Introduction

In the thirty-year period between 1810 and 1840, the printing trades and nascent publishing industry in the United States underwent a series of transformations that changed how books and other printed matter were created. These transformations changed notions of authorship and reading practices and began to break down an artisan-based model of printing and publishing that dated to the late medieval and early modern period. In a short time, the introduction of power presses, the adoption of stereotyping (printing from cast plates instead of standing type), the introduction of machine-made paper, and the growth and consolidation of local printers into regional and national publishers all presented challenges and opportunities to an existing trade, the localized artisan craft practices of which had not fundamentally changed since the earliest days of European printing in the fifteenth century. All of these innovations became market-ready, at least for some well-capitalized printers, in this thirty-year period. The most successful printers amassed capital (some of it in the form of stereotype plates) and secured wider distribution networks for their output, allowing them rightfully to be called publishers in the modern sense. Newly formed organizations such as the American Bible Society immediately grasped the ways in which these innovations in speed, size, and reach could allow them to dramatically increase the scale and impact of their mission to produce and distribute printed scriptures to the nation's citizens. The

calculated growth and innovation of regional printing and publishing businesses during this time, together with their successes and failures, paved the way for the large-scale, nationally focused commercial publishing houses that would emerge in the United States by midcentury.

Publishing Plates investigates the development and significance of stereotyping and its companion process, electrotyping, in the United States, primarily through the lens of book history and literary studies. It argues that stereotyping was the most significant of these early nineteenth-century innovations that helped create the large-scale, nationally based publishing industry in the United States by 1850. If a publisher made the right choice of title and followed the right business model, investing in stereotype plates could secure a greater market share and provide years of cheap reprints. If they chose to publish the wrong text, it could tie up significant amounts of capital better used elsewhere. As some local printers grew into regional and national publishers, the decisions about when and how to invest in new technology became crucial to their growth and success. This book explores some of these decisions, including several unsuccessful ones. By mining the archives of nineteenth-century US printers and publishers, a detailed picture emerges of individual reactions to technological changes and disruptions in the printing trades, and of how American printing and publishing grew into the industry it is today.



In his 1816 inaugural address as the Rumford Professor and Lecturer on the Application of the Sciences to the Useful Arts at Harvard University, Jacob Bigelow celebrated what he considered the unique inventive achievements of the citizens of the United States. These accomplishments were not pursued with an eye to fame or fortune, he said, but with an inherently American spirit of improvement and interest in technological progress. Bigelow argued that the origins, government, and natural resources of the United States set it apart from other nations and created the unique conditions for its advancement: "The progress of our internal improvements, and the high state of the mechanic arts among us, as well as in our sister states, has entitled us to the character of a nation of inventors." American invention, he argued, should serve a higher purpose than simply to make profits for a small group of owners, as in the Old World. Bigelow believed that labor without human progress and invention without improvement to society was a regressive model more suited to the older economies of Europe than to the unique character of the early US Republic. A new, representative democracy, unique in the world, naturally lent itself

to new, democratic forms of innovation in the mechanical arts. In the United States, a spirit of quiet progress and steady innovation was the reason the new Republic had advanced so far in so little time, he thought, securing its freedom and becoming a progressive model for the rest of the world to emulate.

This early articulation of American mechanical exceptionalism closely linked democratic principles with technological improvement, and its object was to realize human potential and promote societal advancement. Bigelow's ideological position, here applied to technology, was not uncommon in the early national period, where the recognition and celebration of uniquely American ways of conduct, from political organization, to spelling reform, to medicine, architecture, and business, were commonplace in a new nation attempting to establish itself as an important, successful experiment on the world stage.

