REVIEW ESSAY THE TRANSFORMATIVE TECHNOLOGIES OF STEAM AND LIGHT

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ndrea Sutcliffe. Steam: The Untold Story of America's First Great Invention. (New York: Palgrave Macmillan, 2004. Pp. xiv, 272, notes, bibliography, index, cloth \$24.95, paper \$14.95.)

Jill Jonnes. Empires of Light: Edison, Tesla, Westinghouse and the Race to Electrify the World. (New York: Random House, Inc., 2003. Pp. xiv, 416, acknowledgements, bibliography, notes, index, cloth \$27.95, paper \$15.95.)

Two transformative technologies—the steamboat and electricity—undergoing development at the end of their respective centuries at the hands of two sets of three inventor-entrepreneurs are the focus of the books here under review. Andrea Sutcliffe's *Steam*, if not exactly "the untold story" of its subtitle, is certainly a well written single-volume retelling of the competitive race among John Fitch, James Rumsey, and Robert Fulton to develop, patent, and most importantly, operate a commercially viable steamboat on America's waterways at the turn of the nineteenth

century. Jill Jonnes illuminates the equally exciting drama surrounding the development of electric lighting at the turn of the twentieth century, which more often than not found Thomas Edison, George Westinghouse, and Nikola Tesla competing with each other for advantage and acclaim. Each technological story has been told multiple times before but is here respectively retold as a single interwoven narrative by a knowledgeable author who has both conducted research into the relevant archival papers of the primary actors and drawn upon the existing secondary scholarly literature to produce a thoughtful and enlightening assessment that is enjoyable and intriguing to read.

From the mid-1780s, when James Rumsey and John Fitch each came up with an idea for a steam-powered boat to the 1807 maiden voyage of Robert Fulton's North River (later and more popularly known as the Clermont), generally acknowledged as the first commercially successful steamboat, a very competitive and often acrimonious race among these three principals, and others less well known, was on. Although the idea of a steam propelled boat was generally in the air, if not yet on the water, the technical particulars were not yet worked out-at issue were such questions as whether to use high pressure or low pressure engines, or an air or water-jet propulsion system versus mechanical paddlewheels, oars, or propellers. Benjamin Franklin had expressed the view that paddlewheels were inefficient leading Fitch and Rumsey to try oars and jet propulsion respectively. Their competition for primary patent recognition under the newly formed 1790 Patent Office came to naught when Thomas Jefferson, head of the first patent board, under the rules then operative, awarded both men patents, thereby favoring neither. Both Fitch and Rumsey struggled in an era when technological know-how was relatively limited, including the ability to fabricate and machine precision parts, when investment capital was in short supply and its lenders often short-sighted with respect to prompt returns, and when the political mechanisms for supporting and rewarding inventor-entrepreneurs were still in their infancy. By 1807 Robert Fulton had the distinct advantages of advanced mechanical capabilities available to him for hire, the knowledge of what had not worked previously, often the most valuable sort of knowledge (for example, a willingness to try paddlewheels in the face of the ultimate failure of Fitch's oars and Rumsey's jet propulsion systems), and the contractual right to export a Boulton & Watt steam engine from England to the United States. Perhaps most important of all was his partnership with the wealthy New York politician, Robert Livingston,

which at once meant sufficient financial wherewithal and the protection of a twenty-year navigation monopoly on the Hudson River. The latter would secure both partners' financial success and, in fact, enabled Fulton to subsequently turn his attention to developing steamboats for the western Ohio-Mississippi waterway, which would subsequently be a tremendous force for population expansion and opening up the economy on a national basis.

Like steam power in its time, the idea of electric lighting was in the air during the second Industrial Revolution of the late nineteenth century. As had the innovators of the steam engine, Edison, Westinghouse, and Tesla vied, often heatedly, with each other to create a viable electrical lighting system. And just as Fitch, Rumsey, and Fulton had a century earlier, these three electric-industry entrepreneurs struggled to understand the technology, to raise sufficient financial backing, and to attain the patents that would protect the electrical empires envisioned. The key would be refining a technological system that would reliably and inexpensively serve large numbers of consumers. Edison's primary role was the development of the incandescent light bulb, thereby subdividing the light for interior use, and even more importantly its incorporation into an electric lighting network, realized first in New York City, but soon replicated in other locations across the nation, that was capable of challenging the gas lighting industry. Tesla, an eccentric Serbian electrical engineer and inventor who once worked briefly for Edison, contributed the idea of using alternating waves of electric current thereby enabling its transmission over much greater distances than was possible using Edison's favored Direct Current (DC). Westinghouse, himself an inventor of railroad-related braking and signal control equipment who was often paired with Tesla, sought to further systematize the production and distribution of inexpensive electricity. The central technical issue, at least as presented by Jonnes, was the debate over whether to use DC as promoted by Edison or Alternating Current (AC) as counter-proposed by Westinghouse and Tesla, a debate played out in venues as distinct as the harnessing of Niagara Falls for hydroelectric power and the nation's first electric chair execution. Their story, as was the case with the steamboat innovators, was one of personal competition, but given the era and the technical nature of the electric industry, it was also one of corporate struggle. In the end Westinghouse and Tesla's AC would win out over the DC system promoted by Edison, but along the way Edison's electric lighting company would be absorbed into what became General Electric and Westinghouse would lose

control of his company, with both subsequently coming under the effective control of the J.P. Morgan investment banking interests. Tesla, who at one point gave up control over(and thus the right to profit from) his AC induction motor and related patents in order to help Westinghouse survive an 1890 financial panic, with perhaps not surprising personal economic dislocations, would move on to scientific experiments with high frequency radio signals.

