Rails to Revolution: Railroads, Railroad Workers and the Geographies of the Mexican Revolution

Hector Agredano
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RAILS TO REVOLUTION: RAILROADS, RAILROAD WORKERS AND THE GEOGRAPHIES OF THE MEXICAN REVOLUTION

by

HECTOR AGREDANO

A dissertation submitted to the Graduate Faculty in Earth and Environmental Sciences in partial fulfillment of the requirements of the degree of Doctor of Philosophy, the City University of New York

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Rails to Revolution: Railroads, Railroad Workers and the Geographies of the Mexican Revolution

By

Hector Agredano

This manuscript has been read and accepted for the Graduate Faculty in Earth and Environmental Sciences in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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THE CITY UNIVERSITY OF NEW YORK
Abstract

Rails to Revolution: Railroads, Railroad Workers, and the Geographies of the Mexican Revolution

by

Hector Agredano

Advisor: Professor Juliana Maantay

This dissertation is a historical geography of the role of railroads and railroad workers in the Mexican Revolution. It shows that despite the presence of railroads in the popular imagination of the Mexican Revolution, the role of railroads and railroad workers themselves remains largely missing from scholarly accounts of the conflict. I argue that railroad workers were central to the revolutionary process from its beginning, and I demonstrate that their close relationship to a critically important transportation network allowed them to intervene at crucial moments of the revolutionary process. Undoubtedly, this relationship to transportation networks also had a formative impact on their political involvement and their relationship to the revolution. I contend that during the revolutionary process, revolutionaries and railroad workers took advantage of the capacity for time-space compression and time-space expansion in order to achieve their aims. Workers and revolutionaries also mobilized these capacities to engage in multi-scalar struggles against the dictatorship of Porfirio Diaz to contend for power in the aftermath of the Mexican Revolution of 1910. In the process, the railroad is transformed from a means of accumulation to a means of liberation by becoming a vehicle for revolutionary social change.
Acknowledgments

This journey began after I read Andy Merrifield’s *Metromarxism* back in 2008. His book inspired me to pursue graduate education in geography and to work with geographers making important contributions to the field. Once at the Graduate Center, I began to work with Neil Smith, who was very supportive of my work when I decided to focus on a critical interpretation of transportation infrastructures. His untimely passing in 2012 was a huge loss to all of us who knew him, to the field of geography, and to anticapitalist struggles. My research lost its focus for a period until James Biles stepped in as my new advisor. I am grateful to Jim for taking over at a difficult time and for working with me diligently through various applications to the National Science Foundation. With his support and the support of the National Science Foundation, I received a Doctoral Dissertation Research Improvement award (#1459108) and was able do archival work in Mexico for this dissertation.

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“The locomotive is the great heroine of the Mexican Revolution. She too is a soldadera who moves with confidence, huffing and puffing, arriving late, true, but only because she’s overloaded.”

Elena Poniatowska

Chapter 1: Introduction

The Mexican Revolution remains one of the defining moments of Mexican history and within this process, the railroad and railroad workers appear in films, photographs, novels, and songs about the conflict. Consequently, these figures have been impressed in the public imaginary of the revolution. So strong is the association between railroads and the revolution that the government issued a commemorative bill picturing rebels on a train to celebrate the centennial of the Mexican Revolution (Figure 1). Despite the presence of railroads in the popular imagination of the Mexican revolution, the role of railroads and railroad workers themselves remains largely missing from scholarly accounts of the conflict. Consequently, the Mexican Revolution is usually thought of as a predominantly agrarian revolt where industrial labor remained mostly at the margins. Nevertheless, ample evidence suggests that while campesinos may have played the most prominent role in the making of the revolution, industrial workers, especially railroad workers, were also central to the revolutionary process from its beginning.

Figure 1. Currency issued in 2010 to commemorate the 100th anniversary of the Mexican Revolution. Source: Bank of Mexico (2010).
The discrepancies between the place of railroads in the popular imagination and their absence in the scholarly literature raise some important questions: What role did the railroad and the railroad workers play in shaping the history and the geography of the Mexican Revolution? Who were the railroad workers that participated, where did they come from, and why did they participate? How did the operation of transportation infrastructures shape the relationship of workers to the revolution—and, by extension, the labor geographies of the Mexican Revolution? In what ways did revolutionaries exploit the contradictions of fluidity and fixity inherent in these means of production to advance the revolutionary struggle? And how did the revolution change the railroads from a simple means of accumulation to a means of liberation?

In this dissertation, I argue that the close relationship between railroad workers and transportation infrastructures had a formative impact on their political involvement and their relationship to the revolution. Furthermore, I contend that railroad workers were able to intervene at crucial moments of the revolutionary process because of their close relationship to a critically important transportation network. For example, railroad workers helped with preparations for an armed uprising using their mobility on the railroads. Once the revolution is underway, railroad workers participate openly and provide important logistical support and even participate in battles. Thus, from the democratic revolution of Francisco I. Madero in 1910 to the military campaigns of Francisco Villa in 1914, railroad workers shifted the course of history through their active engagement with the railroads.

Through this research, I answer these questions and help develop new insights that expand on current understanding of the participation of railroad workers in the Mexican Revolution. Furthermore, I show that the early efforts at unionization by railroad workers were part of the political backdrop for the rise of Francisco I. Madero’s popularity and that the railroads were
crucial to his democratic campaign against the dictatorship of Porfirio Díaz. Railroad workers also play a key role in the preparations for the democratic revolution under Madero and they play an even more important role during the constitutionalist revolution under the command of the Northern Division which is led by Francisco “Pancho Villa”. Thus, as an intervention into Mexican historiography, my work engages the scholarly literature on this topic.

**Railroads, Labor, and Revolution**

Although the Mexican Revolution has been extensively documented, for the most part, the role of the railroads and railroad workers and the use of rail infrastructure during the revolution remain largely unexplored, from either a geographical or historical perspective. Even as early as 1976, Goldfrank identified this gap in scholarship, noting that “nothing extensive has been written on the participation of railway workers in the various phases of the revolution” (20). In their social histories of Mexican railroads, Lewis (2007) and Van Hoy (2008) reach similar conclusions about the railroad, and Lewis notes that “the study of Mexican railroads remains a substantial hole in the historical scholarship of Mexico, the American West, transportation history and border studies” (xi). Thus, not just the role of railroad labor but also the role of the railroads remains under-studied in both English and Spanish works on the subject. 

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1 Recent publications on Mexican and Mexican-American railroad workers have appeared, but these don’t focus specifically on the revolutionary period. See Jeffrey Marcos Garcilazo (2016) and Robert F. Alegre and Elena Poniatowska (2014).
Even though the recent centennial celebrations of the Mexican Revolution in 2010 prompted many historical retrospectives, only three studies address the subject of the involvement of railroad labor directly (Gorostiza 2010; Guajardo 2010; Yanes 2010). Yanes’ short article, for instance, emphasizes the dearth of research on the role of labor during the revolution and points out the contributions of well-known historical figures in the railroad sector. Guajardo (2010) contributes a few substantive chapters on the role of railroads under Zapata’s army but, for the most part, only emphasizes the breakdown of labor discipline during the conflict. Though useful, Guajardo’s work focuses on the center and the south; however, in the first phase of the conflict,
railroads and workers had a bigger impact on the course of the revolution in the north of the country, specifically in Chihuahua, Coahuila, Durango and Zacatecas.

Thus, Gorostiza’s (2010) wide-ranging study on the railroads in the Mexican Revolution is a welcome contribution to the discussion. In its more than 700 pages, Gorostiza provides a chronological retelling of railroad-related events from 1876 to 1926. The book also contains maps, photographs, journalistic accounts, popular ballads, and fragments of literary works that refer to the railroad. Unfortunately, the task is as big as the subject itself, and Gorostiza’s work is more valuable as a general reference on the topic. In addition, there are important limitations in Gorostiza’s work, since citations are sparse, therefore making it difficult to track down the sources of the information he uses. Furthermore, Gorostiza’s heavy emphasis on the railroad fails to account for the role of workers in the conflict, thus accentuating the absence of labor geographies.

Several reasons have been offered to explain the ubiquitous absence of railroad workers throughout the historical literature of the revolution. Gorostiza (2010) claims that workers could not act openly on their political convictions because they feared retaliation, and therefore left very few traces of their participation in the press. Yanes (2010) reaches similar conclusions and believes that railroad workers were not too keen on supporting a revolution, since by 1909, they had already won important gains after the Mexicanization of the railroads. Consequently, after a decade of labor struggles to secure employment, few workers wanted to jeopardize their newfound security; instead of embracing the revolutionary call of “Land and Liberty,” they rallied around the pacifist slogan of “Peace and Work” (Knight 1984; Yanes 2010). These accounts suggest that it was difficult for workers to support the revolution openly, and that many did not take an active part in the struggle, resulting in the scant records of their participation.
Still, these explanations are only partially satisfactory. All major works on the Mexican Revolution, albeit in general terms, acknowledge that railroads played an important role supplying military campaigns (Katz 1998; Gilly 2005; Salmerón 2006). For example, when Francisco I. Madero was arrested by the regime during his electoral campaign, railroad workers helped him escape to Texas by disguising him as a railroad worker. Hence, railroad labor was actively involved in aiding the revolutionaries, even if the workers risked their jobs and their lives to do so. Other accounts suggest that once the revolution had become an armed struggle, railroad workers also joined in the fighting. For example, in the lead-up to the assault on Torreón, the American journalist John Reed writes of an “engineer and fireman hung with cartridge belts [and] their rifles handy” (2006, 184).

These contradictory versions suggest that support for and involvement in the revolution was varied and uneven. Thus, in order to assess the participation of railroad workers, my research focuses on northern regions and revolutionary groups aligned with Francisco I. Madero and Pancho Villa. From oral histories, memoirs, newspapers and secondary sources, I conclude that workers were hesitant to get involved in the conflict at the early stages, yet they still got involved, even if only through small actions. Following Gilly’s (2005) lead, I focus on the Northern Division, which at its height (1913-14) was the largest popular army of the revolution and due to its location in the expansive north, one of the divisions that relied heavily on the railroad. Once the railroads came under control of the Northern Division, railroad workers became more active as the revolutionaries took control of more territory and as the revolution pulled more social sectors into the conflict.
Besides the works already mentioned, several key works were used to reconstruct the life of railroad workers and their relationship to the railroad before the revolution. Sandra Kuntz Ficker’s *Empresa Extranjera y Mercado Interno* (1995) is the main oeuvre on the Central Mexican Railroad to date; the CMR’s strategic location running north to south made it the most coveted infrastructure during the early years of the revolution. Sergio Ortiz Hernán’s seminal *Los Ferrocarriles de México* (1987), Meyer Cosío’s *Ferrocarriles y la revolución mexicana* (2011) and Roy B. Brown’s *Introducción e impacto del ferrocarril en el norte de México* (2009) help to inform our historical background. Besides these works, the classic *Insurgent Mexico* by John...
Reed (2011), originally published as a series of articles in 1914, helps provide insights into the revolution’s impact on both the railroads and Mexican society.

**Transportation Geography**

Throughout this work, I demonstrated that access and control of railroads has important consequences that affect the course of history. Therefore, these infrastructures must be analyzed, understood, and theorized beyond their one-dimensional utilitarianism. Seizing on the dearth of theoretical-political research on transportation from within geography studies, I follow Keeling’s (2007) call for new theoretical contributions to our knowledge of the relationship between transportation and society. By focusing on the railroads, revolution, railroad workers and revolutionaries, I explore the intersection between transportation and social change. My work shows that under a revolutionary process, in the hands of the rebels, the railroad ceased being a means of accumulation and instead became a means of liberation, because its appropriation allowed revolutionaries to advance their political agenda against the regime.

Thus, this project is inspired by the call for more theoretical research and an active re-engagement with transportation within the broader discipline of human geography (2006; Shaw and Sidaway, 2011). A common criticism of transportation literature is that geographers tend to engage with transportation after the fact, and, whenever it is considered, transportation remains largely in the background. Even more problematically, as Keeling (2007, 219) notes, “Transportation is treated as so obviously fundamental to society that there is no need to explain how or why.” Progress on railroad geographies, specifically, has been “less than inspiring,” and railroads seem to have become “the stepchild of transport research” (222). The lack of critical and theoretical approaches to the study of transportation has exposed transportation geography as a moribund (Hanson 2003, 469) and, in extreme cases, even “ghettoized” sub-discipline (Goetz
2006). While there is disagreement with such characterizations (Goetz 2006), Docherty (2005) concedes that transport geography needs to reassess the dominant epistemological and ontological paradigms that dominate the discipline.

Such deficiencies are due, in part, because the discipline has not kept up with theoretical and methodological advances in human geography at large since “it has remained within the analytical framework of the 1960s” (Hanson 2003, 481). The rise of the mobilities paradigm and the popularity of books like Levinson’s The Box (2006) show that there is widespread interest in transportation, however, they also show that there is a need for new interpretations and theoretical exploration within the discipline. According to Freudendal-Pedersen, engineers, planners, policymakers, and practitioners have traditionally dominated the study of transportation, and research has traditionally been concerned with accessibility, risk, optimizing infrastructures, or just getting from point A to point B efficiently (2009, 2).

This “common sense” approach to transportation has resulted in the decoupling of transportation from its social, political, and ideological elements. Henderson (2013) notes that “this tendency is especially evident in quantitative, data-driven methods in which there is often a claim of apolitical, dispassionate, objective and unbiased professionalism in transportation analysis” (17). The result is that transportation and transport-related research has become disembodied from its social and political context when, in fact, it is inherently political. However, a new wave of critical research into transportation shows the way for new engagements between transport and critical theory. For example, Henderson’s (2013) own work has shown how struggles over cycling and automobility are ideologically charged; Cowen’s 2014 work on logistics has shed light on the criminalization of labor for the benefit of trade flows; and Shell’s (2015) work on multimodal transportation has explored the subversive potential of mobility. My
work takes inspiration from this new wave of critical transport research, and thus I focus on a thoroughly politicizing process for the railroad—a revolution.

Theoretical Foundations for Critical Transport Studies

At the turn of the 20th Century, American and European capital—aided by Porfirio Díaz—developed a railroad system and created the economic conditions that gave rise to an industrial labor force in Mexico. Yet this industrial technology that allowed for a successful accumulation of capital and political strength, also became a crucial technology that would help topple the regime. Using Karl Marx’s political economy, and in conversation with the works of critical geographers and mobility scholars, this dissertation explores this contradiction.

Marx’s work on transportation and circulation, though incomplete, is very useful to our understanding of the railroads as a means of capital accumulation that have the power to transform the built environment. While part of the process of production, by “selling change in location,” transportation is also part of the process of capital circulation, through the annihilation of space by time, as it brings commodities to market (Harvey 1977, 2006, 2013, 106–07).

To decipher the impact of the railroad on Mexico’s geography, I deploy David Harvey’s concept of the “spatial fix” to lay the foundations of a geographical-historical materialist framework as a way to approach an understanding of transportation systems under capitalism. Conceptualizing railroad development and its infrastructures as a spatial fix, we can understand the railroads as fixed capital in the landscape and as a “spatial fix” for capital accumulation (Harvey 2014, 152). Besides contextualizing railroad development in northern Mexico, I also show that unionization struggles by Mexican workers also altered the political terrain within the broader process of the capitalist production of space, and they often challenged this status quo with their own labor actions. Weaving these conflicts with a geographical analysis of uneven
development, I show how these conditions gave rise to a mass movement for democratic rights, land-redistribution, and economic justice.

In addition to the work of Marx and Harvey, I explore the mobilities/moorings dialectic (Urry 2003, Adey 2006) to understand how revolutionaries and railroad workers took advantage of the fluidity and fixity of the railroad to advance their revolutionary struggle. Here I engage mobilities literature, specifically the work of John Urry, who theorized the mobilities/moorings dialectic (Urry 2003), as I seek to better understand the dialectical relationship between mobility and fixity as it played out during the conflict. However, to keep consistent with Harvey’s vocabulary, I will speak of this dialectic as fluidity/fixity instead of the mobilities/moorings as is preferred in mobilities studies. Thinking through my work dialectically between fluidity and fixity allows me to deploy concepts like time-space compression (Harvey 1990) and time-space expansion (Katz 2001; Jung and Anderson 2017) and, therefore, to have a better grasp of the contentious nature of transportation infrastructures and labor geographies in the Mexican Revolution. As will be shown, the railroad came with many advantages to those who possessed it and it served the revolutionaries extremely well in their military campaigns, however, it also came with important disadvantages that demonstrate the dialectic of fluidity and fixity in action.

To emphasize the role of railroad workers in the shaping of the geographies of the Mexican Revolution, I follow Herod’s (1997) call for labor geographies. In my work, I conceive of workers as persons who belong to a working class, who sell their labor power to make a living through waged labor and who are essential to the process of capitalist production as creators of surplus value; these workers also exercise a spatial agency, and they produce space in their own interests throughout the different stages of the conflict. Furthermore, by centering on worker’s interventions before and during various phases of the revolution, I contribute show that there is
potential to develop insights towards a study of labor mobilities, which, like work in labor geographies, also analyzes the structural and social relations that shape the agency and the positionality of labor (Coe and Jordhus-Lier 2011) with an emphasis on the capacity for mobility and fixity.

