific methods found significant demand for their expertise. With respect to the Military Academy, Jefferson believed that this institution should function as a training facility that would prepare American military officers for both the defense and exploration of the new republic. The need for scientifically trained officers offered a particular challenge to Jefferson since he inherited an Army filled with Federalists who despised the political philosophy of his administration. The curriculum served as only one way for Jefferson to achieve his goals. The other included changing the leadership. Jonathan Williams exemplified the new scientifically minded officer that Jefferson sought to promote. This leader was a scientist not a battle-hardened soldier. Williams, the grandnephew of Benjamin Franklin, earned membership to the APS through his extensive writing on fortifications and engineering. The APS elected Jonathan Williams in 1787 and then made a leader as one of their vice-presidents during Jefferson’s tenure as president of the APS. Early correspondence between Williams and Jefferson show that they considered it a high priority to set up a learned society at the Academy in order to promote scholarly communication both inside and outside and to promote the type of knowledge that they hoped the modern officer would study.\(^{40}\)

Williams modeled the Military Philosophical after the APS. The Military Philosophical Society, founded in 1802, included all members of the Corps of Engineers, including the cadets, as well as civilians who were American citizens. The purpose of the society was to enhance the study of all aspects of military science. Williams and his colleagues quickly established an official motto for the society. *Scientia in Bello Pax* translated this to mean *Science in war is the guarantee of peace*. Mottoes expressed both the aspirational ideals and the core purpose of many early American educational institutions. It is unclear why these institutions always used Latin to communicate their *Raison d’être*, but the traditional connection between learning and the ability to read Latin may have played a part. The expansion of the number of educational institutions in the early national period was viewed with skepticism due to the apparent pandering and need for money connected to these new academies. Mottoes like *Lux libertas* (Light and Liberty) provided an aura of respectability for the newly formed University of North Carolina, in contrast to the United States Military Academy’s motto *Duty, Honor, and Country* always written in English though not formally adopted until 1898.\textsuperscript{41}

The Military Philosophical Society’s seal and certificate of membership were important symbols designed to convey their new expression of knowledge for the world to see. In 1805, Williams began to create a seal and a certificate of membership. The discussion of this issue is illustrative of how the members viewed information and

knowledge. Williams and Francis de Masson, the first instructor of drawing and French at the military academy, created a first draft of the group’s symbols. Williams asked for the feedback from Jefferson on their appearance because he wanted to avoid criticism from political enemies. Jefferson suggested that Joel Barlow would be better suited to comment on the matter and recused himself. Barlow provided extensive feedback and criticism of the original proposal. The original proposal for the seal was a complex mix of figures from classical mythology with images of scientific warfare. Barlow believed that the imagery was confusing and did not accurately translate its basic tenets. Others in the society objected to the imagery because of the emphasis on classicism. Louis Simond, a member of the society and a renowned artist from New York, preferred an alternative to the traditional use of images of Roman myths and asserted, “Mythology and its Allegories have been in use so long that they are some what threadbare.” Instead, Simond preferred an alternative version set forward by Professor de Masson that emphasized Archimedes and his inventions.

Ultimately the members constructed a compromise. The seal, placed on the certificate used the classical imagery of “Minerva causing an olive branch to start from the ground by the touch of her spear the goddess of Science in full armour produces peace from the very lance with which she is prepared for battle.” The choice of Minerva was important since she was the Roman goddess of wisdom and the “protector of

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43 Ibid.
intellectual and manual skills." Further, Williams selected Minerva because she represented useful knowledge, which they defined as the marriage of science with art. The distinctions now used to segregate art and science were immaterial to those of the time. They viewed science to be concerned with theoretical truth while art concerned itself with the methods to create a result. The result of this unified framework being that universal knowledge which based upon empiricism and application would result in truth. Therefore, the sigil of the institution served as a rallying banner for those that sought unified knowledge.

While the seal drew from Roman mythology, the certificate utilized modern imagery as part of the compromise. The artwork on the Certificate of Membership included a broad array of symbols drawn from both military science and traditional knowledge. The certificate is an intricately crafted work 18”x23” in size and printed on high quality paper. At the top of the certificate is an image of the harbor of the city of Syracuse. The Roman fleet in the harbor has been set ablaze by the mirror of Archimedes, which reflected sunlight and created a burning death ray. Framing this picture are the many examples of weapons of war, including cannons, mortars, muskets, pikes, halberds, and spears. Amidst these familiar weapons, sit a book, gold coins, a map, a compass and carpenter’s square, a sextant, a snake and an artist’s pallet with brushes. These instruments of knowledge and science were crucial to the execution of war. This

44 Ibid.
certificate also demonstrates the complexity with which these men of learning viewed the world of knowledge.
Figure 2 Certificate of Membership to United States Military Philosophical Society. Scientia in bello pax. The United States Military Philosophical Society…

46 United States Military Philosophical Society et al., eds., *Scientia in Bello Pax: The United States Military Philosophical Society Instituted for the Purposes of Improving*
The society was more than just a collection of images, however, it was a means for Williams to exert his authority over the Academy and designed to be a keystone to the plan for reinventing the army. The learned society served as a core component to the activities of the Military Academy itself. Members met twice a month to discuss scientific issues and present papers or ideas for the good of the body.\textsuperscript{47} The society devoted its attention to the study of military sciences. Williams defined military sciences broadly stating, “Science is in its own nature so diffuse, that it is almost impossible to designate any dividing lines.”\textsuperscript{48} Williams also sought to include members from outside the military. First and foremost was Jefferson himself who acknowledged the honor of membership and gave his approval for their purposes to advance scientific knowledge.\textsuperscript{49}

The society received reports and collections from across the world, thanks to its leaders and outside patrons. Williams alone proved very active produced reports on fortifications and different military construction projects such as “a Memoir on a new construction of a gun boat or floating battery with descriptive drawings.”\textsuperscript{50} Williams and the other faculty used these opportunities to expand on their classroom instruction. They collected a variety of materials and used them as practical experiments in the pursuit of


\textsuperscript{48} Ibid., 278.

\textsuperscript{49} Dorothy J Schoeberlein Zuersher, “Benjamin Franklin, Jonathan Williams, and the United States Military Academy” (The University of North Carolina at Greensboro, 1974), 99.

\textsuperscript{50} Jonathan Williams and United States Military Philosophical Society, \textit{Extracts from the Minutes of the United States Military Philosophical Society, at a Stated Meeting Held October 6, 1806}, Shaw & Shoemaker; 11748 (New York, 1806), 3.
new knowledge.\textsuperscript{51} Outside of discussion groups and the library and classroom environments the society engaged with the latest practical military engineering. Extracts from the minutes of the 1806 meeting show that after a “memoir on the Fuzil a Clapet of Montlanbert” was presented to the society that demonstrated the superiority of this type of rifled cannon, the members resolved to make one “at the Society’s expense to serve as a model and to be used in experiments.”\textsuperscript{52} Williams and his fellow members believed that the purpose of the society was to gather all military knowledge for the benefit of the nation.

The prolific works of Williams and his compatriots gave the society instant credibility. The expanding membership of the society included a growing archive, library, and museum, making it an international center for the study of military sciences. The membership rolls of the society included many of the top intellectuals of the period such as John Quincy Adams, Joel Barlow, George Clinton, DeWitt Clinton, Robert Fulton, Thomas Jefferson, James Madison, and James Monroe to name a few. With the exception of Charles C. Pinckney who became the Vice President in 1807, the officers of the society were all members of the engineering corps.

The society published a translation of the Polish-born American Revolutionary War hero Tadeusz Kosciuszko’s work \textit{Manual for the Services of the Horse Artillery} and

\begin{footnotes}
\item[52] Williams and United States Military Philosophical Society, \textit{Extracts from the Minutes of the United States Military Philosophical Society, at a Stated Meeting Held October 6, 1806}, 3.
\end{footnotes}
the Military Constitution of Nations.\textsuperscript{53} The intrepid explorer Major Zebulon Pike dedicated his Account of Expeditions to the Sources of the Mississippi… to his “fellow soldiers and citizens” of the United States Military Philosophical Society.\textsuperscript{54} This endeavor was one of the four expeditions that Jefferson commissioned. The publications and the society’s expansion allowed the group to hold occasional meetings in other cities, including New York City’s City Hall and the War Department offices at Washington D.C. The transition to holding meetings outside of West Point occurred because of William’s traveling schedule and the deployment of the members of the engineering corps throughout the country. Although the permanent home of the society and the engineers was at West Point, only the junior officers or cadets remained there. The engineers were actively engaged in their field work across the country.

Jefferson’s intention to create a scientific centered Academy appeared to be successful. Still the Military Academy and the Military Philosophical Society resided in the hinterlands of New York. Consequently, in the minds of some, these institutions lacked the resources to fulfill the needs of the state. Williams submitted a report requested by Jefferson designed to enhance the military readiness of the United States. In this report, Williams articulated the limitations of the academy “barely existing among the mountains and nurtured at a distance out of sight and almost unknown to its


\textsuperscript{54} Zebulon Montgomery Pike, \textit{An Account of Expeditions to the Sources of the Mississippi, and through the Western Parts of Louisiana…} (Lucas, Fielding, 1781-1854, publisher, 1810), 6.
legitimate parents” residing at the nation’s capital. Williams outlined a new plan for an expanded institution, which would grow from a small number of officially sanctioned professors to a well-endowed institution. The enlarged faculty would include a new professor in natural and experimental philosophy and add two mathematics professors and three specialists to teach astronomy, geography and navigation. Williams also wished to add an engineering professor who specialized in the building of fortifications and canals as well as professors for drawing, French and German, architecture, chemistry and mineralogy, and finally a riding master and sword instructor. The plan envisioned building a worthy physical plant with the auxiliary services and instruments needed to support scientific education. Central to this was an enhanced library and the appropriate scientific apparatus needed to perform research and scholarship. This report most likely represented Jefferson’s vision and approval since Williams submitted it to him as a draft requesting comments before the final submission to Congress.

In submitting William’s report, Jefferson recounted the same concerns and recognized that the “scale on which the Military Academy at West Point was originally established is become too limited to furnish the number of well instructed subjects…which the public service calls for.” Jefferson told Congress that the readiness

56 Ibid, 228-230.
of the military requires officers with advanced training in mathematics, sciences and foreign languages. Jefferson further concurred that William’s proposal to move the Academy to Washington was “worthy of attention” since it offered the opportunity to place the institution “under the immediate eye of the Government.”59 He also saw an advantage of a shared location with the Navy Department and other public service departments. Jefferson believed the scientific mission of the Society and the Academy as crucial to the work of the republic since from there many of the instructors and other officers would leave the Academy to oversee the construction of fortifications and other construction projects at inopportune times. Despite both Williams and Jefferson’s emphasis on these needs many political leaders in both parties that opposed the proposal.

The published debates provide only slight clues as to the rationale behind the Congressional decisions to reject the proposal first submitted in March 1809. Josiah Masters, Republican representative from New York opposed the proposals and succeeded in having the legislation tabled. Masters reasoned that the Academy at West Point was in a better location and that the expense would be great to relocate the Academy. He added that the private property owners in the area would be “injured by the removal.”60 Alternatively, Joseph Lewis, Federalist representative from Virginia stood in favor of the relocation arguing that as a national institution it the Academy belonged near the capitol and the War Department. Lewis tried to bring the measure to relocate the Academy to the

59 ibid
60 Annals of Congress, 10th Congress, 2nd Session, 1809, 1559.
floor at least four times, but he failed to receive a majority of supporters. In the end, the measure to relocate the Academy did not resurface.\textsuperscript{61}

Williams’s influence began to fade when Jefferson retired to Monticello. Madison’s new Secretary of War James Eustis did not support Williams and did not focus on his scientifically minded engineers or the Military Philosophical Society. Eustis was a moderate Republican from Massachusetts who defeated Josiah Quincy for his House seat in 1800 but lost to him in 1804. Eustis’s moderate opinions allowed him to maintain good relationships with most Federalists.\textsuperscript{62} Instead of continuing the path toward developing scientific expertise, Eustis focused on reorganizing the Army and the War Department and promoted the notion of a publicly funded national force of volunteers commanded by presidentially appointed officers. Pragmatically he also wanted to add artillerymen and riflemen as well as reorganize the logistical and support units in a more efficient manner. Unfortunately, this reorganization caused chaos during the War of 1812. Many historians and Federalists blame Eustis for the lack of preparedness of the American Army at the outset of the War of 1812. Williams resigned from the army for a second time in July 1812 and served as Brigadier General of Militia for New York responsible for defending New York Harbor. After the war concluded, he was elected to the House of Representatives but died in 1815. The war of 1812 dispersed the membership of the Society and made it impossible to meet. In 1817, the United States Military Philosophical

\textsuperscript{61} Annals of Congress, 10\textsuperscript{th} Congress, 2\textsuperscript{nd} Session, 1809, 1559. Annals of Congress, 11\textsuperscript{th} Congress, 1\textsuperscript{st} Session, 1809, 234

Society transferred its remaining funds and collections to the New York Lyceum of Natural History.⁶³

Possibly Federalists believed that the Military Philosophical Society had become an arm of the Democratic-Republican Party. This organization shared many members in common with that Federalist nemesis, the American Philosophical Society.⁶⁴ Although Williams asserted that the Military Philosophical Society was apolitical, clearly some disagreed. Timothy Dwight and Noah Webster were among the most outspoken opponents of the scientific progress that was emphasized by the society. Dwight in particular challenged the notion that material progress led to moral progress. The connections between the Jacobin scientific associations and individual liberty seemed to Dwight to be antithetical to republican liberty.⁶⁵ The New England Palladium associated the societies formed in Philadelphia and New York with the Jacobin societies in France. The article states: “Taught by France, the democrats established similar societies here, and they now exist in Connecticut under the imposing name of Republican Societies.”⁶⁶ This fear that the Republicans would overturn sensible governing was rampant amongst the Federalists. Fundamentally, as scholars have shown, neither political party recognized

the legitimacy of the other. Thus, despite Jefferson’s support for a Military Academy and the promotion of scientific knowledge among the officer corps, his opponents remained convinced that the kind of knowledge he promoted was dangerous to the country’s stability and future.⁶⁷

The military academy was only one of several proposals for the creation of new scientific institutions. For example as discussed in chapter 1, Joel Barlow wrote to Jefferson from Paris in September 1800 that he had seen Washington’s legacy in his Will.⁶⁸ The politically astute Barlow offered Jefferson an idea to use Washington’s memory in order to create “…an institution of much more extensive and various utility than anything of the kind has hitherto existed.”⁶⁹ Barlow’s detailed letter to Jefferson identified the deficiencies of the colleges and universities in the United States and pointed to the superiority of European learning institutions. Barlow made the case that the new university needs to be one where “…the twofold object of collecting and disseminating knowledge should be wrought into the system, the Institution to be called the Polysophic Society, or some such comprehensive name by which the variety of its

⁶⁸ See chapter 1.
labors should be designated.”70 This proposal also included sending out expeditions of professors to collect new specimens and then publish books. The federally sponsored central repository of knowledge would house these collections. The description outlined by his proposal greatly resembled a publicly sponsored, and centrally controlled learned society charged with the responsibility of collecting and disseminating knowledge.

Barlow’s purpose for this public, secular institution, centralized institution dedicated to the collection and dissemination of knowledge dedicated to the improvement of knowledge for the nation. Barlow believed that the leaders of this national institution should design a system of schools or provide the professors for the nation’s schools in order “to cultivate a strict adherence to republican principles, and endeavour to encourage as great a uniformity as may be in manners, language & sentiments of the people.”71 Undergirding Barlow’s proposal was that this new institution needed to act independently from the existing educational institutions in the United States. The collegiate establishment and the religious dogma espoused by the churches, which founded them, served the interests of the elite in order to minimize the power of the people. In Barlow’s estimation, only republican science offered hope to the new nation.72

70 ibid
71 ibid
Jefferson very cautiously in his response to Barlow and asked him to communicate verbally through a trusted third party: “I am entirely unable to conjecture the issue of things with you.” It is not clear why Jefferson avoided a direct response to Barlow’s earlier letters. He acknowledged the receipt of two letters including the correspondence from Barlow in September that described the idea of designing his proposed “Polysophic Society” according to the model of the newly established French National Institute of Arts and Sciences. The second letter offered Jefferson a copy of a pamphlet that Barlow had written in the previous year but had yet to arrive in the United States. The pamphlet consisted of letters written to his fellow citizens in the United States, a letter to George Washington, and a Memoir about public maritime law addressed to the citizens of France. The publication of his second letter to the citizens of the United States, originally dated 20th December, 1799 argued that education was not only an individual or family interest. Instead, the interest of the state lay in educating the populace to promote the advancement of knowledge and prepare citizens to participate in their own governance. He also warned that exclusive access to education, especially of a specialized nature or selected curriculum, would lead to tyranny. The reason for

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http://rotunda.upress.virginia.edu/founders/TSJN-01-33-02-0234 [accessed 08 Apr 2011]

74 Joel Barlow, Letters from Paris (London: Printed for J. Ridgway, by A. Wilson, 1800), 77–84 He mentions the threat of emphasizing specialized access to knowledge, especially military knowledge and privilege as a threat to the republic.
Jefferson’s reluctance to take a position may rest in Barlow’s controversial reputation among Jefferson’s opponents.

To Federalists, Joel Barlow appeared the antithesis of the type of learned man that they respected. At first, Barlow seemed destined to become one of the “articulate Federalists” that Linda Kerber described as the leading intellectual foils to the Jeffersonian Republicans. He was very important in the debates over establishment of the proper knowledge institutions for the new republic. Barlow was a member of the Connecticut Wits who included John Trumbull, David Humphreys, Timothy Dwight, and Noah Webster. Initially these writers, all graduates of Yale College during the years of the imperial crisis leading up to the American Revolution, satirized the dull and uninspired corrupt intellectual culture evident in the Augustan literature. Nevertheless, all of them, except for Barlow, became disillusioned with revolutionary rhetoric as they saw the impact of leveling on their society.75

Even while they were criticizing the aesthetics of the literature of their forefathers, these men held very specific notions of what was important and valuable knowledge. Conversely, they also identified the types of knowledge that were less important to civilization. Historian Christopher Grasso points out that as early as 1770 John Trumbull’s *Essay on the Use and Advantages of the Fine Arts* made the case for a

need for the development of fine arts and polite literature. While Jefferson, Franklin and other leaders, especially those in the APS were calling for the enhancement of scientific learning, Trumbull consistently argued that the push toward establishing seminaries of science and the emphasis they held on foreign languages, mathematics and metaphysics was misguided. These institutions would allow pretenders access to both the company of gentility and to define the parameters of what constituted quality in terms of knowledge. A few years later in his 1773 poem *The progress of dulness, part second*, Trumbull likened the study of science to decadence writing that “Pleasure courts the sons of Science and Whores and muses hold alliance.” He further criticized the modern movement toward commercialization and the aspirants that “…seek of learning, but the name…Where kind instructors fix their price, In just degrees on ev’ry vice.” Grasso writes, “Metaphysical speculation, especially, Trumbull believed, falsely inflated the human intellect in a misguided pursuit of truth; the fine arts, on the other hand,

77 John Trumbull, *The Progress of Dulness, Part Second: Or An Essay on the Life and Character of Dick Hairbrain, of Finical Memory; Being an Astronomical Calendar, Calculated for the Meridian of New-York, North Latitude, 41°. West Longitude 72°.30'; but Which May Serve without Material Error, for Any of the Neighboring Climates: Containing, among Other Curious and Surprizing Particulars, Dick’s Soliloquy on a College-Life--a Description of a Country-Fop----Receipt to Make a Gentleman, with the Fop’s Creed and Exposition of the Scriptures----Dick’s Gradual Progress from a Clown to a Coxcomb---His Travels, Gallantry, and Opinion of the Ladies---His Peripaetia and Catastrophe, with the Moral and Application of the Whole. Published for the Universal Benefit of Mankind.*, 13051 (Green, Thomas, 1735-1812, printer., 1773), 13.
78 Ibid.
elevated and ennobled human nature by refining the natural pursuit of pleasure.”

The “Wits” used the language of sentiment and emphasized the importance of manners, and politeness as a means to determine social standing and status. Unlike his fellow “Wits,” Barlow abandoned the Federalists’ traditionalist view of society and became enamored with the leveling ideals of a worldwide revolution. Directly connected to these notions and a faith in humanity’s ability to progress he adopted a more expansive view of science and learning that resulted in being attacked regularly by the Federalist Press for his faith in a godless science.

Jefferson’s connections included people who espoused such ideals. Earlier that same year Jefferson wrote to Joseph Priestley about his wish to establish a publicly funded university, which would above all be useful, it would embrace the study of all the sciences. He wanted to create this institution in a central part of Virginia. Jefferson sought Priestley’s counsel on the appropriate academic structure for the institution. A

79 Christopher Grasso, A Speaking Aristocracy: Transforming Public Discourse in Eighteenth-Century Connecticut (Chapel Hill: Published for the Omohundro Institute of Early American History and Culture, Williamsburg, Virginia, by the University of North Carolina Press, 1999), 289.
well-known dissenting English Unitarian minister, scientist, and educator, Priestley was particularly renowned as a chemist and for his several works on experimental philosophy including *The History and Present State of Electricity, with original Experiments* (1767) and *The History of the Present State of the Discoveries relating to Vision, Light and Colours* in 1772. Priestley’s support of the American and French Revolutions made him a target of the British government; his work was labeled seditious, and a mob destroyed his home and laboratory. Priestley, a friend to both Barlow and Jefferson, continued in opposition to the British and Edmund Burke until he fled to the United States in 1794. There he became a key part of the Jeffersonian Republican response to many Federalist policies that seemed designed to undermine the goals of the revolution.83

In a letter to Priestley, Jefferson noted that some branches of knowledge that were once highly esteemed no longer seemed as important. If they developed an effective plan, they could create a new institution that would focus on only useful knowledge. None of this information is surprising. Jefferson went on to quickly list those subjects, or as he put it “sketch the sciences which seem useful & practicable for us” in the United States.84

These included several natural history subject areas including the auxiliary studies of

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medicine and anatomy. He mentioned mathematics, natural philosophy government, law ethics and fine arts. Jefferson also asked advice in order to select an economical means to establish a university through the employment of the bare minimum number of professors. Jefferson remained attuned to economic considerations from his earlier encounter with legislatures. In addition, he demonstrated a political sensitivity that Americans would worry about establishing an educational institution that would support what they saw as lazy and completely autonomous scholars like those at Oxford and Cambridge. What seems surprising is the amount of time that Jefferson devoted to the state of education in Virginia and his desire to create a “liberal and modern” university. His focus on establishing a university in Virginia is especially interesting because he is focused on establishing a knowledge institution that would attract students from other states. Ultimately this new scientifically focused institution was an institution designed to promote a

healthier country, & more centrally for the state an University on a plan so broad & liberal & modern, as to be worth patronising with the public support, and be a temptation to the youth of other states to come, and drink of the cup of knolege & fraternize with us. the first step is to obtain a good plan; that is a judicious selection of the sciences, & a practicable grouping of some of them together, & ramifying of others, so as to adapt the professorships to our uses, & our means.

Jefferson’s obsession with a scientific curriculum intensified and he incorporated others into the conversation with Priestly over the curriculum of study.

Priestly shared his thoughts with Jefferson in his letter written in May 1800 titled “Thoughts on Education.” He clearly indicated his preference for a system dedicated to scientific education that was a decentralized university like the English system. As such, Priestly envisioned the republic having multiple institutions, not a single hierarchical model with a national university at its apex. This method served the need to broadcast knowledge across vast geographic spaces. This strategy also helped to avoid the possibility that any single place or group could become breeding grounds for the establishment of an intellectual elite that would become a new aristocracy. He estimated that “Two or three schools of Medicine I should think sufficient for all the united states” and that “Places of liberal education in general should be much more numerous.”

Priestly advised Jefferson about the composition of the faculty suggesting that it was necessary to determine the purpose of the education in order to identify the exact type of instructors needed. Priestley divided the educational needs of the children of the republic into those who aspired to be professional men of science and those who would be gentlemen “who are designed for offices of civil and active life.” Although he saw the need for more specialized professorships to be devoted to the study of sciences, Priestly proposed that those studying law, theology, and Belles Lettres only needed a general

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Charlottesville: University of Virginia Press, Rotunda, 2008. 31:319-323  


88 ibid.
education. Although he thought it unnecessary for one professor of ancient languages, he did not see a need for public funds to be devoted to the development of “skill in fencing, dancing, and riding.” Priestley encouraged Jefferson to establish institutions that would be endowed with a large and diverse library with a “lecturer in bibliography” to encourage studious behaviors of both students and professors. Added that professors should be salaried, Priestley cautioned that such remuneration “should not be much more than a bare subsistence. They will then have a motive to exert themselves.” He added that, “The professorships in the English universities, which are largely endowed, are sinecures; while those in Scotland, to which small stipends are annexed, are filled by able and active men.” He saw no place in a republic for an aristocratic intellectual especially in an institution designed to educate the youth.

Pierre Samuel Du Pont de Nemours joined this conversation. Du Pont provided Jefferson with an alternate opinion from learned Europeans who were well-respected scientists and men dedicated to the success of democracy. They also shared a mutual respect and affinity for the modern sciences that included natural history, chemistry, political economy, and the other liberal sciences. Du Pont and Jefferson became friends during Jefferson’s service as minister to France. Du Pont, an early supporter of the French Revolution had become an enemy of the state when he defended the King during the journée of 10 August 1792. Imprisoned in 1794 and awaiting execution, DuPont wrote the Philosophie de l'univers (1793). He was released from prison after the fall of

89 ibid.
90 ibid
91 Wagoner, Jefferson and Education, 55.
the Jacobins, and turned his attention to scientific activities. Du Pont came to the United States in 1799, intending to create an agricultural community for his family and to introduce physiocratic ideas to the American republic. Instead, his family, led by his son Eleuthère Irénée Dupont, built a manufacturing empire using enhanced scientific techniques in chemistry to improve the production of gunpowder. The elder Du Pont was a philosophical pacifist and only assented to the formation of the endeavor after Jefferson convinced him of its merit. Du Pont was elected to the American Philosophical Society in 1800 at its April 18th meeting. At that meeting the society also received his first contribution to its scholarship, titled “Sur les Végétaux, les Polypes et les Insectes.”

Jefferson wrote to Du Pont to remind him of the discussion they had had in person. He asked him to recall their “contemplation in Virginia to establish an university or college on a reformed plan: omitting those branches of science no longer useful or valued, tho hitherto kept up in all colleges, and introducing others adapted to the real uses of life and the present state of things.” He also made sure that Du Pont knew that he had also sought out the ideas of Priestly and that he was hoping to use the best ideas from all

93 “Pierre Samuel du Pont de,” in Encyclopedia of World Biography, vol. 5 (Detroit: Gale, 2004), 155–156,
95 APS, Proceedings, 22, pt. 3 [1884], 298–9; APS, Transactions, 5 [1802], 104–16
of his friends. Du Pont responded by writing a treatise titled *National Education* that was finished by mid-June of that same year. He waited for his son-in-law, Bureaux de Pusy, to correct it and make a copy of the work.\(^97\) Du Pont sent the work to Jefferson on August 24, 1800 and Jefferson acknowledged the receipt of the work in a letter dated December 12, 1800. He also expressed his admiration for the work that Du Pont completed while also expressing a hint at some of the challenges that he foresaw in the implementation of a Du Pont’s grand plan.\(^98\)

Some scholars view Du Pont’s treatise as an example of the many reports and plans that resulted from the American Philosophical Society’s call for a national system of education and as an example of Jefferson’s changing vision for a national university. However, the chronology of the publication of the different sources suggests such a view may oversimplify the diversity of ideas that Jefferson and his friends shared on the issue.\(^99\) Jefferson’s reluctance to take a public stance on the matter likely resulted from


his frustration to enact real educational reform at both the state and national levels. This made him especially cautious when it came to sponsoring institutional plans and structures that were national in scope.\textsuperscript{100} As a result, even if he shared Du Pont’s ideals for a reform of curriculum, Jefferson became increasingly cautious because of the growing fear throughout the country of establishing an institution that appeared capable of producing another Napoleon.\textsuperscript{101}


\textsuperscript{101} The publication history of Du Pont’s \textit{National Education} offers important evidence to consider. Despite the apparent enthusiasm for Du Pont’s work, Jefferson worried about the publication of his work, at least in English. Jefferson warned Du Pont against publication of his work because there were so few people capable of translating his work accurately from French to English. This seems to be disingenuous and issue of request frustration to Du Pont. Jefferson avoided discussing the issue in correspondence with Du Pont despite persistent requests from Du Pont asking for a recommendation for a translator. Du Pont appealed to Madison in 1809, after he became President, to implement his plan and Madison dutifully asked for Jefferson’s input on the matter. Jefferson immediately responded to Madison on October 9, 1809 explaining that he had hoped that Virginia would establish a university and that he had requested information from both Du Pont and Priestly. He indicated that his interest was purely on a proper system for his beloved state of Virginia and that he suspected that Du Pont was acting out of crass self-interest in order to obtain a position. This is a surprising statement since he and Du Pont had continued a long-lived and wide-ranging set of correspondence. Sixteen years after Du Pont originally penned the work, it remained unpublished in America. Some have pointed out that this was a great frustration for Du Pont and a tension between the two men developed over the issue. One scholar suggests that Jefferson demonstrated a “lingering dislike of paternalism.” Jefferson also felt this was implicit in national delivery of mass education. In the end, it is difficult to judge if there was a growing mistrust of his old friend or if he simply believed that a national approach to education would lead to an unacceptable threat to the individual liberties of the people. What is clear is that there was no English language version of the work in the United States until the 1923 edition translated by a descendent named Bessie Gardner DuPont.
The scope of the proposed institution seems to be what ultimately worried Jefferson. Du Pont proposed a mega-institution that would include elementary and secondary schools, as well as a set of four specialized schools where the top students would participate in advanced scientific learning. Du Pont’s plan also included the establishment of a national library, botanical garden, and a museum that would contain chambers which could accommodate the meetings of a national philosophical society. The four independent special schools for the higher sciences would all be located in the nation’s capital. The new institution would consist of a new scientifically focused curriculum in contrast to the traditional European universities that he claimed had become sterile “extinguishers of intelligence” with a particular reverence for “dead languages” and the “gibberish” of metaphysics.\footnote{Ibid., 124.} The four schools proposed included a school of medicine, mines, social sciences and legislation, and higher geometry and the sciences that it explains.\footnote{Ibid., 126.} Although Du Pont’s detailed curriculum was very much in line with the ideas that Jefferson himself espoused, the size of the proposed institution mirrored the size of European institutions. Jefferson may have worried that the new Republic could not afford such a massive undertaking. Moreover, his lifelong animus toward the consolidation of the national government’s power may have blunted his enthusiasm for the project. In the end, Jefferson did not have to deal with Du Pont’s proposal directly since the proposal remained untranslated.