By themselves, each of these books tells the story of a technology that was key to the nation's subsequent development in the following century, technologies without which life would have been much different, or certainly altered in terms of the pace of change. Both Sutcliffe and Jonnes describe the technical and business contributions of the central actors in the dramas surrounding their efforts, and more importantly how intertwined each of the three men were, connections often overlooked or downplayed in other works where only one inventor is the focus of study. Beyond this, they nicely reveal the personal, often quirky, sides of the individuals, especially in the instances of Fitch and Tesla, two talented but star-crossed innovators. Together they tell the reader much about technological savvy and innovation, the importance of attracting financial support, the power of political connections and public relations, and the centrality of identifying, developing, and appealing to the right market to insure success. What is not really explicated in any real detail, although to be fair, in neither case was it the author's primary purpose in writing, was the subsequent history of the societal influence of the steamboat and electricity once they became widely available for use. For that other volumes will have to be consulted. Both books are part of a flurry of more popularly written books exploring a variety of technological topics and commodity products that have appeared in recent years ranging from Dava Sobel's Longitude (New York: Walker, 1995) to Barbara Freese's Coal (Cambridge, MA: Perseus, 2003). As such they are a welcome addition to other such works, and to the scholarly literature in the history of technology, which reflects not only upon the importance of such key innovations, but also upon the human drama entailed in their development and subsequent spread through and influence upon society.

William A. Pencak and Daniel K. Richter, eds. Friends and Enemies in Penn's Woods: Indians, Colonists, and the Racial Construction of Pennsylvania. (University Park: The Pennsylvania State University Press, 2004. Pp. xxi, 336, abbreviations, notes, contributors, index, cloth \$60.00, paper \$22.95).

The maxim "life's uncertain; eat dessert first" has a certain applicability to essay collections such as this one. With so much set before you—in this case, thirteen essays as well as an introduction and an afterword—a reasonable approach is to pick and choose, mindful of the fine line between being sated and feeling bloated. In that spirit, this review will briefly touch upon each of the entrées, offering a guide rather than an authoritative recommendation for the discriminating grazer.

First, start at the end. James Merrell's "Afterword" poses an interesting question: why have Penn's Woods "remained relatively unexplored" (p. 260) in the past thirty years, even as scholars have rediscovered the Indians' importance in early American history? Of course, Merrell, Jane Merritt, Gregory Evans Dowd, and others have recently published books that defy this observation, but Merrell's larger point—that Pennsylvania has typically been treated as the odd man out when it comes to studying the European-Indian encounter in colonial North America—still holds water. Should we study Pennsylvania's Indian relations because they were the exception to the rule, or, as Merrell suggests, because they set precedents ultimately followed by the United States as a whole?

Most of these essays agree with the latter, finding in early Pennsylvania patterns of European-Indian relations that reflected wider trends in colonial America. Michael Dean Mackintosh's study of conflicting Swedish and Lenape notions of land and animal use in the Delaware Valley is reminiscent of environmental histories that have been written about colonial New England and the Chesapeake Bay. James O'Neil Spady's essay on the iconic status of William Penn's 1682 "Treaty with the Indians" knocks the rotund Quaker down a few notches, resituating him among other colonial founders who attempted to impose their idea of property rights on the Indians' landscape. Alison Duncan Hirsch and Amy C. Schutt contribute essays that address gender and the interpersonal dimensions of European-Indian contact, drawing from and speaking to a wider current of scholarship on the colonial fur trade and missionary enterprises. William A. Starna's essay on the diplomacy of Onondaga headman Canasatego and Steven C. Harper's analysis of the fallout from the Walking Purchase both address matters of intercultural diplomacy in a way that connects eighteenth-century Pennsylvania to the geopolitics of the Iroquois Covenant Chain. The last three essays in the volume—Krista Camenzind on the Paxton

Boys, Paul Moyer on the Yankee-Pennamite struggle for the Wyoming Valley, and Gregory T. Knouff on the memories of war veterans of the Revolutionary Pennsylvania frontier—all deal in one way or another with the division of frontier peoples into racial categories of "White" and "Red" and the gendered construction of white masculinity in eighteenth-century America.

Some of the essays do take an opposite direction, preferring to emphasize the singularity of intercultural relations in Pennsylvania. One such example is Carla Gerona's study of the correspondences between Quaker and Indian dream interpretation, a cultural middle ground made possible by Pennsylvania's unique religious heritage. Likewise, David L. Preston's essay on the "triangular contest among proprietary officials, squatters, and Indians" (p. 182) emphasizes the unique social and demographic circumstances of the Pennsylvania backcountry, where Native Americans and European immigrants often had reason to cooperate in resisting the Penns' assertion of dominion there. John Smolenski and Louis M. Waddell each contribute an essay that addresses the efforts by Pennsylvania magistrates to extend their legal jurisdiction over crimes committed by or against Indians. William Penn and his agents did have some unique opinions about such matters, but more interesting is the fact that Smolenski and Waddell disagree with each other: the former concludes that in the eyes of Pennsylvania's magistrates "equal punishment meant Anglo punishment" (p. 123), while the latter finds evidence that the administration of colonial justice bent to accommodate Native American notions of culpability.