Although actor-network theory (ANT) has come into vogue over the last two decades as a lens through which we can understand the more-than-human world, I don’t think that it is a useful set of ideas to study the research problem I am dealing with. The work of Michael Callon (1986), John Law (2002, 2008) and Bruno Latour (1999) played an important role in raising awareness about the role and relationship of human and non-human actors in the making of society. They attempted to do this by learning from actors instead of imposing predetermined explanation by social scientists. As these researchers traced these actants (humans and things), they emphasized their hybrid connections and networks to conceptualize socio-mechanical imbrications. However, what once seemed to be a coherent analytical edifice has been unable to withstand the stream of critiques against it.

As Laurier and Philo (1999) have argued, ANT’s “radical flattening” pretends to treat all actants and networks as equals, but in doing so, it is greatly indifferent to the power relations between the actants and the networks it purports to analyze. Indeed, issues of class, race, and gender are discarded altogether. Sheppard (2002) doubts the assertion that networks are non-hierarchical and correctly critiques the tendency for ANT to underplay the role of power in the creation of networks. Therefore, unlike Castree (2002), I don’t think that it is possible to bridge the gap between Marxism and ANT and to seek a rapprochement between these. My position in this debate is much closer to that of Kirsch and Mitchell (2004), whose blistering critique raises the issue that ANT is unable to explain why some actants are excluded from some networks.
Furthermore, as Kirsch and Mitchell argue, by treating all actants as equals, ANT relegates exploited workers as passive cogs in a machine (network) who are unable to dispute their sorry state of exploitation (695).

Since I understand power as a capacity based in relationships (racism, capital, private property, the State) that change over time through contestations from above and from below (Gilmore 2007, 28–29), my dissertation does not give equal standing to human and more-than-human actants (e.g. machines, infrastructures). Thus, unlike ANT, I contend that power is centered in institutions and individuals and structured in social relations (Kirsch and Mitchell 2004, 691). Within these relationships, humans are agents with the capacity to change and be changed by histories and geographies. I emphasize the directedness of social relations in composing, challenging, and transforming socio-technical relations, and I recognize that different actors can exercise unequal power. Thus, I demonstrate that a small number of individuals can make important interventions at key spatio-historical junctures because of their relationship to transportation networks and infrastructures.

The cross-fertilization of these literatures allows me to conceptualize the co-constitutive relationship between railroads and railroad workers, since both capital and labor have coproduced the geographies of the Mexican Revolution along the main network of the National Railroad from 1910–1914. From the construction of the very first sections of the Mexican railroad, American railroad companies sought to divide American and Mexican workers, who in turn developed organizational structures to surmount this challenge. However, as the nation was swept by a series of revolutionary waves, railroad workers adapted to the changing conditions of their work and made their own contributions to the revolutionary struggle.
**Broader Literature**

Outside of strictly transportation and Marxist geography circles, several additional works make important contributions to our understanding of infrastructures in the built environment (Castleman 2005; McGreevy 2009; Cowen 2014; Shell 2015). My research is part of a broad conversation with this literature on infrastructures, and I take several theoretical and methodological cues from these works. For example, drawing on Castleman’s (2006) social history of road construction laborers in Bourbon Mexico, I have adopted mini-prosopography as a research technique to recreate the lives of a social group, railway workers. This project also develops in conversation with Shell’s *Transportation and Revolt* (2015) and Cowen’s *The Deadly Life of Logistics* (2014) and advances a more critical transportation geography that sees transportation connected to broader structures of power and capital accumulation. My contribution to this conversation shows that workers can appropriate transport technologies for revolutionary purposes; thus, I conceptualize them as active agents of revolutionary processes and its geographies. Most important, this integrative approach contributes a case study that puts transportation at the center of theory by demonstrating its fundamental contributions to society, the production of space, and the making of history.

**Archival Research**

As a work of historical geography, primary sources play a key role in my work. There exists a wide-ranging set of economic and historical works that talk about the development of the railroads up until 1910; yet there doesn’t exist a definitive work on the role of the railroads during the revolution. The work of Chedraui et al. (2014) focuses on the economic issues faced by railroad companies during the revolution. Interestingly, Chedraui et al. conclude that the first years of the revolution (1911-13) did not lead to a sharp decline in passenger and cargo volume,
but that this changed dramatically during at the height of the revolution (1914-15). Nevertheless, this work does not cover the actual use of the railroad by revolutionaries. Furthermore, current research on the role of labor is also scant, and most of it is focused on labor’s involvement with the Zapatistas or during the civil war of 1915 (Meyer Cosío 2011; Guajardo 2010). Therefore, it has been necessary to look for information about the use of the railroads during the revolution and to center railroad workers, their background, their reasons for involvement in the revolution, and their activities on the railroad during the conflict.

This concern is raised by one of my focus questions, where I show who were the railroad workers that participated in the revolution, where they came from and why they participated. To answer this question the fundamental methodological approach that I am using is archival research, and all methods employed in this study rely on archival data. Archival methods are necessary for three reasons: 1) At its core, this is a historical project and therefore it is necessary to consult historical records and archives to contribute new findings; 2) To focus on railroad workers, this project integrates a set of oral histories gathered by the National Institute of Anthropology and History (INAH) during the 1960s and 1970s known as the Proyecto de Historia Oral (PHO).

The PHO interviews are rich with biographical data of individuals who were part of the Mexican Revolution. Although there are important limitations to these interviews, I was able to gather a set of 25 interviews of persons who had worked as railroad workers both before and during the revolution. Appendices A-C summarize the specific characteristics of each worker and by combining these oral histories, we can discern some general patterns. For example, on average, railroad workers were in their late teens when the revolution got underway. These workers came from different states, though mostly from the northwest, a pattern that makes sense since the
railroad did not extend into southern states and therefore these laborers were not part of the mobile labor market of the northwest. They had diverse occupations on the railroad, and most had attended primary school, and some had attended secondary or technical school. Literacy and mathematics were essential since most jobs on the railroad required the reading of signs, symbols, instructions and telegrams. Lastly, they all emerged from working class and peasant communities, and they recognized the hardships endured by the peasantry.

Besides important autobiographical information, the oral histories also reveal their political views, and their role in the revolution. Appendix B shows that less than half of these workers had participated in labor organizing in the years prior to the revolution, however, it does show that most identified with or joined a political organization or newspaper in the years immediately before the revolution. Once they join the revolution, we see that many of them entered as supporters of the democrat Madero and as they radicalized, they became supporters of Villa. Others that joined in the midst of the revolution joined with different revolutionary camps and often switched allegiances as the revolution took its own political twists and turns. Appendix C shows their widespread participation with different military brigadges and under the orders of different revolutionary generals.

While at the Center for Railroad Research (CEDIF) in Puebla I consulted the magazine *Ferronales*, a magazine by and for railroad workers published by the nationalized railroad company after the 1920s. The magazine contains testimonies and memories from railroad workers, which helped me compliment the oral histories of the PHO. In addition to the memoirs themselves, *Ferronales* is a valuable secondary source to register events during the revolution. My study also makes use of photographic images from the national photography library of
Mexico, the Fototeca Nacional, and its system of photo libraries, the Sistema Nacional de Fototecas (SINAFO).

The archives I consulted at the Hemeroteca Nacional, a newspaper and magazine library, gave me access to the pages of the newspaper *El Ferrocarrilero*. *El Ferrocarrilero*, published from 1904–1906, was the newspaper of the Great Mexican League of Railroad Employees. In its pages, we can observe a progressively radicalizing editorial board under the pen of Félix C. Vera, a railroad worker and journalist who helped support the strike of 1906 and organized the strike of 1908. Because of his labor activity, Vera was persecuted by the government, and *El Ferrocarrilero* recorded these events until its closure by government censors. This newspaper is evidence of the challenges of organizing a labor union during the *Porfiriato* and it helps us understand the grievances of railroad workers. Among these, unequal pay between Mexican and American workers and denied employment in top positions. Besides a tool for agitation and propaganda, however, the newspaper also gives us a glimpse of the organizational strategies deployed by labor organizers in the years immediately preceding the revolution.

In addition to oral histories, magazines and newspapers I also use the letters of Francisco I. Madero found in the *Epistolario* which contains his letters from 1900-1910. I used the *Epistolario* to corroborate and compliment key primary and secondary sources (Salmerón 2006; Portilla 1995; Sánchez 2011). Together with photographs from SINAFO of the Anti-Reelectionist campaign I provide a multifaceted and much more complete picture of the electoral phase of the revolution.

I use historical GIS (HGIS) to build upon my archival data and to recreate a series of maps that help the reader understand the geographic extent of the railroad network, the location of important labor unions, the campaign tours of Francisco I. Madero and revolutionary events of the
Northern Division from 1913–1914. For the creation of these maps, I have used the georeferenced data (shapefiles) available through Mexico’s National Institute of Geography and Statistics (INEGI), and I have acquired digital copies of blueprints and railroad infrastructures from the Center for Railroad Research (CEDIF) and the Mapoteca Nacional Manuel Orozco y Berra—the national maps library. I cross-reference the oral histories from the PHO interviews with the writings of Gorostiza (2010); Sánchez (2011); Salmerón (2006); Katz (1998) and Reed (2006). With GIS software, I have created maps that accompany this study and that provide general as well as specific context through GIS. Lastly, I used triangulation as a research method that adds greater depth and nuance to my analysis, and this enhances validity of results and claims. This approach allows me to look for convergence as well as inconsistencies that highlight new and interesting findings in my study (Patton 2002). By comparing the information in my methods, my sources build confidence in my research findings and reveal new ways of the revolutionary process and the intersections of labor and railroads.

Chapter Summaries

My dissertation is divided into two main parts, each consisting of two chapters. The first part is composed of Chapters 2 and 3, and this section lays out the socioeconomic relations of the period before the revolution. In Chapter 2, I provide the historical context of the Porfiriato through a historical geography of the Central Mexican Railroad and I set the background context of this period of Mexican history by describing the development of capitalism in Mexico under the dictator Porfirio Díaz. Here I expand on the political alliances and economic interests that brought immense wealth to a minority and misery to the majority. The main protagonist of this chapter is the Central Mexican Railroad which connects Ciudad Juárez to Mexico City. Following

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2 The word *Porfiriato* is used to refer to the dictatorship of Porfirio Díaz from 1870-1910.
the railroad north to south—Ciudad Juárez, Chihuahua, Torreón, Zacatecas, Aguascalientes, and Mexico City—I engage in a historical political geography of the railroad as it traversed the arid landscapes of the north to connect them with the seat of power, Mexico City.

In Chapter 3, I focus on labor history and the struggles of railroad workers and their unions from 1900-1910 to lay the groundwork for the revolutionary period. Thus, in this chapter, I discuss the development of labor organizations and I follow the attempts of Félix C. Vera and his collaborators in the newspaper El Ferrocarrilero as they attempt to organize a labor union, the Great Mexican League of Railroad Employees. Here I also engage the labor histories of early mutualist associations, the formation of craft-union brotherhoods, and the move towards industry-wide labor unions. I pay special attention to the labor press, specifically El Ferrocarrilero, and its role in organizing railroad workers for the strikes of 1906 and 1908. Throughout this chapter, we see that American railroads discriminated openly against Mexican workers. Thus, the struggle against national discrimination and towards Mexicanization will guide labor organizing until the nationalization of the railroad in 1909.

The second part of the dissertation is composed of Chapters 4 and 5. Chapter 4 begins in 1909 and introduces the electoral campaign of Francisco I. Madero against the dictator Porfirio Diaz. Here we follow Madero’s democratic revolution against the dictatorship from 1910–1911, which ends with Madero taking power. Madero is the main protagonist in this chapter, and we follow him though his campaign tours across the country, a political process unprecedented in Mexican history, which relies heavily on railroad mobility. When the democratic transition fails, the Mexican Revolution begins in earnest, and in this chapter, I follow closely the uses of the railroad during the electoral campaign and during the armed uprising. Using oral histories, we
explore the involvement of railroad workers in this phase of the revolution and follow Madero’s victory against the dictatorship.

Chapter 5 focuses on a new revolutionary wave known as the Constitutionalist Revolution, and the main protagonist is Francisco “Pancho” Villa’s Northern Division. In this phase, railroad labor took an increasingly active role in the revolution and through oral histories, we follow the revolution through military campaigns from north to south, seeing the increased power and that the revolutionaries derived from the railroads. This chapter ends with the Revolutionary Convention of Aguascalientes, a gathering of revolutionaries who sought to form a new government favoring the interests of workers and peasants. In concluding, I reflect upon the historical lessons and theoretical contributions offered by the geographies of Mexican railroad workers and the railroads and propose future lines of research to continue exploring this decisive period in Mexican history.

Conclusion

Scholars of the Mexican Revolution will agree that the railroad and railroad workers are understudied since most works written about the revolution often focus on revolutionary leaders or the struggles of the peasantry, and rightfully so, since they were the main heroes of the conflict. However, in this dissertation I center the railroads and railroad workers because they help us understand the crucial role played by this overlooked social sector and its role in the success of the revolution. Furthermore, the focus on the railroads is way to explore the relationship between transportation geography and social change—another subject that is understudied. Altogether, this intervention seeks to advance our understanding of transportation infrastructures in the midst of a revolution and therefore, to provide insights for present and future revolutionary struggles that will have to engage with the dialectics of fluidity and fixity.
“The uneven distribution of the railways, their uneven development—sums up, as it were, modern world monopolist capitalism” (1939 [2002]:10).

V. I. Lenin

Chapter 2: Capitalist Development and the Railroads

Any study of the impact of the railroad on the Mexican Revolution must consider the circumstances that gave rise to such a cataclysm in Mexican history. As Gilly notes, the establishment of the world market, the integration of Mexico into the world market, and the capitalist development of the railroad during the 34-year reign of Porfirio Díaz should not be seen separately but viewed as three interrelated aspects of a single process. Indeed, Gilly’s argument situates Mexico’s integration to the American economy with the rise of imperialism, and this phenomenon developed simultaneously with the expansion of foreign investments in railroads, mining, and other industries. Thus, Díaz’s reign, often referred to as The Porfiriato, took place during the crucial transitional period between the Age of Capital and the Age of Empire, when emerging technologies like the steam engine profoundly impacted the development of different parts of the world (Hobsbawm 1986, 1989).

Another sign of the changing times was the rise of national industrial economies (British, German, French, and American) that dominated international markets through economic trusts, cartels, and monopolies. These trends help to explain the explosive development of the railroad seen in Mexico from 1880–1910, as well as the conditions of “backwardness” that established a relationship of dependency between Mexico and the United States. As Díaz rose to power, he developed an apparatus that modernized the state to connect the Mexican economy to American capital, and the railroad became an integral part of this modernization process. But just as the railroad was a civilizing machine (Matthews 2013), it also produced hyper-exploitation of the masses until the situation became unbearable, and a revolution was finally unleashed. In this
sense, the historical geography of Mexico’s railroads becomes the historical geography of the Mexican Revolution, as for a short period, railroad workers transformed the railroad into a means of human liberation. This is the story of that process.

**Railroad Development in Mexico and the Rise of Porfirio Díaz**

In the wake of independence from Spain, the Mexican economy was in shambles, and the Mexican state found itself in complete disarray. Government in-fighting between liberal and conservative factions continued in the aftermath of the American intervention and throughout the French Intervention (1862–1867), which contributed to the general sense of disorder and economic stagnation across the territory (Meyer et al. 2010, 290). Under President Benito Juárez, the liberals finally regained control of Mexico in 1867 and began to craft new legislation to systematically regulate trade and commerce. The new laws brought significant changes to policies that affected transportation infrastructures and attempted to assimilate the technologies of the industrial revolution. Since the colonial period, inadequate transportation had been one of the main obstacles to economic growth in colonial Mexico (Coatsworth 1978, 91), and, recognizing this, the liberals laid the foundation for the period of modernization to come. Thus, during Sebastian Lerdo de Tejada’s presidency, the Mexican Railroad, commonly known as *El Mexicano*, was finally opened between Mexico City and Veracruz on 1 January 1874. To encourage more railroad development, the government negotiated contracts with American companies for the construction of railroad and telegraph lines. Unfortunately for Tejada, however, the opposition instigated anti-American nationalism and used these railroad concessions against him, costing him his second term in office and leading to the rise of Porfirio Díaz.

The year 1876 marked the beginning of the thirty-year period of socio-economic development known as *El Porfiriato*. The changes brought about during the *Porfiriato* deeply
influenced Mexican society and marked the full integration of the Mexican economy and the North Atlantic capitalist market (Katz 1981, 3). Porfirio Díaz’s first presidential term was driven by three key objectives: promoting rapid economic growth, enhancing the security of the country’s borders, and acquiring more revenue to balance a chronically under-financed budget (Holden 1990, 581). Díaz set out to accomplish these tasks by applying the motto “order and progress,” with a strong emphasis on order. Díaz’s most important accomplishment was to gain official recognition of his government by the United States and to convince American capitalists that Mexico was a safe and reliable environment for American investments, especially in mining and railroads. Although there was widespread mistrust of American investments in the railroads, the Díaz regime recognized the strategic need to clearly demarcate land and foment the railroad’s development along the nation’s borders, from the southern jungles of Chiapas to the vast deserts of the northern states (Ortiz Hernán 1987, 179; Holden 1990, 582). Thus, the railroads constituted the first large-scale foreign investment project in Mexico during Díaz’s rule.