Although Du Pont’s National Education system was unpublished in English until 1923, his proposal closely resembled Joel Barlow’s \textit{Prospectus for the Establishment of a}
*National Institution*, circulated in 1806. Barlow’s institution used France’s systems of knowledge as a model and also relied on the idea of creating a university in the capital city of Washington. The key to Barlow’s institution was that it was to focus on “the advancement of knowledge by the associations of scientific men and the dissemination of its rudiments by the instruction of youth.”¹⁰⁴ The crux of this idea was to combine the functions of large national learned institutions, like the Royal Society of London and the National Institute of France with the educational institutions such as colleges and universities. This would create a super-institution that would be truly national in its scope. Since the institution was meant to promote the liberal sciences, which Barlow believed were republican by nature, they would “delight in reciprocal communication…and lead to a freedom of intercourse.”¹⁰⁵ This would in turn enhance the sciences and technology needed to promote a better life for all in society, and it would “give an enlightened direction to the labors of industry…moderation and justice in the pursuit of self-interest” and promote good citizenship and morals for the populace through progressive improvements of knowledge.¹⁰⁶

Unlike DuPont’s work, Barlow’s was shorter (only 44 pages) and written in a persuasive tone designed to convince the reader that progress directly sprang from the expansion of new sciences. Barlow believed that the new sciences of botany, mechanics and hydraulics, mineralogy, chemistry, and medicine provided the key to a better American civilization. As a result, proponents would claim that this institution

¹⁰⁴ Joel Barlow, *Prospectus of a National Institution, to Be Established in the United States.* (Smith, Samuel Harrison, 1772-1845, printer., 1806), 4.
¹⁰⁵ Ibid., 5.
¹⁰⁶ Ibid., 5–6.
represented an investment in progress for all the citizens of the republic. A better quality of life would allow citizens to “dispose their minds to devote...to charitable and patriotic purposes.”107 In essence, Barlow provided a template for a vision of progress built on a utopian vision of technological advancement leading to improvement of health and the advancement of civilization.108

Barlow included descriptions of the National Institute and the other knowledge institutions that the French government supported so that the reader could ascertain the universal scope of the establishment. This guild of knowledge was all encompassing and did not focus on knowledge for the gentleman scholar. Barlow provided descriptions of sixteen specific “schools” and gave examples of their value to the American republic. For example, The Conservatory of Arts was a unit designed to help promote the learning of trades and mechanical engineering. Barlow added that the professor responsible for this domain of knowledge would also be responsible for assisting government officials in “discharging the duties of the patent office. Here likewise several trades are carried on, and persons are taught gratis the use of tools by practice as well as by lecture.”109 Likewise, Barlow described the other areas including the Museum of Natural History, which would include a “botanical garden, an extensive menagery, or collection of wild animals, and large cabinets of minerals.”110 Barlow’s vision sought to capture the known expertise of the world and construct a massive scientific institution to organize and control that information.

107 Ibid., 20.
109 Ibid., 22.
110 Ibid.
Barlow also saw the institution as a vanguard for official and authentic knowledge. Barlow hoped that experts from the national institution would become a resource to expose charlatans and imposters as frauds to the public. He hoped that the Institute would become a “general depository of the results of scientific research; of experiments in arts, manufactures and husbandry; and of discoveries by voyages and travels.” The institution could send its own professors at different times to conduct fieldwork and to interact with the diverse citizenry across the nation and the world. This practice would enable the institution to serve as a democratic marketplace of ideas. At the same time, by acting as the official publisher of national textbooks, it would become the most important arbitrator of knowledge. In the end, Barlow wrote, “no rudiment of knowledge should be below its attention, no height of improvement above its ambition, no corner of our empire beyond its vigilant activity for collecting and diffusing information.”

As with DuPont’s proposal, Jefferson, true to form, never took up the cause for Barlow’s Institute. Instead, George Logan a Republican Senator from Pennsylvania took up that mission. Logan had earned his M.D. from Edinburgh, and was renowned for his advocacy of scientific agriculture and establishing agricultural societies. Logan’s private diplomatic excursion to France in 1798 led to a 1799 law that still survives today outlawing unauthorized private diplomacy. Logan became a supporter of several

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111 Ibid., 37.
112 Ibid.
113 Logan’s private diplomatic excursion to France in 1798 led to a 1799 law that still survives today outlawing unauthorized private diplomacy. John K. Alexander,
different internal improvement projects, but was especially enamored with the idea of establishing a national university. Logan insisted that Barlow write a bill based on his proposals, and he promised to submit it to the Senate. Logan submitted the bill on March 4, 1806 and it was sent to a committee that consisted of Logan, Samuel Mitchell and John Quincy Adams. On March 6, the committee reported without amendment. The bill to incorporate a National Academy received a second reading on March 14th and was read a third time on March 24th and was amended by striking out the words “a national.” This change relegated the new version of the bill to a new committee consisting of Logan, Republican Stephen Row Bradley, Republican Abraham Baldwin and Federalist James Hillhouse. There it died never to be brought before the entire Senate again.114

The composition of the second committee is telling. All except Logan had graduated from Yale in the early 1770s. Attendance at this period also made it likely that they knew Timothy Dwight, who with many of his conservative-minded associates and Federalists were especially concerned with the subversive potential of the printed word. Christopher Grasso’s work claims that “Connecticut’s dominant Federalists tried to tighten the bonds between churches, the learned vocations, and New England’s republican society, while Democratic-Republicans challenged such connections.”115

Even Bradley and Baldwin, who were Republicans, remained staunchly independent


115 Grasso, A Speaking Aristocracy, 4.
from the party leadership. All three of the new, committee members were interested in education and each was already, or would become, connected to the establishment of institutions of higher education. It seems very likely that these men were suspicious of any proposal connected with Barlow and they may have opted to let the bill lie in limbo rather than directly address the issue.\(^{116}\) Hillhouse in particular, came to avidly oppose any proposal set forward by the administration. A few years later Hillhouse proposed seven amendments to the Constitution designed to agitate against the administration and to limit the authority of the federal government.\(^{117}\)

Still, Barlow and others continued to gather support for the bill. The *National Intelligencer*, owned and published by Samuel Harrison Smith, printed extracts of Barlow’s prospectus on two different occasions. The *Intelligencer*, the official organ of the Jefferson administration printed the first article on August 1 1806. Smith included a very positive review of the proposal to which he devoted three of the five columns on the second page of his four-page paper. This was the longest article in this particular issue. Smith revisited the matter on November 24 the same year producing another substantial positive article. Smith had written one of the winning essays in 1798 for the American Philosophical Society’s contest to outline the best system of education for the new


republic. That essay brought him national attention and earned his election to the society.

Smith’s essay called for a three-tiered education system that culminated with a national university. He believed that “liberal education needed to look forward, not backward, and to emphasize truth, improvement, science, utility, and love for mankind.”  

Smith’s faith in scientific progress also included a plan to eliminate the study of religion and of the dead languages. Even before reading Barlow’s proposal, Smith had approved of centralized institutions of knowledge.

Smith clearly supported Barlow’s institution. In the August 1 article, he asserted that the proposed institution was essential for the children of the Federal City. Smith insisted that government could use existing tax money, already collected to educate the poor in Washington, to fund the proposal. However, Smith wrote “Although we coincide with Mr. Barlow in his general ideas…we are among those who are inclined to think that the great end…can only be obtained by forming…a more humble plan, susceptible of future extension.”

This provided an opportunity for Smith to defuse protests from those who claimed the proposal was too expensive and grandiose. The majority of the comments from Smith’s newspaper were positive and focused upon Barlow’s concentration “on a liberal system under the auspices of the nation for diffusing the


120 National Intelligencer August 1, 1806. Washington D.C. Pg2
blessings of knowledge.” Smith evidently admired Barlow’s work as right-headed in its structure if not necessarily in its pragmatism. The November 24 article echoed the same message but added, “warmly we approve the general sentiments and principles he inculcates.” It is difficult to know if this was Smith’s opinion or if Jefferson was speaking through Smith. It is reasonable to believe that even if these were not Jefferson’s direct words they are certainly his sentiments. Historian Jeffrey Pasley’s work reveals that Smith was an “utterly reliable mouthpiece. Refusing to seek any political role or glory for himself, he allowed administration members to insert articles at will and set the Intelligencer’s political line.” As a result, it seems likely that Barlow’s work represented some of Jefferson’s aspirational goals for a national institution of learning.

The Federalists as a group, vehemently resisted any attempt by Jefferson and his allies to reconfigure the halls of knowledge. In fact, the ideological divide between Federalists and Republicans appeared most vividly when they debated what should be the voice of science and considered an appropriate course of study and, perhaps even more important, who should act as a gatekeeper to the authority that knowledge provided. Some like Timothy Pickering and Timothy Dwight were suspicious that the bill would lead to a centralized secular educational system much like in Napoleon’s France. This fear certainly could have intensified by the Federalists being the minority party at the

121 ibid
122 ibid. November 24, 1806. Washington D.C. Pg2
124 Kerber, Federalists in Dissent; Imagery and Ideology in Jeffersonian America, 107.
time. Furthermore, they despised the suggestion that classics were not important. Linda Kerber shows definitively that in both oratory and in newspaper articles the Federalists argued that the elimination of classics would serve only to water down education to the point where it would be useless. They saw a world filled with “roving natural historians, aimlessly searching for curiosities—bones, salt mountains, weird forms of animal life.” Federalists viewed such individuals as charlatans masquerading as scholars.

Jefferson’s sixth Annual Message to Congress offers some further hints into his thinking about Barlow’s proposal. Jefferson lauded the enhancements to knowledge gained by the three major expeditions that explored the Louisiana Purchase. Acknowledging the continued success in paying off the nation’s debts Jefferson suggested that the Congress may want to utilize the surplus receipts to the “application to the great purposes of the public education, roads, rivers, canals, and such other objects of public improvement as it may be thought proper to add to the constitutional enumeration of Federal powers.” Jefferson stated that although he believed that in most cases private enterprise “manages so much better all the concerns to which it is equal, but a public institution can alone supply those sciences which though rarely called for are yet necessary to complete the circle all the parts of which contribute to the improvement of the country and some of them to its preservation.” This was the most direct public

125 Ibid., 134.
126 Freeman-Custis Red River expedition; Pike’s expedition along the Mississippi (north), and of course Lewis and Clark’s expedition.
128 Ibid.
statement that Jefferson ever made about supporting a federal role for the expansion of science and learning.

This message clearly presents Jefferson’s views that the country needed to enhance scientific learning, but he also included these types of improvements in the same breath as other internal improvements like the building of roads and canals. These improvements were a way to improve the communication between the states and thus enhance the union of the states. These new communication networks served as the bonds to tie the states together through the development of new associations and societies dedicated to the expansion of knowledge. Most importantly, the communication networks, when fused with the construction of the right educational framework grounded upon study of liberal sciences would create an ongoing set of republican reforms. These reforms would serve as the crucible for the forging of republican institutions, which would outlast individual leaders. Nevertheless, Jefferson, and some Old Republicans, publicly insisted the federal government could implement such reforms only if there were amendments to the constitution empowering it to do so. These amendments never passed.

The paradox that Jefferson and the Jeffersonians included their desire to enhance the ability of the republic to communication and dissemination of knowledge while they retained lingering suspicions of establishing the large necessary institutions to achieve

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130 Wood, Empire of Liberty, 484–485.
these aims is perplexing. Fundamental to all of their aims included the rejection of religion and religious institutions to educate civil society. Rather than rely on religious institutions to inculcate the populace, Jeffersonians emphasized the state and the new sciences needed for the perpetuation of a virtuous population. Indeed, they imagined the state as the modern bulwark for education through a variety of institutions in civil society. A single national institution, even one dedicated to the enhancement of secular science over theology, carried serious risk to the republic. Some scholars maintain that the issues of states' rights and federalism led to the defeat of efforts to establish a national university. While possessing some truth, this approach ignores the wider context in which the debate occurred.\textsuperscript{131}

Jefferson’s views, in particular, evolved over time in response to his experiences in revolutionary America, as a diplomat in France, as a member of Washington’s cabinet, and then as President of the United States. From the time of the Revolution onward, Jefferson continually considered what kinds of institutions of learning were best suited for a republican polity. Jeffersonians perceived a threat in the fusing of moral education with the institutions of civil society, and they worried that large national institutions may result in centralized power monopolized by unscrupulous characters. Jefferson did support the creation of a national Military Academy and advocated a learned society at that institution. However, he remained suspicious of the kinds of national institutions proposed by Barlow and DuPont. Fearing both the centralization of power and the federal

government’s lack of constitutional authority over such matters, he decided to pursue other avenues toward the preservation, dissemination, and transmission of knowledge.\textsuperscript{132}

The Jeffersonians and the establishment of the Academy at West Point exemplify this challenge of establishing a national educational institution. They feared a national institution that held such breadth over the control of knowledge. They made sure that the Military Academy did not relocate to Washington D.C. despite limiting the effectiveness of the synergies that could have developed from doing so. The national institution they established, in the form of the Military Academy, presented the right type of scientific curriculum that they desired but remained limited in scope. The convergence between the development of learned societies in the early republic and a modern notion of scientific knowledge offered new opportunities for citizen scientists to improve the social and economic conditions of society through innovation and invention. It also allowed for varied understandings of what constituted authentic knowledge. These different understandings of truth led to increasingly specialized learned associations and disciplines of study like the Military Philosophical Society. Jefferson’s Engineers taught by Williams became civil engineers as well as military engineers.\textsuperscript{133} When it came to their domain of knowledge, the engineers were both self-regulating and discriminating so

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that they could maintain control over their discipline. Within a generation, the graduates of the Academy had become leaders of exploratory missions across the nation and all over the world. The Military Philosophical Society failed to survive as an independent institution; however, it served as a model for others to emulate. In the meantime, the APS and AAAS remained significant but lost their status as the commonly accepted national learned societies as specialized societies became more popular. The differences within the two societies were never reconciled; and as a result, a single institution of knowledge became impossible to establish. The transformation of the college curriculum that Jefferson valued so highly remained spotty at best. Many institutions looked to reestablishing the classics as a means to demonstrate intellectual, and moral, quality during the antebellum period. In the meantime, Jefferson went on to refine his educational ideas and turn his attention to the establishment of another educational institution--this one in his home state of Virginia.

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134 McDonald and McDoanld, “West from West Point: Thomas Jefferson’s Military Academy and the Empire of Liberty.”

DEMOCRATIZING KNOWLEDGE: COLLECTING, PRESERVING AND DISPLAYING KNOWLEDGE IN THE EARLY REPUBLIC’S NEW MUSEUMS

Washington’s call for a national university has traditionally encouraged scholars to focus on educational institutions such as colleges and universities, however different notions competed in reference to what types of institutions would best diffuse knowledge to the citizens of the expansive American republic. Colleges had been the traditional way to distribute knowledge in the European world, and the English colonies had created a similar set of institutions. The institutions prepared men for a public life and set the patterns for public speech for both ministers and politicians. Yet the explosion of knowledge in the information marketplace offered opportunities for people to reframe what constituted knowledge, who should have access to it, and who would create it for consumption and what type of institution should be used to diffuse that knowledge.

Although the initial calls for national institutions, focused on creating institutions designed for the elite, some heard a different message. Many saw the potential for collecting useful knowledge and displaying that knowledge to a diverse set of citizens. New ideas about what constituted scientific knowledge tempted many to suggest alternative ways to teach useful and practical knowledge. This led to an increased number of individuals sought to take a role in the educational process. Founder of a new type of museum, Charles Willson Peale epitomized this transformation. Empowered by the democratic messages of the revolution, many of these people expected that with hard
work they would take a larger role in the republic to help improve the condition of all in the new nation.¹

Many leaders, especially Federalists, believed that the egalitarian messages of the Revolution were unsound and consequently they fervently opposed the elevation of certain men like Charles Willson Peale into men of scientific consequence. Scientific knowledge belonged to men who had been proper prepared through the experiences at colleges. These traditional institutions prepared men for a public life by forging leaders informed by a curriculum based on a mixture of classical learning and new curriculum additions. The post-revolutionary spirit and the transformation of the information revolution led to radical shifts in what types of knowledge many believed as important for the citizens of the republic. This radical science in the hands of American Jacobins seemed a threat to Christianity and to the survival of morality for the republic. Men like Peale studied that science and professed their knowledge to the community without the benefit of proper training. As a result, these men appeared to have taken short cuts to promote their own self-interest and shortsighted understanding of knowledge. As such, Federalists believed that the foundation of the republic’s civilizing mission remained at because of the improper framework of people and ideas. Men of letters viewed themselves as the suitable leaders of the republic and the definers of knowledge and remained reluctant to include those without a proper classical education. They eschewed modern fashions as the work of the weak-minded mob duped by those charlatans in

¹ Christopher Grasso, A Speaking Aristocracy: Transforming Public Discourse in Eighteenth-Century Connecticut (Chapel Hill: Published for the Omohundro Institute of Early American History and Culture, Williamsburg, Virginia, by the University of North Carolina Press, 1999).
control of newspapers who seemed to be using leveling sentiments to control knowledge. As more people had access to the power of printing via various publishers some worried that the authority of the printed word devolved into the hands of unqualified men.²

Print offered a powerful tool for spreading knowledge and books offered a way to communicate information across both time and space. In 1810 Isaiah Thomas, the founder of the American Antiquarian Society and publisher of the first history of the American book trades, wrote of books saying, “They are the chief instruments of acquiring knowledge; they are the repositories of laws, and vehicles of learning of every description; our religion itself is contained in books and without them…God is silent.”³ Printers and printing expanded throughout the nation and took on the polycentric identity of the new nation. Historian Richard Brown states, “in contrast to Britain and France, there would be no single capital and nucleus for American print culture. The consequences were profound: the new republic could never sustain a single national, unified, elite culture.”⁴ Publishers began to expand their businesses and sought to collect documents and other useful knowledge causing a revolution in the numbers and scope of

³ Thomas, Isaiah. The history of printing in America : with a biography of printers, and an account of newspapers : to which is pre-fixed a concise view of the ... Volume 1. [Worcester, Mass: 1810. 17-18
publication in the United States. Publishers such as Mathew Carey, who published a
journal titled the *American Museum*, collected literary and scientific knowledge broadly
defined and published it in a variety of texts and formats. Print became the preferred
means to disseminate knowledge in the United States in the coming years for many;
however other competitors emerged especially those relate to expanding interest in
physical and natural sciences.  

Representing a change in the way people communicated and displayed scientific
information, Charles Willson Peale’s Museum it offered an opportunity to use new
pedagogical methods to teach about the natural world. The definition of scientific
information began to transform from a universal conception of knowledge to one that
privileged specialization. Even though scholars typically suggest that the Americans were
less influenced by the ideas of the radical enlightenment, many leaders of the democratic
clubs such as Peale and President of the American Philosophical Society (APS) David
Rittenhouse began to link the spread of scientific knowledge, meaning empirical
knowledge, to the success of the republic. Peale embraced the idea of self-improvement
and believed that the proper institutions that displayed appropriately selected information
could distribute knowledge to a wider community and expand knowledge beyond the
elite. Through an effort of democratizing science to a broader community, men like Peale
hoped to both entertain and enlighten the citizenry of the early republic. As such, he

viewed his museum as kind of university for the nation. Further, once these new types of museums began to proliferate, different institutions and groups began to transform them to suit their own specialized needs. Peale also made several pleas for public funding and authority for his museum. Undoubtedly also aware of Washington’s desire for the establishment of a National University that remained unfulfilled, Peale hoped that his institution, if properly designed would serve the diverse needs of the republic.⁶

Peale’s rise to national prominence is well known; however, few scholars have recognized the mistrust that existed between many learned men and these new men of science whom they disparagingly called “philosophers.” An active member of Philadelphia’s radical republican circles, Peale had served as a militia captain during the war. He also served as an agent for the confiscation of Loyalist estates and helped organize large political demonstrations including the Benedict Arnold ceremony of punishment in 1780, and the Arch of Triumph celebration of peace in 1784. He converted his painting gallery into the first scientifically organized museum of natural history in the United States. Peale envisioned his museum as a republican school where all people could learn about the natural world and improve themselves through the acquisition and application of useful knowledge.⁷ Many scholars forget these radical roots as they focus

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on his work as a museum proprietor or as an artist. Some, such as historian Gary Nash, portray Peale as a man that “sold out” his radical beliefs by “manipulating history by erasing parts of the revolutionary past in which he himself had been passionately involved” in order to secure financial support for his family.\(^8\)

Peale did indeed benefit from the patronage and support of men of status; however, he envisioned himself as a man who could bridge the gap between the elites and the new citizen. His experience as a self taught man had placed him in the company of the greatest men of the country. Despite the prolific amount of work that exists to document Peale’s life and work as an artist and as the proprietor of the first museum of natural history, scholars have not connected his radical notion of the purpose of a museum to his democratic ideals. One historian presents Peale as an opportunist that attempted to develop wide interest in demonstrating the need of mankind to live in harmony with natural laws. By developing this interest Peale hoped to propagate the message that people could enhance their lives by following the laws of nature.\(^9\) Other scholars add that that Peale was convinced in his own ability, and the ability of others, for self-improvement in order to be a self-made man.\(^10\) As such, he imagined himself as the perfect person to construct a school for the nation based on the didactic enlightenment.\(^11\)

\(^11\) Brigham, *Public Culture in the Early Republic*. 

Other scholars focused their attention on the need to resurrect the reputation and
importance of Peale’s breadth of work who had been diminished by early scientists and
museum professionals. These works focus on cataloging the accomplishments and
placing his legacy in context. The result is that they have not emphasized on the museum
as an information system and mechanism for framing knowledge for large communities.\(^{12}\)

Peale’s museum serves as an important example of the conflict over different
frameworks of knowledge between learned men with traditional ideas that privileged
published knowledge and a burgeoning group of natural history specialists who
privileged democratic access to knowledge. This new science was empirical. It was
obvious to anyone, and as such, these citizen scientists believed themselves to be
participants in this revolutionary era. The people living in this era wished to promote and

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\(^{12}\) Charles Willson Peale, *The Collected Papers of Charles Willson Peale and His
Family*, 1980; Charles Willson Peale et al., *The Selected Papers of Charles Willson
Peale and His Family* (New Haven [Conn.]: Published for the National Portrait
Gallery, Smithsonian Institution by Yale University Press, 1983); Hart and Ward,
“The Waning of an Enlightenment Ideal”; Edgar Preston Richardson, Brooke Hindle,
and Lillian B. Miller, *Charles Willson Peale and His World*, 1st ed (New York: H.N.
Abrams, 1983); Charles Coleman Sellers, *Mr. Peale’s Museum: Charles Willson Peale
and the First Popular Museum of Natural Science and Art* (New York: Norton, 1980);
Laura Rigal, *The American Manufactory: Art, Labor, and the World of Things in the
Peale and his family is vast and demonstrates the breadth of his experiences in life.
He is of particular interest to scholars who study history of science and technology,
art history, and museum history. His connections with the craftsman and trades
community also add to his importance. He is also interesting to those that study
radical politics during the American Revolution. A major project to collect the family
papers was completed by the Smithsonian and produced on 449 microfiche. Charles
Willson Peale and Lillian B. Miller and Sidney Hart, eds, *The Collected Papers of
Charles Willson Peale and His Family, 1735 -1885* (Smithsonian Institution,
Washington, D.C Microform, 1980) From this a 5 Volume set of selected papers was
produced that is indespensable for researchers.
engage in a new type of scientific learning with the hope of leveling society through the acquisition of knowledge. A modern museum offered a new type of institution with collections designed to support the needs of the farmer, the mechanic, and the merchant. As a result, Peale saw his institution as a “Temple of Wisdom” designed to celebrate American superiority by displaying the wonders of nature in his museum for all.\textsuperscript{13}

Some worried that the new generation were in danger of becoming men of luxury “who possessing talents fail of important attainments by wearing away their time in trivial studies.”\textsuperscript{14} Instead, men of consequence and ability had a social responsibility to use their time effectively and not waste their time by reading texts with fanciful tales especially when the truths of nature could be presented for all to see in a new type of institution. As such, Peale tried to connect his ideals with those of other well-known founders like Benjamin Rush and his call for a “Federal University.” Rush’s proposal had emphasized the study of natural history and had indicated that in order to “render instruction in these branches of science easy, it will be necessary to establish a museum, as also a garden.”\textsuperscript{15} The author asserted that European education focused on the study of antiquities and the finer points of grammar in dead languages. Instead, Americans should focus on “acquiring those branches of knowledge which increase the conveniences of


\textsuperscript{14} “On the Folly of Engaging in Trifling Studies,” General Advertiser, August 14, 1792, 3.

\textsuperscript{15} “Plan of a Federal University,” The American Museum; Or, Repository of Ancient and Modern Fugitive Pieces & C. Prose and Poetical 4, no. 5 (November 1788): 442.
life, lessen human misery, improve our country, promote population, exalt the human understanding, and establish domestic, social and political happiness.”\textsuperscript{16} These advances when studied appropriately, and by the right men, would lead to useful medicines and other improvements for all. Peale embraced these ideals and established many of the common practices for modern museums that remain the standard for museums today.\textsuperscript{17}

Museums became a point of contestation during the age of revolutions because of the changing notions of what constituted knowledge and who ought to use that knowledge. In the colonial period, local learned societies held both libraries and specialized cabinets for the express purpose of encouraging their researchers to share access to their collections. The wealthy had long collected objects of curiosities and often stored these items in cabinets. Over time, these cabinets of curiosities began to grow over time and became especially important to the growing circle of natural history patrons, scholars, and enthusiasts. The eighteenth-century gentleman scholar had an insatiable appetite for an ever-expanding understanding of the physical world. The way that they exerted control over their chaotic world came from a complete and accurate description of the physical aspects of objects. The proliferation of these objects and desire to scientifically control them led to an awareness of the jumbled institutional environment.\textsuperscript{18}

\textsuperscript{16} “Plan of a Federal University”; CITIZEN OF PENNSYLVANIA, “PLAN of a Foederal University,” \textit{The Pennsylvania Gazette}, October 29, 1788.
\textsuperscript{18} May, \textit{The Enlightenment in America}; Arthur MacGregor, \textit{Curiosity and Enlightenment: Collectors and Collections from the Sixteenth to the Nineteenth Century} (New Haven [Conn.]: Yale University Press, 2007); Arthur MacGregor, “The
The term museum had multiple meanings before the revolutionary era. The earliest known written reference in English to a museum was in 1603 in a translated work from Plutarch’s *Morals* that identified “houses ordained for students, which they named Musaea, as farre as they could from cities and great townes.”\(^{19}\) The *New World of Words: or, Universal English Dictionary* published in 1706 identified a museum as a college or a public place for learned men. In 1793 the *Encyclopedia of Britannica* referred to the Alexandria Library as palace museum and place “set apart for the muses and the study of the sciences.”\(^{20}\) This entry also referred to Oxford’s *Ashmolean Museum* and the *British Museum* as institutions that were magnificent and beautiful buildings filled with the “noblest cabinets of curiosities in the world.”\(^{21}\) One scholar points out that the modern museum was an outgrowth of the social upheaval caused by the American and French Revolutions. Closed institutional cabinets changed due to the development of new creative institutions that linked, in the words of a historian, their “infant establishments to cultural resources like hospitals, colleges, and libraries, they assured that museums would

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20 “museum”, *Encyclopaedia Britannica; or, a dictionary of arts, sciences, and miscellaneous literature on a plan entirely new. ... Volume 12*, (Dublin Edition: printed by James Moore) 1790-1798, p 482. In Eighteenth Century Collections Online.

