Review/Reseña


Technology as Cultural Language

Michael Hankins
Kansas State University

Most histories of technology explore “technological cultures,” seeking to situate a particular technology within a cultural context and demonstrate how those contexts shape that technology’s development. For example, Thomas Hughes’ influential work *Networks of Power* explored the creation of municipal electricity grids in Chicago, London, and Berlin, positing that the differing cultural contexts of those three locations informed the differing development of electrification. Michael Matthews’ recent study, *The Civilizing Machine: A Cultural History of Mexican Railroads, 1876-1910*, turns this convention on its head. Instead of exploring how culture shapes technology, Matthews examines how various elements of society implemented technology as a cultural symbol. The book is not yet another study of the construction of Mexican railroads, but rather a story of how both supporters and detractors of the Mexican government
used the image of the railroad to further their own political ends, each using new technology to symbolically define progress, modernization, and national unity in their own ways. Matthews essentially argues that although the Porfirio Díaz (1887-1911) regime linked itself to the railroad, associating the government with the concepts of modernism and progress, opponents of the government employed the same symbolic language to attack Díaz. Matthews takes this concept to its logical conclusion, demonstrating that this ambivalence about the cultural meaning of the railroad revealed tension in the nation’s understanding of the “self-civilizing mission” of modernization and contributed to the Mexican Revolution of 1910.

Matthews relies on an extensive amount of primary sources, defining each chapter thematically, based on the type of sources he employs. The first chapter deals mostly with newspapers that linked the railroads to progress, patriotism, and national unity while associating those elements with the Díaz regime. Most of these publications—and Matthews examines dozens—speak of the railroads as transformative, able to pull the country out of an “uncultivated, savage condition” (30). Railroads, these papers claimed, would foster greater political and social stability as trains allowed the government to exert more reach over the nation and unite distant social groups. They would also spur economic growth through increasing exports. The transformative effect of railroads was often discussed in racial terms as well, as it’s supporters argued that railways could transform Indians into productive modern citizens. This power of progress was linked with patriotism, as railways were hailed as a “lasso of salvation” (35), and by associating himself with the railroad, Díaz earned his title as “Savior of the Nation.” In addition to newspapers and popular publications, Matthews examines a myriad of letters sent to Díaz from his admirers which speak of him in exactly these terms, as a savior of the country due to his expansion of railroads. Interestingly, this use of railroads as a symbol for national vitality unleashed strong patriotism that encouraged many Mexicans to resist foreign involvement, particularly from the United States. American engineers and construction workers often became targets of scorn or even violence as Mexicans blamed them for stealing Mexican jobs.
Matthews finds similar themes in popular and literary publications, such as poetry, stories, cartoons, and social commentaries. These elite publications shared a general enthusiasm for Díaz and his modernization project, yet some of these sources expressed the opposite. Matthews identifies a growing split between the urbanites that favored railroads as symbols of progress and rural people who criticized it. The growth of travel literature, as well as stories and poems that featured railroads, often talked of the new technology in romanticized terms, even to the point of humanizing the railroad itself and speaking to it the way one speaks to a lover. Some viewed trains as democratizing and unifying, linking communities together through travel, with equal access for all citizens. Some of these publications also hailed railroads as civilizing, as the manners and politeness that were expected in sleeper trains or dining cars was an answer to barbarism. Opponents of the trains expressed the opposite in their own travel literature. Some viewed the trains as degrading for national identity, as it was a foreign (American) technology that ushered in an invasive culture. Many critics viewed the mixture of previously separate public and private spheres as the erosion of social norms, especially gender roles. Some travel literature asserted that rail travel was dangerous for females, encouraging sexual awakening too early as social conventions broke down inside the space of the train cars. A sub-genre of travel narratives appeared that emphasized crime on board railroads. This further contributed to the sense that railroads could cause morality itself to break down and put citizens, and the nation’s cultural identity, at risk.