The direct involvement of the Díaz government in the promotion of railroad development produced clear results that further legitimized his rule. For example, at the beginning of Díaz’s first administration, Mexico had only 893 kilometers of track and a poor transportation infrastructure throughout the country. By the time Díaz was overthrown in 1910, Mexico’s railroad network had grown to more than 19,000 kilometers. There had been many prior attempts by U.S. capitalists to establish railroads in Mexico, but 1880 marked an explosion of investment in railroad construction (Knapp 1952). From 1878–1880 the federal government granted concessions to the states, to attract capital and develop local railroads. But states were largely incompetent and lacked capital; thus, Porfirio Díaz pushed the concessions from the Mexican government to great success. For example, in 1880, there were 16 railroads with 1,052 kilometers
of track; by 1884, there were 49 railroads, with 5,897 kilometers of track (Chedraui 2014, 60). The construction contracts offered by the government carried with them highly profitable returns—in some cases $9,500 per kilometer of track laid (Meyer 2011, 326). Guarantees, land grants, and subsidies offered to the railroad entrepreneurs by the government further encouraged the railroad boom. This infusion of foreign capital provided a much-needed jolt to Mexico’s stagnant economy, and under the aegis of an obsequious administration, British and French capital began to invest in Mexico. Nevertheless, many of these investments had a negative impact on rural communities, since the government also carried sweeping legislation to appropriate lands the railroads deemed necessary for construction; in the process, the railroads became large landowners, and these lands were sold to private investors (Meyer 2011, 326).

Railroad construction was one of the most profitable investments in Mexico, and besides generous contracts, large tracts of land were also granted to railroad and land-surveying companies during Díaz’s time in office. Therefore, the regime introduced the expropriation law of 1882, which was very specific in its implementation and aimed to transfer land from proprietors to railroads. This law marked a turning point in establishing the framework to attract foreign investment to develop the railroads (Van Hoy 2000, 34)³. In addition to the expropriation law of 1882, Porfirian land reform established land-surveying companies that were privately owned, mostly by Mexican nationals, although there were important American ones as well. Land-surveying companies were responsible for, and the beneficiaries of, the greatest turnover of public land in the nation’s history. This survey of “vacant” lands caused widespread speculation, not

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³ A memo from one of the directors of the Ministry of Development, Fomento, stresses that “the expropriation law gave ample grounds so that an intelligent person can wield successfully the weapons which [the law] offers” to gain access quickly and cheaply to the land necessary for railroad development.” The director went on to mention that an agent from the government could easily challenge the possession of land titles in the states of Puebla and Oaxaca, and if necessary to invoke tax debts to disposes the landowners. Van Hoy concludes that “the tone of the memo underscored the ministry’s intention to displace residents from their lands” (Van Hoy 2000, 34).
only in the lands next to the railroad tracks but also in adjacent public lands. The nearer the land to a station, the more valuable the property (Coatsworth 1974).

During the Porfiriato, one of the most important concessions granted to American investors from Boston was the Mexican Central Railroad line from Mexico City to the U.S. border in El Paso, Texas. In keeping with the agreement—and to avoid territorial annexation by the Americans—the line had to be built simultaneously from its southern and northern terminals. The Central was completed in a record four years and, soon after it was finished, became the main trunk of the Mexican railroad network to the north. Besides the Mexican Central Railroad, Mexico’s National (Mexico City to Eagle Pass, Texas) and Southern Pacific railroads (Guaymas, Sonora, to Nogales, Arizona) also integrated Mexican railroads into the United States’ extensive railroad network. By the end of the Díaz administration, Mexico had one of the largest railroad networks in the world.

While the Transcontinental railroad opened a “vast wilderness” in the United States, in Mexico, the introduction of the railroad connected an already existing network of cities that had been previously communicated by the colonial Camino Real de Tierra Adentro from Mexico City to Santa Fe, New Mexico (Jackson 2006, xvi–xvii). In northern Mexican territories, mule trains had facilitated communication between the capital and its northern regions for centuries, and water, lodging, food, and fuel were available to travelers along the Camino. Thus, in innumerable ways, the Camino’s network facilitated the rapid construction of the Central Mexican Railroad (Ortiz Hernán in Márquez 2010, 30).

Although we don’t see such dramatic changes in northern Mexico as those brought about by the Transcontinental in the United States, the changes the railroad did bring to Mexico were quite pronounced. Trains linked far-flung cities in the northern and southern regions of the
country to state capitals and to the nation’s capital—thus opening up the possibility of fast, safe, and reliable travel.4 The northern states had been a backward, isolated part of the nation until the railroads connected these territories to the rest of Mexico and the rapidly developing Southwest of the United States. Train stations became centers of activity, and the newly built tramways connected them to city centers. Demographic changes in the north were the most pronounced and spoke volumes of the rates of economic growth during the Porfiriato. Anderson (1976) writes that while the population of Mexico increased by 25 percent between 1885 and 1900, states of the north such as Durango and Chihuahua doubled that rate, and Coahuila’s population increased 105 percent in the same decade and a half. Much of this growth was driven by the introduction of the railroad, the telegraph and steamship lines in formerly isolated cities that were now connected to the most important centers of global capital in New York and London. We now turn to the historical geography of the Central Mexican Railroad, which eventually became part of the National Railways of Mexico, and the impact of the railroad on the north of Mexico.

**El Paso and Ciudad Juárez: Border Boomtowns**

Before the arrival of the railroad, El Paso, Texas, wasn’t much different from its Mexican neighbor to the south, Ciudad Juárez (formerly Paso del Norte). The train finally arrived in 1881, and with it, the machinery to industrialize construction and the colonizers who would change these sleepy border towns. The trains also brought tin roofing and glass panels, and recent developments in mass production brought cheap steel nails and lumber for construction. Thus, El Paso’s railroad connections changed the traditional adobe buildings to modern American Midwestern styles, and soon enough, these styles crossed the border south to Ciudad Juárez.

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4 The railways expanded together with the whole communications system: the telegraph lines built alongside the track; the roads, on which banditry was reduced and sometimes even eliminated; the military and postal installations; and the first urban systems of electric lighting and drinking water” (Gilly 2005, 23).
There too, adobe buildings began to give way to Midwestern-style wooden structures. The establishment of a free trade zone, which gave investors generous terms of trade, also brought more American businesses and commerce to Ciudad Juárez (Martínez 2011).

The convergence of several American railroads in El Paso turned that city into an important railroad terminus, and by 1882, the railroads were important economic players in the region. Three main trunks converged in El Paso: the original Topeka Railroad, the Atchison Railroad, and the Santa Fe Railroad, which connected the city to Albuquerque, Kansas City, and Chicago. The southwestern Pacific line connected El Paso to Los Angeles and San Francisco, and the Texan line connected the region to Houston and New Orleans (Clark 2003, 99). With such intersection and connectivity, the railroads became an important engine of economic growth, and their economic weight was felt across the border. By 1911, the yearly average cargo crossing the border between Ciudad Juárez (Paso del Norte until 1888) and El Paso reached 776 million pounds (González-Herrera and León García 2000, 247, 256). With the connection from Ciudad Juárez to Mexico City, Ciudad Juárez gained new importance as a border city.

The relationship between the cities of El Paso and Ciudad Juárez is deeply marked by their status as border cities and as commercial and transportation gateways to different countries, particularly once the railroads between Ciudad Juárez and Mexico City were connected. Political movements agitating against Porfirian rule also took advantage of El Paso and Ciudad Juárez’s strategic connections. For example, in 1906, the exiled leadership of the Partido Liberal Mexicano (PLM) established its headquarters in El Paso, Texas to throw off the detectives that were tracking them in Montreal. From El Paso, Ricardo Flores Magón and fellow journalist-agitator Juan Sarabia attempted two insurrections in Mexico, in 1906 and 1908 (Romo 2005, 55).
Guns and munitions were easy to come by in El Paso, and members of the PLM weren’t the only ones exploiting El Paso’s strategic location. During the revolution, border cities, especially El Paso, became centers of arms smuggling, journalism, and espionage. Railroad workers facilitated these transactions and eventually used the railroads to move goods for revolutionary camps. According to Romo (2005), El Paso was a crucial border town for the revolution:

…the battles of the Mexican Revolution were sometimes won and lost, not out in the field, but back in the streets of El Paso. Whether or not a faction was successful in getting arms across the border into Mexico through the major customs port of El Pas-Juárez often meant the difference between victory and defeat. This state of affairs was good for many local businessmen who made a real killing selling weapons. The Shelton-Payne Arms Company at 301 South El Paso Street, a major supplier of arms and ammunition to all nations of the revolution, had assets exceeding $1,100,000 in 1913 (109).

Besides weapons, the railroad moved commercial goods, and industrial machinery also moved steadily from El Paso into Ciudad Juárez and further south to the big state of Chihuahua and its capital.

Figure 4. “View of El Paso” by Léon Trousset. Source: El Paso Museum of Art (1885).
Chihuahua City and the Terrazas Clan

As the train rode south to Chihuahua City, it crossed a flat, desert landscape. In 1880s Chihuahua, these lands were undergoing a deep transformation, as enclosures were converting open public lands into cattle-ranching terrain for the richest man in the state, Luis Terrazas. Both Mexican and American authorities worked together throughout the Apache Wars (1849–1886) to exterminate the Apache and Comanche groups that were resisting capitalist development in their home region, especially after the 1880 railroad development boom. With the newfound security and the entry of the railroads, land values increased dramatically and haciendas began to turn to cattle ranching wholesale to supply the growing American Southwest. In Chihuahua, the Terrazas clan emerged as the most powerful family in the state and became partners with the railroads, using them to participate in land speculation and mining. Foreign capitalists found ready business partners in the Terrazas family, and such investors acquired the rich mines of Batopilas, Santa Eulalia, and Cusihuiriachic. Thanks to the railroad, investments became viable in far-flung parts of the state in territories that had once been vacant public lands. Through land surveying companies and enclosures, these territories were reproduced for farming, forestry, and cattle ranching industries (Aboites 2006, 128–131).

By 1890, The Terrazas family had become the largest landowners in Mexico, and the railroad helped their territories thrive, since many of the stations were on hacienda lands themselves. Salmerón (2006) notes two especially good periods of cattle exports that allowed the Terrazas to amass a fortune. 1883–1889 and 1895–1898 stand out as particularly good periods of cattle exports to the United States because of the harsh winters that decimated American and Canadian herds (Hine and Faragher 2007, 121). During this period, Americans relaxed restrictions on beef imports from Mexico, and the Terrazas were able to ship their cattle to California and the
Midwest. These particularly good years allowed the Terrazas to gain a foothold in the growing American markets, and, as González-Herrera and León García (1996) note, these export booms were also closely related to the expansion of Chihuahua’s banking system (247, 255).

Thus, cattle ranching became consolidated as the main economic activity of the region, and exports grew at an exorbitant rate: from 10,000 heads of cattle exports in 1887 to 310,000 in 1897 (Aboites 2006, 132). The profits from these sales were immediately invested in other economic sectors and in other regions of the country. Between 1880 and 1907, the Terrazas clan bought or built flour mills, meat packing plants, transport companies, a smelting company, and a brewery. In addition to their investments in the Mining Bank of Chihuahua, the largest in the state, they also invested in the Laguna and in Monterrey. All in all, the Terrazas employed more than 13,000 workers in their haciendas and in their industrial ventures (Salmerón 2006, 63).

Chihuahua itself experienced an economic boom, and Ciudad Juárez became one of the most important custom houses of the country. New railroad lines were built all over the state, and a new northwestern railroad connected Ciudad Juárez with Casas Grandes and Chihuahua with the mills at Madera. New lines to the east brought Chihuahua in contact with mining towns in Coahuila, and to the south, a new railroad parted from Jimenez to Parral and then on to Durango state. To reach the Pacific coast of Mexico, in 1903, the Kansas City, Mexico, and Orient Railroad began construction from Ojinaga on the Texas border through Chihuahua and towards the port of Topolobampo in the Pacific.

In this period, the state’s population soared from 180,000 inhabitants in 1877 to 405,000 by 1910. Chihuahua also grew rapidly: in 1865, the city had 10,000 inhabitants, and in 1910, the number had risen to almost 40,000. Between 1895 and 1910, Parral grew from 7,300 to 14,000 inhabitants and Ciudad Juárez from 7,000 to 11,000. Much of this growth was aided by railroads,
which brought immigrants from the center of the country to settle in the north. These immigrants were employed by textile factories, railroad yards, and by the mining giant ASARCO, the American Smelting and Refining Company, which established operations in Chihuahua (Salmerón 2006, 61–63). Sparsely populated areas like the city of Madera became thriving towns in the sierra, where Americans like Colonel William C. Greene owned lumber mills. Religious immigrants also began to settle in the state, and Protestant and Mennonite congregations began to establish agricultural colonies. Modern urban amenities began to make their presence in the cities: public lighting arrived in 1897, the cinema in 1899, and the automobile in 1903. During this period, Chihuahua City became the most important city of the state, thanks to the Central Mexican Railroad that directly connected it to the “Pearl of the Lagoon,” the city of Torreón (Aboites 2006, 134–35).

The Impact of the Railroad Upon Torreón and the Laguna Region

At the southernmost part of the Basin of Mapimí, in the desert valleys between the Sierra Madre Occidental and the Sierra Madre Oriental, lies the Comarca Lagunera, also known as La Laguna. The region is named after the seasonal lagoons at the southern portion of the Basin that receive the floods of the Nazas and Aguanaval Rivers. The railroad was a latecomer to this unforgiving territory, but when it did arrive it complimented and revolutionized existing ventures. Colonization ventures sprang up in the region towards the end of the nineteenth century, and with them a system of canals and aqueducts that guided the sometimes unreliable, sometimes unpredictable waters of the Nazas and Aguanaval Rivers. In the 1870s, cotton became the most important crop of the region, and the cotton plantations provided the raw material for Mexico’s booming textile factories. These plantations were the foundation for the dynamic growth that took
off in La Laguna after the 1880s, and a new capitalist class was born in the region (Cerutti 1999, 832).

With the arrival of the Central Mexican Railroad in 1883, new irrigation technologies, telecommunications, and electricity, the Laguna began to export its cotton to the United States, England, and Germany. Local and foreign investors took advantage of the cotton’s derivatives, and the economy diversified. Two textile factories were built, along with two soap factories that took advantage of the cottonseed. The leftovers were then turned into dynamite and glycerin. Between 1882 and 1888, three railroads were built in Laguna, all of them connecting the country with Texas’s extensive railroad network. This interchange gave Mexican markets access to industrial cities in the Midwest, like Chicago, and to the American Northeast, where the second industrial revolution was underway (Cerutti 1999, 859; Salmerón 2006, 172, 176–77).

The junction between the Mexican Central Railroad and the International Railroad made Torreón and Gómez Palacio important railroad hubs, and in a generation, these cities would concentrate the industrial and financial capital of the region in highly profitable business ventures connected to global markets. The population of the Laguna grew rapidly during this period, from 20,000 in 1880 to about 200,000 in 1910. Thanks to its spectacular growth, commercial strength, and grand public buildings, Torreón became known as “The Pearl of the Lagoon,” since it had zero inhabitants in 1883 and upwards of 40,000 by 1910. Between the industrial workers and miners, La Laguna held one of the largest concentrations of industrial work in all of Mexico, with more than 30,000\(^5\) workers (Salmerón 2006, 176–77).

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\(^{5}\) According to the conservative politician Vera Estañol (1910), La Laguna was “in plain development and progress, since year after year the agricultural zones had been growing with the improvement of irrigation while the region had repelled the attacks of the savage tribes. The previously arid and inhospitable lands, and the dens of the barbarian tribes had transformed into the most fertile fields, cities and towns, thanks to the irrigation works” (63). (Cerutti 1999, 827).
The introduction of the railroad connected this formerly isolated region and cohered the scattered towns and haciendas into a growing urban region within a generation. Foreign capital had a strong influence in the development of La Laguna, the urban region of which comprised the cities of Torreón, Gómez Palacio, Ciudad Lerdo, and San Pedro de las Colonias. La Laguna’s business directory, printed by Baca y Aguirre (1904), listed more than 40 factories. The influx of foreign capital is part of a shift of capital investments from the industrialized countries to fresh regions for investment. From 1880–1900, 62% of foreign investments to Mexico came from European capital (mostly British and French) and 38% came from the United States. Towards the end of the *Porfiriato*, American investments eclipsed European capital, and railroads and mining (mostly American ventures) accounted for 60.3% of foreign investment (Gilly 2005, 25–26).

An example of how the railroad influenced the merging of national and international capital is the way the Central Mexican Railroad influenced the soap manufacturer La Esperanza, which established its main factory in Gómez Palacio. La Esperanza became a very profitable business partnership for Brittingham and Terrazas; they began to export animal feed paste (cake) to England, and they also produced glycerin. By 1907, the soap factory of La Esperanza was one of the largest of its kind in Latin America⁶ (Cerutti 1999, 861–63). Besides cotton, rubber production also boomed in La Laguna from an abundant desert shrub known as guayule. In 1900, two processing factories of guayule were established in La Laguna. The largest was the Continental Rubber Co., part of the Rockefeller-Guggenheim consortium, and another one owned

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⁶ According to Cerutti, a fair assessment of the companies, factories, and banking houses located in La Laguna (Lerdo, Gómez Palacio y Torreón) during the 1880s should include: La Esperanza, La Amistad, La Alianza, the shoe factory of La Unión, the Industrial Soap Company of La Laguna, El Brillante, the Electronic Railroad from Lerdo to Torreón, The Brick Company of Gómez Palacio, El Fénix, La Victoria, La Nacional, La Constancia, The Electric Company of Torreón, La Fe, the soap factory of La Unión, the Metal Smelter of Torreón, the Continental Mexicana Rubber Co., the Compañía Guayulera de Torreón, the Bank of La Laguna, the Chinese Bank and the regional offices of the National Bank of Mexico, the Bank of London and México, the Comercial Bank of Chihuahua, the Bank of Nuevo León, the Mining Bank of Chihuahua, the Bank of Durango, the Mercantile Bank of Monterrey, the Bank of Coahuila and the Bank for Agricultural Credit (Cerutti 1999, 858).
by the Casa Madero, whose guayule business was headed by Francisco I. Madero. After 1904, the price of guayule rose sharply and by 1907, the processing, packing, and shipment of guayule employed more than 12,000 persons in La Laguna. By 1907, rubber production had displaced cotton as the primary export of the region (Salmerón 2006, 158–59).