21 Ibid. Museums were not always physical collections as exemplified by the many newspaper publications that utilized Museum in their name such as Mathew Carey’s *American Museum* or the *Weekly Museum* published in New York. There were also several books and published compendia that utilized museum in their title to emphasize the breadth of their content. Museum also conveyed a closed or secretive intelligence compiled within the pages of the published work. In essence, the museum was any diverse collection of objects selected and arranged in a particular fashion in order to tell a story.
be viewed as vital institutions in American life…” in order to inculcate the “American public of the eighteenth century for the curious and historical.”22 As early as 1757 the Library Company of Philadelphia held several examples of artifacts such as fossils donated by earlier explorers like Charles Swaine and early naturalist John Bartram as well as “curious Snakes, Scorpions &c in a Bottle of Spirits.”23 The defined role of a museum remained unclear, and as a result the museum began to take on a public role as part of its developing role as an institution meant to educate citizens in the republic.24

The number of museums and other knowledge institutions increased significantly in British America and in the early republic. Currently no reliable data source can be found on this growth.25 This growth can be discerned in the periodical literature, and the books published during the period. Further evidence abounds in the surviving published catalogs, printed speeches at anniversary celebrations and lecture series, and other notifications of these institutions. These publications indicate their public mission and the attempts to share their collections of knowledge to their communities. A plethora of notifications identified the establishment of new institutions such as the Library Society of Charles-Town’s announcement in 1773 of their plan to promote a “full and accurate

25 Although there are some projects like the “Davies Project” at Princeton University that attempts to identify all libraries established before 1876. See https://daviesproject.princeton.edu/databases/index.html This database is based on Haynes McMullen's work.
NATURAL HISTORY” of their region. As such, the members “fitted up a Museum for the Reception and Preservation of Specimens of these several natural Productions” and they requested assistance from the public for the acquisition of specimens and promised that the “Names of such shall be recorded as Promoters of, and Contributors to, so useful a Work.” Some scholars have made the point that these institutions were transplanted European institutions for the elites. In that, view the fire that destroyed the Charleston museum was beneficial to the progress of American museums since it eliminated an institution for the elite.

Governments and the wealthy have sought means to capture and utilize knowledge for the improvement of their condition and in the name of advancing civilization for centuries. One historian has intricately tied the development of the government of the early modern state to modern information systems. Institutions provided the means to control and disseminate knowledge. Typically, the elite populated these institutions with the goal of promoting the spread of learning. The earliest organizations in United States mirrored the institutions in Europe and many citizens worried about expanding these types of institutions or establishing new ones like the national university proposed by Washington and other nationalists. These centralized and universal institutions offered a risk to the advancement of all the people of the nation since they benefited the wealthy rather than all the citizens, including those who lived on

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27 Ibid.
28 Orosz, Curators and Culture, 24.
the edge of poverty. Other scholars point out that the proliferation of learned societies and academies of sciences served as evidence of the founders’ interest in imparting virtue and knowledge of science to the citizenry. Nevertheless the notion of who should be participating in this process remains difficult to discern. The question is did these institutions provide opportunities for the promotion of an educated citizenry or were they a means to establish control over an unruly populace? This question became even more significant as of the republic continued to explode in size.30

Resistance to established knowledge institutions existed in the early republic. A national university reeked of the old system of education that promoted education for a select few. Radical revolutionary Robert Coram produced a 108 page work articulating the need for democratizing educational opportunity offered by and governed by the state for “every class of citizens, to every child in the state.”31 Coram viewed the existing education system as a means to secure the power of the rich, and wrote “it is a shame, a scandal to civilized society, that part only of the citizens should be sent to colleges and universities to learn to cheat the rest of their liberties.”32 Alternatively, he proposed that each citizen should hold equal access to baseline levels of education. This proposal was

31 Robert Coram, Political Inquiries: To Which Is Added, a Plan for the General Establishment of Schools throughout the United States. (Wilmington [Del.]: Printed by Andrews and Brynberg, in Market-Street, 1791), 57.
32 Ibid.
rejected by the editor of the *Universal Asylum and Columbian Magazine* who thought that the program, along with its author was a radical and “violent declamer against the institution of civil government.”

Resistance to traditional institutions led to the establishment and experimentation with museums and libraries. Some argued for the need to promote new types of public libraries. A person identified as a subscriber to the public library wrote an essay “On the Utility of Public Libraries.” The purpose was to demonstrate the superiority of their new type of institution “over most private, and every circulating library [since], that the books are carefully selected, and such works as might tend to corrupt instead of profiting the morals of youth, gain no admittance.” Although this seems to be promoting a democratic institution, the point of these libraries was to provide only the right kind of knowledge to their readers. These types of public libraries were especially important institutions for those that emphasized the need for a strong nation state. Like public libraries, museums or other the newly reimagined institutions offered an opportunity to establish organizations focused on becoming an engine of change designed to promote a new type of knowledge for citizens in the new republic.

As discussed an in earlier chapter learned societies were a traditional institution that allowed scholars to join in order to share knowledge and resources. The earliest

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33 “POLITICAL INQUIRIES: To Which Is Added a PLAN for the General Establishment of SCHOOLS throughout the United States,” *The Universal Asylum and Columbian Magazine (1790-1792)*, February 1791, 110.
34 “On the Utility of PUBLIC LIBRARIES,” *New-York Magazine; Or, Literary Repository* 2, no. 6 (June 1791): 308.
35 Public libraries were not like modern libraries instead they were subscription libraries.
American learned societies emphasized the interconnected and universal nature of knowledge. They viewed scientific learning in a very pragmatic way and rarely found controversy in the scientific world. Many believed that contention and debate belonged in the realm of the rhetoric of the clergy. Instead of engaging in these metaphysical discussions, members of learned societies valued the importance of collecting, preserving and displaying knowledge of their physical environment and reporting the characteristics of natural phenomenon. For example, before the 1800 presidential election, the American Philosophical Society rarely took an official position on any matter including scientific questions. Instead, the typical report in the Transactions of the American Philosophical Society delivered findings in an encyclopedic manner that emphasized the belief that knowledge needed to be gathered, organized, and displayed. The natural world appeared as a perfectly logical and systematically constructed world. This understanding of the world created a common understanding of science as being utilitarian and designed in order to improve human conditions. Often these men expressed this notion of scientific knowledge as useful knowledge. This useful knowledge was important for advancing civilization and was especially important to the development of a republic.36

Some significant differences did surface between members of learned societies despite the fact that they shared a similar worldview. These men held serious differences over appropriate types of institutions designed to preserve, control, and disseminate knowledge. Increasingly the information revolution relied on specialized practitioners to

collect, display, and catalog knowledge. These skills were obtained in a variety of ways and were disseminated and improved through learned societies. Classification of the world and systematically developing new nomenclature for the purpose of systemization became the new norm. The expanding and specialized nature of scientific learning provided new opportunities for a growing number of participants with varying degrees of expertise and education. The increasing breadth and depth of knowledge required distinct techniques and methods for the collection, cataloging, and presentation of knowledge and represented an initiation of proto-professionalization. These practices developed as an outgrowth of the early learned institutions in the United States; however new members realized that these institutions were not open to all. Thus, sensitive to the need to promote new sciences and subsequently to promote practical learning for citizens in the new republic, some viewed enhanced access to print collections and objects of nature collected in museums as a way to democratize access to information.  

The early museums of Pierre Eugène Du Simitière and Charles Willson Peale offer an opportunity to view how the subtle differences in their collections provided different paths for future institutions of knowledge to follow. Both established traditions and patterns and are crucial to understanding the development of the specialized institutions of knowledge that are familiar to us today. Both challenged the existing pattern of institutions for the elite, sought public support by attempting to establish a national institution for their collections, and failed to secure that funding. This resulted in

the auctioning of their collections, which became scattered among many different institutions.\textsuperscript{38}

Du Simitière’s collections made him a notable man of letters in the Americas and earned him access to intellectual circles and election in 1768 to the American Society for the Promotion of Useful Knowledge, which later combined with the Philosophical Society (APS). The American Philosophical Society recognized Du Simitière’s expertise in collecting by consistently electing him to serve as one of three curators for the Society between 1776 and 1781. Curators held important responsibilities in the Society. As early as 1769 the curators charge included preserving and assuring that all the Society’s “specimens of natural productions… all models of machines and Instruments and all other matters and things belonging to the society…” were to be classified and arranged in “…their proper orders.”\textsuperscript{39} Finally, the position of curator indicated significant trust by the membership. It was the only elected position that required the officer to give a bond of security deemed necessary by the president and vice-presidents. Ultimately Du Simitière’s role in the APS provided him with opportunities and networks in order to


\textsuperscript{39} The minutes of 1768-1837 are published in the "Early proceedings of the American Philosophical Society ... 1744 to 1838," in APS Proceedings 22, 3 (1885). Beginning in 1838 abstracts were printed in the current APS Proceedings until 1937, since which date they have appeared in the Year Book. Minutes of the American Philosophical Society. Citations from the Early minutes will follow as APS Minutes with the date and page number that refers to the the \textit{Proceedings of the American Philosophical Society}, Vol. 22, No. 119, Part III, ed. Henry Phillips, Jr. “Early Proceedings of the American Philosophical Society for the Promotion of Useful Knowledge, Compiled by One of the Secretaries, from the Manuscript Minutes of Its Meetings from 1744-1838” (Jul., 1885), \textit{APS Minutes} February 3, 1769, pp. 27
make a living from his avocation. His relationship with the Society diminished in 1782 when he advertised his collection as open “for the inspection of the Gentlemen and Ladies, Strangers in this City and upon their Friends who are desirous to see the curiosities it contains.” 40 Perhaps this indicated the loss of free time devoted to the collective enterprise or more likely, it may indicate that the membership became less comfortable with his role in the society and the private enterprise of his new museum. 41

Even before his formal opening of his American Museum, Du Simitière likely had provided private showings of his personal collections for several years to selected men and women before he opened his collection for public view in 1782. This was a common practice for collectors. For example, Dr. Abraham Chovet (1704-1790) created a state of the art anatomical museum that exhibited his replications of organs of the human body constructed out of wax. 42 Du Simitière’s financial conditions necessitated the transformation of his personal cabinet into a museum open to those able to afford to spend half-a-dollar for an amusement. More than likely, this seems related to the fact that Du Simitière had to spend a significant amount of time operating his museum. The museum was available for five hours per day four days a week. Payment entitled the

40 Pierre Eugène Du Simitière, American Museum. The Subscriber Having Been Induced from Several Motives, to Open His Collection for the Inspection of the Gentlemen and Ladies, Strangers in This City, and Their Friends (Philadelphia: Printed by John Dunlap, 1782).
41 APS Minutes May 19, 1780, pp. 108-109.
guest to spend an hour viewing his collection and it is clear that his primary purpose was to entertain the literate and gentry within the city.\textsuperscript{43}

Du Simitière gathered his collections to support his ambitions to publish a complete natural history of the Caribbean and North America. Before settling on the North American mainland, he traveled in the Caribbean and collected many different plant and animal specimens while also producing drawings that he planned to use in a publication that he intended on completing once he traveled back to Geneva. He supported himself by painting portraits and ultimately settled in Philadelphia in 1774. Due to the immense scope of his initial project, Du Simitière decided to amend his publishing effort to focus on the North American mainland since he believed this would be a more manageable project. While in Philadelphia, Du Simitière, became well known for producing several important profile portraits of Revolutionary War heroes like George Washington. He also created elements used in the Great Seal of the United States. Due to his precarious financial condition led him to open his private museum to the public by 1782 when a broadside advertised the opening of the collection. He had shown it to select people before the general opening. Although he now had extra money coming in, his larger book projects remained unfinished.\textsuperscript{44}

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\textsuperscript{44} Du Simitière’s was clearly open to selected members of society much earlier. Richard Smith from the Continental Congress mentions being amused while viewing the items in Du Simitière’s cabinet of curiosities as early as 1775. Paul H. Smith, et al., eds. Letters of Delegates to Congress, 1774-1789, 25 volumes, (Washington, D.C.)
\end{flushleft}
Du Simitière’s collections included diverse objects from a variety of sources that offered an opportunity for him to present examples of wondrous and bizarre stories of strange and mysterious places, people and things. Du Simitière kept an inventory in a notebook that identified many different curiosities, books, paintings and other miscellaneous items that he obtained as well as the stories that accompanied the treasurers. In November 1779, Du Simitière records receiving

…a vizor or mask of wood representing a ghastly human face the color of an Indian with a mouth painted red the eyes of yellow copper with a round hole in the middle to peep thro the forehead covered with a piece of bear skin by way of a cap found with several more to the number of about 40 in an Indian town called Chemung which was burnt by the Cont army under Gen Sullivan in his expedition last Summer into the country of the Six nations these visors are commonly called manitoe faces and serve for the Indian conjurors or Pawaws in their dances and other ceremonies…

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The items offered an opportunity to engage his audience with fascinating tales of the unknown. Historian Mairin Odle demonstrates the connection that these artifacts had to the public’s fascination with the frontier, native peoples and the unknown. Unfortunately, no catalogue of the items in the museum has survived however; an advertising broadside indicates selected specimens within the collection and specifies Du Simitiere’s desire to limit the number of visitors that attended during his one-hour guided tour to fewer than eight. He even requested that patrons secure tickets a day or two in advance of their planned visit. It is likely that this request allowed Du Simitiere to manage the limited space available in his small facility/house. It also allowed him to provide different experiences for each set of guests based upon their own interests.46

Du Simitiere emphasized stories connected to his collections rather than the scientific cataloging and presentation of his collections. For example, Du Simitiere divided his collection into two broad categories consisting of “natural curiosities” and “artificial curiosities.” Natural curiosities included the plants, animals and minerals within his collection. Artificial curiosities included items fabricated by people. His collection included artifacts including musical instruments, weapons, and utensils created by native peoples of the West Indies, Africa, and North America. One revolting specimen

Extracts from His Note-Book,” The Pennsylvania Magazine of History and Biography 13, no. 3 (October 1, 1889): 341–75. His papers are also part of the Peter Force Collection at the Library of Congress Manuscript Room Series 8D: entry 40 Microfilm 17,137 (reel 38)

in the collection was a human scalp taken from an Indian from the western part of Pennsylvania. The scalp, probably viewed as a trophy, came through a purchase paid for by the state of Pennsylvania and then transferred to Du Simitère. However, the learned of the eighteenth century also considered this a scientific curiosity. The scalp was evidence. The stories told about that scalp by Du Simitiere are lost, yet clearly the earliest museums contained a space to offer hypothesis and explanations of the goal of civilization through a close examination of these objects of curiosity. Du Simitiere’s collections help to illustrate how closely wedded were the notion amusement and that of the fantastical value of science at the time. These curiosities offered an opportunity for the viewer to experience exotic and wondrous items that offered an opportunity for amusement and a particular type of enhancement of knowledge.47

Du Simitiere has been unfairly penalized for not collecting and displaying knowledge in a way that emphasized scientific methods. Although most acknowledge Du Simitière’s as the earliest public museum in the United States, scholars disagree over the quality of his collections. It is unclear exactly what methods Du Simitière used and whether he used specific scientific methods or terminology as a means to organize, display or preserve the collections in his museum. His notebooks illustrate his broad talent as a collector and a gifted natural history artist; however, he lacked the expertise to use the Linnaean methods of classification. This deficiency is one important reason why historian Charles Coleman Sellers wrote that Du Simitière’s collection was a “magpies

47 Du Simitière, American Museum. The Subscriber Having Been Induced from Several Motives, to Open His Collection for the Inspection of the Gentlemen and Ladies, Strangers in This City, and Their Friends; Odle, “Buried in Plain Sight.”
nest of historical and scientific rarities”\textsuperscript{48} Seller’s assessment is typically viewed as an attack on Du Simitière’s professionalism; however, this may spring from a misunderstanding of the purpose for his collecting. Many early museum professionals pointed to this fact to emphasize his amateur status; however, most scholars ignore the main purpose for his collection activities. Although his collection may have seemed randomly acquired, it actually illustrates a paramount purpose of his collection. Du Simitière’s proclivity as a storyteller influenced his collection’s focus and what he valued. Literature scholar Christopher Iannini shows that Du Simitière’s collection activities served as a means to tell the stories of faraway places and of menacing accounts of slave insurrections and the macabre scenes of a reckoning delivered by the participants. Du Simitière kept significant notes on the objects in his collections especially the provenance of the items. Perhaps more importantly his notes demonstrate that Du Simitière used the specimens and slave artifacts as ways to tell salacious, even vicious stories to his patrons. Therefore, the collection and the organization did not focus on the encyclopedic and taxonomical approach that was becoming the norm exemplified in Peale’s museum. As a result Du Simitière’s approach appears amateurish to modern eyes. While Du Simitière did not have a proper catalog of his artifacts, he did produce an extensive catalog of the printed materials, in his collections and he prepared catalogs on demand for wealthy patrons.\textsuperscript{49}

\textsuperscript{48} Sellers, \textit{Mr. Peale’s Museum}, 12.

\textsuperscript{49} Christopher P. Iannini, \textit{Fatal Revolutions: Natural History, West Indian Slavery, and the Routes of American Literature} (Chapel Hill: Published for the Omohundro Institute of Early American History and Culture, Williamsburg, Virginia, by the University of North Carolina Press, 2012), 131–176; Potts and Simitiere, “Du
Du Simitière assembled his collections during the growth of the antiquarian movement in the United States. Historian Alea Henle’s dissertation reveals that citizens created a host of historical societies in the United States in the early years of the Republic. Du Simitière’s assemblage grew along with other collecting movements that shared the increasing interest in the people and institutions of the North American colonies. This movement led to several projects that aimed to collect the documents and papers that explicitly told the story of Early America. The American movement also grew in concert with developing European practices in the early eighteenth century seen in the explosion of antiquarian societies. The antiquarian focused on collecting written documents and official papers as both examples of evidence and as the eyewitness account. Many participants in the movement believed that the collection of these documents removed the need for a commentator whose bias would corrupt historical analysis. The American antiquarian movement became remarkably important to those seeking information about the heroes of the American Revolution, and many leading Americans supported the actions of collectors as representing examples from the proper advancement of civilization.  

Simitiere, Artist, Antiquary, and Naturalist, Projector of the First American Museum, with Some Extracts from His Note-Book,” 348–349, 360, 363. In a 1779 letter to George Clinton, Governor of New York, Du Simitière requested assistance in securing books about New York. This request for more materials came after he wrote that “I have considerably increased my collection of American Books and Papers, since your Excellency was here last.”  

He proceeded to list a number of works in both English and Dutch that he hoped Clinton would help procure. Still in the same paragraph, Du Simitière lists a number of the artifacts that added to his collections from Pennsylvania and Virginia.

50 Alea Henle, “Preserving the Past, Making History: Historical Societies in the Early United States” (Ph.D., University of Connecticut, 2012), xiv–xxx, 1–30; Pierre Eugene
This antiquarian movement led to the development and publishing of several different documentary collection projects. The Revolution unleashed a printing revolution as much as it did a political and social revolution. Several leaders sought to establish order over the increase in printed publications following the Revolutionary War. Many recognized the importance of providing access to crucial documents for writing the history of the new nation. For example, Ebenezer Hazard received support in 1778 for his proposed publication of the *Historical collections; consisting of state papers, and other authentic documents; intended as materials for an history of the United States of America*. By 1779, the Continental Congress presented a resolution to name Du Simitière historiographer of the United States and to support his endeavor because, unlike Hazard, he already had gathered the necessary collections to complete his proposal. The resolution provided a national contribution including a 3-year stipend of $2,000 per year for his revised project focusing on a natural and civil history of the American states. Although the Congress ultimately eliminated the financial support for his project, they did endorse his work and this provided additional credibility, which in turn assisted his securing financial support from the Pennsylvania Assembly.  

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The aims of collectors such as Du Simitière puzzled some leading men of the day. As early as 1776 John Adams viewed Du Simitière as an eccentric man who collected curiosities that offered little to advance the progress of civilization. John Adams wrote, “This Mr. Du simitiere is a very curious Man. He has begun a Collection of Materials for an History of this Revolution” in a letter to Abigail Adams. Adams continued, “He has a List of every Speculation and Pamphlet concerning Independence, and another of those concerning Forms of Government.”\(^{52}\) Jeremy Belknap in a letter to Ebenezer Hazard, another collector of books and papers, asked Hazard why he did not just write a history instead of collecting documents of history. Hazard’s own publishing project, similar to Du Simitière, focused on collecting documents of the early colonial history of the British colonies in North America. Ultimately published as a two-volume work the *Historical Collections: Consisting of State Papers and Other Authentic Documents: Intended As Materials for An History of the United States of America* appeared in Philadelphia between 1792-1794 and was the first published collection of American state papers and historical documents in North America. Hazard’s reply to Belknap indicated his judgment that documents spoke for themselves and yielded a more authentic history.\(^{53}\) These collections of documents and specialized papers and books resemble the earliest


\(^{53}\) Jeremy Belknap to Ebenezer Hazard, May 16, 1791, emphasis in original, and Ebenezer Hazard to Jeremy Belknap, June 6, 1791, Massachusetts Historical Society, Collections of the Massachusetts Historical Society 5th series, volume III (1877), 258-259, 262.
foundations of specialized libraries; they also indicated a recognition of severe gaps in the bibliography of the Americas. Men of letters and learning blamed the lack of a substantial library for the lack of progress in the knowledge in the America. Fisher Ames remarked “Our own is not yet worthy of a Livy; …where could an American author collect his materials and authorities? Few persons reflect, that all our universities would not suffice to supply them for such a work as Gibbon's.”

Du Simitière, like others of his ilk, sought a better understanding of their world by collecting diverse materials and sources; however, printed materials remained the most valued source of information for scholars. Du Simitière still hoped his collections would yield a valuable edited edition of texts that told the story of the Americas and his artifacts remained secondary to his goals. His letters and notebooks abound with examples of his proclivity for collecting textual sources. These collections appear to equal if not surpass his collection of artifacts. As such Du Simitière may be more accurately portrayed as sharing the growing interest in printed knowledge. This national interest culminates with the establishment of several different types of institutions such as Boston’s Athenaeum and the American Antiquarian Society. Du Simitière’s experience provided lessons to future collectors such as Charles Willson Peale. Du Simitière’s very important published collections was preserved by the Library Company of Philadelphia, his manuscript collections are part of the Peter Force collection at the Library of

Congress while the museum specimens were dispersed on the auction block to different purchasers. Despite the recognition by scholars, that his collections were the first museum in the United States, his greatest legacy really belongs more in the realm of libraries, archives and antiquarian studies.\(^5^6\)

Charles Willson Peale believed in modern science as a means to promote knowledge. Peale’s background as a scientific expert seems unlikely. Most remember Peale as an artist and the owner of his famous museum in Philadelphia. Peale’s reputation as an artist spread from his portraits of well-to-do and middling people. He was a prodigious painter and developed important political contacts once he moved to Philadelphia in June of 1776. As an example, he produced over seventy portraits of George Washington including the earliest known portrait of Washington painted in 1772. Peale’s expertise as an artist secured a commission from a German physician of Hessian soldiers in 1783 to produce scores of drawings of Mastodon bones that were found years earlier in Kentucky. Claiming that this occasion served as a progenitor for this idea to establish a museum of natural history, Peale received encouragement from several of his portrait patrons such as Colonel Nathaniel Ramsey. Despite Peale’s lack of a classical education, he engaged the leading men and women of the day in the important topics of the day. Still he remained an outsider to the world that he painted because he depended upon the patronage of the wealthy. He learned quickly that he was not a member of the world that he painted. Nevertheless he gained access to leadership in society, and his

patriotic zeal for the Revolutionary cause may have provided entry for him to become transformed from an artisan artist to a man of learning.\textsuperscript{57}

Peale sought to create an authentic experience for visitors to his museum. This experience fit his understanding of the promise of the new democratic republic and the natural world and with human understanding of their place within the universe. The museum and its display of knowledge and the audience it served created a space where the lines between leisure and educational pursuits blurred to all those who could pay their 25 cents for admission to Peale’s virtual exhibition of the “world in miniature.” This presented several challenges including the public perception that public amusements were a frivolous waste of time at best and a gateway to licentious activity at worst. As historian David Bingham demonstrates, Peale sought to use the principle of rational amusement in order to counteract arguments by those that insisted his museum was the product of an entertainer and opposed the academic or learned purpose of his institution.

Preservation of humans or animals after their death was important if these corpses were to be transformed into commodities for use in research or storytelling. As a result,

many eighteenth-century natural history experts invested time and resources into the study of taxidermy; however, modern taxidermy was a nineteenth-century creation. The word derived from the Modern Greek words that meant arranging skin. The Oxford English Dictionary identifies its first English use in 1820; however, it had appeared in a French source as early as 1803. Before that, the term “preserve” denoted the related practices of both preserving the skin as well as the practice meant to preserve life. Fitting with Enlightenment ideals, the goal of these early practitioners of taxidermy more widely than just methods used to preserve the specimen and included the scientist’s goal to vivify the creature by recreating the veneer of the animal and its environment.\textsuperscript{58}

Curators found it increasingly important to have these skills. Peale spent a significant amount of time practicing and honing the right mix of skills to properly preserve and display specimens. Some evidence suggests that Peale’s disrespect for Du Simitière practices, expertise and level of competence as a museum proprietor was associated with Du Simitière’s lack of care for utilizing proper techniques in preserving his collections. Peale later recalled that he objected to both Du Simitière’s collections and his level of competence and stated the latter “made no attempt to preserve either Birds or quadrupeds.”\textsuperscript{59} In addition, in a letter to his son Rembrandt in 1812, Peale recollected his account of the “Painters that came within my knowledge in the commencement of the arts

Peale’s devotion to precision and meticulous attention to detail in his work resulted in his preeminent reputation as an artist. Peale expanded on this reputation by presenting a series of changing natural scenes set to music. The moving images recreated natural phenomenon like the rising and setting of the sun and moon. Throughout this experiment with moving images, Peale focused on using his art as a means to reproduce the world on a smaller and controlled scale. This was no easy task because it required excelling in multiple fields of knowledge and artisanship. Peale frequently experimented with new inventions. As he matured, Peale mastered a variety of artisanal trades including a saddle maker, clock maker, and silversmithing. Historian Brooke Hindle likened Peale to renaissance men who excelled in two or more fields of knowledge.