So, like Homer Simpson lamenting that only German potato salad is available in Hell's barbeque line, what empty space on my plate am I left longing to fill after reading this collection? Everything ends quite suddenly after the American Revolution; what of Indian Pennsylvania after 1800? A contribution on the Cornplanter Tract would help round out the treatment of the early national era. The chronological breadth of the collection might also have been expanded by the inclusion of an essay on the Carlisle School or some other Pennsylvania-based manifestation of nineteenth-century reformism by the "Friends of the Indian." Mostly, this volume left me thinking about my well-thumbed copy of Paul A. W. Wallace's *Indians in Pennsylvania* (originally published in 1961) and the need for a new one-volume narrative of Pennsylvania's Indian history that synthesizes the scholarship and methodologies featured here. Until that book is written, this fine collection of essays will have to do.

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Jeff Bach. Voices of the Turtledoves: The Sacred World of Ephrata. (University Park: The Pennsylvania State University Press, 2003. Pp. xix, 282, bibliographical essay, notes, index, cloth \$35.00.)

Jeff Bach divides his book into seven chapters, discussing George Conrad Beissel's religious beliefs, those of other contemporary writers, ritual at Ephrata, gender issues at the Cloister, the colony's mystical language, its manuscript art, and hidden knowledge at Ephrata. Whereas perusing the introduction to a book is often optional, a careful reading of Professor Bach's lengthy, detailed introduction is imperative. Even scholars familiar with the Cloister will find it beneficial. Bach summarizes nicely the history of the movement, correcting some widely held, but erroneous, assumptions. Several helpful maps and diagrams are shown. Other supplementary materials include a list of useful abbreviations and endnotes that are both profuse and elaborate.

Bach's bibliography, in essay form, is quite thorough and is divided carefully into primary and secondary sources. The latter section is separated into nine subdivisions, some of which correspond to the book's chapter headings. Other sections give invaluable references to works dealing with recent archaeological digs by Stephen G. Warfel and with both early and current studies of Cloister architecture. Another section cites important scholars and their studies exploring the music of the Ephrata Cloister.

Bach's fluency in German, including eighteenth-century peculiarities, is a valuable asset used effectively in this study. Many other writers have relied upon extant translations of significant works, especially J. Max Hark's rendering of the indispensable *Chronicon Ephratense*. Bach updates and improves Hark's work. He has also uncovered obscure letters and other documents, making them more accessible by reproducing them in English for the first time and by updating previous translations.

In his introduction, Bach states a major premise of his study: "This book proposes that Conrad Beissel and others at Ephrata used familiar elements from German Radical Pietism to create a language and ritual practices to convey a mystical awareness of God." He continues, "The portrait of Ephrata provided here . . . focuses on the unique religious language and ritual of this distinctive community, virtually unknown beyond the circle of regional interest" (p. 4).

Bach considers that the first ten years of Beissel's writing comprise his early works, with his mature period beginning in 1742. A major portion of

his mature beliefs and thoughts are included in *Deliciae Ephratenses*, Pars II, 1773. Included are the *Wunderschrift (A Dissertation on Man's Fall)* and a collection of *Geistliche Reden* sermons. The last one of these untitled sermons is the most important. Beissel believed that the members of the "true church" at Ephrata spoke "the one mother language" given directly by the Holy Spirit. According to Bach, the *Vorsteher* often employed apophatic language, the *via negativa*, involving denial and loss of self (p. 36). He also cast his ideas in cataphatic language, *via positiva*, involving a spiritual marriage of the soul to either Christ or Sophia (p. 37). Lest one think that Beissel's ideas were exclusively his own or else were forced upon his followers, Bach includes the section "The Religious Thought of Ephrata: Other Writers." Even severe critics of Beissel followed his example in such practices as Sabbath observance and celibacy.

Ritualized worship events at the Ephrata community were generally called "Holy Church Practices" (*Heiligen Kirchen Gebräuchen*), rather than sacraments. Beissel borrowed heavily from his former religious affiliation, the Dunkers, including baptism by trine immersion, love feast (consisting of feet washing, a common meal, and the bread and cup), anointing for healing, consecration by the laying on of hands, and the holy kiss. Constant prayer was intended to occupy the hours normally used for sleep.

In addition, at one time or another, the community fasted, adopted the tonsure, wore monastic attire, and, possibly, practiced self-flagellation. For several years, Beissel advocated and practiced baptism for the dead. Bach cites evidence for the intriguing possibility that the Mormons were influenced by the Ephrata community in this regard.

Ephrata residents, variously, were vegetarians, pacifists, opposed to slavery, and reluctant to utilize animal labor, preferring to pull plows themselves. Beissel's lofty goal was to make the residents so spiritual that they would never need to sleep, become tired, digest food, or eliminate waste. Bach begins his next chapter, "Manly Virgins and Virginal Men: Gender at Ephrata," by quoting Beissel, "Woman is the lack of the man, and man is the lack of the woman." This quotation exemplifies Beissel's belief in an androgynous God, Adam's origin as both sexes in one being, and the later merged savior figure of Christ/Sophia.