At first, guayule was exported by train in bulk out of the Laguna for processing, but with the development of new extraction methods, mills became concentrated in the region. The concentration of rubber production exacerbated the problems of the water and land that came with the cotton boom. A direct result of the guayule boom was that land formerly worthless became very valuable almost overnight, and the haciendas began restricting collection of guayule on their—formerly unproductive—lands. However, many peasants began collecting and selling guayule illegally. In response, the haciendas sent men to patrol the sierras, and soon complaints of abuse became widespread in the communities of Cuencamé. The haciendas of Cuencamé were some of the largest producers of guayule. The hacienda of Sombreretillos de Jimulco, for example, produced more than 2,000 tons of guayule from its 87,000 hectares in 1910. Many of these lands, however, were under dispute by the Ocuila Indians, who accused the hacienda of dispossessing them of their lands (Salmerón 2006, 159–61).

Despite these problems, La Laguna was booming, and it became the pride of the regime: In 30 years, a desolate region had been transformed by the railroads and foreign capital into one of the most industrially advanced centers of Mexico. In short, it symbolized “the triumph of the regime and the resurgence of a new, modern and progressive Mexico.” In the eyes of the regime, the railroad was a great civilizing machine and La Laguna was evidence of this progress. Nevertheless, as the most well-connected region to the international market, La Laguna felt the immediate impacts of the stock market crash of 1907. Immediately after its aftermath, the crisis
exacerbated local struggles over land and water that had pitted local capitalists against international investors close to the regime. Furthermore, struggles over wages and democratic rights added to the grievances of the local bourgeoisie and, by 1910, all of this crystallized in a political campaign to challenge the regime (Salmerón 2006, 172, 176–77).

**Zacatecas: The Railroads, Mining, and Uneven Development**

Further south from La Laguna, the railroad followed the original path of the Camino Real to the city of Zacatecas. Zacatecas was built on a north-to-south axis along the creek of La Plata, and it is surrounded by several cliffs and hills, of which the most well-known are those of La Bufa, the Cerro del Gato, Las Bolsas, and el Grillo. The uneven topography in this canyon resulted in a zigzagging urban grid upon the hilly terrain and forced the train to the outskirts of the city (López Marchán 2014, 122–23). In 1884, when the Mexican Central Railroad reached Zacatecas, it took over the 10-kilometer line of the Ferrocarril Zacatecano that connected the capital with the city of Guadalupe, and, in turn, these two cities connected to U.S. cities in the north and Mexico City in the south.

However, unlike Chihuahua or the Laguna Region, Zacatecas did not see explosive industrial growth because of its reliance on mining. Towards the end of the nineteenth century, mining was the main economic activity in the state besides agriculture, which fed the workforce of the mining towns. From 1875 to 1888, the state was responsible for 20 to 25 percent of Mexico’s total silver production. Overall, the region’s heavy dependence on mining became a burden for the economy, because when mining suffered, the agricultural sector also suffered, since most agricultural products were destined for local consumption (Flores Olague et al. 2003, 143–44). Unlike other regions of the country, Zacatecas did not see large sums of foreign investment or a diversification of its economy with the introduction of the railroad.
For Zacatecas, overreliance on silver became a huge problem at the end of the nineteenth century because of silver’s depreciation in value. The fall in the price of silver wasn’t stabilized until 1905, when the government switched to the gold standard. Thus, while new chemical and technological developments in mining (cyanide milling) helped to produce larger amounts of silver, these methods allowed silver production to increase elsewhere and eventually brought down the value. The adoption of new extractive technologies led to a global “silver rush” at the end of the nineteenth century in places such as Arizona, Argentina, and New Zealand.

Furthermore, the railroad impacted the state in a negative way, because it allowed for bulk shipments of material out of the state where silver was extracted in the smelters of Saltillo and Monterrey, thus losing the profits from silver extraction (Flores Olague et al. 2003, 144–46).

Although the mining sector was in a constant decline, the capital city did see modest urban development thanks to the railroad and the commercial and public investments it brought to the city. For example, a new neighborhood grew around the railroad station, complete with a new church and a new market. After 1890, the public hospital and the Bank of Zacatecas were built. By 1896, Zacatecas also had a smelter, a dynamite factory, and two flour mills. In nearby Guadalupe, there was also a textile factory that housed 120 workers (Flores Olague et al. 2003, 147–48). By 1900, a system of urban trains pulled by mules was also built in the city, followed by the Calderón Theater and the main market hall. Towards 1910, the electric plant was expanded, and it provided electricity to the Alameda Park, the aqueduct, several city parks, the main market, several shopping arcades, government buildings, and the men’s and women’s prisons.

The railroad also brought a new commercial culture to Zacatecas. Businesses were housed in opulent buildings along with banks, hotels, offices, and religious spaces in the center of the city. Commodities from Europe, the United States, and Mexico flooded the newly opened
warehouses and department stores like El Trébol, El Progreso, La Violeta, and El Monte de Piedad along the Portal de Rosales (López Marchán 2014, 125–28). Nevertheless, the growth of Zacatecas pales in comparison to the boom underway in Chihuahua and the Laguna, because unlike in those cities, large factories did not dot the countryside—not even near the mines. Thus, it is remarkable that the capital city grew at all, despite the crisis in the mining and agricultural sectors and widespread emigration.

**Aguascalientes and the Railroad Yards**

For the most part, Aguascalientes remained a sleepy town along the Camino until the late 1800s, when the advent of the railroad turned it into a regional industrial center. The Central Mexican Railroad arrived in Aguascalientes on February 24, 1884, and, to commemorate the occasion, the city organized a series of celebrations to welcome the first passenger trains. The State Marching Band and the Federal Army’s Marching Band were placed at the train station and at the main plaza to provide entertainment to the celebrations, and fireworks went off at midnight as the train pulled in to the station. The program also encouraged the neighbors to illuminate the front of their houses for the occasion (Medrano 2006, 34).

Thanks to an agreement between the state government of Aguascalientes and the Mexican Central Railroad Company, Aguascalientes became the headquarters of the Central’s main repair workshops. The contract stipulated that the government be responsible for acquiring the land necessary for the workshops and that the Central would become the owner of these lands. The State was also responsible for providing great amounts of water for the rail yards free of charge. The Central offered some concessions; among them, they agreed to hire as apprentices “young men that the Government would recommend and who are subject to the order and discipline
established for the workers.” However, the company did retain the right to dismiss these workers if they threatened the integrity of the company (Medrano 2006, 37–40).

Aguascalientes was also chosen as the location for the repair shops because of its central location and because the Central Railroad opened a new line from Aguascalientes to the Port of Tampico in the Gulf via San Luis Potosí. Thus, in 1897, construction began on the Main Workshop of Construction and Reparation of Locomotives and Rolling Stock. A government report from 1899 enthusiastically announced that in Aguascalientes there was a railroad roundhouse being rapidly built and that it would be just as big, if not bigger than, the one the company owned in the nation’s capital, which was a sign of how important Aguascalientes had become for the railroad. In 1900, the department of repairs was inaugurated, along with a new employee hospital and the rail yards. The whole complex was finished in 1903, and it employed more than 1000 workers. Among them one could find smiths, tinsmiths, welders, carpenters, mechanics, electricians, and others. The railroad workshops became very important in the life of the city, especially in the life of labor, since it was there where many workers received training to operate and repair machines (Medrano 2006, 45–46).

Railroad and warehouse management offices were also alongside the repair shops in what became known as the “Casa Colorada,” a large, two-story structure of red brick in Victorian style. The 60-ton cranes and the shop’s electric plants were also located nearby. In the eastern section of the lot, the company built houses in the American bungalow style for its engineers and technicians; this zone became known as the “Ferronales Colony.” Towards the end of the Porfiriato, Aguascalientes built a new train station designed by the Italian engineer G. M. Bosso. The new two-story station had a cafe, a waiting room, and a mail office on the first floor and the station’s offices on the second. A map from 1903, prepared by the engineer Lewis Kingman and
titled “Mexican Central Railway—New Yard at Aguascalientes,” shows the extensive grounds of the property, which also housed five large parks, a playground, a school, a church, and a large warehouse (Guajardo 2010; Medrano 2006, 44–46).7

The impact that the advent of the railroad and the construction of the main railroad yards of the Central Railroad had on the city of Aguascalientes cannot be underestimated. The city became an important node on the north-south and east-west axis of the Mexican Central Railway Company’s network. The arrival of the railroad and the installation of the main railroad shops gave the city an industrial character. The changes brought about by these developments were felt in the social and economic life of the city as it brought with it new industries—among them, the Aguascalientes Electric Light and Power Co. and a flour mill named “La Perla.” As the center of industrial development, the railroad yards attracted other commercial and industrial ventures to the city, including a starch mill, The American Hotel, the W. P. Oil Company, and the Aguascalientes Lumber and Mercantile Company, which had a lumber yard adjacent to the railroad. These ventures joined the already successful investments of the Great Central Mexican Smelter owned by the Guggenheim family which, at the turn of the century, controlled more than half of the ore production in the state of Aguascalientes (Medrano 2006, 36; Wasserman 2015, 3).

**Mexico City and the Nation**

At the southernmost end of the old Camino Real de Tierra Adentro and the terminus of the Central Mexican Railroad, stood Mexico City. For three centuries, the wealth of the colonies flowed through Mexico City to Spain. Colonial rule, the War of Independence, and struggles against the French Intervention all marked the city, and the Mexican Revolution would do the

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same. At the turn of the century, Mexico City was well connected to the rest of the country, thanks to the numerous railroads that converged there. A map of Mexico City from 1910 shows the rail yards and stations established in the capital. There is, for example, the Estación Colonia and the yards of the National Mexican Railroad at the foot of the tree-lined Reforma Boulevard. Just north stood the largest rail yards of the city at the Buenavista Station, which housed the Central Mexican Railroad with its famous roundhouse. Adjacent to Buenavista is the neoclassical station of the Mexican Railroad, and to the northeast, stood the station of the Hidalgo Railroad. To the west of the city—below the newly built penitentiary—were the rail yards and roundhouse of the Interoceanic Railroad, connecting Mexico City to the eastern states. As the railroad hub of the nation, Mexico City had one of the largest and most politically active populations of railroad workers from the numerous stations and workshops (Guajardo 2010, 172–73).

The railroad served to illustrate the relationship between the central government and the rest of the country: It allowed the central government to exercise its power through tax collectors, ministers, bureaucracies, and the army, which could be quickly sent to the provinces. The politician Pablo Macedo wrote that unlike in the past, the “government of the Republic can now, thanks to the railway, make its power and authority felt in the remotest part of Mexico, quashing any sign of unrest or rebellion in fewer days than it used to take months” (Gilly 2005, 25). As was common in the nineteenth century, industrial revolution technology was immediately adopted for imperial and military purposes (See Stein in May and Thrift, 2001). Nevertheless, as Knight (2010) notes, Macedo failed to notice that the army would be confined to these same infrastructures and the cities they connected. Thus, a perceived advantage also had its disadvantages, and it would be these disadvantages that would be exploited by the revolutionaries who would bring down the government (45).
The railroad brought industrial growth to the capital, but commerce and finance were its most important activities. The city’s downtown housed national and international banks that orchestrated the financial operations of the country. Politicians collected fees and issued licenses and mining permits. Up to a quarter of the nation’s commercial transactions occurred in the stretch between the Zócalo and the Alameda. During the Porfiriato, modern department stores were built in Mexico just like they had been in Paris and London. Americans were also well represented in the commercial groups of Mexico City, and the American railroad companies had their offices downtown. Foreign investors also played an important role in the rise of Díaz’s Mexico, and the Mexico-based but British-owned Banco de Londres y México became the country’s second largest creditor (Johns 1999, 16–17).

Like other Mexican cities, the capital also experienced sharp growth during the three decades of Porfirio Díaz’s government. This growth must also be understood as connected to the railroads, since six railroads had a terminus in the capital. The city that Alexander von Humboldt had named “the city of palaces” was shifting in its tastes, and the fine colonial buildings that inspired the German explorer gave way to stately mansions. In the emerging neighborhoods, merchants, politicians, and landlords sought to build a new European city anchored by the three train stations in the west side of the city. The newest neighborhoods had access to the amenities of modern urban living as well as to the railroad stations and an extensive electric trolley network (Johns 1999, 11–15).

The neighborhoods that developed along Reforma Avenue—Cuauhtémoc, Juárez, and Roma—enjoyed the comforts of modern urban living: public lighting, sewage, public parks, clean water, and paved streets. The newly built offices were decorated in the Beaux Arts style, and they shared the streets with colonial mansions. The state also made its mark in the city and erected
several monuments to Columbus, Cuauhtémoc, and in 1910 the statue of the Angel of Independence—a gift from the French government to celebrate 100 years of Mexican sovereignty. As the centennial celebrations approached, the federal government began a spending spree of public works in the capital. Around the Alameda Park, the government also built an imposing neoclassical palace for the Ministry of Communications and Public Works, the new post office and the Palace of Fine Arts (Johns 1999, 18–19, 21).

Figure 5. Railroads of Mexico, 1910.

Many Mexicans were enthusiastic about the advancements made during this time, and they believed that the railroad was a civilizing machine that would uplift even the most downtrodden. For example, the writer Ignacio Manuel Altamirano observed that the once-
wealthy neighborhood in Plaza San Lázaro had died but that the new Hidalgo Railroad could revive it. When a train pulled into the station, Altamirano heard a “majestic and dominant” lion’s roar. The train was the lion of progress; it brought welfare, modernity, and benevolence. Nevertheless, the progress sought by Altamirano would not be evenly distributed. The neighborhood of San Lázaro and its plaza was the place where all those disposed of by society had gathered. There, a miserable proletariat succumbed to malaria, forsaken men, and animals mingled in the shadow of a majestic railroad station.

**Marxist Analysis of the Railroad**

The forceful shifts in the Mexican economy brought about by the railroad established the foundations for Mexico’s capitalist modernization. The development of efficient and reliable conveyors of goods, labor, and capital figured as important prerequisites for the accumulation of capital and a broader engagement with the world market. As Mexico’s railroad network facilitated foreign investment, it also carried with it the most advanced industrial machinery to the remotest parts of the country, effectively reproducing the patterns of combined and uneven development (Smith 2008). Thus, upon leaving the Buenavista station on his trip north to the United States, Justo Sierra—a famous historian and liberal politician of the period—remarked that “the sad and the enchanting aspects of our country are these contrasts between refined civilization and an absolute lack of culture, of clouds that crash on rising mountains, of cities and solitude, of deserts dying of thirst that can be contemplated savoring a glass of cold and delicious lemonade” (*Estaciones* 2010, 31).
Interestingly, in 1879, Marx had observed tendencies towards uneven development; in a letter to Nikolai Danielson, he accurately describes the fate of countries like Mexico, which primarily exported raw materials, because “from the moment every local production could be converted into cosmopolitan gold, many articles formerly cheap… such as fruit, fish, deer, etc., became dear and were withdrawn from the consumption of the people” (Marx 1879).

Simultaneously, the railroads changed local production and in turn fostered the cultivation of crops for export, such as sugar, cotton, guayule, and henequen. In short, the railroad undermined traditional modes of production and further exploited local labor, as it subjugated labor with the priorities of international capital.

Figure 6. Train passing through the aqueduct of Queretaro. Source SECRETARIA DE CULTURA. -INAH.-FOTOTECA NACIONAL.-MEX. SINAFO: Núm: 122607 (1905). Reproducción Autorizada por el Instituto Nacional de Antropología e Historia

Marx also understood the railroads, steamships, and telegraphs as the “couronnement de l’oeuvre”—the crowning achievement—of modern industry, because these technologies “were the means of communication adequate to the modern means of production” (Marx 1879). Thus, along
with the telegraph and the ocean steamer, the railroad forged the globe “into a single interacting economy [and] was in many ways the most far-reaching and certainly the most spectacular aspect of industrialization” (Hobsbawm 1996, 40).

Besides the prowess of the railroads, however, in the 1870s Mexico found itself as the recipient of large capital investments since European and American capital sought new fields for investment after the crisis of 1873. What began as a stock market crash in Vienna spread to the United States and brought down the investment house Cooke and Co., which had invested in the Northern Pacific Railroad. This happened at a time when the post-Civil War railroad boom had peaked, in 1871, after the construction of the Transcontinental Railroad in 1869 (Roberts 2016). Mired in debt, overproduction, and speculation, railroad companies were no longer profitable at home and had to invest abroad.

The flurry of investments into Mexico demonstrates a classic case of what Harvey (2006) calls capital’s “spatial fix,” a strategy where capital invests in new markets and creates windows of stability by projecting the crisis of capital onto new landscapes and into the future. The concept of the “spatial fix” is important to understand the development of transportation infrastructures during the Porfiriato. As noted above, foreign capitalists and the Porfirian state understood the need to modernize Mexico’s transportation system and took measures to produce the spaces of capital because “capital by its nature drives beyond every spatial barrier. Thus, the creation of the physical conditions of exchange – of the means of communication and transport – the annihilation of space by time – becomes an extraordinary necessity for it” (Marx 1993, 524).