Matthews' third chapter examines the pageantry associated with railroads, in which the links with the Díaz regime are the most evident. Across the country, events to celebrate the inauguration of railroads hailed the technology as a symbol of order, work ethic, patriotism, and material progress, linking them directly with Díaz. These events employed religious imagery and symbolism to contribute to both Díaz’s cult of personality and the symbolic power of the railroad itself. Matthews asserts that these events had a “sacred aura” that created a “modern form of liturgy” (105). Poetry, song, and pageantry presented in a religious format at these festivities expressed that “modern technologies had now replaced the cathedral as the
key to people’s salvation,” and linked these to the Díaz regime, as Matthews states, “Like its religious colonial counterpart, the festivals of progress paraded the success of the government to make onlookers feel optimistic about future prosperity and, in so doing, garner support for local, state, and national leaders” (138). However, opponents of Díaz and of modernization used these events a focal point of their critiques. The lavish festivals presented ripe opportunities for mockery of the elite and upper class.

Critics of railroad technology (and the Díaz regime) seized on a much more potent theme to focus their condemnation upon: train wrecks. Injury and death rates due to railroad accidents were much higher in Mexico than in other Western European nations around the turn of the century. Matthews does not attempt to explore the reasons for this discrepancy, but he is instead concerned with the growth of publications and literature that highlighted the wrecks. Accidents served as a focal point for the idea that U.S. interests, rather than Mexican ones, were at the heart of railroad expansion. American construction workers were accused of not caring about Mexican lives; foreign travelers were perceived to receive higher compensation for accidents (although this was rarely actually true); and engineers were blamed for mistakes and sometimes arrested for criminal negligence. Arrests of U.S. workers on Mexican railroads became so frequent that Secretary of State Elihu Root intervened on behalf of some cases. Train accidents were also used to make more generalized critiques of modernization, technology, and the Díaz regime, which was so closely aligned with railroad expansion. Songs, poems, cartoons, and “penny-press” newspapers of the lower class used wrecks to assert that Diaz was apathetic towards workers and the poor. Matthews argues that these strains of resistance, especially the virulent, widespread anti-American sentiment, fueled the later move towards Revolution.

Throughout each chapter, Matthews explores the use of railroads as positive and negative symbols, yet the opposition press receives its own chapter-length treatment. These sources include the “penny-press” publications aimed at the lower class, as well as independent publishers and writers. In addition to the physical dangers of accidents, these works described railroads as a source of disorder, chaos, and social confusion.
They also depicted the railroads as vehicles for foreign domination, mostly from the U.S., and many writers criticized the railroads for antagonizing class divisions by providing economic benefits only to the wealthy upper class. Some authors did agree that the railroads were beneficial sources of progress, but that Díaz’s implementation of them ensured that cultural elites enjoyed increased prosperity, leaving the bulk of the nation, particularly poor or rural people, in ruin. One frequent critique argued that the government refused to expand the railroad to particular rural areas that needed the economic benefits of railway access. Matthews again asserts that these sentiments were important contributing factors to the Revolution in 1910. Many of the themes Matthews brings to light in this chapter feel like repetitions of ideas from previous chapters, although giving them a chapter unto themselves allows for a more nuanced discussion. Perhaps the book would feel more organized if his examples of opposition to the railroads and to Díaz were consolidated here instead of sprinkled throughout the other chapters. However, this is a very minor quibble that in no way diminishes the value of the book.

Matthews’ exploration convincingly demonstrates how the railroad “promoted a self-civilizing mission, through the use of the railway as the supreme symbol of national development, as a means of attaining social order, political stability, and material progress” (13). The book also emphasizes the ambivalence felt across the nation about the expansion of railroads, and how both supporters and critics of the Díaz regime used the symbolic language of the railroad to express their feelings. Matthews is mostly convincing in his assertion that this growing tension contributed to the Mexican Revolution, although a fuller examination of the Revolution’s origins is beyond the intended scope of this work. This book is useful for historians of Mexico but also worthy of consideration for historians of technology and culture. Matthews has clearly demonstrated the level of symbolic power that technological developments can attain. His extensive use of primary sources speaks to how deeply the imagery and iconography of railroad technology penetrated the Mexican cultural zeitgeist, even among groups that fundamentally disagreed with each other on their vision of modernity and national identity. The railroad became a shared language
that various factions of society used for their own purposes. Indicating areas for further research of other technologies in other cultural contexts, *The Civilizing Machine* is an incredibly useful work that reaches beyond its immediate context.