61 In fact, a scandal suggests he copied Peale’s painting of George Washington and sent it to England for sale to Americans.
However, Peale struggled and as a result, he expanded his skills to include painting. David Ward reports that “the shift from artisan to artist was not unusual...painters were not set off from the working class: the ‘noble Arts’ mingled with the vulgar trades and artisans moved back and forth between the two blurring their distinctions.”\(^{62}\) In fact, this blurring of established roles allowed for the application of his considerable powers of observation and probably sharpened his abilities as an artist. Peale’s perspective on nature rested on keen observation.\(^{63}\)

Peale became obsessed with developing the best techniques and utilizing the latest technology to preserve the skin from the bodies of animals. He and his son Titian spent hours pouring over manuals, handbooks and experimenting in order to perfect preservation methods for their collections. Peale thought he had developed the precise method in which to preserve the skins of animals. After this apparent breakthrough, he announced his success in the *Pennsylvania Packet* on October 31, 1786. Shortly thereafter Peale initiated an exchange with George Washington by asking if he would be willing to send, upon their death, the rare specimens of Chinese Pheasants given to him as a gift by Lafayette from King Louis XVI’s aviary. Peale gave specific instructions on the method of packing so that “…such beautiful and rare things should not be wholly lost and which [happens] to often, even when undertaken to be preserved by persons not

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sufficiently skilled in the manner of preserving.”⁶⁴ This could be a noteworthy accomplishment because of due to the fame of these gifts to Washington.⁶⁵

Washington, Jefferson and the members of the American Philosophical Society were Peale’s greatest supporters. President David Rittenhouse and Dr. Robert Patterson encouraged Peale to establish a museum. These men believed philosophy and practical application were the ideal expression of nature and knowledge itself. In the end, Peale decided to proceed and announced his intention on July 7, 1786, in the Pennsylvania Packet to “make part of his House a Repository for Natural Curiosities” for the public to see “many of the Wonderful Works of Nature …now closeted.”⁶⁶ Peale’s mastery of preservation and artistry was rewarded weeks later when the APS rewarded Peale for his inception of his museum by electing him to the Society in 1786.⁶⁷ Election to the APS provided a first step toward the expanded network of patronage that Peale required for sustaining and expanding his museum. This patronage came from multiple sources. Most

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⁶⁶ Advertisement. Pennsylvania Packet, July 7, 1786 in Charles Wilson Peale to George Washington. December 31, 1786. Lillian B. Miller and Sidney Hart, eds. Selected CWP vol. 1 (New Haven Conn.: Yale University Press, 1983), 448. The editors identify that this advertisement ran 39 times between July 7 and November 12, 1786; Peale also used the same advertisement in the The Freeman’s Journal; and in the Independent Gazette.
important was an increased network of likeminded people who helped to enhance his collections and expertise. In October of 1786, he asked David Ramsay, from Maryland, for any of the curiosities from Carolina including a “stuffed skin of an Alligator.” Peale contacted Christopher Richmond, auditor of Maryland, and asked for help procuring information on the quality of a collection of birds offered for sale in Annapolis. Peale sent Ebenezer Hazard, early American document collector and editor, a letter thanking him for sending “sundry Articles for the Museum” which has unjustifiably fueled suspicion that some of the unsold Du Simitiére’s collection in Hazard’s charge ended up in Peale’s museum. This network of respected men also provided intellectual authority to his museum and extended it beyond the realm of a place for amusement.

Peale’s election to the society indicated another important factor leading to the successful creation of his particular type of museum. It was no coincidence that Peale opened his museum in 1786, the year of his election. The election signaled his acceptance into the company of the elite men of learning in Philadelphia. Unlike Du Simitière, Peale seemed energized by membership in the APS and resulted in a symbiotic relationship between his Museum and the APS. His election signified acceptance and a necessary confirmation of his abilities, especially since Peale lacked significant formal education. Peale’s election in 1788 as one of the APS curators indicates an internal change in the society. The membership had generally elected men of letters as their curators.

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69 CWP to Christopher Richmond, October 22, 1786, ibid, 457-8; CWP to Ebenezer Hazard, July 26, 1787, 486
regular participation in the APS to run his own museum in 1782. The following year Ebenezer Hazard, another man of letters, served in this position as well. Hazard served in that role as late as 1785. After Peale’s election, Hazard appears to drop out of regular attendance in the APS and the later curators were all well-known natural history scholars of the day such as Benjamin S. Barton and Edward Duffield. It is possible that Hazard saw the changing priorities of the group on April 4, 1783; they were “instructed to take immediate measures for preserving the natural curiosities from further decay.”70 The new role of the curators was to preserve and create a scientifically accurate catalog of the holdings of the society.71

Once the preservation challenges were overcome, Peale’s demonstrated of his expertise as a man of learning by producing the necessary scientifically organized catalog. He certainly became aware of this expectation while serving as a curator in the APS. The museum catalog consisted of a 56-page work titled *A scientific and descriptive catalogue of Peale's Museum*. The catalog was co-written by fellow APS member A.M.F.J. Beauvois in 1796 and was a groundbreaking since it represented the first known catalog of specimens in a natural history collection in the nation. The authors resigned themselves that the work would never be absolutely complete since the museum daily added new items into the collection. Peale and Beauvois followed the latest scientific standards and placed items into proper Linnaean order. Further, they defined the classifications so that all could understand how the system distinguished animal from

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70 *APS Minutes* April 4, 1783, p116;  
71 “Early proceedings of the American Philosophical Society ... 1744 to 1838,” in *APS Proceedings* 22, 3 (1885) p7-146
vegetable from mineral. After the authors described the physical characteristics of the specimen, a visitor could then wander through the museum and view examples of the descriptions. In 1805 and 1806 Peale followed up with a new and shorter work titled *Guide to the Philadelphia Museum.* The work opened with a quote from Milton

Here undisturb’d  
By noisy Folly and discordant Vice,  
On Nature muse with us and Nature’s GOD!\(^2\)

The eight-page *Guide* provided the reader with a room by room general description of the museum that highlighted key collections and manner of their display. On the one hand the guide offered the individual freedom to peruse the collections on their own without a
lecturer guiding the attention of the patrons. The work effectively promoted the holdings of the museum to those who were not easily able to attend the institution by offering clear descriptions of the physical environment.

Peale pioneered the use of the habitat diorama in order to establish a complete and artificial representation of life in its environment. Peale believed that qualities that defined the distinctions of animals required a new way to present the information. Verbal and printed representations simply could not reproduce the required precision needed to convey the complexity and marvels of a living creature. Peale painstakingly produced naturalistic backgrounds and refined the skills that he had long utilized in his portrait paintings in order to place animals within American landscapes. His work was so accurate that many of the drawings in Alexander Wilson’s landmark book *American ornithology, or, The natural history of the birds of the United States* were created from the backgrounds and dioramas that Peale manufactured for the specimens in his museum displays. Wilson’s book seems to be the first American Bird Book with colored plates published in America. Peale also carefully positioned birds “in Various attitudes on (an) Artificial ponds. Some Birds& Beasts on trees and some Birds suspended as flying.”

Ironically, mid-nineteenth century museum professionals frowned upon these techniques and preferred that specimens were displayed within taxonomic order inside cabinets.

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73 CWP to John Beale Bordley December 5, 1786, Miller and Hart, *Selected CWP*, v.1 195-196.
rather than providing a naturalistic background to produce a virtual representation of the environment.\textsuperscript{74}

Figure 4 Charles Willson Peale, The Long Room, Interior of Front Room in Peale's Museum 1822 The Detroit Institute of Arts

The 1805 *Guide* described each of the eight rooms in detail. Despite the fact that the example above in Figure 2 depicting the Long Room in Peale’s Museum years later, this image is remarkably similar to the 1805 *Guide*. For example, Peale describes the birds displayed as secured in glass cases rising 12 feet from the floor along the extent of the room which is 100 feet long. Generally, the specimens throughout the museum are displayed in Linnaean order by class and labeled with their genus. The specimens are situated in the cases with the “insides painted with appropriate scenery…the birds placed on branches or artificial rocks.”\(^75\) Peale also produced several other catalogs that identified his other collections such as the portraits of those he called the heroes of the American Revolution. Evident in the image of the Long Room. Peale invoked the importance of nature to the new American nation, and these historical figures were a way of connecting his love for nature with the development of citizens through the introduction of these noble men that deserving emulation to his visitors. He produced at least two catalogs called historical catalogs and planned to introduce basic biographical information about the figures displayed.\(^76\)

The guides were useful sources for those who planned a visit as well as for actual visitors and were also designed to promote his ongoing mission to secure government and public funding for his institution. On the title page of the *Guide* Peale announced that the

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state Legislature authorized the use of the vacated State House, more popularly known as Independence Hall where the Declaration of Independence and the work of the Constitutional Convention were approved, for the museum. Although Peale viewed his work as a public good, his museum was a private enterprise. Documenting Peale’s attempt to transform his private enterprise into a national museum, historians have explained it as a failure of imagination by tightfisted politicians or an idea ahead of its time. One historian counted five attempts to gain national support, another attempt to fall under the patronage of the state of Pennsylvania, and a final attempt to secure patronage from the city of Philadelphia.

In 1790, Peale issued a call to the Citizens of the United States of America to create a national museum in his advertisement for his American Museum published in the Pennsylvania Packet. Peale’s efforts for public support escalated in 1792 with an updated call for assistance that emphasized the stability of his museum and the existing support from patrons. Peale promised that he would cultivate the value of the institution “until it shall grow into full maturity and become a NATIONAL MUSEUM.”77 His plan included selecting prominent men from the nation to be board members for his museum. Most of the twenty-seven were members of the APS. Three members of Washington’s cabinet, Thomas Jefferson, Alexander Hamilton and Edmund Randolph served on the board. Peale hoped that this group would shepherd his call for federal or state support. On November 16, 1799, Peale delivered, as part of his agenda to promote his museum as a

77 “To the Citizens of the United States of America, Mr. Peale Beg Leave to Present the Following Address,” The Mail; Or, Claypoole’s Daily Advertiser, January 16, 1792, 3.
national museum, his *Introduction to a Course of Lectures on Natural History* at the University of Pennsylvania. This lecture was the first in a series of 42 addresses outlining the importance of natural history and providing a description of the animals in his museum. He asserted “Natural history is not only interesting to the individual, it ought to become a NATIONAL CONCERN, since it is a NATIONAL GOOD.” Peale built the case supporting the importance of a national museum by citing European examples such as Sweden’s use of the scientific advances of Carl Linnaeus to institute systematic changes in medical practices that resulted in the saving of their shipping. Peale also focused on the interconnected importance of natural history to a diverse set of occupations and all citizens. Peale wrote, “The very sinews of government are made strong by a diffused knowledge of this science – of this, agriculture, the mechanic arts, religion, are striking evidences.” Using his museum catalog as his guide, Peale delivered lectures that advocated the study of natural history as a means to spread universal harmony. In fact he told his audience that science rose above faction which is why he gave up his political career for the “peaceful studies of the fine arts: When the merit of each was put in the balance. The peaceful muse outweighed political warfare – and since that period I have been scarcely so much as a common observer of the political world.” The next year he made a dual pitch for public support.

Peale believed that the election of 1800 heralded change in the struggle to acquire national support for his institution. Peale requested guidance from Jefferson on the fate of

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78 Miller and Hart, *Selected CWP*, v2 p 1 265
79 Miller and Hart, *Selected CWP*, v2 p 1 267
81 Miller and Hart, *Selected CWP*, v.2 p.1 269
his museum. A letter dated January 12, 1802 included a draft address calling for governmental aid as an enclosure. The letter asked if he should send the application to the state of Pennsylvania or if he could expect that his work “would be crowned in a National Establishment of my Museum.” Peale seemed convinced that his institution was an important piece in a plan for a national institution. Perhaps he was party to conversations similar to the one (discussed here in an earlier chapter) that inspired Joel Barlow’s Prospectus for a National Institute. Jefferson’s reply dashed Peale’s hopes. Apparently, by this time, Jefferson decided that no hope existed for a national institution like the one that Peale had proposed. He assured Peale of the importance of the institution and indicated that he greatly valued Peale’s diligent work and considerable abilities. However, Jefferson asserted that their endeavor had little hope of obtaining enough support to purchase Peale’s collections for the country. Jefferson wrote that he wished that the museum could be used for the national interests however, he did not want to give Peale false hope that Jefferson could publically support the establishment of a national museum since “those who hold them to the enumeration, have always denied that Congress have any power to establish a National academy.” Jefferson continued, “if there were an union of opinion that Congress already possessed the right, I am persuaded the purchase of your museum would be the first object on which it would be exercised.”

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Jefferson added that he planned to develop a university in Virginia, and he would have “made your Museum an object of the establishment. However, the moment is not arrived for proposing this with a hope of success.” This last statement indicates the lack of acceptance of these collections as real knowledge which deserved addition into his planned university. This letter also exemplifies the political problems identified by historian Albert Castel in the debates over the national university. In the end, Jefferson encouraged Peale to continue his efforts and to focus on funding from the state.

Peale’s hope to have his museum become the national museum of the United States rested upon the belief that “all national museums in the world (as far as he is informed) were from beginnings of individuals.” The private collections collected by individuals became indispensable to the state and thus supported on a national scale. Peale viewed himself as the curator of the natural treasures of the republic. Eventually these treasures, once they became mature, were destined to shift hands from his to the “great Public of the American States.” His call for assistance rested on more than his interest in preserving his memory in posterity. Peale’s faith in progress rested on the practical kind of application knowledge gained from natural history. Specifically he


84 ibid
87 ibid
viewed his museum as a repository of useful knowledge for the republic to assure that citizens had the ability to harness the power and wonders of nature via the power of description and representative reproduction of the world in miniature. Although nominally successful, Peale’s frustration with the various levels of governments continued throughout his life, and he resolved in a letter to Jefferson written in 1815 that if support were not forthcoming “The Museum must be sold, for if it is not disposed off, before my death, a division of it will be its destruction.” He continued with a list of the many political problems about securing any public assistance including use of the State House because of local political squabbles. Despite his years of efforts to secure patronage, the museum remained a private institution.

Peale’s private institution remained successful by astonishing his patrons. Peale’s Collection often impressed his even in the earliest iteration of the museum at his house on Lombard Street. Manasseh Cutler, a Congregationalist clergyman from Ipswich


Massachusetts visited Peale’s Museum with his friend Matthew Clarkson on July 13, 1787. Cutler wrote in his journal of his astonishment with the near perfect replacement of Mr. Peale made of wax. Cutler raved that this method of preservation could create perfect representations that allowed people to “in some degree to disappoint ye ravages of time and prevent mortality itself.” Cutler’s positive impression continued as he proceeded through the museum viewing the portraits of the heroes of the Revolution and concluding with the specimens of natural history. Cutler found the “natural curiosities were arranged in a most romantic and amusing manner. There was a mound of earth considerably raised…covered with green turf…” with a variety of shells and animals situated all around an artificial pond. He continued that “although it is not in my power to give any account of ye numerous species of fossils and Animals—but only their general arrangement…” seemed so very realistic because of the conditions of their skins and the environment that Peale created for the visitor.91

More importantly, these strategies were popular. It is difficult to determine how many visitors attended Peale’s Museum. Peale sold two main kinds of tickets for entry into the facility. A single entry ticket cost 25¢, and Peale often was open during evening hours in order to offer opportunities for more visitors to attend. Peale also encouraged annual subscriptions that he sold for one dollar in 1788, rising to ten dollars by 1819. These annual sales offered the opportunity for citizens to publically align themselves with his important cause, in the words of one historian, the subscription

91 Manasseh Cutler; Excerpt from Journal entry in the Selected CWP, v.1 482-486
served as “a social expression of mutual validation not simply an economic exchange.”

Annual admission often came with enhanced incentives such as access to special events for example his moving pictures shows and special lectures. These events did help raise money, but they also gave Peale a solid list of supporters on whom he could call when he needed political muscle. All in all, the number of visitors remains difficult to ascertain; however, one scholar reports, “by 1816 Peale’s annual gross receipts of $11,924 indicated a paid attendance of nearly forty eight thousand people.” The museum appeared in many travellers’ guides and other publications. Peale’s museum was popular, served the elite, the middling classes and inspired many to model their own institutions after the Philadelphia Museum.

Others sought to establish museums in the early republic, and many attempted to emulate Peale’s example. The American Museum in New York established in 1795 is a well-known example; however, it languished until John Scudder took over in 1810. Scudder published a 103 page companion to his museum titled *A companion to the American Museum* that included the rules for access and descriptive information about the bulk of the collections. Each display case in the museum was numbered and *the companion* directed the user through the museum, taking them from one display case to another. Scudder used similar techniques and conducted lectures that focused on the

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accuracy of the display of the specimens.\textsuperscript{95} However, one distinction that emerged between Peale’s Museum and Scudder’s is that the latter was less interested in the educational mission of the institution. One historian called it a “museum for the masses.”\textsuperscript{96} This ideal followed the practice of Gardiner Baker, the previous owner, for whom Scudder worked before taking ownership. Baker, although similar to Peale in encouraging a distinction between his educational institution and an entertainment facility, believed that the people ought to be the final judge as to truth; thus he offered opportunities for provocative questions to be asked by the patrons of the museum as a means to lure them into the museum. Scudder also added the notion that museum curators were obliged to present collections that fit the popular taste. Many admired Scudder’s museum, and some leaders such as David Hosack met with Peale to encourage a combination of the two museums to form a national museum if Peale received no answer from the state about public funding.\textsuperscript{97} Scudder’s premature death in 1821 left the museum in the hands of a group of five trustees and eventually Scudder’s son. In a tenuous position, P.T. Barnum purchased the museum after two decades of mediocrity.\textsuperscript{98}

Some within his own American Philosophical Society began to challenge Peale’s scientific credentials. In one case, Peale submitted a report on July 18, 1806 to the APS titled “On the American Antelope.” The report included a written description and an accompanying drawing of the animal. Peale had not directly observe the animal since he

\textsuperscript{95} John Scudder, \textit{A Companion to the American Museum}... (New York: Printed by G.F. Hopkins, 1823).
\textsuperscript{96} Orosz, \textit{Curators and Culture}, 71.
\textsuperscript{97} Miller and Hart, \textit{Selected CWP}, v3 p 511-512
\textsuperscript{98} Orosz, \textit{Curators and Culture}, 71–80, 131–139.
had received it as a donation to his museum from Jefferson, who acquired the preserved remains of the animal from Meriwether Lewis’s expedition into Louisiana. After Peale presented the report to the APS membership, they adhered to the customary process and submitted the paper for review by a committee consisting of Benjamin Smith Barton and Zaccheus Collins. The committee quickly acknowledged the paper as worthy of publishing; however, less than a year later Peale asked to withdraw the paper officially in order to allow Lewis to publish a more complete account of the animal from his journal of the expedition.99 However, a letter to his supporter, Thomas Jefferson, hinted at a frustrating experience that Peale experiences while delivering his report. After presenting to the group, a member, likely Benjamin Smith Barton, asked Peale what was the name that he had given to the animal and he replied the Forked Horned Antelope. The member protested that “But sir that is not a scientific name. It is not a Latten Name but one more descriptive of the animal.”100 Peale’s letter demonstrated his consternation over the incident. Peale continued “As men pretending to a knowledge must be humored with the high sounding names made from dead languages I must humbly request of you my dear Sir to give me a name for this American Antilope, perhaps the Indian name if it could be had would be a proper one…” Interestingly enough there is no evidence of a

99 “Early Proceedings of the American Philosophical Society for the Promotion of Useful Knowledge, Compiled by One of the Secretaries, from the Manuscript Minutes of Its Meetings from 1744-1838 [1806],” Proceedings of the American Philosophical Society 22, no. 119 (1885): 386–388 Lewis never completed his project due to his tragic suicide in 1809 nevertheless Peale did not resubmit his article for publication nor do the minutes of the APS mention this animal again. There seem to be no mention of the creature until John D. Godman’s 1826 edition of American Natural History as the Prong-Horned Antelope.
100 CWP to Thomas Jefferson, July 4, 1806, Miller and Hart, Selected CWP, v.2 pt. 2, 974-975.
response from Jefferson. Peale’s proposed name did not become authoritative despite the fact that he was the first to present it to a scholarly society. Instead, in 1818 naturalist George Ord, one of the next generation of scholars that was an avid follower of Benjamin Smith Barton, named this animal the Pronghorn Antelope *Antilocapra Americana*. Despite Peale’s many accomplishments he seemed unable to win respect as a man of learning and a citizen scientist in the way that he had envisioned that duty.\(^{101}\)

Expanding knowledge was important for the success of the republic; however, many men of learning feared expanding the community of participants into their domain. They believed fragmentary knowledge of those who lacked proper preparation provided greater threats to the order than the benefits provided. These men were acceptable as artisans assisting with the labors of science, and bringing a paying audience of consumers to their didactic lectures; however these men of learning believed in limits. The learned grew worried that their empire of reason carefully constructed by fellow educated men remained under threat of chaos. The hazard came from a variety of merchant citizens, well-meaning novices who dabbled in science in order to attain wealth. Peale’s museum epitomized this threat. Masterfully exploiting natural history for financial gains, Peale’s endeavors remained centered on educating the citizenry as well as entertaining them. He

utilized visual displays to engage the audience and mixed science and the marketplace in a new kind of institution.\textsuperscript{102}

Ultimately both the literary institutions of the United States and the modern museums developed from the tradition of collecting knowledge. The next chapter will outline the development of specialized scientific institutions that chose to reject Peale’s “democratic” museum and instead focused on a return to closed institutional cabinets meant for serious researchers. Ironically, document collectors and their institutions, represented by historical societies and libraries, proliferated throughout the nation.\textsuperscript{103} Although these institutions did not establish a national means to disseminate knowledge, they were seen as institutions with gravitas and the model became for local communities to emulate. No single national institution directly evolved from these traditions, nevertheless institutions such as the American Antiquarian Society became defacto museums of documents and part of a network of national research libraries that developed to fulfill the needs for an educated citizenry. Ultimately operating the museum as a private business for several years, Peale’s sons closed the door on their business and sold the collections. Some of the items became part of P.T. Barnum’s American Museum, some became part of the Peabody-Essex Museum, while others entered the new


\textsuperscript{103} Haynes McMullen, \textit{American Libraries before 1876}, Beta Phi Mu Monograph Series, no. 6 (Westport, Conn: Greenwood Press, 2000); Henle, “Preserving the Past, Making History,” 290–301.
Smithsonian Institution. The debates over credibility had changed and focused on the transformation from the gentleman scientist to the professionally trained and educated scientist. The purveyor of details became the sign of an expert, and the storyteller became an entertainer. Science and art became split into distinct domains. One emphasized aesthetics and the affective domain while the other emphasized real knowledge. Real knowledge came from authority and the ignorant masses could not be trusted with that authority. This debate resurfaced in with the establishment of institutions in the federal city after receiving the Smithson bequest.

In the end, Jefferson’s dual reactions show a struggle with older ideas related to collection and dissemination of knowledge. In fact, his reputation as a friend of science encouraged collectors and entrepreneurs to contact him with their ideas to establish other museums. In 1804 as President of the United States, he engaged in a series of letters with G.C. Delacoste, a collector of natural history materials. Identifying himself as a man who lost property in Dutch Guyana because of the French Revolution Delacoste had established a cabinet of natural history in the city of New York and initiated a plea for assistance from the President.\(^{104}\) Despite having received backing of the leading men of the city, Delacoste resolved to dispense with the collection since the institution received “so little supported by the Citizens at large, that unable to keep it any longer by my own

\(^{104}\) Not much is known about Delacoste. He wrote three letters to President Jefferson between 1804-1807 and received responses. The second letter in 1805 he divulges that he was “Deprived, by the consequences of the revolution of france, of valuable property on the coast of Dutch Guyana, I am since several years used to privations, and reconciled to my situation.” -“To Thomas Jefferson from G. C. Delacoste, 27 May 1805,” Founders Online, National Archives (http://founders.archives.gov/documents/Jefferson/99-01-02-1790 [last update: 2015-09-29])
Jefferson’s initial reply, while sympathetic stated that he received a multitude of requests for all types of improvements that forced him to establish the general policy of rejecting them all on legal grounds. Not discouraged Delacoste, wrote a second letter on May 27, 1805 stating that he has been “Informed that your Excellency has the intention of forming a National Museum at the seat of Government,” and indicating that his collections were properly preserved and cataloged. He added a partial list of the collections and offered to sell it to the United States of America for $4,000. In an insistent reply, Jefferson assured Delacoste that he had “no authority…for the establishment of a Museum at this or any other place on account of the General government.” Even if money were available “it is probable that an amendment of the constitution” would need to be passed to use public money for that purpose. In the end, Jefferson believed public patronage for these institutions to be impossible since no specific enumerated power existed in the Constitution to found them nor would the institution be able to serve all the population.

Delacoste changed his approach with Jefferson in what appears to be his final letter to the President in 1807. This time Delacoste proposed to form a “Museum Natura at the college of William & Mary” in order to promote “the science of Natural

Jefferson’s polite reply reiterated his belief in the importance of this “useful science, and I view no science with more partiality than Natural history.” However, he worried that this effort would fail since the general population was unwilling to support these endeavors. Such failures, he feared, would “retard rather than promote this object.” He added that the many different attempts for museum enterprises had all failed except Peale’s museum in Philadelphia. The success “has been owing there to a measure of zeal & perseverance in an individual rarely equalled: to a population, crowded, wealthy, & more than usually addicted to the pursuit of knowledge.” Jefferson’s response also informed Delacoste that even Peale’s institution faced financial problems that forced the proprietor to return to his original profession of painting to help maintain the institution. Jefferson’s final letter demonstrates the problem of attempting to establish an institution that was filled with curiosities. The museum appeared to be for entertainment and few members of the public could use these collections for their scientific ends. Additionally, it became a challenge to determine whose judgment received more weight when confronted by alternative assessments of empirical fact. As a result, despite valuing scientific collections and experimentation Jefferson resolved first to create a university for the people. This traditional institution of knowledge was deemed

110 ibid
111 ibid
112 Lewis, A Democracy of Facts.
more reliable than the ne reframed museums that were pioneering experiments for disseminating knowledge in a democratic republic.
COLUMBIAN INSTITUTIONS: THE DIFFUSION OF KNOWLEDGE IN THE FEDERAL CITY.

In 1821, Congress passed, and President James Monroe authorized, the creation of the Columbian College. This institution, formed by Luther Rice, an active Baptist missionary and minister, later became the George Washington University. Some viewed this institution as the fulfillment of the years of fruitless debates about the establishment of a national institution in the federal city. Trustees and managers of the recently created Baptist General Convention heralded the college as an institution of “national benefit, as well as an object of general patronage.”¹ They intended that the college would serve the community and nation by offering a similar curriculum to that of other colleges across the nation. Their courses would provide an education in “English, learned, and foreign languages, the liberal arts, sciences, and literature” to the youth in the District of Columbia.² The newspaper the Boston Patriot evoked the memory of Washington, as well as other great men of the country, to fulfill their desire of “an institution for literary instruction...bringing together young men from various quarters of our wide and extended

country to meet…on neutral ground.”³ They hoped that this new institution would collect young men and remove them from the sources of their sectional prejudices, resulting in a “beneficial effect upon the stability of our union. It will be the source from which streams of mutual good will and brotherly love will flow through our happy land.”⁴

Despite the high hopes that many held for the Columbian College, many others remained unconvinced that this institution could fulfill the needs of the republic. A few years later in his first Annual Message to Congress, President John Quincy Adams reminded the nation of the responsibility to improve the condition of humanity through the expansion of science and learning. In the midst of Adams’s grand proposal to utilize the government for planning and marshaling the necessary resources to build institutions for internal improvements, he reminded listeners that George Washington’s plan for a national university remained unfulfilled. Adams declared that if Washington were to set eyes on “the city which has been honored with his name he would have seen the spot of earth which he had destined and bequeathed to the use and benefit of his country as the site for an university still bare and barren.”⁵ This analysis resonated with many of the leading learned citizens of the District of Columbia who preferred an institutional model that based on the newly established civic societies rather than on the educational

⁴ ibid
institutions formed by religious groups. Others hoped that the United States would create regional scientific and engineering education centers based on the model set forth by the Military Academy. Adams and others hoped for a proliferation of modern scientific institutions.  

Figure 5  Benjamin Latrobe’s Plan of the west end of the public appropriation in the city of Washington, called the Mall: as proposed to be arranged for the site of the university, 1816.  


“Plan of the West End of the Public Appropriation in the City of Washington, Called the Mall : As Proposed to Be Arranged for the Site of the University /,” map, accessed November 21, 2015, https://www.loc.gov/item/88690937/.
The most obvious opportunity to establish a new educational institution came from the establishment of a military academy in Washington. After the war of 1812, many called for an expansion of the military academy to include multiple campuses for an enlarged military academy system. The lack of enumerated authority from the Constitution stymied earlier attempts to establish a national university however; no such barrier existed for a military academy. Additionally, the curriculum installed at West Point provided the national standard for civil engineering and other core applied scientific knowledge. Historian Jennifer Green points out that the military academies that proliferated during the antebellum period, mostly in the south, all modeled their institution and curriculum after West Point. A centralized military institution in DC seemed to worry many and instead these institutions became the most important educational institutions for southerners of the emerging professional middle class.8

The antebellum period also saw a rapid increase in the number of colleges that seemed to expand westward with the population. Scholars demonstrate that by 1848 there were approximately 113 of these institutions up from 33 in 1815.9 These institutions sought to establish an ideal moral society. Washington D.C.’s Columbian College was

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one of these many new colleges formed during the early part of the nineteenth century to promote moral education. Most of these new establishments reflected the diverse burgeoning democratic movements of the period and some were closely associated with the evangelical movements of the second Great Awakening.\(^\text{10}\) Some scholars claim new colleges suffered because of their dogmatic bond to an outdated and irrelevant curriculum.\(^\text{11}\) Others see these colleges as closely tied to their local communities and supported by the local community.\(^\text{12}\) According to historian Albert Castel the establishment of the Columbian College can be seen as an imperfect compromise that resulted in the creation of “just another small college, and in no way constituted a true national university.”\(^\text{13}\) Although this may be partially true, this statement misunderstands the primary purpose of the Columbian College to prepare ministers and educators to do missionary work in the American west and in India.