The tendency of capital to shrink space with speedy means of communication is well known, and it is related to the equally important internal dynamics of industrial transportation systems tied to the capitalist mode of production. As a commodity, transportation is a very
specific type of service, and in Volume 2 of Capital Marx states that the formula for the transport industry is $M - C_m p ... P ... M'$ (Volume 2 1992, 135). This means that transport is consumed as it is produced, and therefore the value it creates or the value it carries over to the commodity transported can be realized in a shorter period of circulation. Furthermore, transport occupies a crucial place in the production process, and its role in speeding up the circuit of capital means it can reduce capital’s turnover time—“the time spent by capital in the circulation process” (Heinrich 133, 2004). This is a revolutionary quality because since capital is value in motion (Harvey 2010), speed is very important so that “…capital throws off its commodity-form and assumes that of money” (Marx 1992, 124), and the universal commodity that can then be redeployed in cycle $M - C - M'$.

Most trends in technological development under capitalism share a concern to reduce the time of circulation, since for capital “time is money,” and as Harvey notes, “Traversing space takes both time and money. Economy of time and money is a key to profitability” (2014, 147). In a sense, it could be said that transportation is “hooked on speed” (Hanson 2003), and under this logic, “even spatial distance reduces itself to time: the important thing is not the market’s distance in space, but the speed – the amount of time – with which it can be reached” (Marx 1993, 538). This tendency to reduce distance with speed creates “a strong incentive to reduce the circulation time to a minimum, for to do so is to minimize ‘the wandering period’ of commodities” (Harvey 1977, 270).

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8 This logic guides current research and technological development in modes of transport such as Maglev trains, Hyperloop transportation, and the potential return of the Concorde supersonic jet. The emphasis on speed is not accidental, and with projected speeds of 760mph, the Hyperloop would shorten a six-hour drive between San Francisco and Los Angeles to a trip of 30 minutes. The consequences of such “annihilation of space by time” are legion. Although we are nowhere near physical “spacelessness” and teleporting goods isn’t yet possible, current trends in mobile technologies and virtual reality can lay the foundations for a future where the circulation of capital is almost instantaneous and “spaceless.”
The railroad also plays an important role in the circulation process since, “hitherto no one has discovered the art of transporting commodities and objects from one place to another without changing their location” (Smith 2008, 117) and because “commodity capital likely has the most marked materialities and spatialities” (Cowen 2014, 101). As a conveyor of commodities, the railroad carries out a “locational moment” that can be regarded as the transformation of the product into a commodity for, according to Marx, a product is only finished when it is on the market (Marx 1993, 534). Schivelbusch (1986) supports this conclusion and shows how the railroad contributed to the process of commodification since the bringing of the product to the marketplace separated the product from the place of production and thus contributed to its sensuous qualities as a commodity away from the factory, the farm, or the field (40).

At the heart of the theory of the annihilation space, there is a dialectical relationship between the tendencies of capital to expand and contract. While capital seeks to conquer the whole earth for its market, it strives to reduce to a minimum the time spent in motion from one place to another (Marx 1993, 539). The need for the annihilation of space is one of the most revolutionary qualities of capital and a key driving force in the development of speedy means of conveyance since “capital accumulation is bound to be geographically expansionary and to be so by progressive reductions in the costs of communication and transportation” (Harvey 1977, 270).

Neil Smith also notes that capital aims to “conquer the whole world for its market” through the simultaneous extension of the market and the annihilation of space. He argues that these aims reveal the historical tendency of capitalist society to emancipate itself from space and that “in this context, the “universalizing tendency of capital” represents an inherent drive toward spacelessness…” (2008, 127). This drive towards spacelessness can be partially explained through the concept of time-space compression (Scheivelbusch 1986; May and Thrift 2001; Warf...
which stipulates that changes that revolutionize the mode of production also revolutionize space-time. The railroad played a significant role in the process of time-space compression in the nineteenth century; in North America and Britain, for example, the railroad adopted a uniform time system to coordinate its operations that established the basis for a system of World Standard Time\(^9\). This system was a practical necessity for a vastly expanded railroad network, and it also helped coordinate the emergence of capitalism as a global economic system coordinated through railroads, steamships, and telegraphs (Martineau 2016).

The impact of infrastructures like the railroad has deep consequences for the geographies of capitalism, since an efficient transport system can lead to the rise and fall of centers of production (Capital, vol. 2, p. 250 cited in Harvey 1977, 271). This is the case because improvements in the means of transport decrease turnover times and further concentrate new capital near existing or improved transport nodes. These improvements contribute to a process of agglomeration that we see with the explosive growth of cities like Torreón and Monterrey during the Porfiriato. Furthermore, time-space compression introduces new scenarios since the markets connected in a network—including in the colonies—are disciplined by the same rules and demands of capital across space-time. For example, Stein shows how the increases in technological speed also led to speed-ups at work and how technologies like the telephone and electric lighting were tools used to better control and exploit factory workers.

However, focusing on the capacities of railroads to increase speed tells only half of the story, since a study on the circuits of capital circulation must not only investigate time-space

\(^9\) Martineau adopts Harvey’s concept of “socially necessary turnover time,” which is defined as the “average time taken to turn over a given quantity of capital within a particular sector, under the normal conditions of production and circulation prevalent at the time.” As Harvey notes, “Firms with shorter than necessary turnover times will receive excess profits or relative surplus value. There will likely be, therefore, a competitive struggle to accelerate turnover times. We can also see that a faster turnover time yields a higher rate of profit on an annual basis when all else is held constant. Turnover times can be reduced by a variety of means…” (Harvey 2006, 186). In our case, we argue that technological and infrastructural developments in transport are some of those ways to reduce turnover times.
compression but must also consider time-space expansion (Katz 2001, Jung and Anderson 2016). Taking a cue from the mobilities literature, I have sought to explore the dialectical relationship between mobility and fixity, a dynamic detected by Harvey (2006) early on but not fully developed until recently through the mobilities literature (Adey 2006; Sheller and Urry 2006). Saskia Sassen also identifies this relationship and claims that “there is no linear increase in fluidity without extensive systems of immobility and that the global city, capable of generating global flows, has massive resources in place (cited in Sheller and Urry 2006, 210). Massey (2014) also notices the interdependence of the mobile and the immobile (fixed), arguing that “mobility and fixity, flow and settledness; they presuppose each other. …The impetus to motion and mobility, for a space of flows, can only be achieved through the construction of (temporary, provisional) stabilizations” (Massey 2005, 95). We can clearly see these patterns emerge from the railroad as a technology that is anchored by fixed rails and fixed stations that simultaneously allow for the mobility of trains. Of course, the rails and the stations are not the only infrastructures that must remain in place: workers, water tanks, and coal supplies must also be readily available to produce railroad mobilities.

Nevertheless, infrastructures of capital accumulation tend to give preference to capital and capitalists in their access to time-space compression and selective time-space expansion, a capacity that is not granted to all persons equally. Thus, I recognize this power difference in my work and I argue that mobility and fixity are mediated through power relations where mobility and fixity are understood as capacities deployed by different actors to exert and exercise power (Adey 2006). Urry, Sheller, and Hannam note that “there are new places and technologies that enhance the mobility of some peoples and places even as they also heighten the immobility of
others, especially as people try to cross borders” (Hannam et al. 2006, 3, emphasis in the original).

The Mexican Revolution is an ideal terrain to study the contentions for mobility/fixity between different groups. On the one hand, these infrastructures allowed railroad workers to organize unions across the national territory, as well as the political campaign of Francisco I. Madero to challenge the regime—thus taking advantage of the fluidity of transport. Nevertheless, workers and revolutionaries also seek to exploit this contradiction through work slowdowns, sabotage, and, ultimately, the interruption of circulation through strikes. The Revolution makes the targeted aspect of mobility and fixity evident since, as Addie argues, “The mobilities of everyday life—whether for social reproduction, work or play—are thus always emergent and contested, over multiple pathways and scales” (Addie, p. 190 in Cidell and Prytherch 2015).

In our case, these insights from mobilities lead us to understand the Central Mexican Railroad, the main trunk of Mexico’s national railroad system, as one of the most contested pathways of railroad mobilities during the Revolution, one on which the government became highly dependent (fixed). Throughout the Porfiriato, the railroad was used as a military tool for repression, and thanks to the expanding railroad network, army troops were easily dispatched to the remotest regions of the nation to crush any rebellions (Knight 2010, 45). Rebels contested these pathways of mobility by destroying bridges or obstructing rails with rocks. But the rebels didn’t just obstruct the army; they also captured railroads and deployed these infrastructures to redefine power relations by exploiting the dialectic between mobility and fixity.

**Conclusion**

As the railroad connected landed interests to international markets, the haciendas became important exporters during the Porfiriato. Nevertheless, the railroad also exacerbated the
conditions of exploitation because the railroads and foreign markets brought higher demand for agricultural goods. This in turn brought more workers into plantation economies, but these workers were forced into debt peonage and they were also required to purchase from the company store at significantly higher prices. Debt peonage was most prominent in the henequen plantations of Yucatán and tobacco plantations of the Valle Nacional in Oaxaca. Thus, Yucatán and Oaxaca’s Valle Nacional became popularly known as a “tropical Siberia” after the American socialist John Kenneth Turner published a series of articles that caused an international uproar against Díaz (Lomnitz 2014, 150–161). These unbearable conditions eventually forced masses of peasants to join the ranks of the revolutionary armies.

Opposition to the Díaz regime came from several sectors of society—including workers, the middle classes, and sectors from the ruling class—and these groups took advantage of the railroad to fight against Díaz. For example, radicalized railroad workers distributed the anti-Díaz newspaper Regeneración edited by the Flores Magón brothers and their supporters in the American Socialist Party (Lomnitz 2014). During the Porfiriato, there was a blossoming of the opposition, and as workers developed their own organizations, they also developed a labor press. Telegraph workers had Trenes y Alambres, mechanics had La Unión de Mecánicos, and machinists had El Maquinista. Félix C. Vera worked for the Great Mexican League of Railroad Employees and published El Ferrocarrilero to unite all railroad workers under one union. As workers developed their own organizations, they also developed a labor press, which fused with the liberal ideas of the period, and many of these publications were influenced by socialism, anarchism, and syndicalism (Cumberland 1974, 25–26; Bringas and Mascareño 1988, 41).

While the railroad brought modernization and industry, it also brought economic instability and fierce competition. These new conditions of trade forced sections of the ruling
class to compete against each other, and land and water disputes intensified. The railroad and the telegraph also connected Mexico to the rising global economy and brought with them competition at the international scale. Of course, capitalists who were not politically connected with the regime usually found themselves on the losing end of legal disputes. In the Laguna, the wealthy Madero family began to challenge the regime’s political bosses, and pushed by personal convictions and political circumstances, Francisco I. Madero launched an electoral campaign to challenge Porfirio Díaz for the presidency.

The railroad had changed Mexico forever. It had unified the national economy and it had connected Mexico to the booming United States and the flush capitalist economies of Europe. But while it brought modernity and progress, this progress was not equally enjoyed by the majority for whom it brought exploitation, dispossession, and displacement. These contradictions crystalized in a revolutionary process, and there too, the railroad made its mark, this time led by a radically different vision of progress.
Chapter 3: Railroad Labor and the Struggle for Mexicanization

Introduction

In its need to unify the country’s geographical space and to connect its economic markets, the Porfirian government embarked on an ambitious railroad construction project led by the investments of American railroad companies. This ambitious development was limited early on by a largely agricultural economy pinned down by the demands of the landed estates on labor. In a country where most of the industrial development was confined to the mining sector and the textile industry, the railroad companies had to create a new type of industrial worker, one who would be disciplined by the dictates of wage labor. Yet, to the dismay of American capital, this new industrial worker would also be influenced by American railroad labor and its organizational forms. Nevertheless, the American railroad brotherhoods—American craft unions—were anything but fraternal to Mexican workers. Therefore, Mexicans saw the need to organize along nationalist lines to resist the exploitation of American railroad companies and the discrimination of American railroad workers. Thus, Mexicans organized their own labor unions to compete against the American brotherhoods to gain their positions within the railroad hierarchy. Even though this socio-political consciousness allowed them to organize Mexican workers, it also weakened their position against the government when the railroads became nationalized.

All of these processes occurred in the last decade of the regime of Porfirio Díaz, when the national territory became integrated and when the country became widely connected to the global economy. The grievances of the railroad workers also aligned with those in other sectors, though they pursued their own organizational means. The Mexican railroad labor movement became closely integrated with and influenced by the increasingly critical and liberal movement that emerged as a dispersed but incessant opposition to the regime. These politics and alliances
marked the development of railroad unions and helped raise political and class consciousness in the process. One of the most remarkable contributions to the labor geographies (Herod 1997) of the Porfírian period came from a small group of workers who sought to organize a national, industry-wide railroad workers’ union, generally referred to as the Great Mexican League of Railroad Employees. The Great Mexican League faced significant challenges exercising their spatial agency (Coe and Jordhus-Lier 2011) and trying to overcome the scalar tensions (McFarland 2014; Savage 2006) of geographically expansive labor conflicts.

**Railroad Construction and Labor**

The construction of the Central Mexican Railroad began in 1880, and early in its design, the government and the Mexican Central Railroad Company agreed to build the main trunk of the railroad, from Mexico City to Paso del Norte, and that construction would begin simultaneously from both ends. The material to build from Mexico City was imported from Great Britain and transported by the Mexican Railroad from Veracruz to Buenavista Station in the capital. By 1880, the company had stockpiled material in the station’s environs and was ready to begin construction. Construction of the northern end of the line did not begin until May 1881, however, when the Atchison, Topeka, and Santa Fe Railroad arrived at El Paso, Texas.

To build the railroad, teams of engineers, headed by a chief engineer, would survey the land where the route would pass. Then the right of way was traced, and the plans were verified and approved by the Ministry of Development. Once these procedures were complete, construction began in earnest. The land was cleared and leveled along the predetermined route, together with ditches, bridges, and tunnels. The last step was to erect telegraph poles and wires (Kuntz Ficker 1995, 93).
In her summary of construction of the Central Mexican Railroad Company, economic historian Sandra Kuntz Ficker calculates that the number of workers during these phases of construction fluctuated but grew exponentially over time. When construction began, the company had about 4,000 workers on its payroll, and by the end of the year, that number had grown to 8,000. In 1881, the number ranged from 10,000 to 12,000, 16,000 in 1882, and in 1883, the company employed around 22,000 workers in all its divisions during the summer, the high season. Kuntz Ficker estimates that in the coastal sections, construction was much slower than the main trunk due to insalubrious conditions and periodic fevers during the rainy season (93–94).

Often, construction was slow because labor was scarce, and these labor shortages were a dynamic that contributed to the first labor conflicts along the railroad. For example, on the San Blas branch, Mexican workers went on strike to demand a wage increase of one peso per day, the same as foreign workers. In the same section, engineers and their supporters walked off the job when they received a 20% wage cut, and the route surveying came to a halt. Skilled workers seem to have been the most active, since, unlike construction workers, they were not easy to replace. In one particular case in 1887, locomotive engineers went on strike to demand that the company not promote firemen with similar skills to their posts. Among other demands, the engineers also wanted to decide the number of cars to form a train. The company refused to make these concessions and fired them, arguing that most of them were good workers but had been deceived by “professional agitators.” Another case of unrest took place that same year in their labor camp near Tierras Blancas, Guanajuato. Workers rioted because the company was late on payments and the local authorities had to intervene to quell the unrest. Nevertheless, based on the scarcity of reports, we can conclude that labor conflicts were not common during the early years of the railroad, especially during its construction, where the itinerant nature of the work, the temporary
aspect of the work, and the low levels of organization did not offer favorable circumstances to labor organizing (95).

Construction on the line also faced other challenges, such as the local traditions and ways of life that came into conflict with the demands of an industrial operation. Many workers refused to work Sundays and holidays, and during Easter week, all work would stop, much to the frustration of the company. The historian Cosío Villegas (1973) writes that in the countryside, the demands of seasonal agriculture also affected the availability of workers who had to leave the railroad to tend their harvests (143–147). Furthermore, local demand for labor in the mines or the haciendas also came into conflict with the demands of the railroad. Even though the railroad paid better than local employers, the temporary nature of the work dissuaded some workers from leaving a stable job to take up a temporary position with the railroad. Thus, in many cases, the railroad saw the need to import workers from other states, a need that became even more acute as construction moved north, where low population also contributed to the railroad’s labor shortages (96–97).

To meet these chronic labor shortages, the company hired foreigners. Early in its construction, the company hired blacks from Kansas, Jamaica, and other parts of the region to work on its lines. For other railroads, like in Sonora, Chinese workers also figured among the workforce, and the National Railroad even listed four African cooks among its workforce in 1888. However, for the most part, Mexicans made up the bulk of workers. According to Kuntz Ficker’s estimates, 89% of the Central Railroad’s workforce on the line between Leon and Mexico City was Mexican. This trend continued as the industry matured, and by 1902, out of the

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10 Cosío Villegas writes that there existed discrimination by white Americans against blacks and that in the Tampico line blacks were refused medical attention by the company hospital. Mechanics and blacksmiths also said they preferred to work with Mexicans instead of blacks (1973, 172).
17,500 employees of the Central, 90% were Mexicans. The remaining 10% was made up of 1,246 North Americans, among them 5 blacks, 373 British blacks, 37 Englishmen, 39 Germans, and a few dozen French, Spanish, Chinese, and workers from “other” groups.