Derivative of this theory is Vater Friedsam's belief in the equality of the sexes, hence, opposition to male dominance. As a result, Beissel encouraged married couples to separate so that each partner could achieve eternal life in

one of the solitary bodies. "God's Holy Point of Rest: Ephrata's Mystical Language in Space and Time" describes how patterns of those dimensions contributed to Ephrata's goals. Bach describes the three overlapping architectural periods: the solitary period, in 1725; the monastic communal period in 1735; and in 1749, a dormitory for boys, which died in the planning stage. Time at Ephrata followed the Jewish pattern, configured so that the sabbatical number, seven, came at midnight and at noon. "Although odd to the uninitiated, Ephrata's system of time expressed Beissel's allegorical harmonization of Old and New Testaments. . . . Thus Ephrata used its mystical language to count the hours until eternity" (p.138).

Jeff Bach, in his epilogue and elsewhere, summarizes Beissel's goals, but also points out the difficulties in achieving those goals. "Conrad Beissel spoke and wrote in an idiom that he wished to have understood in a mystical sense. He developed a language to portray God's presence in the intimacy of loving spouses, in the nothingness of dissolution into God, in the holiness of theophany in an inner sanctum" (p.194). "When grounded in the work of Christ and Sophia, the metaphors helped sustain a community of prayer and charity. In successes and failings, Ephrata's singular language created a unique community of faith and practice in the holy experiment of Pennsylvania" (p. 67). However, "[a]s early as 1762 Peter Miller wrote that only a few remained who could speak the 'language of the Spirit,' and that they were hard to understand" (p. 193).

Jeff Bach's often ponderous writing style may discourage the casual reader. Also, the bibliography, packed with information, would be much more readable and useful if it were written in the more common alphabetical style, with separate annotations. However, anyone who is seriously interested in expanding his or her knowledge of the Ephrata community and its founder, Conrad Beissel, will benefit handsomely from a careful study of this book.

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Alyn Brodsky. *Benjamin Rush: Patriot and Physician*. (New York: Truman Talley Books/St. Martin's Press, 2004. Pp. viii, 404, notes, selected bibliography, index, cloth \$35.00.)

Benjamin Rush played key roles in American public life during the Revolution and into the early republic. He advised Thomas Paine in the writing of *Common Sense* and even suggested the title. He signed the Declaration of Independence and then became an army surgeon, emerging as one of the leading medical authorities in the country. Rush was a strong backer of the 1787 Constitution, and advised Washington, Jefferson, Franklin, Adams, and other luminaries. Yet for all his achievements, Rush remains little known relative to other leading figures of his time.

Alyn Brodsky's new biography laments this condition and tries to correct it. He offers a life and times of a man he regrets has been reduced to "little more than a historical footnote" (p. 5). Brodsky has also penned biographies of Grover Cleveland, Fiorello La Guardia, and other books. His career also includes stints as combat correspondent, lecturer on classical music, book critic, and editor of encyclopedias on American history and the Bible. In this book, Brodsky is determined to restore Rush to his rightful place.

Rush is deserving of more recognition and higher status. His career (or careers, given the multiplicity of Rush's interests and activities) intersects with key events and developments in early American history. A sound scholarly biography could shed considerable light on Rush and his era. Unfortunately, Brodsky's book is not such a work and seems unlikely to compel a reexamination of Rush's life. It is too much a simple narrative of events with frequent unhelpful digressions that relate only tangential information. Brodsky offers almost nothing in the way of analysis, context, or meaning. He fails to analyze Rush's career, while also overlooking the meaning and significance of what he accomplished. Not once does he offer a compelling reason for Rush's importance and there is no thesis or overarching interpretive thread. Brodsky thus tells Rush's story, but does so without advancing an interpretation of what it meant or why it was significant.

This work is largely based on Rush's published writings and autobiography, and on other secondary sources. Brodsky's writing style tends toward exclamations and gratuitous if sometimes interesting asides. His treatment of Rush's life is uneven and unbalanced; the first 258 pages cover his life through the Revolution, while only the last 100 pages cover the final 30 years of his life. Well over one quarter of the book focuses on Rush's activities

during the Revolutionary War. Brodsky is, however, capable of telling good stories. His chapter on one of the most famous aspects of Rush's career—the 1793 yellow fever epidemic in Philadelphia—is interesting and informative, but this section stands apart from the bulk of the work.

Brodsky actually raises a fascinating question in his introduction about why, despite his myriad accomplishments, Rush remains relatively little known today. Unfortunately, he immediately dismisses it: "let us not ponder why Benjamin Rush is not remembered today as he should be. Rather, let us examine why he deserves to be so" (p. 6). What makes this problematic is how Brodsky's whole project begs the question of why Rush is not remembered as he should be. Rush deserves a biographer who will probe that question in the course of examining his life and who will offer some thoughts on the meaning of events and their significance. Was Rush's personality partly to blame? Was it his obsession with settling scores or attacking rivals? Or was it his "impetuousness and a proclivity for indiscretion" (p. 194) as Brodsky puts it? Several of the stories that Brodsky tells suggest as much, but the author fails to link those stories to any larger interpretive frame. By failing to explain or even address Rush's obscurity in the face of obvious achievement—central to the premise of the book—Brodsky not only misses an opportunity, but fundamentally fails at his appointed task. Benjamin Rush was a vitally important figure who deserves careful scholarly attention. This book, however well-intentioned, does not provide it.