Bigelow himself expanded the meaning of the term "technology" to include its practical, applied aims when his expansive survey of American mechanical achievements, Elements of Technology, was published in 1829.2 This work appeared, notably, in the same year as Thomas Carlyle's essay "Signs of the Times," with its negative portrayal of the machine. For many in the new Republic, mechanical innovation seemed to be a natural outgrowth of democratic values. Any early hesitation about the growth of applied industrial technology and its role in the new nation gradually dissipated as nineteenth-century innovations proved that technological progress and republicanism could reinforce each other for the betterment—if not of all, then at least of many. As John Kasson notes, throughout the early nineteenth century, public voices "hailed the union of technology and republicanism and celebrated their fulfillment in an ever more prosperous and progressive nation."3 Thomas Jefferson, the champion of agrarianism, also had an Enlightenment-based sense of optimism about the progress of science in solving real problems and improving the lives of ordinary people. As the young nation's first secretary of state, he reviewed the first US patent applications in the 1790s. As president, he championed the newly formed Patent Office (1802) as a symbol of US ingenuity. In Jefferson's view, a republican government could help encourage and cultivate native talent in the mechanical arts in ways that other forms of government could not. He wrote to Robert Fulton, the inventor of the steamboat, in 1810, "I am not afraid of new inventions or improvements, nor bigoted to the practices of our forefathers." 4 Jefferson, with his ideal of the independent yeoman farmer, was wary of the new Republic's becoming a nation of manufacturers, but he felt that technological improvements could alter the quality of life for its citizens in significant and meaningful ways.

Aileen Fyfe has recently argued, and I agree, that technological changes in the printing trades during the nineteenth century are often alluded to in other works of history, but exactly how they occurred on the ground is still little studied.⁵ The introduction and impact of stereotyping is mentioned, for example, in all the recently published national histories of the book in the United States, Britain, Canada, and Ireland, and also in bibliographical manuals and other works on printing history.⁶ But the last full-length monograph on stereotyping in the printing trades, George Kubler's New History of Stereotyping, was published in 1941.7 Other disciplines could add some contributions to a deeper study of stereotyping in the United States. Scholars in the field of American studies have observed that a culture of uncritical technological positivism pervades much of the American history of technology, and they have argued that we need increased interdisciplinary attention to "stories of technological stewardship" and critiques of technology "as both substance and ideology in American cultural life."8 As this book is primarily concerned with the meanings generated by the introduction of a newly invented physical object—the stereotype plate—into a long-established profession, an object that contains both textual and symbolic meaning in addition to embodied capital, it is important to consider the increased critical attention to how material objects resonate and create new interpretive meanings as individuals interact with them. Anthropological and historical studies of objects have become commonplace in the past few decades (the latter often grouped, for better or worse, into "material culture" studies), but objects and their meanings are also the subject of increased attention by literary scholars and cultural theorists.9

This book, then, is necessarily informed by critical studies in the history of technology. Printing historian Jessica Despain recently discussed the work of film scholar Rick Altman on "the social interplay that occurs between the creation of new technologies and the human usage of them." Altman refers to this approach as "crisis historiography," which understands that the uses of technology are socially constructed and are both "ongoing and multiple. That is, the technology is never socially constructed once and for all. During a crisis, a technology is understood in varying ways, resulting in modification not only of the technology itself but also of terminology, exhibition practices, and audience attitudes." Because the introduction of stereotype plates offered printers new options for reprinting, investment, and the expansion of their trade, the crisis they faced, in the form of decisions on how to best employ plates and the texts they chose to have cast into plates, fits well into this model. The multiple ways in which printers and publishers understood the significance

of this new technology, its potential, and its limitations, and how this understanding continued to evolve and change over time, drives this study. Also, the significance of owning a newly cast set of stereotype plates as a piece of intellectual property, and the ways in which this physical change in publishing was managed through storage, shipping, and physical movement through urban and rural spaces, is worthy of greater attention and is considered here.