Typically, scholars recognize that a significant change began around 1815 in scientific activity. These scholars make a significant distinction between the gentlemen scientists of the founding era and the professional scientists who made their living from teaching and producing scientific works. Much of this scholarship points to the expansion of proto-professional and specialized civic societies that became abundant in this era. The

growth of these institutions came from a growing demand for access to varied and specialized information based on the needs of a heterogenous populace. Historian John Greene observes that “by the second decade of the nineteenth century the leading scientific societies had largely ceased publishing essays on practical subjects, leaving these for societies promoting agriculture and the mechanical arts.”

Often this shift toward specialization of institutional knowledge, as evidenced by the proliferation of civic societies, provides examples for the progressive enhancement of the scientific capabilities of the United States. It also provides evidence of a democratic and civic spirit was a new idea that many Americans believed helped define their distinctiveness from other nations. The state had long controlled access to civil society and the legitimacy of the expansion of civil society remained a hotly contested notion throughout the early republic. Learned societies such as the American Philosophical Society (APS) and the American Academy of Arts and Sciences (AAAS) came to represent a way to maintain control over the creation and distribution of knowledge. This control assured veracity of information. However, the price of this authenticity was that these societies also became institutional barriers to diffusing knowledge. The larger the scope of the institution the more difficult it was to be nimble and respond to dynamic environments.

This development encouraged an increase in the number and types of civic societies and other institutions of knowledge. Historian Johann Neem declares that the “Federalists and Republicans were divided over whether public opinion should emerge

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from the top down or the bottom up, whether the state or ‘the people’ should be the primary agent in civil society.”15 Those concerned with a national university believed that the purpose of the creation of knowledge mattered most. The question of who benefited from the creation of knowledge was also significant. Many realized the need for an establishment of authority and order over the diffusion of knowledge; while others worried that the expansion of access to civil society might include charlatans and quacks.

Government served as a gatekeeper to civil society by being able to approve or deny articles of incorporation. The struggles over the needs for access to information led to conflicts between those who needed or wanted to utilize information in every day life and those who demanded institutional order. The expansion of engineering tasks and the expansion of needs for specialized studies, such as agricultural and geological surveys, new transportation modalities and new expeditions of exploration, as well as growing natural history expeditions required men with scientific expertise. Moreover, these same experts were now able to use their expertise to support themselves. The result of this is evident in the splintering of the universality of knowledge as seen in the expansion of new scholarly societies. The question was what type of institutions would provide the needed authority in the republic.16

The years of debate between leaders in the Washington, Adams, and Jefferson administrations had proved to be unproductive. Jefferson famously gave up on the issue

15 Neem, Creating a Nation of Joiners, 7.
of a national university and focused on establishing the University of Virginia as a model of a state supported educational institution segregated from religious interests. Jefferson preferred that the state form appropriate institutions of knowledge and was wary of the growing number of private societies which he worried would be dedicated to their own private interests. Historian Johann Neem argues: “Jefferson, like other Americans of his generation, believed that permitting the spread of voluntary associations and corporations would threaten civic equality by allowing a small minority, a cabal, to exercise disproportionate influence over public life.” These debates continued throughout the Madison and Monroe administrations.

Continuing discord among the nation’s representatives suggest that many people had incompatible ideas about the purpose of a national university. Some could not envision an educational institution that did not have a moral center that religiously affiliated institutions provided. They viewed traditional colleges as the primary way to deliver knowledge to the citizenry. Several people imagined scientific institutions free from religious ties dedicated to enhancing and diffusing scientific knowledge to the

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18 Neem, *Creating a Nation of Joiners*, 5.
citizenry. For example, John C. Calhoun believed that the national government should focus its attention on educating a diverse group of military officers to defend, improve, and explore the expansive republic. These ideals, and the government support of them, seem as the logical and proper extension of the principles of the Enlightenment. However, the establishment of widespread state-sponsored institutions failed to materialize, and this mission instead became fulfilled by evangelical Christians. Historian Daniel Walker Howe observed this connection and suggested that many citizens believed the proliferation of their colleges bolstered freedom for all thus charging them with the responsibility to diffuse the Word and the mission to spread moral liberty across the new nation.¹⁹

President James Madison made three appeals to Congress for the establishment of a national seminary of learning. Before becoming President, Madison had clearly supported the founding of a national university as he championed Washington’s call for the project. Reminding members of Congress of the need to establish “a university within this District on a scale and for objects worthy of the American nation,” he said, “induces me to renew my recommendation of it to the favorable consideration of Congress.”²⁰ Three separate appeals for Congressional action focused on their authority to establish institutions in the District of Columbia to support the local needs of the

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community there. Madison’s Second and Eighth Annual messages continued these calls. The gaps in time separating his call is likely due to the War of 1812. In his Seventh Annual Address, delivered in 1815, Madison specifically called on Congress to establish a “national seminary of learning within the District of Columbia.” He harkened back to Washington’s vision of a “central resort of youth and genius from every part of their country diffusing on their return examples of those national feelings…which contribute cement to our union.” Nonetheless, Madison also expressed some uneasiness with the existing powers of Congress to establish a national university.

Further complicating the issue is that in one of the very same addresses often used to demonstrate Madison’s softening of his support for a national educational institution, he called for the expansion of other types of centralized national institutions. Madison, like Jefferson before him, saw the need for the enhancement of the military academy and the specialized sciences taught there. In his Second Annual Message to Congress Madison called on Congress to address the poor educational conditions existing at the Military Academy. He also requested a revision of law to provide an increased support for the “cultivation and diffusion of the advantages of such Institutions, by providing professorships for all the necessary branches of military instruction; and by the establishment of an additional Academy.” This expansion of the number of academies

remained a significant goal because of Madison’s attraction to scientific education, and his belief in the importance of establishing secular institutions for knowledge.24

Many of those supporting a scientifically trained military officer corps, called for a professional institution that encouraged the specialized learning needed for military work. Jonathan Williams, Superintendent of West Point and founder of the Military Philosophical Society, wrote to Madison that “Every professional man is convinced of the absolute necessity of a systematic education in his own profession, & feels, if not contempt, at least a want of confidence in those who enter into it without having passed through all the grades of previous Instruction.”25 The determination to gain competent professional men came from the demand for new military officers to help systematically map the American wilderness. National expansion required scientific exploration of the new territory acquired during the early years of the republic. These trips of exploration became increasingly complex in both their design and object. Between 1803 and 1835, no fewer than eighteen major scientific exploration trips took place into the American frontier. Madison’s call for the expansion of the Military Academy became even more

http://rotunda.upress.virginia.edu/founders/JSMN-03-03-02-0059 [accessed 09 Aug 2014] Superintendent of West Point Jonathan Williams requested that the Military Academy be moved to the capital city in a report to Thomas Jefferson and in letters to James Madison leading Madison to ask Congress to deal with the issue.  
24 Letter from James Madison to Edward Everett, March 19, 1823, Madison, *The Writings of James Madison: Comprising His Public Papers and His Private Correspondence*... , 1900, 9:125-134.  
important after the War of 1812, in which the American barely won, yet ultimately secured continental predominance for the United States.\textsuperscript{26}

The mixed results of the war reminded those in government, just like the leaders after the American Revolution, that national security rested on the expertise of the military leadership that the Republic could muster when needed. John C. Calhoun spearheaded the efforts to expand the Military Academy’s reach as an educational institution for the citizenry when he joined James Monroe’s administration as Secretary of War. Before joining the executive branch, Calhoun served in the House of Representatives, led the War Hawk faction, and remained an ardent nationalist. He supported several internal improvements including increasing the number of military academies. These proposals coincided with what most scholars view as Congress’s last significant attempt to establish a national university in the early republic.\textsuperscript{27}

Calhoun and several supporters in Congress hoped to create as many as three additional military academies. Calhoun worried that if there were only “one great central school it would principally be filled with the sons of wealthy men: of great and influential men” because of the inability of poor and middling families to afford to send their boys away to the academy.\textsuperscript{28} Calhoun asked Congress “where in this country shall we look for genius,” and answered, “most indubitably in the middling ranks, in the lower ranks,”

\textsuperscript{26}“William Stanton Guide to American Scientific Exploration”; Taylor, \textit{The Civil War of 1812}, 437–438. (edit citation this is an introduction to a specialized bibliography)
\textsuperscript{28}Calhoun, South Caroliniana Society, and South Carolina, \textit{The Papers of John C. Calhoun}, vol. 1. 287.
since those young men will be stimulated to make themselves successful. Calhoun also reminded Congress that many of the best officers in the latest war came from these ranks rather than from the elite. Additionally Calhoun believed that by spreading out the military academies, the nation could build effective internal improvements. The graduates from the academies would be new engineers who would protect the nation and encourage economic expansion. Ultimately Calhoun’s academies would promote a spirit of nationalism and bind the nation together.

Some in Congress disagreed with the idea of establishing three academies. Georgia Representative Richard Henry Wilde suggested the republic needed only one central institution located in Washington D.C. It is unclear whether Wilde supported a large centralized multidisciplinary institution, such as the one proposed earlier by Joel Barlow and Pierre Samuel du Pont de Nemours but he later supported the establishment of a national university. As for the military academy, Wilde and others may have feared that multiple institutions would intensify sectional feelings in the new republic. The Annals of Congress reports that Wilde did not want to “diminish the number of cadets, but to give to the institution of the Military Academies, as far as possible, a national character, which, he thought, would be assisted by depriving them of local or sectional features.”

Other differences emerged over the curriculum and purpose of the military academy. Some worried that a centralized national system offered a model that could

29 Ibid., 287.
31 *Annals of Congress*, 14th Cong., 1nd sess., 421. (see 420-436)
produce a new type of aristocratic men. This contested idea of the proper type of knowledge for an officer became the central issue in the court martial of Captain Alden Partridge. Partridge refused to give up command to his replacement Major Sylvanus Thayer, who sought to reform the curriculum at the Military Academy. Jonathan Williams’s early attempts to infuse science into the curriculum of the early military academy, his efforts had limited success. After his resignation, the institution stagnated. As a result, Calhoun and other leaders sent Thayer on a tour of the leading military schools in Europe. After observing the pedagogy and noting the curriculum in France, England, Germany, and Holland Thayer intended to make West Point the premier institution of learning for science in the nation and finally fulfill the initial aspirations for the institution of Thomas Jefferson and Jonathan Williams. Partridge resisted the change in command and the change in curriculum that Thayer instituted resulting in his court martial.

In 1817, President James Monroe gave Partridge a choice to resign his commission or suffer the public denigration used by the military known as cashiering when the court martial found him guilty of neglect of duty and insubordination. Following this, Partridge’s supporters rallied, and ironically, he led the move to establish at least ten private military institutions of learning across the nation like his own American Literary, Scientific and Military Academy at Norwich, Vermont and Virginia Military Institute, the Citadel as well as academies in Pennsylvania, New Hampshire, and
Delaware. Partridge published several different books that outlined the moral defects of most collegiate institutions and the need for strict order and self-discipline instead of a standard curriculum based on liberal studies. After four years he stated that they are not prepared to promote “the great and important branches of national industry, and sources of national wealth—Agriculture, Commerce, and Manufactures.” Partridge continued his assault on the Thayer and the new Academy that focused on engineering in his book titled *The Military Academy at West Point unmasked, or, Corruption and military despotism exposed* published in 1830. Partridge addressed the 28-page book to Congress and the President of the United States, although there is no record him submitting it as a memorial. The book outlines what he deemed as corrupt and treasonous behaviors as well as wrongheaded curricular decisions by Thayer and the other professors at West Point such as Captain David Douglass, professor of Engineering. His arguments and curriculum seemed to resonate with many. According to one historian, the expansion of military education had a profound impact on the south since it became the favored educational institution established in that region. Southerners especially approved of the pragmatic curriculum over that taught in northern colleges and even provided state

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33 Alden Partridge, *Capt. Partridge’s Lecture on Education.* ([Middletown, Conn.], 1828). 2

financed scholarships for students to attend these private institutions. This prompted one historian to observe that “The arrangement offered the best public funding for southern higher schools at a time when no southern state maintained a functional public school system.”

Alternatively, Wilde led a select committee studying the feasibility of creating a national university instead of focusing on the military academy. Wilde himself was a man of letters and served as the attorney general for the state of Georgia from 1811 to 1813. He also practiced before the U.S. Supreme Court in 1817. Wilde’s expertise also extended to classical Italian studies, and he became renowned as an American Romantic poet. His poem "The Lament of the Captive," written in 1819 described his brother’s travels through Florida with natural history scientist William Bartram and is known for the theme of alienation and separation from civilization; nature appeared the opposite of civilization. This notion of order came from the establishment of literary institutions and in particular an emphasis on classical education.

In 1817, the year after the military academies debate, Wilde began an attempt to realize the goal for a national university. Wilde’s relentless commitment to establishing a national university led to several attempts to bring his bill to a vote by the whole House. After these efforts failed, he clearly became frustrated when the House refused to

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35Jennifer R. Green, *Military Education and the Emerging Middle Class in the Old South*, (Cambridge ; New York: Cambridge University Press, 2008), 40. Also see 1-58 for the advantages and objectives of how many saw this as a pragmatic form of education especially in connection to westward expansion and taking a hands on approach to business.
consider the bill for the final time in March 1817. The final attempt followed the failure to overturn Madison’s veto of the Bonus Bill. Wilde asked the House to let the idea of the university “rest in peace. Let no one disturb its ashes…” Disillusioned with legislative action, Wilde hoped that those “mediating among the tombs of National Education and Internal Improvements…would listen less seriously to those noble and captivating projects…” and to “learn to distinguish those things which were intended for Congress, from those…which were intended only for the people.” In the end, this disappointment was one of many that led Wilde to become an expatriate studying and writing in Italy.36

Despite the failed efforts to establish a publically supported national institution of learning, the federal government did begin to experiment with different ways to develop and deliver the needed institutional support for scientific learning. Early exploratory missions relied on scientific learned societies to supply for experts to participate in the expeditions such as the William Dunbar and George Hunter expeditions, the Lewis and Clark expeditions in 1804, and the Stephen Long expedition to the Rocky Mountains in 1819. In some cases, learned societies provided training for the explorer scientists while in others they provided the needed experts who conducted the mission. The earliest learned societies held privileged positions of authority when it came to what constituted useful and appropriate knowledge. The American Philosophical Society, based in Philadelphia, the early capital of scientific learning of the United States, benefitted from exclusive access to collections acquired in many of the federally sponsored scientific

expeditions. As such, members had advantages in their scholarly avocations and produced papers for publication in their journal. Still, over time specialized groups of like-minded men came to challenge the authority and preeminence of the large national learned societies.37

Scientists thrilled in their ability to form and join new civic societies. These societies remained especially reliant on the resources and advantages provided from patronage. This patronage came either in the form of attracting well-known men of learning to belong to their convocation, or through the financial wherewithal of affluent supporters. Once secured, a learned society could grow. As historian Simon Baatz demonstrated for the Academy of Natural Sciences, the society seemed destined for a pedestrian existence until social experimenter and scientist philanthropist William Maclure gained interest in the fledgling society. Maclure brought respectability and money to the institution allowing the radical group to begin to publish a journal, the

*Journal of the Academy of Natural Sciences.* Shortly after his election to the presidency

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of the ANS in 1817, Maclure sponsored a privately funded effort to collect specimens in Florida. Maclure secured young scholars interested in specializing in aspects of natural history from the ranks of the APS to participate in the expedition and publish their findings in the Society’s journal. This made their organization both a leading producer and distributor of the latest scientific information. The expedition included notable scientists such as Thomas Say, George Ord and Titian Peale.\(^{38}\) The expedition produced valuable additions and publicity about the ability of these members to conduct field research, however; the expedition ended before its scheduled completion because of hostilities with Seminole and Creek Indians. This experience seemed to provide more evidence for the need for military support and expertise for these expeditions.

Beginning in the Jefferson administration, these expeditions offered an opportunity to enhance the scientific knowledge of Americans in order to transform the trans Mississippi region from an unknown region to a known entity in the heart of the American republic. The Florida expedition was unusual due to its lack of military men. Typically, these expeditions included military officers for protection, as well as to provide leadership and exercise an official governmental role in identifying strategic sites to support the development and expansion of the American republic. This practice became a key responsibility for West Point’s engineers. The scientifically trained officers

with topographic mapping expertise were crucial members of scientific parties sent to identify and categorize the abundance of natural resources in the West. The military engineers initially handled the topographic duties and provided a military escort and the needed management for the expeditions. Over time, this role expanded to include civil engineering tasks and support for the burgeoning transportation networks established across the nation to shrink the tyranny of distance.³⁹

The expanding popularity and interest in science among a growing number of educated people resulted in a wide need for specialized knowledge. That no other institutions trained men in these skills suggests that the state sought to maintain control over certain types of knowledge and ultimately the people wielding that authority. Over time, the engineers and graduates of the Military Academy served on multiple expeditions often without needing outside expertise to conduct their missions. Typically, these men held the best training and expertise needed to implement expansion, and they exerted control over the west and the practical science of establishing coastal defenses. With the decline of the United States Military Philosophical Society, discussed in chapter 2, the reliance on local learned societies became more important for the engineers and other scientifically trained men.⁴⁰

⁴⁰McDonald and McDonald, “West from West Point: Thomas Jefferson’s Military Academy and the ‘Empire of Liberty’”; Hill, Roads, Rails & Waterways; the Army Engineers and Early Transportation; Neem, Creating a Nation of Joiners.
Other cities also supported learned institutions that included scientists. In Washington D.C. the Columbian Institute for the Promotion of the Arts and Sciences had well respected individuals among their membership. The Columbian Institute modeled itself after traditional learned societies such as the American Philosophical Society. The founders of this group wished to build a traditional institution that focused on all aspects of sciences and hoped that it would serve as a national institution. Their founding document defined the “object of the Institute shall be to collect, cultivate, and distribute the various vegetable productions and natural curiosities of the United States and give publicity to every discovery.”

41 The proposal of these leaders in the capital city expressed a desire for the President of the United States to serve as the patron of the Institute and thus connect their work to the public good. Their aims of promoting commercial and national improvement and disseminating knowledge for the betterment of society remained at the heart of this institute’s purpose.

The selection of the name “Columbian Institute for the Promotion of the Arts and Sciences” signifies the importance of their purpose. The name “Columbian” became extremely common after the Revolution as Americans began to emphasize a new identity that tied as a new race of Americans. 42 The first known use of the term “Institute” to

describe a society of learning was in 1795 by the French for the Institut National des Sciences et des Arts. The purpose of using this name rested in the completeness of this center of knowledge and the interdependence of arts and science with the nation. The British later adopted the term to describe institutions of similar design such as the Royal Institution of Great Britain in 1799, the Royal Institute of British Architects founded in 1834 and the Royal Archæological Institute founded in 1843. The founders of the Royal Institution of Great Britain sought to use their institution as a way to promote knowledge of sciences and new inventions to a broad number of people. The institution provided rooms for lectures and other experimental lectures as well as a publication to promote “useful discoveries; not only to those which might be made by the Institution and in this country, but in every part of the world. …the benefits of the Institution would by no means be confined to the metropolis, but…to the remotest corner of the British dominions.” 43 Many leaders in the Federal City saw this institution as a cornerstone to progress as they tried to emulate European models. 44

The Columbian Institute specifically wanted to establish a national botanical garden for the enhancement of the space outside the national capitol. Private gardens offered spaces of escape and scientific materials for the wealthiest members of society.


Early America sported several large private gardens such as the Woodlands, in Philadelphia, where “there was not a rare plant in Europe, Asia, Africa, from China and from the islands in the South Seas which William Hamilton had not procured.”\textsuperscript{45} Several leading individuals formed agricultural societies throughout the nation; public gardens however were almost non-existent. Washington and Jefferson planned for a space in the federal city for a botanical garden in the 1790s, and some scholars have suggested that it was crucial for the agrarian utopia that they hoped to create. A national garden offered “social and moral benefits …conferred… where one would be taught the principle of botany and landscape art.”\textsuperscript{46} Public gardens linked together the ideas of scientific, agricultural and ornamental interests. Charles Willson Peale’s museum, situated on public land, had a public garden, yet it was very limited in size. A long-standing promise made many believe that the Bartram gardens in Philadelphia would become a legacy for the people, but these benefits and promises did not yield public gardens.\textsuperscript{47}

Shortly after the leaders declared the aspirations of the Columbian Institute, a letter to the editors of the \textit{Daily National Intelligencer} applauded the plan. The author, like many others across the country, welcomed the new association because it would not “be local” and it would “extend to all classes of citizens…” promoting the “…discoveries

\textsuperscript{45} Therese O’Malley, “’Your Garden Must Be a Museum to You’: Early American Botanic Gardens,” \textit{Huntington Library Quarterly} 59, no. 2/3 (March 1996): 208.

\textsuperscript{46} Ibid., 213.

of the learned...for public utility.”

Many viewed this as an organization for the nation. The Otsego Herald reported that the institute was “a national society on the plan of the Institute of France and the Royal Society of Great Britain.” These reports and hopes were probably recalled Barlow’s proposed National Institute as evidenced by a call for all citizens and their representatives to cooperate and support this institution in order to fulfill Washington’s objective. Concluding that America’s youth “at some future day will resort to finish their education in different branches of science at the NATIONAL SEMINARY, to which, a Botanical Garden and Mineralogical Cabinet will be an important appendage.” The expectations for the institution focused on national aims and improvement of conditions for all Americans.

Shortly after founding the society, the membership of the Columbian Institute elected Edward Cutbush, a leading naval surgeon, as President. Cutbush, a graduate of the University of Pennsylvania in 1772 had served in the navy until 1820. After resigning from the navy, he became professor of chemistry and medicine at Geneva College in New York until his death in 1843. Cutbush’s scientific interests included appropriate practices to promote the health of soldiers and sailors. His book *Observations on the means of preserving the health of soldiers and sailors and on the duties of the Medical department of the army and navy, with remarks on hospitals and their internal arrangement* served as the standard text for American military doctors for years. In it, he laments the lack of knowledge of natural history, especially in botany and mineralogy.

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50 C, “For the National Intelligencer,” 3.

Cutbush used his initial address to the Institute to outline the objects of the group and encouraged the group to build the scientific infrastructure needed in order to promote increasing numbers of men of learning. His twenty-six page address asserted that the expansion of knowledge of the natural history of the American continent was crucial to new riches and medicinal cures for ailments and “every individual in our Republic should be animated with a patriotic zeal.”\footnote[52]{Edward Cutbush and Columbian Institute, \textit{An Address, Delivered before the Columbian Institute, for the Promotion of Arts and Sciences, at the City of Washington, on the 11th January, 1817.}, Variation: Early American Imprints.; Second Series ;; No. 40604. (Washington [D.C.]: : Printed by Gales and Seaton., 1817), 13.} As such, Cutbush viewed part of the Institute’s mission as one that to help prepare industrious middling citizens. He also hoped that by demonstrating the importance of a botanical garden to the nation’s representatives, the nation would support science throughout its state. On every page Cutbush reiterated the importance of securing access to the materials within a garden, museum, and a library to the expansion and dissemination of knowledge. He made eight separate references to the...
establishment of a garden, four to the establishment of a mineralogical cabinet, three for a museum, and finally he mentioned the need for a well selected library twice.\textsuperscript{53}

Because the importance that Cutbush lent to the establishment of a botanical garden, it is not surprising that the institute had significant success with this project. Members of the Institute lobbied Congress and the President for several years. They were successful in securing five acres of land for a botanical garden in 1820. The group quickly went to work, erecting a wooden fence and planting honey locust trees that would eventually serve as a natural fence to protect the specimens in the garden. They encountered several problems securing the funding to properly prepare the garden and maintain the land. Surviving records only sparsely document when and what was planted in the garden; however a significant list of plants arranged in Linnaean order is published in William Elliot’s \textit{Washington Guide}. After the Columbian Institute’s charter expired in 1841, the society merged with the Historical Society of Washington. Both became a core part of the National Institute for the Promotion of Science, which became pivotal in the discussion over the Smithson bequest. The Botanical Garden reverted to the Federal government and became the model for the present botanical gardens.\textsuperscript{54}

\textsuperscript{53} Cutbush and Columbian Institute, \textit{An Address, Delivered before the Columbian Institute, for the Promotion of Arts and Sciences, at the City of Washington, on the 11th January, 1817.}

Members of the Columbian Institute also focused on other issues. Many seemed particularly interested in establishing national standards for scientific tools related to cartography, weights and measures and with currency. For example, William Lambert, a clerk who worked in the Pension Office, insisted on establishing prime meridian in Washington in order to free American mapmakers from dependence on using Greenwich England as the centralized site of longitude. Those who focused on these efforts believed in the importance of establishing a national observatory as a new national institution located in the federal city in order to establish the American prime meridian. Lambert called upon Congress as early as December 1809. A select committee reviewed the memorial and in 1810 called for action after performing research that showed that the lack of international standards. After examining maps and charts printed in the United States, the committee found “publishers have assumed different places in the United States, as its meridians. This creates confusion, and renders it difficult, without considerable calculation, to ascertain the relative situation of places in this country.”

Like the secular societies of the time, many religious organizations considered creating institutions to promote their interests and fulfill their needs. The Baptist organizations found that they had problems with producing educated men for their evangelical missions because the diffused nature of their churches. Several men worked

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55 American State Papers 038, Misc.277 William Lambert, *Establishment of a first meridian for the United States*. March 28, 1810; Lambert and others did painstaking calculations and surveys that established the longitude of the original District of Columbia using the milestone marker, set down on April 15, 1791 at Jones Point, Virginia by Major Andrew Ellicott. In 1819, John Porter erected a mansion on the grounds and called it "Meridian Hill" John Quincy Adams moved here when he left the White House in 1829. During this time the entire high ground of the present day national park was known as "Meridian Hill."
together to establish national institutions to rectify this deficiency. Luther Rice, the founder of the Columbian College, was a Baptist minister who had converted from the Congregationalist faith while on a mission in India. Rice became an advocate and leader in the move to establish a national Baptist Convention as a means to centralize the evangelical missionary efforts of the Baptist denomination in the United States.

The Triennial Convention in 1814 resulted from these efforts. Having experience with the system designed by the American Board of Commissioners for Foreign Missions and using the style of revival meetings, Luther Rice energetically spoke in several states before calling Baptists in 1814 to Philadelphia to form the General Missionary Convention of the Baptist Denomination in the United States of America for Foreign Missions. Usually dubbed the Triennial Convention because of the practice of meeting every three years, the new denomination formed a board of volunteers, the Baptist Board of Foreign Missions, to handle the business between conventions. Rice became the official agent of the group and assumed responsibility for raising funds for projects. In 1818 he became the founding editor of the *Latter Day Luminary* and a few years later he established the *Columbian Star*. Both publications focused on delivering news on the state and progress of missions and published missionary news and reports of the Board. These publications became a significant part of the subsidiary group of the Board known as the Baptist General Tract Society, a precursor of the American Baptist Publication Society and were instrumental in promoting the need to expand the use of publications.
for the spread of knowledge, but a different sort of knowledge than other intellectual organizations.56

The core component of their plan included establishing an educational institution. The problem was articulated in the 2nd triennial meeting of this group held in Philadelphia in 1817. A sermon delivered by Boston minister Thomas Baldwin pronounced the need and urgency of the problem that faced the United States. The population of the United States had swelled and some claimed that the nation was “more deplorably destitute of religious instruction than any other Christian nation under heaven...[and] there is a great want of evangelical ministers in various parts of the country, especially upon the frontiers.”57 The call went out for ministers to serve the American citizens of the frontier west and the “many thousands of Aborigines...[that] after living in the neighborhood of Christians for nearly two centuries are still pagans!”58 Two leaders of their established missionary program wrote a letter, submitted into the proceedings, that pronounced the need for “the introduction of religion into the very heart of the empire where Satan’s seat


58 Ibid., 8.
is.” The organization’s President Richard Furman, a South Carolinian Baptist minister, delivered his second presidential address in 1817 and presented a scheme for a seminary of learning. Furman presented two new students to the convention who had “been engaged in preparatory studies under the direction of the Baptist Education Society in Philadelphia” as evidence of the sincerity of the leadership in preparing to tie its own fledgling efforts with the international movement to convert the heathen.

The Baptists passed an amendment to the constitution of the group in the 1817 meeting that directed that once they had secured enough money the “Board shall proceed to institute a Classical and Theological Seminary, for the purpose of aiding pious young men who,…possess gifts and graces suitable to the gospel ministry.” This appeal and the work of the convention resulted in the founding of five colleges and seminaries within eight years of this call. The results of this convention provided the commissioners with the ability to develop the financial support for the Columbian College.

The Columbian College’s founders planned to fulfill their needs with an institution that would produce men whose dedication to education. With the evangelical

60 Ibid., 126.
61 Ibid., 131–132.
energy of the early nineteenth century harnessed, these men could be dispatched on the mission to plant Christian outposts in the ever expanding nation and in the world.

