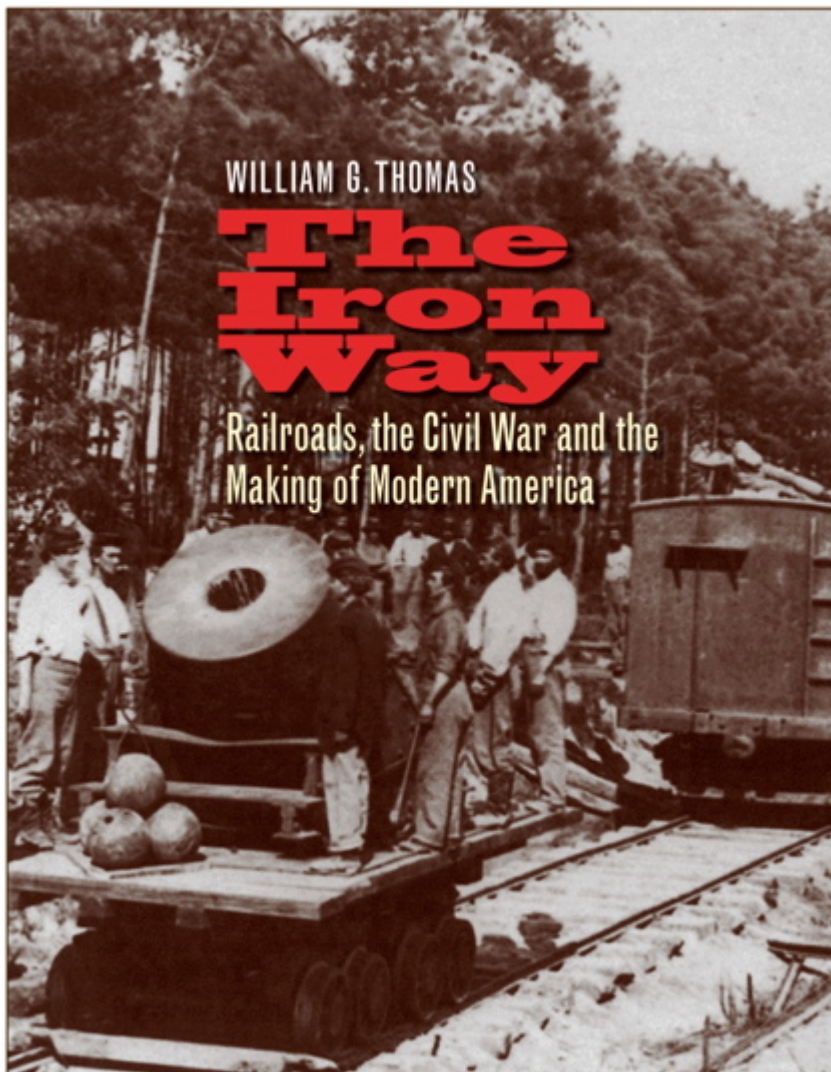
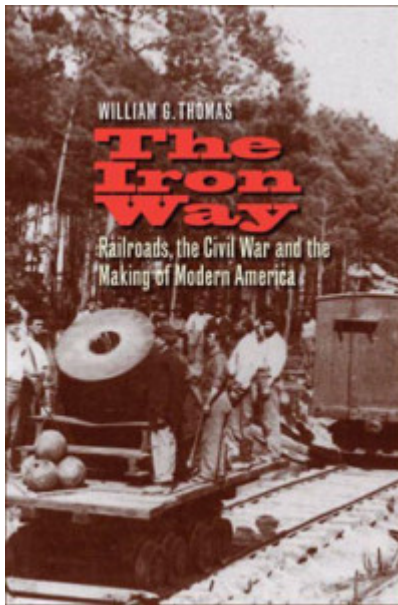


Like an Arrow from Jupiter's Bow: Railroads and the Civil War



On August 7, 1864, William Sherman sent the following instruction to George Thomas during the Union army's march to Atlanta: "Telegraph to Chattanooga and have two 30-pounder Parrotts sent down on the cars, with 1,000 shells and ammunition. Put them into your best position, and knock down the buildings of the town." This brief directive incorporated three technologies which pointed to the modern character of the Civil War: railroads, telegraphs, and Parrotts were all unknown when Sherman was born in 1820. Sherman was not starry-eyed about technology; as Robert Angevine notes in his 2004 book *The Railroad and the State*, Sherman complained in the first year of the war that "these railroads are the weakest things in war." Yet, as William Thomas shows in this fascinating new book, railroads played a critical role in the conflict and in so doing forced Americans to confront the meaning of modern technologies which in peacetime had brought so much benefit.



William G. Thomas, *The Iron Way: Railroads, the Civil War and the Making of Modern America*. New Haven: Yale University Press, 2011. 296 pp., \$30.

Scholars have long debated how different the North and South were from each other prior to the Civil War. A wealth of recent work on antebellum Southern economy and culture has demonstrated that southerners were hardly afraid of material acquisitiveness or new technology; rather, they intended to pursue modernity on their own terms (which included, of course, slavery). Thomas embraces this historiographical vision of the South, and presents evidence demonstrating that southerners did not see railroads as antithetical to their way of life. In the North, conversely, railroads were increasingly associated with free labor. Thomas's sketch of the ideological function of railroads in the two sections of the country is a wonderful illustration of the argument that technologies accrue different meanings when they are used by different groups of people. The presence of railroads in the North and South did not determine social relationships in either region. Instead, both sections of the country used the same technology for their own ends.