Different business models for owning and using stereotype plates and other new technologies in the printing trades will emerge in the narrative that follows. Some individuals and organizations successfully managed this transition; others did not. By looking closely at the decision-making processes of the people who worked through these changing times in their respective professions, we can avoid the trap of falling into one standard description of how the introduction of stereotyping and electrotyping played only a singular role in the transformation of the nineteenth-century printing trades and publishing industry. This simplistic shorthand, which is still found in many of the standard printing and publishing histories, also tends to embrace varying degrees of technological determinism and positivism. Michael Warner reminds us to guard against granting technology "an ontological status prior to culture," observing that "practices of technology . . . are always structural, and that their meaningful structure is the dimension of culture."11 The technological changes examined in this book are fully embedded in the cultures of the early US Republic and the artisan-based apprentice models of labor found in the printing trades in the modern West, and in their attendant ideologies: the Enlightenment and post-Enlightenment enshrinement of reason and progress, the Protestant work ethic, and the seemingly unlimited potential for human advancement offered by the boundless new American continent, brimming over with resources of every kind. But the ways in which this technology was deployed, as this book shows, were not at all monolithic or straightforward, nor are these ideologies without inherent contradictions, problematic aspects, and disastrous consequences for those without political or economic influence, such as Native Americans and enslaved and free Black citizens.

These theoretical areas of concern underlie the conclusions that follow in Publishing Plates, which discusses the ways in which stereotype plates became embodied objects of capital, corporeal manifestations of authorship and investment, instances of intellectual property and artistic expression portable and infused with the potential for reproduction and distribution in ways that had not been seen before. By looking at printing, publishing, and authorship through a materialist lens, focused on the plates that enabled these

changes to occur and the people who used them, we can better understand the transformations that took place in the printing trades and nascent publishing industry in the United States in the first half of the nineteenth century.

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Chapter 1 traces the European origins of the process of casting plates from set type and its first successful realizations in the United States, drawing a parallel with its multiple origin stories to the multiple national origin stories of printing itself in the fifteenth century. It updates the last histories of stereotyping written by George Kubler in the 1930s and 1940s and traces its first instances in the United States to the successful English precedents of Charles Mahon, Third Earl of Stanhope, and his circle of printers in the first decades of the nineteenth century. This chapter brings together, for the first time, all the earliest mentions of stereotyping in the United States in printing trade manuals and popular literature. It describes the first successful uses of stereotype casting in New York City in the 1810s and 1820s, the interconnections among the earliest American typefounders, stereotypers, and printers, and stereotyping's first introduction into the printing trades.

With chapter 1 having established stereotyping in the United States in 1813, chapter 2 focuses on the business practices of the Philadelphia publisher Mathew Carey as he navigated a changing national marketplace in quarto Bibles between 1813 and 1824. Carey already owned one of the only complete Bibles in standing type, from which he could print as many copies as he needed, and so the introduction of stereotyped Bibles by several New York typefounders in the mid-1810s complicated his market dominance and investment. As the production of multiple sets of quarto Bible plates threatened to upend the market, Carey was forced to make decisions about acquiring some of these sets for his own use. He was also forced to react to increased competition for the same product produced by competitors using a newer technology. Carey's main regional competitor, the New York printer and stereotyper Collins & Company, produced exactly the same range of Bible variants from its newly cast set of stereotype plates that Carey did, but Collins undercut Carey on price every time. As multiple sets of plates for the same book entered the market, only well-capitalized publishers like Carey could afford to invest in them. In order to maintain his market share, Carey purchased a complete set of quarto Bible plates, only to store it untouched for several years in an unsuccessful attempt to embargo it and maintain a fleeting regional monopoly on the quarto Bible trade. Within a

few years, as multiple sets were used for the production of the same work in cities throughout the country, Carey's advantages dissolved as the marketplace for quarto Bibles became diffuse and oversaturated.