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Paul Douglas Newman. Fries's Rebellion: The Enduring Struggle for the American Revolution. (Philadelphia: University of Pennsylvania Press, 2004. Pp. xii, 259, notes, index, cloth \$29.95, paper \$19.95.)

These are the best and worst of times for up and coming historians. The choices of topics and methods are virtually limitless, with none of the former artificial limits on which topics were "serious" enough or materially feasible to research. Sophisticated research methods and aggressive contextualization have allowed any number of formerly obscure topics and "minor" events to accumulate a significant literature. While intellectually liberating, the efflorescence of scholarship on formerly obscure topics places some burdens

on the rising historian that can be difficult to manage. How can a writer do justice to it all? Where can a new study fit into a burgeoning literature? How much context can one book stand?

Fries's Rebellion is a case in point. While invariably making at least a cameo appearance in studies of Pennsylvania politics, the Adams administration, and the election of 1800, it managed to avoid sustained scholarly attention (outside of dissertations) until this journal published a special bicentennial issue on the subject in 2000. The present volume by Paul Douglas Newman, one of the contributors to that special issue, appears to be the first full-length scholarly book ever published on this topic, and as such bids fair to become a standard reference. Unfortunately, while scrupulously thorough, Newman's tome makes it obvious that there are good reasons why no one ever tried such a thing before.

It turns out that reading a whole book on Fries's Rebellion underscores how little there was to it. As Newman shows, the very name is a serious misnomer: there was no fighting in 1799, and John Fries was most likely trying to restrain the tax protests rather than lead them. Believing that the 1798 Direct Tax on personal wealth was unconstitutional and possibly not yet in effect, the Kirchenleute, or "Church People" (non-sectarian Germans), of Northampton and a few neighboring counties got up petitions asking Congress to repeal the tax and formed associations to prevent the local assessors from doing their work. The most serious incident came when U.S. Marshal William Nichols arrested some of the resistors in early 1799. On March 7, a hastily assembled force of some four hundred Kirchenleute men besieged Bethlehem's Sun Inn while Nichols and his deputies enjoyed a nice lunch inside. After some negotiations mediated by popular auctioneer John Fries, the prisoners were released and "Fries's Rebellion peacefully concluded without gunfire, fisticuffs, or bloodshed" (p. 140). Even "Northampton Insurrection," the alternative designation favored by some scholars, seems a stretch.

Newman's narrative deflation of "Fries's Rebellion" in chapters 3 and 4 is preceded by nearly eighty pages of build-up that the Northampton events cannot easily pay off. Perhaps straining to fill a book-length study, Newman takes the reader on a tour of virtually everything even remotely connected to the Kirchenleute resistance, including most of the major and minor political events of the 1790s, all the major strains of political thought that historians of the period have identified, and most of the significant metatrends posited by social and cultural historians of the period. Nor is the contextualization limited to the early republic. Most other rural protest movements in

American history pop up for at least a page or two. One section at the end of the first chapter, "Liberty" (pp. 40-45), races from the Kirchenleute forward to the Robber Barons and Populists, then back to E.P. Thompson's and Pauline Maier's crowds, on to the Paxton Boys, Shays's Rebellion, the Whiskey Rebellion, and back again. Ironically, this section concludes (partly in a footnote) that the Northampton resistors actually fit quite poorly into the Anglo-American mob tradition Newman invokes, because of their resolute nonviolence. Chapter 2, "Order," opens with five pages rehashing Hamilitonian Federalism, followed by some twenty pages of exposition covering nearly every development that excited Federalist fears of insurrection back to the beginning of the 1790s: the Whiskey Rebellion (again), all three conniving French ministers, the XYZ Affair, the Illuminati scare, and more. The chapter ends with a more original discussion of the debate on direct vs. indirect taxation that finally brings the story, just barely, to the beginning of the Northampton troubles. The effect of this extensive backstory is not so much hidden connections revealed as the author's bookshelf emptied.

The smorgasboard approach to interpretation on display here does not lend itself to easy summary. Despite identifying religion as the key factor distinguishing the tax protestors from the hated assessors, Newman places relatively little emphasis on religion, or any other aspect of their German culture, as a component of Kirchenleute political experience. He invokes the oftrepeated explanation of German antipathy to the Direct Tax as a result of their bad experiences with "hearth taxes" back in Europe without fully rejecting or affirming it. Moreover, though Newman casts the Kirchenleute, somewhat schematically, in the role of common people battling the machinations of elite politicians of both parties, neither class nor economics looms as an important factor in his analysis. While the book canvasses the economic difficulties faced by eastern Pennsylvania farmers, Newman briefly but specifically rejects fellow *Pennsylvania History* contributor Terry Bouton's "economic interpretation" of the rebellion (p. 208n18).