Thomas argues that railroads played a key role in the strategy of how the Civil War was fought. When the war began, the Union military leadership realized that the South could defend itself via the rail network, and thus pored over maps in order to find deficiencies in the network. As they fought in the South, the Union military had to contend with not only the natural Confederate landscape, but the geography created by the "second nature" of communications and transportation linkages. Thomas goes further to say that "increasingly after 1862, the American Civil War became structured around the railroad network" (82, 105). Thomas presents some compelling evidence in this regard, such as the details of Sherman's Atlanta campaign. But at other times the evidence is less robust. Thomas links Philip Sheridan into his concept of "railroad generalship," but concedes that Sheridan paid little attention to the railroads during the Valley campaign. Likewise, Thomas argues that Robert E. Lee "sought

more than anything to position the fighting away from the principal Confederate railroad zones," but it is unclear if this was Lee's explicit intention or simply a fortunate byproduct of his strategy (150-151, 107).

If Thomas's specific claim about the impact of railroads on overall Civil War strategy are not entirely compelling, his broader claims about the place of railroads in the war and their symbolic status are thoroughly convincing. Thomas posits that railroads were "one of the most obvious, and the most prevalent, forms of symbolic technology in nineteenth-century society," a finding he then traces in detail (10). Most northern soldiers traveled on railroads to reach their unit, and many continued on the railroads into the South. Thus, they were not just soldiers but *travelers*, and as such recorded their thoughts about the railroads, the landscape, and the people. Thomas also does a fine job of exploring the racial history of these railroads, particularly the growth of the U.S. Military Railroad, which he terms "the longest, and possibly the largest, most comprehensive experiment in black free labor employment in the occupied South" (121).

Although southern railroads are necessarily the focus of the book since the war was mostly fought in the South, Thomas spends some time on wartime northern railroads, including how the United States Sanitary Commission canvassed communities to raise funds and deliver aid to soldiers. I would have been interested to learn more about the effect of the war on northern railroads, and was particularly curious to know if service in the army or the need to run southern railroads in the war deprived northern lines of skilled labor. Importantly, Thomas also realizes that railroads did not operate in a vacuum, and while the book remains focused on that technology, allied technologies such as the telegraph and steamboats are also brought into the story when appropriate.

A normal book review would stop here, but Thomas has given us something more. As he points out in the introduction, *The Iron Way* is a work of digital history as well as a published book. I am not a practitioner of digital history, so I make these comments as an interested observer. Just as oral historians, cliometricians, and others have expanded the tools available to the historian, digital historians bring the power of computers to help answer particular historical questions. Thomas exposes some of this work in the book itself, as when he uses word clouds to analyze the Peninsular campaign (word clouds are a method of visually representing the prevalence of words in a given body of text). This is a fascinating exercise, although I wish Thomas had taken a bit more time to explain the process by which the word clouds were generated, the methodology by which common words are assessed and eliminated, and so on. However, the result is an ingenious way to see how different types of transportation rose and fell in correspondence over time, and is a clear demonstration of the superiority of digital methods in answering questions of this type (one shudders to think of counting the words by hand).

In addition to enlarging the historian's toolbox, digital historians are also

interested in new forms of representing scholarship. Thomas's work does this as well; he and a team of others have placed a large quantity of material on [an associated Website](#). In the introduction to the book, Thomas notes that the purpose of the Website is not "to reach 'conclusions,' " but instead to "creat[e] models of humanistic inquiry for readers" (12). The Website includes some of the collections Thomas used in his own research, such as a concordance of references to "railroad" from the Atlanta and Peninsular campaigns in *The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies*, the comprehensive documentary collection of war records published by the government (popularly known as the "OR"). I searched Sherman's 1864 Atlanta campaign correspondence for "cars" (a common nineteenth-century term for railroads), which is how I discovered the quotation that opens this review. Doing a search also exposes the problem of uncorrected optical character recognition, which yields text such as "MiLiTARy I)IvIsloN OF TilE MI8SISSrPPI," thereby complicating word searches. The Website also includes a map of guerrilla activity on the railroads and a map charting the use of African American labor, with links to relevant OR documents.

The Website also features a tranche of material (called "case studies") focused on broader railroad topics. Each case study links to original documents appropriate to the individual study. The case studies include more interpretation, although they lack the robustness of the interpretive material in the book. I enjoyed browsing the material and there is certainly plenty to see, but some more structure would greatly assist the user. For example, it is not always clear why certain objects were chosen for study, nor is it clear if the evidence selected is always fully representative for the topic—perhaps more detailed introductions to these studies would help. Nevertheless, seeing railroad networks expand over time on maps and being able to see the original documents is an excellent demonstration of the advantages of this type of representation. As historians look to an uncertain future in book publishing, we may find that projects such as this Website are more and more the norm. If so, I hope that such digital history resources can rise to the same level of analytical vigor that characterizes Thomas's monographic work.

Thomas has written an important book that deserves careful consideration by scholars of the Civil War and the history of technology during this time period, and his use of the Internet to expand his work's reach is admirable. Despite my misgivings about his arguments for the place of the railroad in Civil War strategy, his broader points about modernity and technology are compelling. By taking southern railroad advocates and railroad developments seriously, he underlines the fact that technology does not automatically bring with it democracy or freedom. The North's victory in the Civil War helped erase our country's memory of the South's technological accomplishments and in so doing created an assumed link between technology and freedom. Thomas's work helps correct this national forgetting.

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