Most North Americans occupied posts as engineers, firemen, machinists, and blacksmiths, while Mexicans occupied middle ranks as station agents, train agents, telegraphists, painters, carpenters, construction workers, and day laborers. As early as 1884, some Mexicans, though very few, did occupy a few high-ranking positions as firemen and machinists. Thus, ranks and nationality were factors considered in wage differences among workers. But geography, labor shortages, and experience also factored in. Still, by the end of the nineteenth century, Mexico’s continually developing labor market was different across the country. Nevertheless, the Ministry of Development calculates that on average, a Mexican railroad construction worker received 75 cents per day, equivalent to an average artisan’s wages. Still, the railroads paid better than textile manufacturing (50 cents per day) and much higher than agricultural day laboring.

For American railroad companies to attract qualified workers for higher posts, they had to entice them with higher wages to work abroad; this difficulty was coupled with the railroad boom of the 1880s in the United States, which contributed to a labor shortage of these workers. In the four wage categories that existed in 1884, the highest rung was made up of American superintendents, engineers, station agents, and managers of important railroad stations that were paid, on average, 350 pesos per month. Within these categories, however, there were considerable differences, and the Mexican third-class station managers earned as little as 40 pesos per month. The middle ranks consisted of two tracks, one for specialized artisans (carpenters, blacksmiths, and painters), and the other for train workers, station agents, telegraphists, and machinists, averaging from 45 to 100 pesos per month; within this group, engineers and conductors of
superior rank could earn 100 to 150 pesos per month. The lowest rank was occupied by day laborers and construction workers, earning on average the 75 cents per day already mentioned.

Kuntz Ficker notes that as the industry matured, the wage structure at the Central Railroad evolved, and the four wage classes of 1884 were divided into 13 wage classes by 1900. The new wage structure differentiated between middle ranks (chiefs, masters, captains, and agents) to the lowest qualified positions (baggage carriers, peons, night watchmen, and other workers). In her study of the company’s workforce, Kuntz Ficker remarks that the Mexican Central Railroad Company went through several important developments in this period, becoming in 1902 the largest private employer in Mexico, with 17,500 workers. At the same time, Kuntz Ficker’s research shows that over a fifteen-year period, the wages of the railroad company’s top and middle ranks increased significantly, while its lowest ranks stagnated around 50 to 75 cents per day (98–103).

Thus, early on, the company’s labor force was segregated by nationality, and, as we’ve seen, in some cases by the racist attitudes of American workers. The company’s rationale that Mexican workers were not well trained to occupy higher posts that demanded technical qualifications was not unfounded, since, for the most part, the railroad industry was new to Mexico. Even the National Railroad, which had been established in the 1870s, employed engineers and conductors from Britain. Furthermore, it was not uncommon for a foreign-owned company to hire administrators and managers of the same nationality as its investors. When the company did try to hire untrained Mexican workers as conductors and engineers to save money, the action was harshly criticized, because it led to constant derailments, prompting criticisms that forced the company to keep Americans in the company’s top posts (103–104).
Nevertheless, the argument against promoting Mexican workers to higher posts became more and more unfounded by the early 1900s, since by then, Mexican workers had been trained by other companies to fully operate a railroad, and some railroads were fully operated by a Mexican workforce. Thus, the initial rationale of lack of technical ability lost its veracity (105).

**Railroad Labor and Labor Organizations**

Once the railroads were established and operational, American railroad companies often hired from their own network in the United States and brought workers to occupy the highest posts of railroad administration, as well as those of engineers, conductors, telegraphists, and dispatchers. Besides their technical expertise, these workers also brought with them their labor
organizations that were directly connected to American unions. Although there remain important gaps in transnational trade unionism (McIlroy and Croucher 2013), in the case of Mexican and American railroad labor history, Richard Ulrich Miller (1974) and Lorena M. Parlee (1984) stand out as vital contributors. Miller focuses on the installation of American labor unions in Mexico and sees this as a process of proletarian Manifest Destiny, whereas Parlee has developed a more nuanced understanding of the benefits and conflicts this process produced for American and Mexican laborers.

Towards the end of the nineteenth century, as American capital and companies settled abroad, American labor unions followed suit and began to call themselves internationals. It was common for the American labor movement to have branches in Canada, Mexico, Puerto Rico, Panama, and Chile, as well as South Africa and Western Europe (Miller 1974, 239). Thus, by 1884, the Brotherhood of Locomotive Engineers (BLE) had established fifteen local lodges in Mexico. They were followed by the Order of Railway Conductors, which counted eight lodges by 1885, and Locomotive Firemen’s Union, which had established four lodges by 1886. The carmen, telegraphists, and clerks also had a lodge each, and their membership and presence was markedly smaller. Despite the presence of these lodges in Mexico, neither the railroads nor the government officially recognized any of these associations as official representatives of labor (Parlee 1984, 450).

Although the brotherhoods were supposedly open to all nationalities, in practice few Mexicans joined them, and those who did often left them because of the discrimination by their American co-workers, who often referred to Mexicans as “greasers” and “peons.” The brotherhoods also benefited from the use of English as the official language for all railroad communication, technical manuals, rule books, timetables, safety regulations, company reports,
correspondence, and examinations for promotion (Parlee 1984, 450). Racism, a tiered wage structure, and the use of English as the official language divided Mexican and American workers early on.

The railroad companies and the government also fostered these divisions and went as far as prohibiting Mexicans from joining the brotherhoods. This was quite useful because it allowed the companies to pit workers against each other. For example, in May 1894, when American machinists working in the Central Railroad’s repair shops in Aguascalientes walked off the job demanding better working conditions and higher wages, the company hired Mexican machinists of the Mexican-only Supreme Order of Railroad Employees, a mutual aid society that had been founded in 1890. The company hired the Mexicans at the same wage that the Americans had been paid; unable to maintain the strike, the American workers accepted defeat and returned to work. Upon their return, the Central Railroad demoted the Mexican machinists to their original jobs and salaries (Miller 1974, 250; Parlee 1984, 450). This experience brought internal conflicts and disagreements into the Supreme Order of Railroad Employees and caused it to disband. Unfortunately, the American brotherhoods did not learn from this defeat and refused to include Mexicans actively in their associations.

At first, Mexican workers formed mutual aid societies that raised funds to support workers who suffered accidents or illnesses or who died on the job. Overall, they rejected strikes and labor actions and instead focused on the moral and intellectual improvement of their members. Railroad companies and government officials preferred these to the more anarchist-inspired associations common in the Mexican textile industry and often sponsored them as long as their aims remained limited to mutual aid (Bringas and Mascareño 1988; Parlee 1984, 453). However, mutual aid
societies did not address the needs of workers on the job, and wage discrimination and abuse by American workers continued to be unaddressed by the government and the companies.

Mexican railroad workers continued to organize Mexican-only labor associations, which took up these grievances as their main cause for organization. For example, in 1900, the Union of Mexican Mechanics (UMM) was founded in Puebla by Teodoro Larrey, a mechanic who had previously worked in the United States. The UMM was a craft union for mechanics from all industries, of all nationalities and established branches at important railroad workshops, including San Luis Potosí, Aguascalientes, and in Chihuahua, where Silvino Rodriguez became a nationally recognized figure of the railroad labor movement.

The founding program of the UMM called upon its members to fight for equal wages and privileges given to foreigners and against exploitation in factories and workshops. The growth of the UMM also spurred other sectors to organize, and soon the Railroad Boilermaker’s Union (Caldereros), organized by Cástulo Herrera, appeared in Chihuahua City (Parlee 1984, 454–55). However, craft unions had many limitations, among them that they only organized workers of a specific occupation. Therefore, if mechanics or boilermakers at a specific workplace went on strike, they would not receive support from other workers because they were not unionized in that craft. The shift to organize Mexican railroad workers along industrial lines came in 1904, with the founding of the Great Mexican League of Railroad Employees (henceforth referred to as the League). The founding of the League also coincided with the effervescent emergence of independent newspapers, and its leaders used a newspaper, El Ferrocarrilero, to organize workers and to establish a labor union. This was a decisive shift in Mexican railroad labor history because for the first time, a single labor union sought to organize all railroad workers.

**The Liberal Press and the Great Mexican League of Railroad Employees**
During the first decade of the twentieth century, there existed in Mexico a very active print culture. Each state had its own newspaper that reported on government policy and politics. There was also the commercial press, which included El Imparcial, pro-regime, and The Mexican Herald, pro-American and pro-business, both based in Mexico City.

Counter to these, there existed a very active opposition press, often referred to as the Liberal press, because they were influenced by the liberal reform movement that established the Constitution of 1867 and that expelled the French Intervention. These newspapers used the personality cult, Benito Juárez, against that of General Díaz to criticize the regime and undermine its legitimacy. One of the longest-running opposition papers was El Diario del Hogar, established by Filomeno Mata in 1881; as Díaz’s regime wore on, it became increasingly radical. By 1900, the opposition press included Renacimiento and El Porvenir; in 1901, Vésper; in 1903, Excélsior; and in 1904, La Humanidad, among others. El Paladín and Regeneración initially belonged to the liberal opposition but became increasingly radical and openly critical of the government. Most opposition newspapers were printed in Mexico City, but state capitals and larger cities also hosted important regional publications, such as El Correo de Chihuahua in Chihuahua City. All newspapers faced censorship, harassment, and persecution by the regime. Journalists were often jailed and newspapers shut down, only to re-emerge in new guises and under different names. Such was the case of the Ahuizotes, which had at least four different versions (Bringas and Mascareño 1988, 29). Within this lively independent print culture, El Ferrocarrilero began publishing in 1905 with the goal of starting the Great Mexican League of Railroad Employees.

To understand railroad workers and why they did or did not participate in the Revolution of 1910, it is important to understand the precursors that informed their political consciousness. The newspaper El Ferrocarrilero gives us an insight into this process, as issue after issue reveals
how the working conditions of railroad workers influenced their political consciousness in topics ranging from labor grievances to freedom of the press. Through the different articles in the paper, we can also see that the League did not seek to overturn the state of affairs between labor and capital; rather, it sought a *reworking* (Katz 2004) of power relations among the companies, the state, and the railroad workers. A thorough reading of the newspaper has also allowed me to see the growing spatial agency of the League in action as it sought to organize affiliated locals, first in the central region near Mexico City and later at the national level. It also allows us to see its weaknesses, such as its dependence on national leadership and its naive trust in the state, which became an obstacle to its mission (Shabot 1984, 170–172).

The first issue of the newspaper sets the tone for the first volume, which ran from 26 May 1904 until August of 1904, when it was closed by government censors. During this period, the paper listed Félix C. Vera as its owner and director, and Manuel Moreno Casasola as its editor-in-chief. It was a biweekly, with its motto claiming it as a Periodico Independiente (*independent newspaper*), and in its short circulation history, it garnered the support of railroad workers in Mexico City, Veracruz, Aguascalientes, Puebla, and other points in between. The newspaper also attracted managers and superintendents, and, eventually, the attention of the authorities. From its first editorial, it spelled out its mission as “the champion [of railroad workers]” that had come “to wage a struggle in the field of truth, bringing as its shield honor and as its motto, Loyalty, Unity, Fraternity and Progress.” As a humble newspaper, it offered its intellectual efforts at the service of its readers to defend just causes, not to be a voice for the powerful, and professed its aims to the beautiful ideal of fraternity (1, *El Ferrocarrilero*, May 26, 1904).

This humble newspaper, however, was also a vehicle to organize an industry-wide union, which was missing. Shabot writes that the newspaper was founded as the organ of the League at
the behest of Ernesto Hernandez Espejel and Adolfo L. Castillo in 1904—both workers from the Interoceanic Railroad—at the Banderilla Station in Veracruz. The League recruited Félix C. Vera, a former worker of the National Railroad, while in Belem Prison, to become the writer of a railroad worker’s periodical that would help organize an industry-wide labor association, the Great Mexican League of Railroad Employees (El Ferrocarrilero, January 23, 1906; Anderson 1976, 91; Shabot 1982, 128).

One of the main tasks of the newspaper was to report on and denounce abuses by railroad companies and American workers, and in the first volume, the paper reported regularly on wage deductions. Several railroad companies deducted a small amount from a worker’s wages destined for a “hospital fund”; nevertheless, the Ferrocarrilero denounced these deductions as extortion, since workers in isolated areas did not have access to these hospitals but still had their wages deducted to fund their medical care. Furthermore, the newspaper reported that instead of healing injured workers, company hospitals often gave them amputations instead of treating them with extensive procedures. It called on the Secretariat of Communications and Public Works (Secretaría de Comunicaciones y Obras Publicas—SCOP) to look into the matter (2, El Ferrocarrilero, May 30, 1904). Besides the hospital fund, the first volume also focused on the abuses committed by American railroad workers against Mexican workers. Mistreatment and abuses by Americans—“Yankees,” as the newspaper refers to them—were a topic throughout the first two volumes of the newspaper, but disappeared in its third volume. In “It’s time to wake up,” an article in its fourth issue, the newspaper pointed out that management always addressed American workers respectfully, whether in person or by telegraph. That same article also mentions that Americans were always awarded overtime when they asked for it, but that Mexicans were always asked to work longer without overtime, and that when they asked, if the
overtime was conceded at all, it was done so begrudgingly. Besides the clear advantages given to Americans, Mexican workers also complained about the arrogant behavior of Americans. A letter to the newspaper by a worker from the Central Railroad explains that Americans behaved “like the greatest Czars” and “ordered” Mexicans and other foreigners around as if “workers were slaves or peons” (6, El Ferrocarrilero, June 6, 1904; 9, El Ferrocarrilero, June 23, 1904).

Besides discussing the attitudes of American railroad workers, in its first articles, the newspaper identified the railroad company’s management as its main enemy and directed most of its attacks and ridicule to them. In its first issues, the paper singled out Teodosio Montalván, a manager in the Electric Railroads, the tram company of the capital and its environs. The newspaper reported that according to information gleaned from Montalván’s subordinates, the company was forcing conductors to traverse a route in a short amount of time, which almost led to accidents. When workers faced lawsuits for these accidents, the company refused to defend them, and on the contrary, managers like Montalván insulted and abused them. This earned Montalván a place in at least seven out of the eighteen issues of the newspaper’s first volume. Two other managers who earned the ire of the newspaper were E. H. Decelles and Mr. Berumen, a yard manager and station manager of the Central Railroad, respectively. In its regular column Válvula Abierta (“Open Valve”), the paper criticized Decelles for running a clandestine business of raising chickens and selling animal feed from leftover seeds at the warehouses of the Central Railroad. In addition to Decelles, the newspaper also criticized Berumen, the general manager of the Buenavista station, for favoritism in the hiring and intimidation of workers who refused to spy for him (3–8, El Ferrocarrilero, June 2–20, 1904; 10, El Ferrocarrilero, June 27, 1904).

In addition to denouncing managers and criticizing American workers, the newspaper also praised specific Mexican workers as being exemplary, and several railroads and crews at specific
stations became early supporters of the newspaper. For example, *El Ferrocarrilero* constantly upheld the Hidalgo and Northeast Railroad as offering the best working conditions and one of the safest. According to the newspaper, this was due to the fact that it was a Mexican-owned and -operated railroad, which reduced and almost entirely eliminated the discrimination, animosity, and miscommunication between workers (12, *El Ferrocarrilero*, July 4, 1904). Another group of workers who became early adherents to the newspaper were the mechanics who worked in the railroad workshops at Aguascalientes. The workshops at Aguascalientes were the largest railroad yards outside of Mexico City and concentrated one of the largest groups of mechanics in the whole industry. The paper reports on the issues aggravating the workers from the beginning, especially the issue of low wages, since many of them had been offered a wage increase that never came. Aguascalientes workers were early adopters of the railroad and often sent in lists of subscribers as well as reports on working conditions in the workshops (3, *El Ferrocarrilero*, June 2, 1904; 12, *El Ferrocarrilero*, July 4, 1904; 13, *El Ferrocarrilero*, July 7, 1904). Besides supporting specific railroads and workers, another important contribution of the newspaper throughout its life was its reporting on labor actions by different workers. For example, in its seventh issue, the newspaper reported on the two-day strike at the Mexican Railroad, a strike initiated by brakemen because of low wages (June 16, 1904). Through its reporting on labor strikes, the newspaper tried to draw important lessons for Mexican workers about the need for a labor association. Like the workers of the Hidalgo Railroad, the mechanics at Aguascalientes became some of the longest-running supporters of the newspaper throughout its life and even afterwards with their admission into the League.

The newspaper’s aggressive and denunciatory style earned it the ire of management throughout Mexico City. Its effective reporting on abuses by management earned it a lot of
support with railroad workers, who sent in clandestine reports about management’s threats to fire any workers who read the newspaper. In its tenth issue, published on 27 June 1904, the newspaper ran an article on a pending lawsuit by Teodosio Montalván against the paper itself, replying that it was ready to go to court to defend itself. The following issue, published July 1, reported that Vera was summoned to the penal offices of the infamous Belem Prison to testify in his own defense. The case proceeded, and in the editorial of the 16th issue of that same year, the newspaper defended itself, criticizing railroad companies for trying to silence it. Alongside the editorial, the paper published an open letter from Belem prison written by Vera to his accusers. In his open letter, Vera addressed Montalván, saying that he should quit his job or quit abusing workers if he did not want the press to write about him. In the same letter, Vera also said that he was confident in the court proceedings and that he trusted the law and the courts (July 26, 1904).