Although the college’s supporters evoked George Washington’s memory and support for the establishment of an educational institution in the District of Columbia, they differed from Washington’s goal to forge morally virtuous citizens who would be leaders in government. Further, the sectarian founders of the college were not interested in establishing institutions devoted to the diffusion of centralized scientific knowledge. Instead, the founders of the Columbian College intended to instruct men to spread the Gospel to the world through the creation of a centralized institution. The notion and plan for the college developed from the revival movements that proliferated throughout the nation’s colleges in the early nineteenth century. This evangelical institution therefore, traces its intellectual origins to the Haystack Meeting at Williams College rather than the secular institutions envisioned by Washington and Jefferson.  

The establishment of the Columbian College evoked some debate in Congress and among the Baptists throughout the nation. Many worried that the institution would not have the financial wherewithal to survive in Washington; some wanted to be clear that this would not be a national college or university. Representative Henry Storrs, objected that the proposal “originated with a religious society and that clause of it which proposes to give this corporation a general capacity to hold lands from which might be inferred a

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capacity to hold them in any State of the Union.”\textsuperscript{64} The Annals of Congress reports that this objection set into motion a debate that lasted the rest of the day and the scope of the arguments traversed many topics ranging from Congressional powers to the Missouri Compromise. Ultimately the law passed. Upon Congressional insistence the law included provisions that “persons of every religious denomination shall be capable of being elected trustees” and that the College shall not bar “any person, either as president, professor, tutor, or pupil, be refused admittance into said college, or denied any of the privileges, immunities, or advantages, ... on account of his sentiments in matters of religion.”\textsuperscript{65} Nevertheless, despite the presentation of a nonsectarian image, the College served as one of the main methods for the Baptist missionaries to spread a democratic version of Christianity to the country and the world.

Despite the objections and the withdrawal of many Baptists from the missionary movements, many Baptist leaders continued to emulate secular educational institutions as a means to focus their resources and to develop ties with the national government. The purpose of their college was to create educated men to work in missions especially with Native Americans. They often served with government officials and received government support, and their institutional model seemed to rely on federal funding. Rev. Lee Compere set off in 1822 to establish a mission Withington Station to the Creek Indians on the borders of Georgia and Alabama. In 1823, Rice’s \textit{Latter Day Luminary} reported that the United Associations in Georgia voted to support the mission with $3,000 and that

\textsuperscript{64} Annals of Congress, House of Representatives, 16th Congress, 2nd Session, January 31, 1821, 997
“this and our other stations will derive considerable assistance from the government of the United States.” By 1825 the General Board submitted a letter and report to Secretary of War James Barbour regarding the progress at Withington Station. The letter included standardized data needed by the War Department to justify the expenditures by the Federal Government for the moral education of Indian souls. Despite these steps, the leaders seemed to have very difficult time securing the financial support and thus the direct relationship that they sought.

Notwithstanding the tireless efforts of Luther Rice and many others, the College endured significant financial troubles, which threatened to close it. The financial situation became so dire that salaries for faculty typically remained unpaid or delayed because of the excessive debt accrued from purchasing property and constructing buildings for the college. Reports of the amount of this debt varied between $30,000 and $85,000. The members of the General Board investigated Luther Rice and although his accounting practices were suspect, his fellow board members exonerated him from wrongdoing. The biggest problem is that the college never secured enough funds to carry out its mission. The Trustees repeatedly asked for more financial assistance from donors as well as requested that the House of Representatives make a loan of $50,000 in February of 1824. These calls for support went unheeded and resulted in the crisis that continued until 1828


67 Letter from J.A. Ronaldson to James Barbour 11/6/1824, Luther Rice papers, University Archives, Special Collections Research Center, The George Washington University.
when Congress forgave $30,000 of debt spent the various landholdings of the college in the District.68

The leadership of the college dealt with objections to their leadership from many different sources. Anne Royall the famous travel writer wrote that the “college exists only in name, and with the exception of two New-England professors, may be said to be destitute of instructors.”69 Royall demonstrated significant contempt for the College’s President William Staughton and declared that the president is “no more than an old woman.”70 Upon the inevitable demise of the college, she predicted that he “must now go to preaching, and ogling the women, with whom, I am told, he is a great favorite. Shame on my sex…I have been told, he is a great orator, and attracts a great many females. So do all priests.”71 Still others had objections that extended beyond those of Royall’s readers.

The opponents of centralized missions among the Baptists were widespread and caused tensions and threatened a schism in the early period of the antebellum era. Some groups, like the Hephzibah Association of south Georgia refused to interact with the Triennial Convention. Historians Thomas Kidd and Barry Hankins reported that “When the mission spirit waxed hot,” one critic recalled, “the anti-mission began to wax warm

68 Kayser, Bricks without Straw; the Evolution of George Washington University, 56-79.
70 Ibid
71 Ibid.
also.” These schisms also inflamed religious reformers like Alexander Campbell, a founder of the Disciples of Christ. Campbell emphasized the financial woes of the institution as proof positive of the corrupting influence of centralizing authority in churches. He and others issued several articles in publications such as The Christian Baptist and Christian Watchman that voiced their objections to different methods used to finance moral initiatives. Typically they insisted that the payment of the salaries of the lottery commissioners and overhead needed were so significant that if only the “government could have justly taxed the community…an unjust burden would be avoided by the poor and middling classes, who are generally gulled and defrauded by lotteries.” These articles generally worried about the crime and immorality associated with these gambling practices. Campbell continued his campaign against these centralized institutions writing derisively of the foolishness of new Baptists to adopted secular practices like those being established to fund bridges and roads. Campbell declared

The Columbian College needs a lottery, or a religious fast or the presence of some great spirit to help it to stand. Religion is made to help the masons and bricklayers, as much as the students of algebra; and all more than the students of the Bible, in the erection and support of such establishments as that of the Columbian College.

73 “Immorality of Lotteries,” Christian Watchman (1819-1848), June 23, 1821, 111.
Many religious reformers from different sects and faiths objected to the inappropriate use of secular strategies that deviated from the teachings of the New Testament.

The centralization of authority that led to the Baptist establishment of the Columbian College caused many Baptists, especially in the South and West, to join the anti-missionary movement. Opposition focused on the establishment of institutions such as Sunday schools, missionary societies and theological seminaries as teaching a scriptural justification. Spearheading the group was Alexander Campbell whose publications often attacked those developing associations. He wrote, “money was the bond of union of that association, and that it was an unlawful amalgamation of the world and the church.” These relationships seemed to lead to the transfer of money from congregations in the west to the eastern establishments. The critics also resented salaried and professionally trained preachers. They believed the Columbian leaders and their “hireling priests” from their “priest factories” were threats to Baptist democracy.

In 1817, the same year that the 2nd Triennial Conference called for the establishment of the a national Baptist educational institution, the leaders of a new medial professional association began to gather in the District of Columbia to establish a local medical society in order to exert control over the licensing of practicing physicians. Congress issued a charter and President James Madison approved the establishment with of the Medical Society of the District of Columbia (MSDC) in February of 1819. The Annals of Congress recorded the initial charter as submitted in March 1818; thus,

congress took nearly a year to approve. The sparse number of remaining records did not reveal any significant debate, nor were there major revisions to the legislation. Some opposition to the initiative seems to have existed as shown in the final recorded vote of 58-48. As such, most likely the opposition came from a concern either with the legislation or with the establishment of institutions themselves.\textsuperscript{77}

The MSDC was the first medical society chartered by Congress; it however was part of a national trend in the first third of the nineteenth century.\textsuperscript{78} Several of the members also belonged to the Columbian Institute. Generally, the medical societies of the era resembled the new specialized learned societies then developing as both allowed opportunities for experts and specialized practitioners to share and distribute information to other experts. Perhaps most significantly, however, the medical societies held important and exceptional powers to regulate the practice of medicine within their particular jurisdictions. In the District of Columbia, for example, they granted licenses to practice medicine, established the standards for membership, collected fees for memberships that in turn allowed the institution to administer the licensure and other administrative needs of the medical community. The only limits placed on the MSDC prohibited regulating the price of medical or surgical services and establishing medical regulations for any states or territories outside of the District. As such, a burgeoning

\textsuperscript{78} Nathan Smith Davis, History of Medical Education and Institutions in the United States : From the First Settlement of the British Colonies to the Year 1850 (Chicago [Ill.]: S.C. Griggs & Co., 1851),

201
professional class and the government developed a means of regulating the practice of medical arts through the establishment of this local specialized society.\footnote{79} The immediate priority for most medical societies turned to the establishment of new medical colleges that provided systematic education based on a core curriculum instead of relying on the existing apprentice model used to train physicians. The increasing number of medical colleges correlates to the increasing number of learned societies. Many in the MSDC seemed to believe that their role was to establish the curriculum as well as the standards for qualifications within the city. The members however, appeared divided over the means to accomplish this goal. In February 1826, in the midst of the financial crisis of the Columbian College an obvious division occurred in the MSDC. Some members sought to establish their own medical college, while others wanted to remain associated with the Columbian College. The reason for this division is unclear. Scholars have demonstrated that the Columbian College had long sought to create a Medical Department in order to promote the expansion of their college into a proper university. The college moved deliberately until a rival group challenged them. Leaders of the rival group included William Thornton, one of the three original D.C. Commissioners in the early years of the District, and steadfast champion of Washington’s proposal for a national university, and Dr. Henry Huntt, a founding member of the MSDC.\footnote{80}

\footnote{79} Act to Incorporate the Medical Society if the District of Columbia, February 16, 1819, Chapter XXVI, Stat. Vol. VI, 221-223
\footnote{80} Nathan Smith Davis, History of Medical Education and Institutions in the United States: From the First Settlement of the British Colonies to the Year 1850 (Chicago [Ill.]: S.C. Griggs & Co., 1851); Elmer Louis Kayser, A Medical Center; the Institutional
Thornton and Huntt’s faction, who consisted of members of both the MSDC and the Columbian Institute, sent a memorial to Congress. They articulated their aim in the first sentence that stated the need for “well regulated Medical Colleges and […] the time has arrived [for] an such an institution…in the city of Washington.” These men sought to institute their own Medical College in the capital city. In their view, the Columbian College held no power to establish a medical college despite claims that rested on the vague language of the original charter. Instead, members of the MSDC believed that a medical college should be the responsibility of the men charged to complete these duties by Congress, namely the MSDC. Moreover, even if the college was empowered to confer medical degrees they saw no reason for the need for a monopoly of education in the District. The faculty of the Columbian College reacted immediately and in a memorial submitted on the same day, requested Congress to reject the proposal from Thornton’s group and provided examples of discord that had developed when multiple institutions were established in New York, Philadelphia and Boston. In addition, the Columbian faculty asserted that Congress had already established “two institutions, the one for education in, the other for the regulation of, the practice of physic” and they asked that Congress consider the “expediency and necessity of creating other incorporations at this

81 U.S. Senate. 126 S.doc.35, Memorial of sundry citizens of District of Columbia, praying charter for medical college. (February 13, 1826).
time."\textsuperscript{82} This memorial from “The Professors in the Medical Department of the Columbian College in the District of Columbia” was hastily put together and the signatories made it appear that only then had the support of the Dean of the college, Thomas Henderson and medical faculty member Thomas Sewall.

The role of the Columbian Institute and the Medical Society of the District of Columbia (MSDC) has not considered in concert with the history of the Columbian College; yet, the college and learned societies shared members. Historian of the George Washington University did identify that “several of the petitioners” for the establishment of the MSDC were “later connected with the Columbian College.”\textsuperscript{83} Several amounted to five of the 21 members. In the case of the Columbian Institute, there was also share membership such as Edward Cutbush, the President of the Columbian Institute and the renowned naval surgeon who held an appointment as professor of chemistry with the Columbian College from 1825 to 1827. The proliferation of groups in the Federal City, and the diversity of their membership may offer some insights as a clue as to the possible dissension. The different groups in the city might have preferred a different type of institution instead of the path taken by those at the Columbian College.\textsuperscript{84}

\textsuperscript{82} U.S. Senate. 126 S.doc.36, Memorial of professors of medical department of Columbian College adverse to petition for charter for medical college. (February 13, 1826).

\textsuperscript{83} Elmer Louis Kayser, A Medical Center; the Institutional Development of Medical Education in George Washington University (Washington: George Washington University Press, 1973), 10.

\textsuperscript{84} Ibid, 10-38; Frank Lester Pleadwell, Edward Cutbush, M. D. the Nester of the Medical Corps of the Navy (New York: P. B. Hoeber, inc, 1923), 378–381; Gordon S. Brown, Incidental Architect: William Thornton and the Cultural Life of Early Washington, D.C., 1794-1828, Perspectives on the Art and Architectural History of the United States Capitol (Athens: Published for the U.S. Capitol Historical Society by
The debate illustrates varied ideas over the function of the government to regulate knowledge and specialized practices in the early republic. The two groups used counter memorials to hold public debates on the matter however; these sources never revealed the underlying issues that caused the split among the membership of the MSDC. Thornton’s group identifying themselves as “Citizens of the District of Columbia” constructed a well-articulated and legalistic rebuttal to the “Professors” and they gathered the signatures of thirty-six well-known citizens of the District including seven physicians. It is likely that Thornton’s group supported a different type of medical college that would focus on advancing new scholarship. Trained as a physician at Edinburgh University, Thornton was a founding member of the MSDC. Although he had not practiced medicine for many years, Thornton’s election as Vice-President of the society during this crisis does not seem coincidental. Thornton longed for the government to establish the types of scientific institutions befitting of the aspirations of the new republic ever since he championed George Washington’s national university while serving as a Commissioner for the District of Columbia. Further, scholars like Sally Kohlstedt point out that many colleges lacked the resources for natural history instruction. Those in urban areas began to rely on the collections of local learned societies for instruction and encouraged colleges to develop their own research cabinets and natural history museums in order to

Ohio University Press, 2009), 86–93. It needs to be noted that Cutbush did not officially participate as a signatory on either side of this issue.
“establish a foundation for systematic, specialized, and centralized museums” that served as both the “symbols and mechanisms for education in science.”

Sparring occurred back and forth between the two sides as each submitted counter memorials articulating the merits of their side. The Columbian College apparently won its point about establishing the sole medical college in the District by mustering larger popular support which included over one hundred prominent citizens such Thomas Law, a member of the Columbian Institute, and Peter Force as well as thirteen doctors of medicine. Perhaps the key to gaining such wide support rested in the assurance that College was to develop new leadership and a curriculum focused on science. The Columbian college group, led by Harvard Medical College educated professor of Anatomy Thomas Sewall, had begun delivering lectures in 1825 before the split in the MSDC surfaced. This factor probably helped them secure an initial monopoly on medical education in the nation’s capital. Sewall came to Washington to rebuild his reputation after his conviction in Massachusetts for body snatching despite the defense presented by noted lawyer Daniel Webster. As part of this rehabilitation, Sewell became a fervent member of the temperance movement and included a moral education component to the education curriculum at the new Columbian College. Such moral education fused well with the ministerial education of the college. In addition, Edward Cutbush, the President

of the Columbian Institute, the renowned Naval surgeon, received an appointment in the Medical College.\textsuperscript{86}

The attempts by the administration of the Columbian College to garner special treatment caused some resentment across the nation. In a South Carolina newspaper \textit{The Columbia Telescope} a letter writer who identified himself as Republican reported his strong objections to the efforts to receive support from the treasury that “is filled with the money of you and me, and of other citizens to be devoted to the United States purposes.”\textsuperscript{87} He also intimated that the college administration held nefarious intentions to defraud the people that were “the consequences of undertaking to aid the priesthood.”\textsuperscript{88}

Faculty members of Columbian’s medical school became particularly successful at developing tie to the national government. James Staughton, Dean of the Medical Department of the Columbian College, reported an offer from the faculty to extend access to medical education to students unable to afford the admission to the classes. They


\textsuperscript{87} “Mr. Sweeny:-About Two Years Ago, the Baptist College at Columbia, Applied to Congress for a Donation of $18,000,” \textit{Columbia Telescope} (Columbia, SC), October 31, 1826, Nineteenth Century U.S. Newspapers, http://tinyurl.galegroup.com.mutex.gmu.edu/tinyurl/LdZC5.

\textsuperscript{88} Ibid.
resolved that “the school be open to the admission of one student of character…from each of the Unites States, and one from each of the territories, to attend all lectures, without charge.” These appointments of deserving students appear to have been a useful tool to reduce the resentment toward the D.C. school from these across the country. These administrations also allowed a diverse set of students from around the country to attend the Columbian College and then return to their home state to continue to promote the new knowledge gained in Washington. By 1847, the college expanded its claim on education by adding “the National Medical College” to its name. Columbian’s medical school never received direct support from the national government; they however were able to stave off failure and bankruptcy by cultivating relationships, emulating the practices of secular learned societies, and relying on the moral imperative to educate the youth for higher purposes.

Even though leaders such as President John Quincy Adams provided some independent financial support for the Columbian College, he still observed a need for the establishment of different types of national institutions geared toward the cultivation and creation of scientific knowledge. Adams’s first annual message to the Congress provided a blueprint for a different kind of future for the United States. He envisioned the need for wide-ranging improvements led by the national government, which broadly defined, included a national plan, offered by the experts such as the Board of Engineers for Internal Improvements, for an expansive program of transportation, communication and

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90 Kayser, Bricks without Straw; the Evolution of George Washington University, 115.
knowledge systems. Education in engineering, especially civil engineering remained the specialty of West Point. Although many military academies, especially in the south, tried to emulate the curriculum of the Military Academy they were more successful in providing education for a bourgeoning professional class of young southern men. Adams used this message to link his agenda of promoting scientific progress with the dreams of his predecessors in order to evoke connections to the period of the founding fathers. He also invoked the memory of Washington’s proposed university to promote the needs of citizens to receive the “spirit of improvement” and to use their liberty to develop the “higher faculties” of mankind. Adams lamented the limited progress made on Washington’s vision. Upon “surveying the city which has been honored with his name he would have seen the spot of earth which he had destined and bequeathed to the use and benefit of his country as the site for an university still bare and barren.” Adams sought to continue the work begun by members of the Columbian Institute for the Promotion of Arts and Sciences. A few years earlier several publications heralded

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92 Ibid.
the formation of this group as evidence of the progress of learning and civilization in the federal city. Some scholars view the growth of knowledge institutions as a progressive process. The learned institution formed as a community of interest that served as an aggregate of the learned community, a group that could help marshal and prioritize limited economic resources, a way to mobilize power and authority over the dissemination of knowledge, and it served as an important symbolic act of joining the international Enlightenment movement.\textsuperscript{93} The members of the Columbian Institute dedicated their mission to promote the arts and sciences, but particularly mineralogy and botany. Their greatest collective aspiration focused on the need to establish a national garden to “collect, cultivate, and distribute various vegetable productions of this and other countries whether medicinal, esculent, or for the promotion of arts and manufactures.”\textsuperscript{94}

\textsuperscript{93} Dupree, “The National Pattern of American Learned Societies, 1769-1863.”

\textsuperscript{94} “Columbian Institute: From the National Intelligencer,” \textit{The National Register, a Weekly Paper, Containing a Series of the Important Public Documents, and the Proceedings of Congress; Statistical Tables, Reports and Essays, Original and Selected, Upon Agriculture, Manufactures, Commerce, and Finance; Science, Literature and the Arts; and Biographical Sketches; with Summary Statements of the Current News and Political Events; Making Two Volumes Yearly (1816-1820)}, August 24, 1816, 405.
On Saturday, May 1, 1847, numerous public officials gathered together in Washington, D.C. for a public ceremony to lay the cornerstone for the newly established Smithsonian Institute. The Baltimore Sun declared it a “memorable day” and a “glorious jubilee.”

A grand procession began at City Hall and consisted of the Mayor of Washington William Seaton and several lodges of Free Masons from throughout the region, including Washington, Virginia, Maryland, and Pennsylvania. A large contingent of the Independent Order of Odd Fellows attended the renowned and popular Washington light infantry, popularly known as the “National Blues” adding to the pageantry. The music was reported to be “very fine” and the “exceedingly rich regalia, splendid banners, and other paraphernalia rendered its appearance grand and imposing.” As the procession advanced toward the designated public square for the new building between Seventh and Twelfth streets, it passed the President's mansion and Capitol building where the President, his cabinet, and members of Congress as well as the Judiciary all joined in.

After arriving at the Mall, dignitaries addressed the crowd of thousands, with the keynote address delivered by George Dallas, Vice President of the United States and Chancellor of the Smithsonian. Dallas’s address recounted the congressionally sanctioned purpose of

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2 Ibid.
the Smithsonian. Officials had taken more than a decade to bring the organization into being and to define its scope and purpose. Dallas professed to those in attendance the interconnected nature of this new institution with their government and the designs of their nation. The Smithsonian was to be a national institution that served “not a chosen or designated class, not the followers of a particular sage or sect, not the favorites of fortune, nor the lifted of rank, but among men, men of every condition, of every school, of every faith, of every nativity! Men!”

The debates that led to the creation of the Smithsonian Institution represented not a new era in early American history but instead were a continuation of the debates over the long-standing quest to establish a national university. Most scholars maintain that the failure of John Quincy Adams’s call for the establishment of a national university marked the end of this debate. This might appear true, since no national university materialized. Some suggest that this lack of a university showed parochial Jacksonians pandering to the base elements in society. Other explanations claim the university disappeared as a victim of the many battles over federalism and the proper use of resources in the antebellum era.

After receiving a bequest from Englishman James Smithson in 1835, this obstacle to a national institution of learning seemed vanquished. Smithsonian’s will conveyed the

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3 George Mifflin Dallas, Address Delivered on Occasion of Laying the Corner Stone of the Smithsonian Institution, May 1, 1847. (Washington, Printed at the Office of Blair and Rives, 1847), 4.
entirety of his considerable estate to "the United States of America, to found at
Washington, under the name of the Smithsonian Institution, an Establishment for the
increase and diffusion of knowledge." The bequest spurred a decade of debates in the
United States, revolving around whether the nation should accept the gift from a private
individual—and a foreigner, at that--and what kind of institution should be established. In
other words, the argument about the national university became less about
constitutional issues and party politics and more about what constituted an appropriate
institution of knowledge for the republic.

Ironically, however, the establishment of the Smithsonian marked a profound
change in the ways in which Americans sought to promote the diffusion of knowledge
throughout the United States. Its establishment meant that the older, more democratic
idea of the citizen-scientist yielded to the notion of the highly trained scientific specialist.
Certain types of knowledge generated by particular groups of researchers would be
privileged over other types. Only research that met highly exacting scientific standards
became acceptable, and the work of those without highly specialized training became
marginalized. Finally, a strict reliance on scientific reason would supposedly eliminate
petty politics from scientific endeavors, thus enabling scientists to advance humanity
without attending to superfluous concerns. Yet, in doing so, the older notion of universal
knowledge available to all gave way to a more recent trend toward scientific

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6 William Jones Rhees, The Smithsonian Institution: Documents Relative to Its Origin
and History, 1835-1889, vol. 1, Smithsonian Miscellaneous Collections 42-43
7 George Brown Goode, The Smithsonian Institution, 1846-1896. The History of Its
First Half Century. (Washington, 1897), http://hdl.handle.net/2027/umn.31951001285676x.
specialization in which knowledge became the province of a highly educated elite. Although the country finally had the means to establish a national institution of knowledge, conflict continued to dog its creation at every step.

The founding of the Smithsonian has proved a compelling story for many scholars. Institutional histories abound and offer useful insights into the myriad of debates that occurred during the decade between the time on July 1, 1836 when President Jackson announced the existence of the bequest to Congress and August 10, 1846 when President James K. Polk signed the legislation to establish the Smithsonian Institution. Several scholars point to the fulfillment of Smithson’s will as the inception of meaningful federal support for science.8 Richard Rush, son of Benjamin Rush who called for the establishment of a national university before the constitutional convention, secured the bequest and returned to the United States in 1838 with the legacy in the form of gold, Smithson’s personal library, and collections of minerals. President Martin Van Buren offered an opportunity for a limited national discussion to determine the disposition of the Smithson bequest. Secretary of State John Forsyth issued a circular letter to “persons versed in science and in matters relating to public education, as to the mode of applying the proceeds of the bequest.”9 Although Forsyth addressed the letter to a limited set of leaders, it quickly became a national discussion and resulted in several responses made

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9 Select Committee on Smithsonian Bequest. House, Message from the President of the United States, upon the subject of the bequest of James Smithson to the United States, 345 H.doc.11, (1838). 2
by diverse constituents in antebellum America for the design of the appropriate means to diffuse knowledge. ¹⁰

The responses from many of the nation’s leading thinkers greatly resembled those over the national university. The establishment of the appropriate type of knowledge organization for the new nation remained an issue for debate based on the goals and priorities of the different groups across the country. Some reminded the president and others of the importance that educational institutions played for civilization and the republic. Others pleaded for a national learned society designed to promote knowledge and coordinate the proliferations of societies across the country. Another proposal concluded that an agricultural institution offered the best opportunity to serve the widest number of citizens. Still others encouraged the enhancement of literature and culture through teaching and the construction of an excellent national library. Some remained determined that the nation needed a national museum and they built the suggestions by Charles Willson Peale. John Quincy Adams, serving in of the House of Representatives,

advocated the creation of a national astronomical observatory but mainly worried that unscrupulous men would be elected to positions of authority. Adams made it his goal to assure that this money did not end up squandered to promote independent political agenda and to him every group looked suspect. The groups all fit a growing trend toward specialization of knowledge. They each called for specific types of resources that promoted the expansion of learning for their proto-disciplines.\(^\text{11}\)

Nonetheless, many saw the Smithson bequest as destined for establishing a traditional educational institution. In fact, less than a month after President Jackson informed Congress of the bequest, some newspapers were reporting that the donation was for the establishment of a national university.\(^\text{12}\) At least six distinct proposals were sent to Congress between 1837 and 1846. For example, Steven Chapin, President of the Columbian College advocated an institute of higher learning that would complement the still struggling college. Robert Dale Owen, son of Robert Owen, founder of the utopian community at New Harmony, Indiana, promoted the idea of free public education and thus called on the bequest to provide an facility to train teachers. Others wanted specialized scientific education while Francis Wayland, President of Brown University argued that the nation needed an institution devoted to the Classics. These proposals all drew objections. In one case a person identified as “THE FAR WEST” suggested to


Washington’s *Daily National Intelligencer* that the best use of the fund would be to publish a journal whose articles would be “under the sanction of the National Institute.”

The author continued, “The publication shall embrace in its range religion without sectarianism; politics, or a thorough elucidation of our republican institutions and policy free from partyism...shall include a practical view of the sciences and arts.”

The divergent notions remained a challenge since all of these proposals sought to establish an educational institution, yet no one could identify what type of institution or purpose it should serve.

Some worried less about the curriculum taught and more about how colleges emphasized localism and sectional factionalism. Some hoped that a national university would emulate European institutions and “serve as a bond of union between the States. It would be an Institution in which every citizen in the union would be a proprietor; and those of the choicest genius and most profound talent, from every quarter of our country.”

Many in the early republic, and in Washington D.C. in particular, believed that the nation needed a national learned society. The Columbian Institute for the Promotion of Arts and Sciences, Washington's first and most prominent learned society, had experienced a decline in membership. Members reconstituted their organization as the National Institute for the Promotion of Science whose purpose was to establish a

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14 Ibid.
national learned society to help coordinate the actions of various scientific societies and civic organizations. The period between John Quincy Adams’s call for a national scientific agenda and the establishment of the Smithsonian Institute gives a clear view of the disparate claims on the Smithson bequest.¹⁷

The Smithson bequest offered an opportunity to establish a national institution to help disseminate knowledge to the nation. Still, it remained unclear what type of institution made the most sense. In contrast to earlier models of learned societies, many other Americans wished to diffuse knowledge among a larger population by establishing a more inclusive national learned society. Alternatively the society could serve as a means to help coordinate the proliferation of the many different groups forming across the nation. Nothing seemed more relevant in the United States then expanding the knowledge of science. Curiosities requiring study abounded in the second quarter of the nineteenth century, and books offered only one means of study. The craving for new scientific wonders and knowledge gripped the populace as more people participated in manufacturing, engineering, mining, and an ever more rationalized agricultural system. New scientific societies with museums and lyceums offered new opportunities for citizens to expand their knowledge beyond the education acquired in their formative years.