While the book never quite gels around any one thesis, Newman's clear preference is interpreting "the ideology and motivation of the Lehigh resistance movement" largely in terms of language and ideas. Yet armed with only a handful of statements from the resistors themselves, this becomes a rather sketchy enterprise, leading to what Newman awkwardly calls "the broad outlines of a single idiomatic pidgin language" (p. 17). The best Newman can do to identify this language is "revolutionary republicanism," which boils

down to the Kirchenleute habit of reusing political language and tactics they had learned during the Revolution, such as raising liberty poles and signing "Associations" to protest or resist a hated law. While accurate enough, this point does little to explain why eastern Pennsylvania became the particular flashpoint for resistance to the Direct Tax. The habit of rerunning the Revolution was more or less ubiquitous in the politics of the early republic, showing up in a wide variety of particular places, groups, and causes.

Newman also makes a more ambitious claim about Kirchenleute ideology. Based primarily on the fact that they resorted to direct action against the assessors and claimed to be acting in defense of the Constitution, he labels the Northampton tax resistors exponents of a "radical popular constitutionalism" that "represented the rekindling of the Revolution's democratic flame, and thus an alternate idealistic definition of the Revolution's purpose and its future" (pp. 151-52). There's simply no way that the brief, mild-mannered resistance depicted in the rest of the book can sustain that sort of hyperbolic rhetoric. Popular constitutionalism, the notion that the people (not just the courts or the president) should have an active role in enforcing the Constitution, is an important topic that historians have long neglected. Almost the conventional wisdom in many circles during the 1790s, popular constitutionalism was not an idea that the Kirchenleute invented (p. 38), nor (as Newman repeatedly suggests) was direct action the only form that popular constitutionalism could take. Attempting to burnish his protagonists' radical credentials, Newman lumps the Direct Tax's Democratic-Republican critics in with its Federalist progenitors as opponents of popular constitutionalism, ignoring the fact that the Republicans were busy devising other ways of using democratic processes to defend the Constitution. Thomas Jefferson and James Madison famously tried to work through the state legislatures, but much more successful and democratically oriented were the efforts of Republican editors and other activists to use publicity and the new institution of party politics to get the policies of John Adams declared unconstitutional at the polls. Newman frequently quotes editors William Duane and Jacob Schneider, both firm believers in the unconstitutionality of the Direct Tax and many other Federalist measures, but leaves them off the popular constitutionalist team simply because they distanced themselves from the tactics of the Northampton resistors and urged readers not to violate the law. It might just as easily be argued, and was argued, that true popular constitutionalism meant working only through democratic political processes like the press, public meetings, and elections as long as such

peaceful means remained an option. Readers interested in popular constitutionalism should begin with Larry Kramer's *The People Themselves: Popular Constitutionalism and Judicial Review* (New York: Oxford University Press, 2004) rather than *Fries's Rebellion*.

The most focused and convincing sections of the book are the concluding chapters dealing with the federal government's response to the Northampton protests, including a military expedition, treason trials, and a dramatic last-minute pardon from President John Adams. As Newman and others have shown, the aftermath said more about the fears, ambitions, and rivalries of the country's Federalist rulers than anything about the Germans of Northampton County. While essentially following the traditional line that the overreaction to Fries's Rebellion played a key role in the Federalists' fall from power, Newman presents an unusually complete and convincing account of just why this was. The repression campaign really did swing German votes into the Republican column, but only temporarily, he shows, and the Northampton resistance played an even more important political role in breaking open the Federalist schism between Adams and the national security minded followers of Alexander Hamilton that inspired many Federalist leaders to plot and publish against their own candidate. As appealing as it is to validate a social protest movement, it may be in these elite machinations that Fries's Rebellion finds its major significance after all.

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[EDITOR'S NOTE: Paul Newman, Book Review Editor of *Pennsylvania History*, did not solicit or edit this review.]

Lawrence A. Peskin. *Manufacturing Revolution: The Intellectual Origins of Early American Industry*. (Baltimore: Johns Hopkins University Press, 2003. Pp. x, 294, notes, index, cloth \$49.95.)

Revolutions, perhaps because they spawn controversy both in contemporary and historical contexts, occupy a prominent place among students of late eighteenth and early nineteenth century America. Following shortly on the heels of the American Revolution, scholars have identified first an "industrial" and then a "market" revolution. Interpretations of these events, moreover, are as varied as the revolutions themselves. While Drew McCoy's *The Elusive Republic* (1980) argued that the War for Independence gave rise to a nation rooted in the tenets of "republicanism," Joyce Appleby in *Capitalism and the New Social Order* (1984) countered with a "liberal, capitalist" interpretation. This, in turn, precipitated not the industrial revolution as early twentieth century historians initially labeled it, but a broader market revolution toward the end of the War of 1812. Lawrence Peskin offers yet another late eighteenth-century revolution—the "manufacturing" revolution—for consideration.

Taking his cue from the market revolution school, Peskin downplays the role of institutional and technological forces (the industrial revolution school) that contributed to the transition from workshop to factory production. Rather, he cites the actions and rhetoric of individuals—Peskin's "manufacturing revolutionaries"—to explain how a nation populated predominantly by farmers and merchants embraced manufacturing as critical to their national economic independence. Peskin's explanation proffers a different political economy than that described by the republican and capitalist schools and suggests that the United States' transition to capitalism may still be in the offing. Peskin argues that pro-manufacturing forces in New York, Baltimore, Philadelphia, and Boston sought state and federal action to foster a balanced, well-regulated economy in which the three branches—agriculture, commerce, and manufacturing—benefited. Because their focus was the economic independence of the country, as opposed to individuals, and they hoped to discourage, if not inhibit, the self-sufficiency of farmers and thus include them in their economic system, Peskin's manufacturing revolutionaries were neither staunch capitalists nor traditional republicans. Rather, they were "neomercantilists."