Chapter 3 turns to the work and influence of the New York-based American Bible Society (ABS), whose businessmen-founders eagerly embraced new advances in the printing trades to enhance their mission to produce and distribute cheap Bibles throughout the young nation. The ABS was established because its founders knew that stereotype Bibles could spread the gospel quickly and efficiently. Evangelical organizations such as the ABS and the American Sunday School Union were the first nonprofit groups to adopt stereotyping to further their publishing goals, effectively creating the first mass media organizations in the United States. For the ABS managers, ownership of the means to reproduce the Word at will was as much a sign of God's Providence as it was a technological or scientific advance. This chapter explores the printing and business practices of the ABS as it commissioned and amassed stereotype plates and printed cheap Bibles and New Testaments, from its founding in 1816 through its attempts in the late 1820s to supply every household in the country with a Bible. By looking closely at the ABS's decisions to employ new technologies in its printing work, we can better understand the newly emergent marketplace in stereotype plates, the risks and rewards of being early adopters of new printing technologies, and the ways in which the ABS's calculated growth and innovation became models for the large-scale commercial publishers that would emerge by midcentury.

Chapter 4's focus extends further outward, to the afterlife of stereotype plates as they were sold, exchanged, auctioned, and used to create multiple published editions. It investigates advertisements in the printing trade and looks closely at used sets of plates offered for sale at the industry trade sales between 1824 and 1900. Sets of plates were sources of capital for publishers; they were also, for the first time, true material texts, the physical embodiment of an authorial work and a self-contained, portable source of reproductive value. Reference works and scripture mostly lacked copyright protection, but some new works that were cast in plates were often sold or auctioned with their copyrights intact, offering second-tier or regional publishers the opportunity to acquire a relatively recent work to reprint. Some texts had long afterlives as they were bought, sold, and printed many times over the years. This chapter traces the stereotype plates of Solomon Northup's Twelve Years a Slave (1853) through their appearances at trade sales and through multiple reprintings and

looks at Herman Melville's experience navigating the stereotype marketplace for his own works.

Chapter 5 examines some of the cultural changes caused by the introduction of stereotyping and stereotype plates into literary circles, in the American lexicon, and in the broader cultural landscape of nineteenth-century America, including African American authorship and publishing. Edgar Allan Poe advocated the new process of "anastatic" printing as a way for authors to stereotype their own writings and reconnect directly with the reading public, excluding publishers entirely. Walt Whitman wrote of "making poems," both as a poet and also quite literally as the initiator and owner of the stereotype plates for Leaves of Grass. Henry David Thoreau, an author whose livelihood and family prosperity were deeply embedded in the supply chains of the stereotyping and electrotyping industries, also evolved his own literary uses of the term "stereotype." Common language quickly appropriated stereotype and stereotyping from terms specific to the printing industry to synonyms for copying, and finally to the pejorative definition that we use today. Finally, this chapter looks at the experiences of the authors Sojourner Truth and William Wells Brown and their intimate connections to the stereotype plates of their own narratives and identities, and considers the ways in which embodied forms of authorship in the form of plates could serve as vehicles for liberation, independence, and justice.

Together, these chapters explore a changing technological world in the printing and publishing industry in the nineteenth-century United States and the ways in which the introduction of stereotyping affected the broader cultural landscape. The digital humanities scholar Alan Liu writes aptly of "new media" encounters with older forms of media, "good narratives of new media encounter are in the end less stories than whole imaginative environments or, as I termed them, borderlands of surmise. Good accounts of new media encounter imagine affordances and configurations of potentiality.... We want a way of imagining our encounter with new media that surprises us out of the 'us' we thought we knew."12 The same spirit informs Publishing Plates and its exploration of the changing media environment in US cultures of print during the nineteenth century, specifically the introduction and uses of stereotyping and electrotyping. The book examines how the printing and publishing worlds of the era reacted to change; how individuals, businesses, and organizations used these new technologies to further their aims; and how the cultures of plates that emerged had broader meanings that rippled out and influenced popular culture, everyday life, and language through their ultimate products: printed material texts. This

new understanding of the role of material texts pervades nineteenth-century American culture, from the physicality and ubiquity of the plates themselves to the popular uses of the term "stereotyping" as a metaphor for the expansiveness and the limitations of rapid technological change. Carlyle was right: the early nineteenth century was most certainly a mechanical age, with all that the term implies, and nowhere more so than in the adaptive technological environment that grew up in the printing trades and publishing industry.