In the last two issues of the newspaper before it was shut down, Vera called on railroad workers to join him in the struggle to shake off the yoke of foreign oppressors and asked them to support the newspaper, because it would not cease to continue publishing. Throughout the court proceedings and from prison, Vera demonstrated his confidence in the courts and also in his convictions. In his last letter dated August 9, which he sent to the newspaper from prison, he wrote that he would do his time in prison with a clear conscience, because even if he was deprived of his liberty, he was “proud to have fulfilled his mission” (18). Thus ends the first volume of El Ferrocarrilero, with its editor in jail and the newspaper itself shut down. It would not re-appear until the following year, but the experience earned Vera a place in the Mexican labor movement and a name as an honest and principled journalist in the eyes of railroad workers.

The second volume of El Ferrocarrilero reappeared as a weekly newspaper eleven months after it was closed and was registered as a first-class article with the post office on 1 June 1906.
The first issues of the second volume were not as biting, and the column “Open Valve,” where managers were personally denounced by Félix C. Vera under the anagram Faver Cliex, or “Silhouettes,” a section where managers were mocked and parodied, did not reappear until later issues, when the paper was firmly reestablished and had a large following. Like the previous volume, it focused on denouncing abuses, except that the emphasis was on railroad companies and on individual “yankees.” From the outset, it took up the issue of the hospital fund, except that in this volume, the paper criticized the “miserly” and “ungrateful” American railroads and called on the Mexican government to force companies to establish a pension system.

One of the main targets of the paper’s reporting in the second volume was the Electric Railroads of Mexico City. However, instead of focusing on its managers, this time the paper emphasized the poor working conditions and the poor quality of service. Judging from the paper’s reports and the letters from the company’s workers, conditions at Electric Railroads were unbearable. For example, there was a hiring fee to begin working for the company, but once hired, workers still had to pay for an expensive uniform with special plates and buttons sold by a company-picked tailor (12–14, El Ferrocarrilero, August 11–25, 1905). Workers also wrote to the newspaper claiming that the company eliminated night-time inspectors and rail operators in attempts to save money. Thus, evening drivers would speed up to complete their routes and stop at intersections to switch rail routes. These changes led to several near misses and a few accidents (8, El Ferrocarrilero, July 14, 1905; 12–14, El Ferrocarrilero, August 11–25, 1905). Besides a litany of abuses and poor working conditions, the paper also reported on the poor service offered to the public: the poorly maintained rails, shoddy cars, and uncomfortable stations. In an attempt to improve their lot, the tram workers organized a mutualist association, the Sociedad Juárez. As

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the Sociedad Juárez began to grow and organize, its members faced repression and the company began to fire its members (14, *El Ferrocarrilero*, August 25). Besides the Electric Railroads, *El Ferrocarrilero* reported extensively on working conditions and issues of discrimination within all railroad companies and, as a result, gained many supporters who wrote in to tell their stories and to commend the newspaper for its work. In some cases, the newspaper also helped workers get jobs at the different lines by posting letters from laid-off workers and more than once, it organized fundraisers to help injured workers or widows of railroad workers (19, *El Ferrocarrilero*, September 29, 1905; 52, *El Ferrocarrilero*, May 20, 1906). These acts of solidarity earned it the sympathy of unaffiliated workers.

Figure 8. Félix C. Vera, standing second from the left, with members of the San Luis Potosí branch of the League. Source: *Ferronales*, Volume 52, Issue 3 (1973).

To pursue its mission to start a labor association, the paper began its organizational drive from June to December of 1905 in earnest. Through its regular section on “The League,” it carried
on extensive propagandistic work about the benefits of labor associations. This section also covered the League’s business extensively, giving us a glimpse into the organization’s rapid growth from June 1905 to July 1905, when it celebrated its first congress in Aguascalientes.

Throughout the fall of 1905, El Ferrocarrilero launched an important organizational effort, and Manuel Moreno Casasola, the paper’s first editor-in-chief, became the League’s traveling organizer. In the newspaper, we learn of his trips to Veracruz and Coatzacoalcos, where the League had immediate success and began local branches. The notes from founding branch meetings also serve as demonstration of the benefits of League membership, as during the founding meeting of the branch at Coatzacoalcos, the workers also held a fundraiser for workers who had suffered accidents or who had been unjustly imprisoned for union activities, as was the case of C. M. Eguiarte, in Parral, Chihuahua (44, March 25, 1906).

Casasola also traveled to Oaxaca to arrange the distribution of the newspaper and other matters for the League, presumably to set up a chapter. Nevertheless, we learn that his travels to Oaxaca were not as successful as those to Veracruz; a report to the newspaper mentions that he faced many difficulties. Although he was unable to establish a chapter of the League in Oaxaca, Casasola was able to establish an official representative for the newspaper there (Issue 27, November 24, 1906; 29, December 15, 1906). From these reports, we can surmise that there existed strong repression in Oaxaca, since El Ferrocarrilero reported that several independent journalists from that city were in prison. From an article written in the 34th issue of the newspaper, we see that the post office had been collaborating with the railroad company, as they held all shipments of the newspaper and delivered them to company management instead of the intended recipients (January 21, 1906). The reports of this type of collaboration corroborate with other articles about the extensive surveillance and repression of labor activists in that city.
Despite these obstacles, the League continued organizing. Manuel Moreno Casasola’s role as the League’s leading field organizer was undeniable, and constant letters to the newspaper attested to his qualities. His efforts to start chapters were more fruitful in northern Mexico, and by February 11, a new chapter was founded in the city of Jimenez in the state of Chihuahua. A week later, a new branch started up in the industrial city of Monterrey. An important branch was also established in the city of Chihuahua, where the Union of Mexican Mechanics (UMM) also had a chapter. A series of reports from April 29 mention that Casasola was given a well-attended reception hosted by the president of the UMM, Silvino Rodriguez. A champagne lunch was also held at the Jockey Club of Chihuahua in his honor, and the editor of the influential newspaper *El Correo de Chihuahua* also expressed its support for the League and its newspaper (49, *El Ferrocarrilero*, April 29, 1906).

The League’s rapid growth demonstrated its effective structure as well as the demand for such an organization of its type among railroad workers. Throughout this period, *El Ferrocarrilero* received many letters in support of the League, as well as donations whenever the League organized a fundraiser. For example, when Félix C. Vera was hospitalized for several months, members of the League sent in donations regularly. Once the League established an extensive network of branches and supporters, it called for a national convention. Nevertheless, an accident at the printing press held back the publication booklets containing the League’s program, and so the congress was postponed. When this accident happened, the newspaper became even more important, since it became the central organizer and published the program of the organization in three different issues: 30, 32, and 34. This episode is another example of the importance of the newspaper as the League’s key organizational tool.
Finally, in July 1906, a year after the reopening of *El Ferrocarrilero*, the League hosted its first national convention in Aguascalientes with the support of the local chapter of the Mechanics’ Union. While at its national convention, the League also opened a branch in Aguascalientes, an important railroad hub. *El Ferrocarrilero* reported extensively on the meetings between the delegates and between the League and the Mechanics Union. It can be said that besides the League’s newspaper, its decision to designate a traveling organizer like Casasola is one of the keys to its success from 1905–1906. Through Casasola’s branch-building activities, the League could jump scales (Smith 1992) by establishing an “active social and political connectedness of apparently different scales” (66). Thus, exactly one year after the re-emergence of the newspaper, the League was a reality. Its growing membership, the numerous ties with labor associations, the liberal press, and supportive government officials seem to have finally turned the tide for Mexican railroad labor. However, a newly confident labor movement also faced its biggest challenges in 1906, a year of historic labor strikes.

The growing Mexican labor movement found itself at a crossroads in 1906. On the one hand, labor associations with mutualist fronts were growing in influence. Furthermore, efforts like those of the League were also underway in the mining sector and the textile industry, which, together with the railroads, represented the most industrialized sectors of the Mexican working class. These three sectors also represented the largest number of industrial workers, since mining employed about eighty thousand workers, the railroads employed about forty thousand workers, and the textile industry another thirty-two thousand workers (Shabot 1982, 32). These industries also shared another common aspect: all three sectors were dominated by American companies whose investors and management were also American.
The growing confidence of the Mexican labor movement and the unbearable conditions of abuse and exploitation in the workplace became the catalyst for the strikes of 1906. These conditions were evident to the liberals who continued to organize an opposition to Díaz; among these liberals were the members of the Partido Liberal Mexicano (PLM), an initially liberal party that had been moving towards anarcho-syndicalist politics and by 1906 would foment revolts against the regime with hopes of touching off a general insurrection. *El Ferrocarrilero* and its activists were also in touch with this radical wing of the liberal movement and reported on their release from prison in issue 31, dated 31 December 1905, informing readers that the journalists Ricardo and Enrique Flores Magón and Manuel Sarabia had been released from prison. In
subsequent editions of *El Ferrocarrilero*, editors published articles by the PLM, and shared correspondence, denouncing abuses by American companies on Mexican soil. Vera and his collaborators also published advertisements for the PLM newspaper *Regeneración* and encouraged “every good Mexican to subscribe and help with their own grain of sand the good cause of liberty” (38, *El Ferrocarrilero*, February 11, 1906).

However, as 1906 progressed, both newspapers and their editors grew apart. As the League became more established, it sought support from local government officials, some of whom agreed to support it. The PLM, on the other hand, moved in an opposite direction and fomented strikes and labor actions, which the League was very cautious to address. In fact, from its founding, the League stated in its program that it only supported orderly protests and not the tumultuous strikes that led to the destruction of property (30, *El Ferrocarrilero*, December 22, 1905). The experience of the PLM was much more radical and internationalist in character (Heatherton 2012, Lomnitz 2014). We can only speculate, but perhaps sustained interaction among these two publications, their organizations, and their members could have produced a stronger League with a more radical program, and the PLM could have recruited railroad workers to better distribute its ideas and newspapers throughout the railroad network. Although a few railroad workers did belong to the PLM, the party did not seem to have had a strategic focus on them, or telegraph workers for that matter. Besides their opposition to Yankees and their support for labor causes and a free press, both organizations organized separately; furthermore, constant repression and sabotage on the PLM and labor organizers effectively limited collaboration across sectors.

As in other industrial sectors, labor grievances were coming to a head. Excesses by American workers and the lack of action by management were widely reported beyond the liberal
and labor press. Furthermore, the lax attitude towards foreigners by local judges and political bosses was also reported on, causing widespread indignation among Mexicans. In January 1906, *El Ferrocarrilero* reported that a local judge in the Hipolito station constantly jailed Mexicans without cause but allowed Americans to roam the streets of the town, causing a scandal with guns at their waists. The League’s extensive relationship with the Mechanics Union gave it extensive favorable coverage in the paper, resulting in extensive reporting about the abuses faced by mechanics in the main workshops of the Central Railroad at Aguascalientes. In one particularly notable case, *El Ferrocarrilero* reported on the firing of Mr. Ridgeway, station superintendent, and Mr. Risque, a master mechanic, two Americans who treated Mexican workers fairly. In the same article, the paper also denounced the administration of Mr. Tilton, because he continued to lower wages, despite a yearlong demand by mechanics for a raise.

According to a report in the newspaper *El Imparcial*, workers in Aguascalientes went on strike when the Central Railroad hired a group of Hungarian mechanics at a higher wage than Mexicans. The workers were indignant because they had lobbied the company for a raise for several years, but due to the Central Railroad’s monopolistic expansion years prior, it faced a debt crisis in 1906 and argued it could not give workers a raise. This was a clear case of discrimination, and the Mechanics Union filed an official complaint with the company, shifting from its mutualist nature to a labor union. The complaint went unanswered, and several weeks later, the mechanics went on strike. On August 1, mechanics walked off the job and delivered a list of demands to management, among them a wage increase, recognition of the Union of Mexican Mechanics as the official representative of the mechanics, overtime pay for holidays, control over apprenticeship, and other demands on working conditions. They also demanded that the company not retaliate against those on strike. The company refused to meet with the strikers.
and instead fired union leaders in Aguascalientes, Chihuahua, and other stations. Demonstrating a higher level of organization between local branches and national leadership, as well as consciousness, the Mechanics Union went on strike throughout the network, gaining widespread sympathy from the public and other labor organizations that declared sympathy strikes. Within a week the Central Mexican Railroad, the nation’s largest railroad company, was practically paralyzed. Since the company refused to meet the strikers’ demands, the union president Silvino Rodriguez sent a delegation to Mexico City to ask for government arbitration on the matter. *El Ferrocarrilero* reported extensively and hailed the mechanics’ strike as an “eloquent protest of the humiliations against Mexican workers that have said ‘enough!’” The newspaper also praised the orderly, peaceful nature of the strike. When the mechanics’ delegation arrived in Mexico City, the League held a banquet reception in Félix C. Vera’s house for the delegates, and its members pledged their support to the strike. While in Mexico City, the union delegation was granted a private audience with President Porfirio Díaz, where he also praised their orderly strike and promised to support their efforts to receive the same wages as foreign workers. Nevertheless, he also told them that he could not support unjust demands on foreign capital and called their demands for union recognition “notoriously unjust and unacceptable.” After a series of arbitration meetings between the government, the company, and the union, the strikers returned to work. Although the company ignored all the mechanics’ other demands, they did concede to increase wages, an act that the entire movement hailed as a triumph. A large part of the strikers’ success was also their spatial cohesion around fixed shops, and in this sense, workers who stayed in one place were able to build stronger unions. Furthermore, as skilled industrial workers, they were also difficult to replace and could thus leverage their technical aptitude (Lalana Soto 2013). This spatial fixity allowed them to see each other more often than station workers and mobile railroad
workers, and therefore contributed to the strengthening of their bonds at the local scale, and to build on a solid foundation towards a national strategy.

After the victory of the mechanics, *El Ferrocarrilero* proclaimed in its August 19 editorial, “The Triumph of Reason,” that thanks to the peaceful strike and the involvement of the President, “Reason has triumphed and peace reigns once again in the home, the future of the mechanics is bright…” The article ends with a declaration that “all Mexican citizens are now authorized by the laws of their government to associate themselves in labor unions to defend their honor and dignity and to claim their rights” (63–65, *El Ferrocarrilero*, August 50–19; *El Imparcial*, July 26–29 and August 1, 2, 5, and 7, 1906, cited in Parlee 1984, 461; Shabot 1982, 91–93).

However, before *El Ferrocarrilero* could celebrate this partial victory, it faced a major setback. Once again, Félix C. Vera was imprisoned in Belem on charges of defamation by the American E. W. Wuerpel, a manager in the Southern Mexican Railroad, a company whose abuses *El Ferrocarrilero* had covered extensively. Out of the several threats from its managers, Wuerpel managed to summon Vera to prison. Due to his delicate health, however, he was imprisoned at Hospital Juárez. In addition to the lawsuit, Vera’s persecution and the newspaper’s denunciation in the business press were due to a panic spreading from the Mexico-United States border. After the brutal government repression of the Cananea strike a month earlier, the PLM and anarchist newspapers affiliated with the PLM propagandized a revolt scheduled for September, during Mexican Independence celebrations, in which the demand was to expel Americans and to take back “Mexico for Mexicans.” These articles were picked up in the American press and reached Washington. The American Ambassador in Mexico City, David Thompson, was actively involved in investigating the veracity of these reports and met with representatives of the League and *El Ferrocarrilero*, who reassured him that they had no part in these plots and constantly defended
themselves in the pages of their newspaper pointing to the League’s program, distancing themselves from socialism and anarchism, and arguing that the violent Cananea strike was an isolated incident, since in Mexico, labor and capital are inseparable brothers. Thus, conservative attitudes of the League and its attempts to court government support brought more distance between it and radical organizations like the PLM (68, *El Ferrocarrilero*, September 9, 1906; Parlee 1984, 426). Following the September scares and his poor health and imprisonment, Vera stepped down from the board of editors of *El Ferrocarrilero* and informed its readers that, as its elected president, he would dedicate himself full-time to the League’s business. Abraham Velazquez Jr. replaced him as its main editor. For his part, Manuel Moreno Casasola also resigned as general secretary of the League. It is unclear if the resignation was related to political or ideological disagreements, although there was a small announcement adjacent to Casasola’s resignation that the League’s main correspondence would then be handled by others, since the party responsible was unresponsive to letters from its members, perhaps hinting at Casasola (73, *El Ferrocarrilero*, October 14, 1906).

**1906–1907: Railroad Mexicanization and Labor Unrest**

In the aftermath of the mechanics’ strike and the anti-foreign September scare, the government stepped up its repression of journalists and labor activists. Even though the League sought to convince the American ambassador and the authorities of its activities as apolitical and focused only on labor, Vera’s imprisonment was in line with the censorship that was going on across the country. Therefore, even though the President had stepped in as arbiter of the labor dispute and had ruled in favor of the worker’s demand for equal wages, the government’s involvement and positive resolution for the workers was an anomaly in what was otherwise a wholly repressive record on labor issues.
The government siding with the mechanics should also be understood within the broader context of railroad consolidation taking place in Mexico under government aegis. Since 1902, the government had been acquiring shares in small railroads in north-central Mexico. Fearing that an American railroad magnate would monopolize Mexico’s transportation system, the minister of finance, José Yves Limantour, led the government’s efforts to become a majority shareholder in key railroad lines. By 1906, the government had also become a majority shareholder in the Central Mexican Railroad. The Mechanics Union and the League saw this as a positive process of consolidation and used it to pressure the government to begin enacting a policy of Mexicanization. The movement for Mexicanization centered around three important demands: equal wages between Mexican and foreign workers; the hiring of Mexicans as conductors, engineers, and managers; and the use of Spanish as the official language of the new national company. Using its newly acquired leverage as majority owner, the government was able to pressure foreign shareholders to increase the wages of mechanics in the Central Railroad. However, it also mobilized nationalism to ask the mechanics to support the government’s efforts and to put off their demands for union recognition because it could hurt the national interests. This move temporarily pushed back the pressures by railroad labor, and the government moved on to consolidate the Central, the International, the National, the Hidalgo and Northeast, and the Mexican railroad under a public railroad enterprise, the National Railways of Mexico. By 1908, the government had consolidated the network into a single national system that appointed the minister of finance and other Mexican officials to the company’s board of directors but which retained the entire management structure staffed by Americans under an executive president, E. N. Brown. In the new company, the government’s role became that of policy advisor, but the
employment structure and practices remained the same as before (Miller 1974, 251; Parlee 1984, 463–464).