Peskin locates the roots of this neomercantilist ideology within the American colonial experience. While subjects of the crown, Americans flourished as part of a British imperial system that, until the crisis of the late

eighteenth century, stressed mutual economic interdependence between England and the colonies. As the supplier of raw materials, North Americans held a secure market for their goods while they guaranteed England an outlet for its finished products. In this "organic" relationship both profited and neither was subservient. At the center of this system stood Parliament and the crown, whose role was to balance various economic interests for the good of the commonwealth. England's ability to achieve this balance until the 1760s made mercantilism legitimate in Englishmen's eyes, be they merchants, craftsmen, or farmers.

Following the French and Indian War in 1763, Peskin claims that Whitehall, in a desperate search for revenue, shifted from mercantilism to "territorial imperialism" through measures such as the Sugar (1764), Stamp (1765), and Townshend (1767) acts. Because these measures did not regulate trade for the good of the empire, they violated British mercantilism, rendered colonists economically subservient, and thus represented economic as well as political innovations. Adopting what Peskin calls an "instrumentalist" position, many colonial merchants reluctantly supported boycotts and domestic manufacturing with the hopes of pressuring Britain to repeal the acts and return them to their profitable position as carriers for American raw materials and finished English goods. America's mechanics, on the other hand, warmly embraced nonimportation and advocated a "developmental" position that enhanced their productive capabilities. Certainly opportunistic. colonial mechanics argued that increased domestic production would end North America's economic dependence. For colonial craftsmen in particular, then, political and economic independence were inextricably linked. Nevertheless, this developmental stance was not a rejection of mercantilist ideology.

While nonimportation acted as a de facto tariff, the exigencies of war further convinced American pro-manufacturing forces that governmental regulation was critical to the nation's nascent economic success and, in response to the influx of cheap British goods in the 1780s, craftsmen strongly favored protectionism. These experiences turned mechanics in the 1780s and 1790s toward Federalism, with its promise of a strong, active government, internal improvements, and tariffs. Following the initial success of the Federalists, the nation witnessed a significant rise in the number of manufactories that employed *traditional* methods to process agricultural products (tobacco, sugar cane, hemp). It appeared at this point that craftsmen had the most to gain from an emerging, pro-manufacturing political economy that foreshadowed

Henry Clay's American System. Unfortunately, their favorable position was short lived.

After the tariff of 1789, protectionism ceased to be an important political issue among mechanics and they surrendered their role as leaders of the pro-manufacturing movement. Into this void stepped the new-born merchant-manufacturer. Though tariffs slowed their businesses, merchants explored the benefits of domestic production during the revolutionary confederation eras, and formed, along with wealthier master-mechanics, "manufacturing societies." With the investment capital necessary for creating new factories readily available, these new merchant-manufacturers directed their resources into technologically advanced facilities and touted the advantages of national self-sufficiency. This new breed of producers declared that larger modern factories, complemented with federal subsidies, tariffs, and internal improvements, benefited the public because they utilized the country's vast agricultural resources (many members of manufacturing societies also belonged to "agricultural societies") and provided employment for the poor.

Peskin argues that this alliance between wealthy merchants and mechanics, though not always successful, changed the meaning of the term "manufacturing." Persuaded by the force of their argument, Americans no longer thought of manufacturing as an activity that took place in an urban craftsman's shop. Rather, it required large mechanized, state-incorporated facilities that employed hundreds of wage laborers. After the Embargo of 1808, modern manufacturing facilities, using labor-saving technology, including waterpower, emerged in rural America. This geographic shift, Peskin observes, further removed urban craftsmen from the center of the promanufacturing debate. Ironically, this geographic, ideological, and economic transformation remained rooted in the rhetoric of those same urban mechanics who advocated protectionism in the eighteenth century.

Rhetoric plays an important role in this analysis. Rhetoric drew merchants and wealthy manufacturers together in what Peskin claims represented industrial-entrepreneurial class formation even before the nation industrialized. Rhetoric concerning domestic manufacturing and its benefits laid the foundation for the transformation from workshop to factory. Also, rhetoric defined work as "male," despite the quantity, quality, and importance of the female-produced homespun many wore, and portrayed women—who themselves were "dependents"—as the idle consumers of the foreign luxuries that threatened to keep Americans dependent on imports.

Surprisingly, however, silence surrounds the issue of slavery, and the concomitant issues of "wage slavery" and "free soil." If pro-manufacturing advocates saw fit to use female dependency to highlight the advantages of domestic production, would they not also use slavery for the same purpose? Given that many Americans interpreted Parliament's actions in the 1760s as attempts to "enslave" them, it would seem reasonable that this type of language would have found its way into the manufacturing debate. Perhaps it did not, but this fact alone would be significant and worthy of analysis. These questions notwithstanding, Peskin's analysis of the manufacturing revolution offers intriguing insights into an already fascinating debate and his work will attract serious attention from students of the Revolutionary, early republic, and Jacksonian eras.