An expanding democratic view of knowledge offered opportunities for non-elite citizen scientists to collect, codify, and even explain objects within the world in which they lived. One historian has noted that ordinary people aided scientists because “natural

¹⁷ Dupree, Science in the Federal Government, 66–90; Madsen, The National University, Enduring Dream of the USA. more
history was not yet a profession.” As the practice spread throughout the country, “many Americans … felt entitled to their own opinions and their own facts.”¹⁸ Learned societies offered individuals the opportunity to practice their work with like-minded colleagues.¹⁹ The names of the institutions signaled a growing trend toward specialization in scope and purpose. By the 1840s groups sported more specialized names, such as the Association of American Geologists and Naturalists or Iowa Historical and Geological Institute or the American Ethnological Society. The goal of many of these institutions seemed to be to offer access to a growing community of people interested in participating in what we now call scholarship. Instead of emphasizing the social status of individuals, these groups seemed to focus on the intellectual worth of the ideas offered.

Ironically, opportunities to participate in scientific activities and scholarship grew at the same time that many scientists longed for more specialization. The egalitarian inclination in society frustrated many who viewed themselves as serious scholars and who longed for the establishment of systematic processes. The egalitarianism further obstructed the desire to institute standards of authority to thwart the proliferation of charlatans and the misinformation they propagated among the uneducated.²⁰ Some

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scholars compare this enthusiasm as a way for individuals to articulate their own notions of science and learning to the religious movements of the day.\textsuperscript{21}

Individuals and their groups offered a variety of schemes to diffuse knowledge to the community. Some of these proposals had long histories while others were viewed as humbug or even malicious schemes by foreign powers. Ira Hill of Baltimore, a scholar known for his work \textit{An abstract of a new theory of the formation of the earth}, initiated a campaign and lobbied Congress to achieve support for a Geographical Garden. In December 1823 Hill proposed to obtain ten acres of land near the Capitol in Washington and $10,000 to construct an accurate miniature representation of the world. The proposed topographical creation included mountains raised to a proper elevation and bodies of water all laid out and placed in scale. Hill wrote

\begin{quote}
the proper situations for Roads, Canals, and other improvements, may here be seen at one view, that a far more useful knowledge of the science of Geography can be obtained by walking a few hours in this garden then could be gained by reading in as many years.\textsuperscript{22}
\end{quote}

This plan attracted the interest of several publications across the nation, which suggested that the proposal as a “novel” idea offered “utility” since it produced “paths of Science to be strewed with flowers…and serve to attract the young to useful studies of geography…adapted to imprint strongly on their memories…important facts” and thus enhance their learning.\textsuperscript{23} Several newspapers defended the proposal, telling readers that this proposal did not deserve ridicule like earlier “propositions of a ludicrous nature such

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\textsuperscript{21} Curti, \textit{The Growth of American Thought}.  
\textsuperscript{23} “Geographical Garden,” \textit{Arkansas Weekly Gazette}, May 4, 1824, 4.
\end{flushright}
as the flying machine of Bennett…and the ridiculous attempt of Major Symmes to
explore the polar regions…passing through an imagined cavity…into the bowels of the
earth.” 24 Similar schemes flooded the Congress--so many, in fact, that at least one
proposal sought that the Speaker of the House not “present any memorial, petition,
address, or paper, of any description, not officially communicated by some officer of the
Government, to the House, except on his responsibility as a member.” 25 In the end this
proposal failed, and by 1833 Hill focused his attention on his latest scholarly interest,a
book titled Antiquities of America. Nevertheless, the proliferation of citizen participation
created a flood of competing intellectual purposes eager participants to learn about and
independently assess for its veracity.

Benjamin Silliman’s 1826 report in the American Journal of Arts and Sciences
offers a revealing portrait of the existing scientific societies in the United States. Silliman
had become a national figure through his expertise as a chemist and professor at Yale. In
1818 he founded the American Journal of Science and Arts, which became the longest
running scientific journal in the United States. Silliman was eager to differentiate
between those that he viewed as savants from those that were true scientists. He was
particularly frustrated with the proliferation of what he regarded as pretender scientific
societies filled with amateurs, including the venerable American Philosophical Society.26

24 “Geographical Garden,” Providence Gazette, February 7, 1824; “Geographical
Garden,” Times, February 24, 1824; “Geographical Garden,” Norwich Courier, March
3, 1824.
25 Register of Debates, January 05, 1826 19-1 (1826)
26 Chandos Michael Brown, Benjamin Silliman: A Life in the Young Republic
The chief value he saw in his journal was that it offered an opportunity to provide a “direct influence in promoting the honour and prosperity of the nation as connected with its physical interests, but will also tend in no small degree to nourish an enlarged patriotism, by winning the public mind from the odious asperities of party.”

According to one historian, party politics had infiltrated the existing scientific learned societies with the result that “the primary loyalty of most scientists was to local institutions [thus hindering] the creation of a national scientific community.”

If scholars focused more on science, perhaps partisanship would melt away.

Silliman reported the existence of at least twenty-eight scientific societies in the United States. Acknowledging the weaknesses in his data, he noted that he had omitted “Historical, Literary, Antiquarian, and other Societies, not cultivating natural knowledge, and also academies for the fine arts.” In other words, Silliman privileged the natural sciences over other kinds of knowledge. Silliman’s survey of societies showed that ten states and the District of Columbia had at least one society. Of the twenty-eight reported, two-thirds were located in the three states of New York (11), Pennsylvania (4), Massachusetts (4). In fact, he identified only two institutions in the South and both were in urban areas. Finally, twenty-four of them were specialized scientific societies or lyceums promoting scientific topics and only four were universal institutions that

27 “Conclusion,” American Journal of Science: More Especially of Mineralogy, Geology & the Other Branches of Natural History 1 (January 1819): 440.
29 Ibid., 47.
resembled the American Philosophical Society. This move toward professionalization and popular infatuation with science became a national trend until the Civil War. Silliman thus sought to identify the most elite and discriminating of the societies as a way to establish an authoritative list of trusted societies.

What is interesting about this move toward scientific specialization is the pattern of exclusion of those deemed as unfit for scholarly pursuits. This pattern influenced the segregation of the elite scientists from those who practiced other types of scientific knowledge. Notably absent from the Silliman’s group were several agricultural societies. Agricultural societies had a long tradition of promoting the interests of new knowledge and practices in the early republic, beginning as early as 1785 in Philadelphia when individuals, including at least 12 members of the APS, formed the Philadelphia Society for the Promotion of Agriculture and Agricultural Reform. At an earlier date, local groups had proliferated. One example in the Washington D.C. area was a group of leading citizens who established the Columbian Agricultural Society for the Promotion of Rural and Domestic Economy in 1809. Although the group ultimately failed during the

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31 Lucius F. Ellsworth, “The Philadelphia Society for the Promotion of Agriculture and Agricultural Reform, 1785-1793,” *Agricultural History* 42, no. 3 (Summer 1968): 189–99; Margaret Rossiter, “The Organization of Agricultural Improvement in the United States 1785-1865,” in *The Pursuit of Knowledge in the Early American Republic: American Scientific and Learned Societies from Colonial Times to the Civil War* (Baltimore,MD: Johns Hopkins University, 1976), 279–98 Rossiter’s work connects the early efforts of the group with those of the 1820s and the antebellum period while Ellsworth delineates a more active period as a separate movement.
War of 1812, one scholar claims that the Columbian Institute and the Washington Botanical Society in 1817 continued to promote these issues well into the Jacksonian period in the 1830s. Eventually the Columbian Institute for the Promotion of Arts and Sciences itself dissolved and became subsumed by the learned society in Washington called the National Institute for the Promotion of Science.\footnote{32}

Several other examples of agricultural societies founded at the state level experienced different levels of successes. DeWitt Clinton’s program of internal development in New York provided state-sponsored support to the Albany Lyceum, which promoted and published knowledge as a means to encouraging best practices among the community at large.\footnote{33} The program in New York created more than fifty new agricultural societies and the New York Board, which published 3 volumes of Memoirs of the Board of Agriculture of the State of New York between 1821-1826. Citizens across the state submitted their findings to the editor George William Featherstonhaugh. Lamenting the final publication, he hoped that “an enlightened legislature will appreciate

\footnote{32}{Harold T. Pinkett, “Early Agricultural Societies in the District of Columbia,” Records of the Columbia Historical Society, Washington, D.C. 51/52 (January 1, 1951): 32–45 The leaders included Thompson Mason, Charles Carroll, John Mason, David Wiley and George Washington Parke Custis. David Wiley, principal and librarian of the local Columbian Academy commenced the first agricultural publication in the nation, the Agricultural Museum, in 1809. They held five annual exhibits twice per year demonstrating best practices and awarding prizes for domestic manufactures and agriculture however the society lay dormant during the War of 1812.}

\footnote{33}{Donald B. Marti, “Early Agricultural Societies in New York: The Foundations of Improvement,” New York History 48, no. 4 (October 1967): 313–31 Under DeWitt Clinton’s program of internal development, the Albany Lyceum received a State subsidy to underwrite its program, but this subsidy was cut off with the defeat of the Clintonians in the mid-1820’s. Further State aid was denied the agricultural societies until the 1840’s, which seriously undermined their effectiveness. The promoters of these institutions beginning with Robert Livingston in 1794 saw these practices as part of the goal to establish all inclusive improvements via civic society.}
the benefits” from their publication. He also expressed the wish that his journal would “serve as an example to sister states...[and] call into active employment the genius skill and industry of thousands of our fellow citizens.” No further state support was forthcoming, however. Nonetheless, the publication encouraged the rise of a popular agricultural press. The Genesee Farmer in Rochester and the Cultivator of Albany both were successful and advocated for the establishment of a state agricultural society. In 1833, they successfully established a statewide agricultural society with the Cultivator as its primary publication. State funding provided support for both publications and supporting the county societies and their fairs in 1841.

Some scientists resented the claims that these contemporary publications made to scientific knowledge. Joseph Henry, professor of Natural Science at the College of New Jersey (and future Smithsonian Secretary), wrote a letter in 1838 to an unnamed journal that condemned it for providing suspect information about the powers of electricity. Henry repeated the claim that “a salad of mustard or water cresses may be produced in a few moments by the assistance of electricity and that rain water apparently free from any

35 Margaret Rossiter, “The Organization of Agricultural Improvement in the United States 1785-1865.”
36 Joseph Henry, The Papers of Joseph Henry: January 1838-December 1840, The Princeton Years, ed. Nathan Reingold and Marc Rothenberg, vol. 4 (Washington: Smithsonian Institution Press, distributed by Braziller, New York, 1981), 167. The editors of the Papers of Joseph Henry estimate that Henry wrote the letter after 1837 based on references made in the letter regarding the experiments that discredit Mr. Cross's claims about electricity being able to fertilize insect eggs. Also interestingly they believe Henry sent the letter to the editor of New York's Genesee Farmer or the Cultivator since they printed the stories he is writing to discredit. Also these stories made the rounds in several newspapers. See note 3 p167.
noxious animalcule in an hour may be rendered full of insects.” He immediately assured the editor that this was a falsehood and both were “without foundation.” Henry proceeded to reveal the first example was a story originally published as a piece of fiction by an American traveling in “Europe who saw a Parisian juggler perform the ‘sleight of hand’ as the important discovery of a new electrical action.” The second was the result of “wonderful accounts of the experiments by Mr. Cross…which…have been proved to be incorrect.”

Henry disdained the growing popular participation in science because it offered opportunities for imposters an avenue to spread misinformation. Also abhorring any tolerance for ignorance and unprofessional behaviors by fellow scientists, Henry called for the development of a scientific code of conduct.

Henry did not suffer fools. He confided in a letter written on August 9, 1838 to his friend and fellow scientist Alexander Dallas Bache his disappointment with the nation's premier scientist, Benjamin Silliman, the founder of the *American Journal of Science.* Henry reminded Bache of their goal: “we must put down quackery or quackery will put down science.”

After a list of several examples of science that he viewed as evidence of swindlers and imposters, Henry reserved his greatest criticism for those who had positions of authority over knowledge. First, he pointed to the ill-advised practice of allowing questionable scientists to testify before congressional committees, which then produced a report using “flattering terms” and stating that “in the opinion of several scientific gentleman and in their own estimation” that the discoveries presented to them.

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37 Ibid.
38 Ibid., 4:xviii.
39 Ibid., 4:97.
were sound and were “worthy of the confidence of the public and the patronage of Congress.” This incensed Henry, causing him to publish a correction and protest “on behalf of the scientific character of the United States against the custom of publishing scientific articles among the documents of Congress before their true character is ascertained.” He also indicated that he had confronted Silliman on the inadequacy of the reviewers for the *American Journal of Science* and suggested that a new group of collaborators from different departments of science was needed to participate in the publication of his journal. Nonetheless, “the hint was not however taken and shortly after the name of the Professors son was attached to the Journal.” In the end, Silliman did acquire some new collaborators. Henry, however maintained vigilance to ferret out pretenders who sought to dupe the masses, and he longed for the day when scientist would have what one scholar has called, an “*Esprite de Corps.*” In other words, Henry wanted scientists to professionalize the field of scientific endeavor.

These publications were very popular, and despite his imperiousness, it is easy to understand Henry’s frustration with them. The *Cultivator* alone printed at least twenty-six articles featuring the impact of electricity upon agricultural pursuits between its first volume in 1834 and its seventh in 1840. Interestingly enough, Henry’s letter to the editor may have actually increased the interest of the editors in stories about electricity since even more articles were published including an article written in 1840 titled “the Science of Agriculture” after Henry’s corrective letter. Further, the writers began to publish a

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40 Ibid., 4:98.  
41 Ibid., 4:98–99.  
42 Ibid., 4:100.  
regular series consisting of twenty-five articles titled “A Dictionary of Terms Used in Agriculture and its Kindred Sciences.” These essays focus on the power of electricity to accelerate growth of plants and to assist the movement of farm machinery. Nevertheless, the entry laments that “the effect of electricity on vegetation has not received the attention it deserves. That plants push forward much faster where the electric currents are active is well known.” The need for a dictionary or glossary by the journal indicates the increasing need for precision in the use of scientific terms for their own purposes so the farmers are not beholden to the definitions of others, including those they deemed to be scientific philosophers who lacked the ability to apply their knowledge to real situations. These journals, which were popular, democratic and accessible to a general population, did not necessarily present accurate information. In fact, they often seemed to present misinformation.

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44 “DICTIONARY OF TERMS USED IN Agriculture and Its Kindred Sciences,” The Cultivator (1834-1865) 7, no. 12 (December 1840): 187.
A tension, then existed between a commitment to democratizing knowledge and a belief in promoting accurate scientific information, validated by researchers in the field. These trends accelerated in the 1830s and 1840s. The image emblazoned on The Cultivator’s cover demonstrates the Agricultural Society’s vision of the totality of knowledge. Several crucial elements are obvious in the image including the embrace of art and science, the promotion both of the advances of technologies, evidenced by the train and ship in the background, and also respect for classical knowledge in the form of books and scrolls. Surrounding the muses, likely Polyhymnia and Urania, were the tools

of knowledge. Crucially they connected these symbols within the context of the American nation including familiar American emblems such as the beehive of industry and the eagle of the republic. The growth of knowledge is symbolized through cultivation and is available to the common people who plow the fields in order to yield the treasures of the earth. Progress, made possible by mankind’s utilization of knowledge for the improvement of mankind, is the clear message of this image. Thus, agricultural societies represented the best qualities of the republic because they embraced all knowledge and all men.46

Agricultural societies were widespread, and their popularity was growing. A scholar estimates that by 1841 912 agricultural societies existed in various localities in the United States.47 Additionally the number of specialized publications was increasing dramatically; this however was only a first step. When the societies met they typically shared the bounty of their harvests, and they gathered to hear the addresses of their leaders and to share tributes via toasts to their convictions and their brethren. Henry Alexander Scammell Dearborn, son of former Secretary of War and Major General Henry Dearborn, served in several political offices including the House of Representatives and several state and local elected offices. He also served as the long-time president of the Massachusetts Horticultural Society. In this capacity he delivered an address every year and several were ordered printed and distributed as a means to diffuse the knowledge of the society. Dearborn delivered the first anniversary address on

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46 ibid
September 19, 1829. Dearborn’s address connected the advance of civilization with the advances in horticulture. Later in the address he stated, “The co-operation of individuals, by means of variously organized societies...has been one of the most efficient means of accelerating the progress and the bounds of knowledge.”48 He extolled the advances made in literature, history, natural science, and other fields of knowledge. Even the advances of science as an “abstract mental embellishment” created an “unnatural alienation of the sciences and arts.”49 Dearborn concluded his speech by pointing to the totality of human knowledge as interconnected with that of horticulture and its pursuits. These addresses moved many toward the realization that the next step needed was to establish agricultural experimental stations and for the need to seek federal support for the needed expertise in agricultural chemistry and agricultural botany.50

This call for national support came eleven years later by Dearborn himself. His speech to the Berkshire Agricultural Society suggested the majority of citizens in the United States pursued agricultural cultivation and the entire national industry relied on the success and failure of those pursuing agriculture. After evoking George Washington’s call for agricultural improvements Dearborn made his own, stating that agriculture served as “not only the emblems but the trophies and conclusive evidence of an antecedent and exalted state of civilization…and of the progress and moral improvement and intellectual

49 Ibid., 10.
50 Margaret Rossiter, “The Organization of Agricultural Improvement in the United States 1785-1865.”
cultivation.” Dearborn concluded that a “wise national administration” would focus less on theoretical sciences and more on promoting advances in agricultural knowledge as a means to unite the science and the arts. In 1841 after reading Joel Poinsett’s address, Dearborn and suggested that the National Institution also include creating a botanical and zoological garden. These tools offered the ability to experiment and “diffuse intelligence on all the numerous branches of rural economy.” He suggested that the national institute use the land on the mall for this purpose. Further the creation of an “extensive experimental farm…would prove to be indispensible at the national capital.” He even suggested that these groups should associate with the National Institute and colleges much like the role models he cited from Europe. Finally, the goods created at the experimental site would yield money for reinvestment.

Charles Lewis Fleischmann, a naturalized citizen from Germany who worked in the patent office, submitted a similar suggestion in 1838. Fleischmann appealed to both the duty of humanity and to the notion of progressively improving civilization, as well as to the committee’s sense of practicality since the government needed to contend with a growing population and many demanded access to federal land. Even more importantly, his institution, built upon the successful German model, offered the added

52 Ibid., 23–24.
53 Letter from Henry Alexander Scammell Dearborn to J.R. Poinsett, April 22, 1841, Smithsonian Institution Archives, Record Unit 7058, National Institute, Records, Series 1, Box1.
54 See Preemption Act of 1841.
benefit of acculturating and training the mass of citizens to acquire the goal of all humanity: wealth. Fleischmann wrote, “when wealth is produced by agriculture, it banishes idleness and the vices connected with it; it renders…the population strong, healthy, and industrious; it is the source of domestic happiness and contentment.” Some scholars see Fleischman’s plan as an important part of a progressive advance toward federal legislation in 1862 and 1887 as well as complementary state actions. This is certainly an important building block for improved resources for agricultural research.

Figure 7 Charles Lewis Fleischmann’s drawing of his Proposed Agricultural Institute shows the scope that he, and others, hoped to establish in Washington. In Memorial of Charles Lewis Fleischmann, In relation to the Smithsonian Legacy. Congressional Serial Set. 346 H.doc.70

In fact, many Americans believed that agriculture represented the only scientific field that utilized all aspects of knowledge. The Mount Airy Agricultural Society adopted

55 Select Committee on Smithsonian Bequest. House, “Memorial of Charles Lewis Fleischmann in Relation to the Smithsonian Legacy,” 346.70, (1938). 2
a symbol, shown below, to demonstrate how farmers and science had become interconnected. Just as significantly, the image conveys the importance that science be useful. The society’s motto states this message and also communicated the point through the image of the plow that is tethered to the book on natural science. The science and knowledge from this program offered communitarian improvements for the primary means through which the citizens of the land worked and made their living. As a result, this plan offered the nation the appropriate means for diffusing knowledge to men who would bind the nation together through their common interests.
Considering the popularity of agricultural societies, it is somewhat surprising that these institutions did not enter into the planning of the new Smithsonian institution. At the same time, many other types of new knowledge institutions were developing. Colleges and other educational institutions proliferated across the nation. Additionally many states had begun to develop state-supported agricultural education programs. Finally, the diverse number of new institutions being established was large in every part of the nation.

One of the leading candidates for the Smithson money included a national library to be established. Much like the proliferation of learned societies and colleges, libraries increased rapidly throughout the early republic even though the lack of data makes it difficult to know how many existed between 1790-1840. A leading scholar of early libraries found that New England citizens founded at least 266 social libraries. States established laws that made it easy for these types of institutions to privately incorporate. Still, even these relatively similar institutions had nuances in the way they operated. These private library corporations awarded shares and membership to those that could afford membership. Unlike earlier models called “voluntary libraries” which held that all members were equal, these new “social libraries” offered additional benefits to those that paid for them. Those who held more influence could use that to direct the collection.

development resources of the institution. Another type of library was the commercially focused “circulating” libraries that charged users to borrow books for a fee. Libraries developed based on local markets and sensibilities and many believed that these institutions should develop as needed. At the same time, others advocated the need for more libraries throughout the country as a means to provide for an educated citizenry.\(^{58}\)

A national library offered a means to demonstrate that the United States belonged in the community of civilized nations. Proponents of this idea valued literary knowledge and lamented the lack of resources in the United States. The supporters of using the Smithson bequest for a national library included a particularly significant subset of the Whig party consisting of Daniel Webster and Rufus Choate. Historian Daniel Walker Howe has identified them as ideologically conservative. This conservative group owed much to Burkean notions of society, which emphasized the importance of virtue and the common good. According to their genteel tradition, they believed that the bonds of affections in a community offered a defense from the base avarice of humanity. They opposed the advance of Jacksonian democracy and rampant individualism.\(^{59}\)

Choate's particular kind of conservatism helped shape the way Smithson's bequest would be implemented. Choate, a renowned lawyer and judge, believed that the best way to use the Smithson bequest would focus on the collection of all forms of published works and print knowledge. Although the texts alone did not constitute knowledge, these


texts, when used by a properly trained scholar and obtained through the crucible of disciplined study, would contribute to creating a refined moral character forged through true knowledge. Although anyone could achieve these goals most would fall short. In fact, Choate had little regard for people, as one historian has stated, “because he knew human nature so well and …how to take advantage of its weakness.” As a result he held “private contempt for jurors” since they lacked the expertise to properly arrive at a verdict. Nevertheless, he did hold elected office at times and served as a Senator from Massachusetts from 1841-1845 during the heat of the Smithson debates. He wanted to make law the new religion of the United States, and he hoped that a new class of lawyers would assume their proper role in American society as the new high priests of the community. Choate and those that shared his views focused on the need to construct institutions that would strengthen national education and intellectual unity. He worried that the people of the nation had such a simplistic notion of the proper role of government that the state was on the precipice of destruction. The solution, he believed, was a society built upon a sound and nuanced understanding of classical texts.

Choate found allies in the newly constituted National Institution (later Institute) for the Promotion of Science. Joel Poinsett outlined the purpose of the National Institute saying “the Institution…will embrace every branch of knowledge” thus reassuring Choate that this body might help establish order to the unstable environment evidenced by the proliferation of societies that threatened to divide the nation and their

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60 Ibid., 226.
61 Ibid., 210–236.
understanding of the world. The National Institute filled the void left by the then defunct Columbian Institute and inherited many of their members and projects. Choate worked diligently to encourage the government to provide financial support for the Institute as long as its members emphasized the needs for a national library.

In 1842, the Historical Society of Washington and the Columbian Institute had merged to form the National Institution for the Promotion of Science. This newly formed organization, whose name later shortened to the "National Institute," filled the void left by the now defunct Columbian Institute. Although ostensibly dedicated to scientific pursuits, its mission was broader. According to the statement of purpose, its goal was to “embrace every branch of knowledge.” The society divided itself into eight scientific classes, namely: Astronomy. Geography, and Natural Philosophy; Natural History; Geology and Mineralogy; Chemistry; the application of Science to the useful Arts; Agriculture; American History and Antiquities; and Literature and the Fine Arts.

Every learned society and scholar would have a place in this Institution and would be welcome so long as they paid their dues. Many scholars suggest that the intent of the

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63 Matthews, *Rufus Choate, the Law and Civic Virtue,* 116–117.


65 Poinsett, *Discourse, on the Objects and Importance of the National Institution for the Promotion of Science, Established at Washington, 1840,* 6.

66 Ibid., 7.
founders of the National Institute was to acquire the Smithson bequest. Thus, they could establish connections with other groups and become the national organization for all knowledge. This however may be an oversimplification of their designs.\textsuperscript{67}

The National Institute had many major core goals articulated in their constitution and by their newly elected President Joel R. Poinsett. Poinsett, known as an outspoken southern nationalist, served in several diplomatic posts and had long-standing experience with several Latin American nations. He believed that the nation needed to acquire new territory via exploration. He was a supporter and friend of Andrew Jackson and supported the establishment of the Unionist party. Poinsett utilized his contacts internationally and throughout the nation to promote the exchanging of plants and seeds with collectors all over the world. Most people know Poinsett by his connection to the Christmas flower’s name, the Poinsettia. The plant pulcherrima, which he brought back from Mexico after serving as Minister in 1830s, was one of “about twenty-five hundred objects of Mexican antiquities” including the famous tribute roll of Montezuma to that he donated American Philosophical Society.\textsuperscript{68} Named the Secretary of War by Van Buren and Poinsett immediately reorganized the army and state militias. He also organized the exploratory expeditions led by the Corps of Topographical Engineers, including fellow Charlestonian Charles Fremont, and authorized the expedition of Captain Charles Wilkes to explore the


South Seas and North Pacific coast. Both expeditions focused on the mapping of the unknown regions and the gathering of diverse specimens. This served the mutually reinforcing goals of preparing the regions for rationalized use of their resources by organizing and controlling knowledge gained from the areas.69

The published proceedings of the National Institution record Poinsett’s remarks after his selection as President of the newly incorporated group to the forty-eight members present at the inaugural meeting on March 8, 1841. Poinsett told the members that they held a great responsibility since “This is the first experiment that has been made of a popular Institution of Science; but as it is intended for the benefit of the people, it is right that they should take part in its administration.”70 Poinsett charged the group to keep abreast of all new advances in science while also remaining determined to find a way to present them in a “cheap form to the people” and to encouraged them to “communicate to the Institution the results of their own observations and experience.”71 He concluded that the best way to convince the government to deposit Smithson’s legacy with the Institute was by demonstrating the value of its work in establishing connections with other scientific institutions and in coordinating and communicating the activities to the American people.72

71 Ibid., 70.
72 Ibid., 69–70.
In the mission statement, Joel Poinsett gave several examples of the need for a stamp of authenticity that only government could provide. Many scholars argue that Poinsett and his compatriots wanted to establish a museum with the Smithson money. Although the last page and a half of Poinsett’s introduction indicate the desire to establish a National Museum, the other 50 pages focus on the need to establish appropriate specialized science associations under the umbrella of a national institution.\footnote{73 Poinsett, Discourse, on the Objects and Importance of the National Institution for the Promotion of Science, Established at Washington, 1840.}

The earliest institutional histories of the Smithsonian identify the primary purpose of the National Institution to be seizing the Smithson bequest. Since they are focused on the outcomes that resulted from the process, they have missed one of the most important reasons for seeking the Smithson money: the goal to establish order on the chaotic environment unleashed by the rise and fall of the multitude of new learned societies in the nation. A national means of granting authority via a broad membership and open review of information offered a solution to a national boom and bust cycle of tiny individual societies as well as a clear mechanism guaranteeing authentic information to all citizens. Moreover, the National Institution intended to act as a conduit between the learned societies of the nation and those of the world. This institution would represent the nation and through effective management, overcome their deficiencies in science.\footnote{74 George Brown Goode, The Smithsonian Institution, 1846-1896. The History of Its First Half Century., 37–xx.}

Most historians of science view the National Institution, now called the National Institute, as a failure. They see it as an antiquated society that promoted dead ideas from the old world of science and relied on political connections to survive. In fact, they see
few differences between the Columbian Institute and the National Institute especially when comparing this catholic institution of scientific knowledge to the specialized institutions of science developing such as the Association of American Geologists. Historian Sally Kohlstedt indicates that a series of discussions throughout American society in the 1830s show considerable interest in forming a national scientific organization to fill in her words “the institutional vacuum” in the United States to direct and promote scientific knowledge. This staged a conflict between competing scientific groups to “establish American scientific integrity and unity through a national association” and to resolve the relationship between government and science. Scholars suggest that this is a watershed moment and argue that a change had occurred in scientific practitioners. This period of transition shifts away from the privacy that modern scholars call amateur scientists to an emergent period of professionalism that required new institutions.

This assumes that the National Institute only wanted to acquire the Smithson bequest to establish a museum. The most important piece of evidence that scholars have overlooked is that the National Institute served as the coordinating society for the collections exhibited at the Great Exhibition of the works of industry of all nations, in 1851. This is widely known as the first World’s Fair, and is sometimes called the Crystal

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Palace Exhibition. The National Institute coordinated the reports and exhibitions displayed for the United States. This complicated process included the selection of materials for the exhibit and the production of the extensive narrative that accompanied the materials. The collection of technology included an impressive set of inventions. Among the examples of technology selected were Cyrus McCormick’s Virginia Grain Reaper, Matthew Brady’s daguerreotypes, Samuel Colt’s revolver, a coffin that removed all oxygen from inside the container to help preserve the corpse, as well as several dental apparatuses. The committee also amassed an impressive collection of minerals and domestic goods with detailed descriptions of the processes to create Cincinnati pickles or Virginia honey. British observers offered many criticisms of the American exhibits. They claimed that the Americans displayed their collections incorrectly, packing their collections so tightly together that only one quarter of the space allotted was used. Instead of using all the space for exhibitions, the remaining area came to provide a place for weary spectators to sit and indulge in refreshments. Despite such carping, the American’s involvement was successful and they won respect for their technological and artistic productions. As the new Smithsonian Institute assumed its dominant role in

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institutionalizing scientific knowledge, however, the National Institute’s involvement in the Crystal Palace extravaganza faded from the collective memory.\textsuperscript{80}

The divergent interests of the citizens involved in deciding on how to spend the Smithson money resulted in ongoing power struggles over the disposition of the funds and what type of institution to establish. Different factions formed in both the House and the Senate. John Quincy Adams remained the lone advocate for a national observatory while the others remained convinced that each’s own institution was the proper one for the nation. Each action led to a counteraction, and some argued that even if this was actually a proper gift as they wondered about the wisdom of establishing another institution that reminded many of the dreaded Bank of the United States. Those who opposed any educational institution, such Representative, and future President, Andrew Johnson of Tennessee believed that this institution would corrupt the nation. Johnson argued on the floor of Congress that a “young man educated at the Smithsonian Institution and brought up in All the, extravagance, folly, aristocracy, and corruption of Washington” would be educated and hang about at law office get a license become a pack of drones instead of schoolmasters.”\textsuperscript{81} Ultimately those who wanted to reject the bequest forced many of the supporters to come together in order to compromise. Adams dropped demands for national observatory, as did Robert Dale Owen and the other advocates for a college. They still hoped for their programs to succeed; however, they chose a compromise program that developed a system for the administration of the funds. The final vote in the House was 85-76 and the Senate was 26-13. The bill establishing the

\textsuperscript{80} Cunliffe, “America at the Great Exhibition of 1851.”
\textsuperscript{81} Rhees, \textit{The Smithsonian Institution}, 1:411.
Smithsonian Institution that President James K. Polk signed into law on August 10, 1846, represented ten years of negotiation and compromise.  

The legislation established the institution, as stipulated in James Smithson’s Will, as the Smithson Institute and located in Washington D.C. “for the increase and diffusion of knowledge among men.” Section 2 of the four and a half page law enumerated that the money secured from the bequest remained safe as a loan to the United States government from the gold that had been secured by Richard Rush’s expedition years earlier. The operation of the Smithsonian and its new facility received a budget from the 6 per cent interest that the government paid to a separate account. Congress designated a board of regents to conduct the business of the institution. Further the legislation designated the composition of this board as the

Vice-President of the United States, the Chief Justice of the United States, and the Mayor of the city of Washington… three members of the Senate, and three members of the House of Representatives; together with six other persons, by joint resolution of the Senate and the House of Representatives other than members of Congress, two of whom shall be members of the National Institute in the city of Washington, and resident in the said city; and the other four thereof shall be inhabitants of States, and no two of them of the same State.

82 Dupree, Science in the Federal Government, a History of Policies and Activities to 1940, 76–79.
83 An Act to establish the “Smithsonian Institution,” for the Increase and Diffusion of Knowledge among Men, Act of August 10, 1846, United States Statutes at Large, ch. 178, 9 Stat. 102, 102.
84 Ibid, 103; The initial Board of Regents included George M. Dallas, of Pennsylvania, Vice-President of the United States; Roger B. Taney, of Maryland, Chief Justice of the United States; William W. Seaton, Mayor of the city of Washington; Senator George Evans, of Maine; Senator Isaac S. Pennybacker, of Virginia; Senator Sidney Breese, of Illinois, Robert Dale Owen, Representative from Indiana; William J. Hough, Representative from New York; Henry W. Hilliard, Representative from Alabama; the
The composition of the regents clearly shows the compromises in Congress and the overall goal of assuring broad governmental participation including members from the three branches of the federal government as well as the Mayor from Washington and representatives from multiple states. The group oversaw the business of the institution including the selection of a site to construct a facility on public grounds and the employment of officials to supervise the day-to-day operations of the Institution. 85

This compromise, orchestrated by Poinsett and his associates at the National Institute, provided an administrative structure to the governance of the Smithsonian. More important, the design of the institution greatly resembled the multivalent goals of the National Institute. One historian has called it “a classic example of the art of congressional compromise.” 86 Sections 6-10 outlined the comprehensive purpose of the institution directing that all “objects of art, natural history, plants &c., belonging to the United States” needed to be delivered to the Institution for them to be properly classified and arranged to “facilitate the examination and study of them.” 87 The employees mentioned in the legislation included the Secretary of the Institution, and a librarian,

Honorable Rufus Choate, of Massachusetts; Doctor Gideon Hawley, of New York; and Richard Rush, of Pennsylvania, citizens at large; Doctor Alexander Dallas Bache and Colonel Joseph G. Totten representing the National Institute of Washington.


87 An Act to establish the “Smithsonian Institution,” for the Increase and Diffusion of Knowledge among Men, Act of August 10, 1846, United States Statutes at Large, ch. 178, 9 Stat. 102, 105.
curator and other assistants as needed. Finally, Rufus Choate insisted on a particular clause that assured the formation of the national library for which he had fought with an annual appropriation for the gradual formation of the library.

Clearly, the establishment of the Smithsonian did not remove politics from the Smithsonian Institution. In fact, it appears that Congress believed that the varied interests of the nation remained represented on this governing instrument. Congressmen viewed this balance of interests and the wide-ranging goals of the institution as the fruition of the nearly decade long struggle to act on the Smithson bequest. This appears the clear intention in the legislation and in the composition of the board of regents. These members selected as the Secretary of the Institution Joseph Henry, an internationally renowned leader in the emerging scientific community and a professor of natural philosophy at the College of New Jersey. Some had wanted Francis Markoe, an expert on museums and member of the National Institute for the Promotion of Science, as the leader. Still others preferred Charles Pickering of the Academy of Natural Sciences or the leading librarian of the day, Charles Coffin Jewett, for that post. Joseph Henry’s friend, Smithsonian Regent Alexander Dallas Bache told Henry that his nomination came with a price to “appoint an assistant Secretary who shall act as Librarian and Professor Charles C. Jewett

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88 Apparently some thought the job of Secretary was the inferior position and believed that the Chancellor, who a member of the Board of Regents that was selected by the body would actually be the key official. The believed the Secretary was an administrative position that was an assistant to the Chancellor. See Rothenberg, Marc, et.al. *The Papers of Joseph Henry: The Princeton Years, January 1844-December 1846*, vol. 6, 544-546.

89 ibid
of Brown University” to ameliorate the conditions with the “library part of the Board.”
He concluded the letter “Science triumphs in you today my friend.”90

The newly appointed head of the Smithsonian, Joseph Henry, detested the notion
of wasting the limited Smithson bequest on establishing a library, a museum, or even a
lecture series. The compromises made by Congress that included these objectives made it
clear to Henry and several of his colleagues that “politics” had no place in the work of a
scientist. In a letter to his friend Eliphalet Nott, long-serving president of Union College
and champion of scientific education, Henry reported his intent to promote scientific
research rather than create a “pile of brick and mortar filled with objects of mere curiosity
intended for the embellishment of Washington and the amusement of those that visit that
city.”91 He declared that too many commitments existed for the money available and
worried that the entirety would be spent on objects rather than expanding the knowledge
of humanity.

Henry sought to establish an institution devoted to specialized scientific research.
Dedicated to establishing authority for science, Henry viewed this institution as a means
to remove charlatans from the realm of science. The key to accomplishing this, in
Henry’s mind, was to support original research and publish it in a journal with the
authentic credentials provided by experts and endorsed by the Smithsonian Institution. He

90 Marc Rothenberg, “Henry, Joseph,” American National Biography Online (Oxford
Years, January 1844-December 1846, vol. 6, 544-555, 564-567.
91 Letter from Joseph Henry to Eliphalet Nott, 26 December, 1846. Joseph Henry, The
Papers of Joseph Henry: The Princeton Years, January 1844-December 1846, ed.
Nathan Reingold and Marc Rothenberg, vol. 6, 608
quickly went to work to isolate the various factions within the Board of Regents, and using the skills of a master politician, he pitted the groups against each other in order to promote his mission.\textsuperscript{92}

Many different agendas competed even after the Congressional battles were over. Henry hoped to minimize the impact and influence of those who wanted to emphasize museum and library elements of the Smithsonian’s educational mission. First, he encouraged Robert Dale Owen, the leading advocate of the popular education elements in the mission of the Smithsonian to develop plans for the new building, which was one of the enumerated requirements in the legislation. He hoped that the building would be as simple as possible and that he could separate Owen from the library faction which represented a major threat. Kept very busy, Owen submitted plans for the building in early 1847. Henry wrote to his wife that he was “quite dispirited and had resolved to…resign” if a compromise on the excessive expenditures of the building was not reached.\textsuperscript{93}

The first publication of the Smithsonian Institution was Robert Dale Owen’s \textit{Hints on Public Architecture}, in 1849, which was the product of his work as the chair of the Smithsonian’s building committee. The publication outlined the research that Owen

\textsuperscript{92} Ewing, \textit{The Lost World of James Smithson}, 315–342; Matthews, \textit{Rufus Choate, the Law and Civic Virtue}, 106–146; For in depth details on the various compromises and types of proposals throughout the decade see Dupree, \textit{Science in the Federal Government}, 66–90 My goal is not to retell the story of the establishment of the Smithsonian.

and his committee had performed as they developed the architectural plans with noted architect James Renwick, Jr., for the Smithsonian’s elegant new building. The building included an art gallery, a library, a chemical laboratory, lecture halls, and museum galleries, all were part of the mission established by the compromise in Congress. Many hailed it as an architecturally unique building in America because of its melding of the great architectural features from across Europe. This building illustrates an attempt by Owen to manage the specialization of knowledge and the multiple missions of the Smithsonian by placing them all under one roof. Further, Owen included a deep study of architectural history to try to effectively blend Norman and gothic architecture, to honor Smithson’s heritage as well as use Romanesque elements. The features and functionality for the purposes assigned demonstrate his holistic approach to knowledge that Henry thought was superfluous. Despite having many problems with the plans to develop such an elaborate building, Henry effectively marginalized Owen from the administrative operations of the Board by giving him the responsibility to deal with the construction and planning of the new building.⁹⁴ Yet this did not completely solve Henry’s problems.

Figure 9 Robert Dale Owen Proposed Design of the Smithsonian Institution in *Hints on public architecture*. 95

A mere seven months after the jubilation celebrated by the laying of the cornerstone of the Smithsonian, the seeds of internal discord had already produced distinct problems for the new institution. Henry’s *Programme of Organization of the

Smithsonian Institution submitted on December 8, 1847 and approved by the Regents provided a blueprint for the institution. After consultation with the leading experts of the day and through a “critical examination of the will of Smithson, to serve as a guide in judging of the fitness of any proposed plan…” Henry offered the following as the “priori.”\textsuperscript{96} This priority defined the mission of the Smithsonian as “stimulate researches” by conferring monetary and other awards to the leading scientific scholarship of the day.\textsuperscript{97} Further, the Institution would create a publication series to share the advances throughout the world. He also intended to give grants for “special objects of research under the direction of suitable persons.”\textsuperscript{98} These referred publications were the core of his agenda.

Henry offered several other examples including providing sponsorship of research trips for archaeological excavations or gathering objects of natural sciences. The fourteenth item on the list made Henry’s intentions and mindset clear. After scientifically divining Smithson’s intent Henry concluded

\begin{quote}
Besides the foregoing considerations, deduced immediately from the will of Smithson, regard must be had to certain requirements of the act of Congress establishing the institution. These are a library, a museum, and a gallery of art, with a building on a liberal scale to contain them.\textsuperscript{99}
\end{quote}

\textsuperscript{97} Ibid., 6.
\textsuperscript{98} Ibid., 6–7.
\textsuperscript{99} Ibid., 5.
In other words a museum, a gallery of art and a library all were part of the agenda of the institution; however, these forms of knowledge were less valuable and were only required because Congress included them as part of the mandate. In fact, these collections of items of dead knowledge were valuable, but Henry believed the real value that the Smithsonian could provide was to establish a series of surveys of libraries across the nation and a survey of learned societies throughout the world. Then the Smithsonian would produce a directory of these findings for the world.

Despite his ambivalence toward libraries and museums, Henry was keenly aware that several members of Congress and leading citizens supported establishing a large national library that collected knowledge. He worried that this would be a never ending drain on their limited resources; and thus he supported the idea of creating a national catalogue of academic libraries throughout the country in order to assist researchers in finding the location of resources. For a time Henry and the Assistant Secretary of the Smithsonian Institution, and Librarian Charles Coffin Jewett worked together on a plan to make “the Institution a centre of bibliographic knowledge” after securing “catalogues and statistics of all the Public Libraries in the United States.”\(^{100}\) This work resulted in Jewett’s *Notices of public libraries in the United States of America* in 1850. This landmark publication provided a union list of libraries and offered basic statistical information regarding the location, size, and purpose of each institution. This work

offered a crucial underpinning to a future compilation of the catalogs the institution collected. The utility of this synthesized list came when the Smithsonian could publish and distribute this resource throughout the nation and to similar institutions abroad. Jewett also published this plan in 1851 after presenting it during a meeting in the preceding year to Joseph Henry’s own American Association for Advancement of Science.

The American Association for Advancement of Science was Joseph Henry’s ideal organization to establish authentic scientific standards. It grew from the foundation of the small but successful Association of Geologists and Naturalists. These establishments consisted of the younger scientists who viewed everyone outside their circle as imposters. Calling themselves the Lazzaroni they sought to promote the truths of pure science. The Lazzaroni were the lowest class in Naples and lived by doing odd jobs or begging.\footnote{“Lazzarone, N.,” \textit{OED Online} (Oxford University Press), accessed June 19, 2015, \url{http://www.oed.com.mutex.gmu.edu/view/Entry/106565}.} A commitment to abstain from traditional public life in favor of their life of study led these scientists to adopt the nickname. The club had worked together for several decades to establish authority and to overcome and supplant the existing intellectual order in favor of a new one.\footnote{Axel Jansen, \textit{Alexander Dallas Bache: Building the American Nation through Science and Education in the Nineteenth Century} (Frankfurt ; New York: Campus Verlag, 2011), 249–284.} Through attracting members of the elite and limiting membership the Lazzaroni were able to establish a monopoly over the definition of scientist. As such they
established methods to assure authority over knowledge.\textsuperscript{103} Henry was elected the Association’s President in 1849.

Jewett’s next goal sought to use the technology of stereotyping to create a cheap way to publish a national catalog and to distribute that throughout the nation. Evidence of Henry’s support of this function abounds in his correspondence. He wrote to several leading scholars and librarians of the day introducing Jewett and his plan. One example of this was an August 1850 letter to Samuel Haven of the American Antiquarian Society. Henry wrote that the “Smithsonian Institution, desirous of facilitating research in literature and science…resolved to form a general Catalogue of the various libraries in the United States.”\textsuperscript{104} This method fit the idea for promoting research without expending money for books that would gather dust on shelves. Nevertheless, Jewett and his patrons demanded more resources for the library.

Having made significant progress on Henry’s institutionalized vision for the Smithsonian library Jewett sought to begin to build the collections so that the Smithsonian Library would become the national library. As part of Rufus Chaote’s compromise, significant parts of the endowment were used for the library after the building had been completed. Henry remained committed to appropriating only a shoestring book budget for a small working collection of titles and instead sought to build the collections only through the copyright depository sections of original legislation. This

\textsuperscript{103} Their flagship publication \textit{Science} remains among the most significant publications in the world to date.

frustrated Jewett and resulted in his removal in 1854 for insubordination, after he and Henry clashed over their interpretations of the roles of the library and research functions within the Smithsonian. Henry proceeded to eliminate the copyright proviso from the Smithsonian mission and transferred the majority of the library collections to the Library of Congress.105

Moving the library assured the focus on Henry’s vision of science as he begrudgingly accepted the role of national museum under the caveat of receiving more support. His focus remained on producing expertly reviewed publications and supporting new research. As time passed, Henry grew increasingly bitter about his conflict with Jewett and supporters. Henry completely reframed the story as a disagreeable time caused by ignorant politicians and men with no vision for how to create and disseminate true knowledge.106 Jewett on the other hand returned to Boston and immediately became the superintendent of the Boston public library, which was the first municipal public library system in the country.107

The Smithsonian Institution fulfilled one vision of establishing a national university. This design included both a research arm and a component consisting of a library and museum. When established, it appeared to be an institution built from

political compromise between many of the different interests of citizens throughout the nation. This institution offered something for everyone and was supposed to be a new type of institution built on the ideal of being an open collection for citizens to view and use. In several annual reports, such as the one in 1856, emphasize that the collections are "freely open to any persons engaged in original research." The previous year, after the completion of the construction of the building, now known as the Castle, the annual report detailed that several associations had utilized the spaces in the building to conduct their meetings. Importantly, the building had been planned to “accommodate the meetings of literary, scientific, and other associations which might assemble at the seat of government” as long as the group had no “party or sectarian character.”

Despite the fact that those who established the institution did so as an open establishment for a broad community of users, it is hard to track and see if it really was open to all. The same annual reports that declare the open nature of the institution also emphasize the increasing burden that these physical collections have on the Institution. Joseph Henry never hesitated to remind all that the main purpose of the institution ought to be one dedicated to supporting scientific research and not gathering collections for the general use of the population. Henry disdained the idea of collecting objects like books

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and items of natural history since he viewed these ambitions counter to the advancement of knowledge. After jettisoning the bulk of the Institution’s library, and the responsibilities of serving as a national library, Henry hoped to remove the museum component of the Institution.

This proved impossible for many reasons, not the least of which was that all the natural history specimens collected by the federal government that was housed in Washington D.C. including the massive collections of the United States Exploration Expedition, were transferred to the care of the Associate Secretary and Curator Spencer F. Baird. Baird became Secretary, after Henry’s death, and emphasized the importance of the collections, and led the installation of the Smithsonian’s exhibit at the Centennial celebration in Philadelphia in 1876. The Smithsonian archives staff report “Baird's most important triumph, however, came as he was able to convince most of the Centennial exhibitors to avoid the hassle and expense of shipping their displays home by donating them to the Smithsonian.”

Baird filled sixty boxcars of donations for the national museum, which provided the impetus for Congressional appropriations for a National Museum building that opened in 1881.

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Many of the scientists of the mid nineteenth century emphasized the need to separate the world of ideas of science from the domain of politics and sectarian knowledge. They sought to establish the Smithsonian Institution as a research facility devoted to promoting specialized scientific knowledge. Ironically, it closed the door to the idea and participation of the citizen scientist in favor of promoting a new specialized class of elite scientists. These learned men sought to be free from those whom they viewed as amateurs and as charlatans and favored creating a new professional class to study specialized disciplines. They also believed that their notion of scientific knowledge trumped others. As such, this institution benefited all by allowing the few to organize and spread knowledge throughout the republic in an efficient manner. The debates over the purpose and nature of the knowledge institutions within the United States changed the definition of how people thought about and participated in the creation and dissemination of knowledge. Scientific research became an all-powerful way to understand the world without the messy debates over the meaning of knowledge. Science became a universal truth distinctive from humanistic understanding of texts, the arts of practical application, or even the science of social organization and politics. Ironically, this new savior of the republic created more divisions through specialization and it encouraged more distinctive parsing of knowledge based on local geographies and occupational needs. Some believed that separating science from politics offered a future free from discord. Even though Henry wanted to separate politics from science, he was a masterful practitioner of political arts and he constructed the scientific identity as a way to thwart democratic excesses. To him, libraries, museums, and associations focused on the arts of
entertainment and science and dedicated to practical and commercial interests were subject to appropriation by clever men that undermined the mission of a true scientist. In the end, this struggle between a narrowly specialized or elitist vision for the dissemination of knowledge and a more democratic notion began with the original debates over Washington's national university and continued through the establishment of the Smithsonian. These debates continued after the establishment of the Smithsonian and continue today. The modern Smithsonian Institution is best known as a series by the American public as collective of museums meant for the people of the nation and the world. Despite Henry's efforts, the idea of democratic access ultimately prevailed, though it took decades to fully realize this dream.
A radical transformation—an information revolution—occurred between the era of the American Revolution and the Civil War. This change profoundly altered the way people participated in the creation and dissemination of knowledge, culminating in the proliferation of new sources and institutions of information. This process, in turn, shaped the way American citizens participated in the democratic polity.

From the earliest days of the republic, George Washington had envisioned the need for a national university to educate the future leaders of the nation. Washington, as one of the few founders that did not possess a college education, greatly esteemed learning and hoped that this institution would serve as a centralized location for the youth of the nation to learn the privileges and duties of citizenship in their nascent republic. Washington embraced the Enlightenment’s understanding of the universal nature of knowledge and believed the quest for this knowledge provided a goal for the improvement of humanity. In order to eliminate discord, promote mutual goals, and progress, Washington and many Federalists wished to establish an institution designed to initiate and nurture the bonds of affection of the nation’s youth through the acquisition of common knowledge and shared experiences. They worried that without constant vigilance their new nation was destined to devolve into factions filled with unscrupulous men who held designs that promoted their own self-interests. The republic needed to sequester their youth among the best in
the nation and provide them with a safe place, free from the corruption of the older institutions of Europe, to mature as the rightful inheritors of the goals of the revolution.

Yet almost a half century later when the Smithsonian was established, the notion of what constituted a national university had changed. Instead of a universal institution designed to promote common vision for a homogenous citizenry, a complex environment became evident from the plethora of specialized interests of residents. These specialized interests were evident in the different types of organizations and institutions; each designed to fulfill the information needs for its distinctive community. Although legislators intended the Smithsonian as an institution to fulfill the many information needs in the nation, the way that the leadership of the institution implemented its mission assured that a new type of science would spur on a radical change toward further specialization of scientific knowledge. Joseph Henry and other leading scientists demanded an institution that promoted original research. Rather than focusing on collecting and displaying knowledge, Henry wanted his institution to serve as a catalyst for science to improve the condition of humanity. This required a rejection of the notion promoting citizen science in favor of the specialized scientist who needed to remain separate from the politics in order to focus on his own specialized understanding of world. At the same time, the institution would also become a museum, which would open up knowledge to a larger public and create a more democratic arena for sharing information.

Scholars have long recognized the expansion in the amount and range of sources such as newspapers, magazines, almanacs, catalogs, and documentary histories. These
information sources were critical for conducting business, and in a republic it was crucial for the citizenry to be educated participants in the spread of knowledge. Knowledge is thus a factor of production and a core part to self-governance. Other scholars have recognized the development and enhancement of several communication networks in conjunction with the expanding transportation network. The convergence of political, market, transportation and communication revolutions all produced a revolution in the expansion of information in the early American republic. Access to new information markets offered more opportunities for a diverse and engaged citizenry to participate in the public sphere. The citizen scientist who took part in what had been solely the domain of elites best exemplifies this change.

The challenge became evident as more people participated in the democratizing of knowledge in the United States. Many worried it was becoming exceedingly difficult to trust the quality and veracity of information due to influx of new practitioners. With diversified participants came an expansion in the creation of new information and projects in the new nation. Some became military engineers and participated in the expansion of civil engineering projects as well as mapped the west and located the vast mineral resources in the region. Others collected and studied natural oddities and sent their findings to traditional institutions. When ignored, they formed their own institutions. Some of these groups and individuals became incredibly successful. Some of these were specialized learned societies such as the Academy of Natural Sciences. Others formed museums, or presented their findings in the plethora of new options including Lyceums. Other examples of these new citizen scientists included those who believed that the Earth
was hollow and called for expeditions to travel to the center of the Earth. Still others called promoted their ideal of expanding civilization by enhancing a new moral education for a community of Americans as well as the Native Americans and others deemed to be heathens. This seemed to offer new opportunities, however, many believed that offering access to the public sphere provided an opportunity for charlatans to defraud the citizenry. As a result, such leaders sought different means to create access to knowledge without totally abandoning hierarchies.

Government remained an important gatekeeper in establishing official sanction for institutions; more proto-professional groups, however, form established a basic level of self-regulation over their nascent disciplines. Some hoped that the National Institute for the Promotion of Science would serve as a national institution to govern the rolling flood of new scientists and the explosion of new information sources in the nation. By the time that the Smithsonian was established, few trusted a universal society to perform this work. Instead, many relied on national institutions focused on individual branches of knowledge and with their own means of control. The American Academy for the Advancement of Science grew out of from the Association of American Geologists and Naturalists. The membership requirements were stringent and moved away from the democratic approach of the National Institute and other groups that allowed membership to anyone interested and able to pay. Instead, the AAAS demanded that members should already be members of specialized learned societies, college professors, or civil engineers employed in public works. As a result, admittance was limited. The AAAS established
the journal *Science*, the model publication for academic and scientific research to this day.

Joseph Henry’s design for the Smithsonian intended to remove the specter of political interests in favor of establishing an institution designed to efficiently apply its limited resources toward scientific researches to promote the expansion of knowledge. Further, Henry, hoped that the Smithsonian would serve as a nexus to tie together colleges and eventually the research universities in the United States. Rather than being a single national institution that served the variety of different needs of the nation, Henry insisted that the Smithsonian focus on a few specialized tasks including that of a clearinghouse for natural history. As such, the Smithsonian became the depository for the vast amount of specimens collected by various agencies of the United States Government over the years. The Smithsonian also showcased the technical and scientific knowledge of the United States to both its citizens and to the world. The Smithsonian provided leadership for the national presence at World’s Fairs as well as various industrial exhibitions and the 1876 Centennial Celebration. Publications highlighting the significance of the collections told the world that the United States belonged amongst the elite scientific nations of the world.

It was no accident that specialized institutions connected to specific disciplinary studies developed independently after the Smithsonian was established to promote natural history research. Agricultural and technical colleges proliferated as a means to promote practical knowledge and they developed experimental stations to promote their needs. The proliferation of diverse types of libraries enhanced a wide range of scholarship. The
push for public libraries to promote the educational needs of the poor resurfaced, and the specialized needs of scholars led them to advocate for a national library. Supporters of educational agendas remained committed to the establishment of a national university; the call for these institutions went unfulfilled. Instead, the proliferation of normal schools and other teaching colleges continued as populations increased throughout the nation. Knowledge became measured by its practical application and the value that it provided to material progress in the country.

Advocates for a national university of universal knowledge believed that access to knowledge was critical for the success of a republic and to society. The question remained what means would provide for that goal. Institutions provided a mechanism to establish order over a chaotic information environment. Peale’s museum began as a democratizing institution allowing broader communities to experience the new scientific knowledge. Once museums became less exclusive, men of learning demanded new types of institutions to secure “real” knowledge from that which was being consumed by the masses. By the time a national museum was constructed, men of learning typically performed science out of the public eye. Nevertheless, many of commercial elements of science and technology remained to demonstrate the importance of technological advance with the advancement of civilization.

Despite the efficiency and the establishment of new kinds of professional work for the citizens of the nation, significant costs existed. People became isolated within their own specialized professional communities. Although promoting efficiency, the result was an isolated polity concerned more with self-interest rather than the virtues of
citizenship. Despite the fact that more people consumed knowledge and participated in creating new knowledge, access to the correct specialize knowledge became the key to success. Yet, at the same time, that knowledge was becoming increasingly specialized and under the purview of a scientific elite, the means of dissemination—the museum—actually created the potential for a more democratized form of sharing information with a larger public. Ironically, the abandonment of the dream of a national university meant that more Americans could potentially take part in experience of learning about the fruits of the federal government’s research.

Although far distant in time, the debates over a national university speak to present-day questions concerning information in a digital age. We are living at a time when the shift from the printed word and physical libraries to digital technology and virtual-learning environments are rapidly changing what it means to be an informed citizen. Although most commentators see the digital revolution as a process of democratizing knowledge, the debates over the national university suggest that it will be a more complex process. At the same time that information will be more widely available, some forms of knowledge may become more highly specialized and inaccessible. The ease of dissemination may make every person believe that he or she is an expert—in which case, the authority and validity of knowledge may be open to question. Information revolutions change not only what is known but also how citizens participate in the democratic process. Figuring out the implications of these changes for the present system of American government is the task at hand. Learning from the fate of
Washington’s national university may provide some clues as to where we as a nation are headed.
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