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Roger G. Kennedy. Mr. Jefferson's Lost Cause: Land, Farmers, Slavery, and the Louisiana Purchase. (New York: Oxford University Press, 2003. Pp. xv, 350, notes, bibliographic note, bibliography, index, paper \$16.95.)

Historians continue to write negative evaluations of Thomas Jefferson. In Mr. Jefferson's Lost Cause, Roger G. Kennedy, former director of the National Park Service and the National Museum of American History, argues provocatively that Jefferson betrayed his ideal that the United States should become a land of small, yeoman farmers. Desiring approbation from fellow Virginia planters, Jefferson instead pushed for public policies—climaxing with the Louisiana Purchase—that expanded the domain of cotton plantation agriculture, further subordinated the South to Britain economically, and entrenched slavery. "The plantation system might have been constrained" by Jefferson, Kennedy concludes, "before it became so proud and powerful as to lead its leaders to sunder the Union" in 1861 (p. 28).

Mr. Jefferson's Lost Cause was widely recommended for library acquisition. Library Journal said it was "an essential addition for academic and public libraries" (128:133). Kirkus Reviews found it "[f]resh, endlessly fascinating, and altogether extraordinary" (70:1824). It was a Choice Outstanding Academic Title. Even Publishers Weekly, while warning that the book was "aggravating," concluded that it had "considerable value despite itself."

Internet opinion suggests its readers loved it or hated it. For example, one customer at Amazon.com found it "an excellent piece of research behind the myth machines" while another concluded that "It has all the nihilism, lies, and propaganda one would expect from a 'profession' laded with Marxists and Leninists" (www.amazon.com/gp/product/customer-review/0195153472, accessed January 6, 2005). What did professional historians actually say about Kennedy's book?

The most unambiguous praise came from Michael A. Morrison in the Journal of American History—"powerful, exceedingly well-written, and engrossing" (91:223–25). Several historians with reservations agreed with Kennedy's overall thesis. Clay Jenkinson, in the Oregon Historical Quarterly, concluded "it is hard not to acknowledge that he is essentially right" (105: 509–16). Leonard Sadosky warned his colleagues "they should not so readily dismiss the thrust of his thesis that the development of the American South was the product of a diverse set of actors operating on a larger, transatlantic world" (William and Mary Quarterly, 3d ser., 61:592). Others carefully qualified their praise. Brian Schoen concluded that Kennedy's "desire to bring the history of the land and the diverse people living on it to a wider audience [is] commendable" (H-SHEAR, www.h-net.org/reviews/showrev.cgi?path=23361071465589, accessed January 6, 2005). With a hint of patronization, Hutch Johnson allowed that the book "will find an audience among . . . scholars with progressive interpretive bents" (History: Reviews of New Books, 32:11).

Some reviewers praised portions of the book. Jenkinson admitted that Kennedy "is certainly right" in pointing out that Jefferson's oft-cited critical comments about tidewater planters were inconsistent with his pro-expansion public policies. Benjamin R. Cohen, appropriately for *Environmental History*, stressed Kennedy's "notable contribution" in highlighting how tobacco and cotton cultivation exhausted tidewater soils and, in turn, created the demand for fresh land that Jefferson could not resist (9:322). Schoen praised the book's section that "evocatively" sketched individuals such as Alexander McGillivray, who, Kennedy says, tried to defend a multi-race society of small-scale environment-friendly farmers in the Old Southwest.

However, in the case of a far-reaching work such as *Mr. Jefferson's Lost Cause*, specialists will dissent from parts of the argument. Sadosky, invoking recent work by Claudio Saunt, argued that Kennedy does not recognize the complexity of mestizos such as McGillivray, who themselves owned plantations with slaves and were not unambiguously recognized as leaders by the Creek nation. Cohen pointed out that Kennedy relies on dated scholarship,

and Richard B. Latner believed that the book presented a "romanticized" view of environmental history (*Pennsylvania Magazine of History and Biography*, 128: 89–90). Jenkinson claimed that Jefferson's failure to join *les Amis des Noirs*, a French abolitionist society, was not because of subservience to planter opinion, as Kennedy claims, but because of his diplomatic status.

Some reviewers always want an author to have a different focus or emphasize different topics. In this instance, James E. Lewis, Jr. (Journal of the Early Republic, 23: 283–85) and Andrew Burstein (Journal of Southern History, 70: 420–21) lamented that a complicated and discursive narrative obscures the subject of Kennedy's title, the Louisiana Purchase. What is lost as a result, Lewis believed, is that Jefferson and his party actually adopted policies that facilitated the expansion of the "yeoman's republic," in contrast to the Federalists described sympathetically by Kennedy.

Overall, no historian accused Kennedy of being a Marxist or a Leninist, but most were uneasy with *Mr. Jefferson's Lost Cause* because of its present-mindedness (Jenkinson, Sadosky), heavy-handed moralizing (Lewis, Schoen), speculative flights (Burstein, Sadosky, Schoen), and confusing organization (Cohen, Latner, Lewis, Schoen). R.B. Burnstein summed up the concerns: "fixing blame on Jefferson for an event that happened decades after he died seems to fly in the face of the complexity and contingency of the past" (*Virginia Magazine of History and Biography*, 111: 411–13).

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