Within this new state of affairs, the League and the UMM sought to recalibrate power relations with the state through what can be termed a *reworking* strategy (Coe and Jordhus-Lier 2010; Katz 2004) that had clear politics of scale at the national level. That is, the railroad unions did not seek to resist the state’s takeover of the railroad lines; on the contrary, they supported it because they could now mobilize a nationalist discourse to demand that Mexicans occupy the positions of a Mexican company. Therefore, throughout 1907, Mexican railroad unions, especially the League and the Mechanics Union, mobilized their membership around the demands for Mexicanization. The League’s second convention was held in January “to discuss the national situation of the railroads,” and out of its proceedings, it issued a call for complete nationalization of the railroads owned by the government. Besides the calls to hire Mexican workers in top posts and the establishment of Spanish as the official language, the League also called for maximum hours, pensions, and clear paths to promotion (84, *El Ferrocarrilero*, December 30, 1906). In its efforts to train and qualify Mexican workers for top posts, the League and the Mechanics Union coordinated an effort to establish unofficial technical schools to train Mexican workers, and led by Felipe Pescador, a chief dispatcher in Puebla, both organizations also began to translate and publish railroad manuals in Spanish (Gorostiza 2010, 148; Parlee 1984, 465). When Vera was released from prison in November 1907, he continued as president of the League and dedicated himself to organizing the League’s third national convention in Monterrey from January to February of 1908, where the calls for Mexicanization became stronger. Members of the League and the Mechanics Union were tired of the gradualism of reform in the National Railways and
continued to mobilize around the issue, attempting a national campaign (Anderson 1976, 215–216).

The Failed Strike of 1908

As Miller (1974) writes, “Bitterness continued to simmer below the surface until 1908” (251). In April of that year, the League went on strike against the National Railways. Although the League typically opposed unjustified strikes on principle, in this case, it was forced to act. In March of that year, V. M. Holland, chief of the National Railways in San Luis Potosí, fired a Mexican worker who had been in the company for fourteen years without a reason for dismissal. Workers in San Luis Potosí suspected that the worker was fired because he was a member of the League. Petitions to the company went unanswered, and in April, the local chapter appealed to Félix C. Vera for support and told him that they were ready to go on strike. Vera authorized the strike, and 300 workers in San Luis Potosí walked off the job, demanding the restitution of their fired co-worker and the firing of American supervisors for discrimination (Anderson 1976, 215; Miller 1974, 251).

Nevertheless, the strike’s prospects for success were tenuous from its beginning. Having never directed a strike before, Vera and his collaborators in the national office committed a series of mistakes that alienated important League branches that refused to join the strike. For example, when the strike was called, the Monterrey local criticized the national leadership for its unilateral action without previously consulting branch delegates, as was written in the League’s statutes. In rejection of the order from the national offices, the division of Saltillo and Laredo also refused to walk off the job because they were not previously consulted. The strike, in fact, was poorly organized, poorly executed, and poorly funded. Antonio R. Ramos, secretary and treasurer of the League, commented that although the strike action in San Luis was entirely justified, the League
did not consult with the locals on strike action and that in some cases, the locals learned about the strike a week after it had begun. Ramos also complained that the League had not prepared to support any prolonged strike action and had not amassed any funds in anticipation. Vehement opposition and criticism in the national press also forced the League on the defensive, and the strike did not enjoy the public support enjoyed by the mechanics in 1906. Seeing his losing position, Vera sought support from the president as mediator and met with him a week after the strike.

The president, however, was not as lenient as he had been with the mechanics’ strike of 1906, and in the aftermath of the economic crisis of 1907, the Mexican government refused to tolerate any labor action by the League. In 1907, the global recession that began in the United States and Europe also reached Mexico. With the drop in demand for exports, factories ceased production and widespread unemployment ensued. This hit export plantation economies and industrial regions in the north of Mexico particularly hard. Unemployment deportations and restrictions on migration to the United States also led to an increase in the unemployed in the border regions and the north of Mexico. The economic crisis was worsened by a drought, which hit the north’s cotton and guayule harvests and thus led to even more unemployment and famine. Out of work and away from the bosses’ supervision, more workers turned to the radical ideas of the PLM (Gorostiza 2010, 52; Salmerón 2006, 180–181).

Thus, the government became more cautious of supporting labor activity and instead sought to defend its interests and those of foreign capitals during the strike of the National Railways. Instead of cooperating with labor, as Vera had hoped, the president ordered Vera to call off the strike and threatened to use force to suppress it as it had in Río Blanco in the textile factories’ strike a year prior. With the strike defeated, Vera stepped down as president of the
League in May, and League members were persecuted and fired. With morale low and the organization in disarray, League locals began to disband (Anderson 1976, 215; Miller 1974, 251). Vera would never return to the head of the railroad workers’ movement. He went into exile after the strike and later returned to write for the opposition in 1909. He was arrested by the government for his journalistic activities and, without a trial, he was sent to Belem prison, for the fourth time, in August of 1909.

Thus, the consequences of the strike of 1908 were nothing short of disastrous for the League and for the organized labor movement in the railroad industry. Furthermore, unlike the mechanics’ strike of 1906, the League was not able to jump scales (Smith 1992) from the local San Luis Potosí strike to national actions, and this capacity proved decisive for its defeat. As Tufts (2007, cited in Tufts and Savage 2009) has argued, labor organizing is tethered to “a spatial circuit dependent on multiscalar action which occurs at a variety of reinforcing scales” (946). Thus, coordination between locals builds regional and national infrastructures for action, such as building the League’s Convention. However, in the case of the 1908 strike, the League’s barely developing branch infrastructure demonstrated the contested scales (Savage 2006) and scalar tensions (McFarland 2014) between the national leadership (Mexico City and San Luis Potosí) and specific locals in Monterrey, Saltillo, and Laredo. Thus, we can conclude that the League’s poor planning, its historic rejection of strikes, and its inability to jump scales at a decisive moment led to its greatest defeat. This historic loss is even more tragic when we consider the struggle and sacrifice it took to build the League from 1904–1908.

**Labor Policy and the American Strike of 1909**

Despite the defeat of the League in the strike of 1908, Mexican railroad labor was still frustrated at the slow pace of Mexicanization and sought to pressure the government and exploit
any opportunity that could speed up the process. Although the use of Spanish was being gradually introduced into forms, correspondence, and examinations, the company’s hiring practices had not changed. Facing pressure from workers and the press, the Mexican government moved to speed up Mexicanization of the railroad, and on July 1, they called on E. N. Brown to begin hiring the Mexican workers who had been educated through the company’s Department of Instruction. Then Brown enacted these directives and instructed American dispatchers to begin training Mexican “assistants.” Understanding that these “assistants” would be their replacements, the American dispatchers refused and walked out on strike a few days later. Mexican unions had waited for this chance and thus worked closely with the government to replace the striking American dispatchers with Mexicans. Thus, when Mexican workers stepped in to keep the trains running, the strike was quickly defeated. By mid-August, most American dispatchers had decided to leave the country.

When the Brotherhood of Locomotive Engineers and the Order of Railway Conductors of America saw the results of the dispatcher’s strike, they understood that they could quickly be replaced by Mexican workers. To avoid the same fate as the dispatchers, they appealed to other American brotherhoods in the United States for support against unfair treatment and discrimination in Mexico, given the sudden “wave of anti-Americanism.” The American Brotherhods also appealed to the U. S. government to intervene on their behalf in negotiations with the Mexican government. However, the American ambassador and the envoys of the Taft administration sided with the National Railways of Mexico, arguing that the terms that the brotherhoods wanted to impose on the union concerning the control of hiring and promotion were unacceptable. Contemplating a sure defeat, the American conductors and engineers called off the threat of a strike. Seeing the potential for future conflict that could put the company in a
vulnerable position, the Mexican government continued training Mexican engineers and conductors.

That conflict would not come until 1912, but in the meantime, the tension between an increasingly Mexicanized workforce and the American brotherhoods continued to simmer. Mexicans complained that the Americans subjected them to extensive scrutiny and that they blamed them for accidents in order to undermine them on the job. Increasingly confident, the Mexican railroad unions began to coordinate for a railroad-wide union confederation to be more effective in their lobbying of the government and opposition to the brotherhoods. In April 1910, delegates from several Mexican railroad unions met with President Díaz, expressing support for the Mexicanization program. The government also reaffirmed its support for the program and promised to continue working with railroad workers to implement it (Anderson 1976, 235–241; Miller 1974, 251–54). Nevertheless, these efforts in railroad labor policy were cut short by the political events in the autumn of 1910. After Francisco I. Madero from the Anti-Reelectionist Party called for a revolution against the dictatorship of Díaz, the government’s efforts at Mexicanization came to a standstill.

Conclusion

As we have seen, towards the end of the nineteenth century, Mexican unions quickly transitioned from mutualist organizations to labor unions in everything but name. In part, this transition was due to the example set by American brotherhoods that established locals in Mexico in what Miller (1974) has referred to as “Labor’s Manifest Destiny.” Mexican industrial workers modeled early labor associations on the brotherhoods and followed the craft union model that these had. The racism and discrimination of the American brotherhoods antagonized Mexicans from the start, and they launched their own organizational efforts in response. Thus, national and
ethnic divisions divided both set of workers early on. American railroad companies exploited this division to their benefit, pitting Mexican workers against the brotherhoods when these went on strike, and vice versa. Twenty years after the establishment of the railroads as the most advanced industrial sector of the economy, Mexican railroad workers felt emboldened to launch their own labor unions due to the growing technical expertise and on-the-job experience gained by Mexicans but not reflected in wages or promotion prospects. Thus, by 1910, Mexican railroad labor unions had achieved a consistency and longevity that gave them an important platform from which to organize for demands to improve their working conditions and their wages. Less successfully, these unions also tried to gain official recognition as representatives of different sectors and to have a say in hiring and promotion.

Within the brother context of social contestation underway in the last decade of the Porfiriato, the Mexican labor movement in the railroads joined other social sectors mobilizing to improve their social standing, wellbeing, and other conditions. The continued emphasis of railroad workers on social betterment demonstrated that the workers saw themselves as a particularly enlightened segment of the population, and, unlike the uneducated peasant masses or the riotous miners and textile workers, they saw themselves closely aligned in values and ambitions with the growing middle classes of Mexico. Thus, their relationship with the extensive liberal movement surging against the regime situated the railroad workers as one more segment of the population that sought to make social gains within the limits of what was permissible, but which also sided with the opposition to make its own demands. As an attempt to cohere railroad workers, El Ferrocarrilero became an important vehicle to express the grievances of railroad workers, to rally public opinion to their cause, and to raise the consciousness of workers to the power of labor unions.
Attempting to break the pattern of mutualist and craft unions, the Great Mexican League of Railroad Employees was remarkable in its attempt to cohere an industry-wide union. To achieve its goal, it relied on mobilizing workers around nationalist ideology because of the obvious discrimination by American companies, American brotherhoods, and American management of the railroads. Though initially opposed to strikes, Mexican unions leveraged the grievances of increasingly unbearable circumstances to gain government support, and when these failed, they turned to strikes as a last resort. The repressive nature of the regime proved an important deterrent for labor action, and the instances of violent repression in Cananea and Río Blanco are exemplary cases of violent strike suppression in the annals of Mexican history. In this sense, the strike of 1906 is unique because the striking party won its main demand for equal wages. However, the strike of 1906 also coincided with the government’s interests in nationalizing the railroads, a process where Mexican workers would be useful. Nevertheless, by 1908, when the League walked out on strike, the priorities of the government had changed, and the need for the government to shore up its investments in the National Railways superseded those of the workers. Furthermore, the League’s own mistakes in executing their strike deprived them of the resources and support of their workers, their allies, and public opinion, and led to their defeat. The defeat extended beyond the strike, to the ultimate collapse and dissolution of the union. Thus, both ended with different circumstances. On the one hand, the Mechanics Union was still in existence on the eve of the revolution of 1910 and still negotiating with the government to pursue Mexicanization. But in the case of the League, the organization was almost disbanded, except for a few local chapters that remained well organized but never returned to their strength.

By the eve of the Mexican Revolution of 1910, the railroad workers had been organizing for at least a decade for the Mexicanization of the railroads and to secure better working
conditions. Thus, when the revolution was unleashed between 1910 and 1911, the railroad workers were in conflict. On the one hand, the regime slowly but progressively implemented the plan of Mexicanization, but on the other, there remained significant wage differences between Mexican and some Americans within the National Railways. These demands and grievances were appropriated by the opposition party against the Díaz government, and these demands were combined with the calls for democracy from the middle classes and the calls for land from the peasants. Since the workers saw their demands reflected in the program of the opposition, the railroad workers found themselves swayed to the side of the revolutionaries. In their position as the operators of Mexico’s most extensive industrial infrastructure, the railroad workers increasingly became an important factor in the process of social change that was unleashed by the revolution. In the democratic phase of the revolution, railroads became crucial for the organization of an opposition to Díaz by Francisco I. Madero and his Anti-Reelectionist Party. During the second phase of the revolution, both the workers and the railroads became key participants in the conflict, and their position in a key sector of the national economy gave them a position from which to intervene in the revolutionary process.
Chapter 4: Francisco I. Madero: Iron Horse Democrat

Introduction

Throughout the third decade of the Porfirian regime, Mexican railroad workers rapidly evolved their labor organizations from mutualist associations to industry-wide labor unions that were disguised as mutualist organizations. Although officially unrecognized as labor unions by the regime and by the American railroad companies, unions operated as representatives of workers, and the government negotiated with the unions during the strikes of 1906, 1908, and 1909. Their activism and the evolving needs of the regime culminated in the process of Mexicanization, a process that was slow in implementation but wholeheartedly supported by the railroad workers. Relatively conservative, the railroad unions sought to work together with the regime, and it seemed that their efforts were bearing fruit. As Yanes (2010) points out, by 1909, the workers had made important and hard-earned gains in their workplace, so unlike the peasants, miners, and textile workers, they had more to lose when the revolution came. This is important to remember as we begin to analyze the participation of railroad workers in the revolution.

Nevertheless, despite these important gains, railroad workers were willing to participate in political activities against the Porfirian regime, in some cases risking their jobs and in others, risking their lives. Railroad workers are ever-present in the political movements that began to challenge the regime, in particular, the campaign led by Francisco I. Madero, who challenged Porfirio Díaz in Mexico’s general elections in 1910. Madero, a wealthy landowner of northern Mexico, took advantage of the mobility provided by the railroads and the extensive network built in the three decades of Díaz’s rule. From 1909–1910, Madero’s campaign relied on the Mexican railroads to organize six campaign tours. Unable to accept a democratic challenge, the regime suppressed Madero’s democratic movement. This repression detonated a revolution, and the
railroads and railroad workers shaped the course of the revolution. Even though most railroad workers did not participate openly, they became increasingly involved in supporting Madero’s campaign. The railroads shaped the course of the revolution so decisively that through their relationship to the infrastructures, railroad workers played an important role in moving the revolution forward, often literally, up or down the railroad tracks.

**Francisco I. Madero’s Democratic Challenge**

The entry of Francisco I. Madero in Mexican politics is a testament to the deep dissatisfaction of many social sectors with the dictatorship of Porfirio Díaz. Díaz’s thirty-year dictatorship antagonized the peasantry, the working classes, the middle classes, and even the Mexican bourgeoisie. In the north of the country, the Díaz regime came into conflict with local *caudillos* because of their deeply rooted interests in business and politics. The process of modernization detonated by the railroads had also brought wealth and prosperity to bourgeois sectors, like the Madero family, opposed to the regime. The Madero clan owned cotton plantations and *haciendas* in the Laguna region that borders the northern states of Coahuila and Durango along the Nazas River. They were also business associates with other capitalists in soap and dynamite factories in the region. Their vast fortune increased when they began selling rubber extracted from the desert shrub guayule that grew abundantly in their lands and became direct competitors to the Continental Rubber Co., a conglomerate backed by Guggenheim-Rockefeller interests and the Belgian Crown.

The business interests of the Madero family were run by Francisco I. Madero, an enlightened hacienda owner with a European and American education and progressive ideals. The family’s commercial interests brought them in conflict with local and foreign capitalists allied to the regime, and these competing interests were fought out in local politics. Madero organized his
local followers in the Democratic Club “Benito Juárez” in 1904 to oppose regime strongmen. With this club, Madero dabbled in political propaganda and journalism, writing for the club’s newspaper, El Democrata. In his memoirs, Madero writes that the newspaper “caused quite a sensation in Coahuila, since it spoke to citizens about their rights and invited them to the electoral struggle” (Francisco I. Madero v. 1, 1985, 9; Salmerón 2006, 188–192). Through this early foray into local politics, Madero developed a network of democratic clubs in the region; however, their efforts were constantly frustrated by the regime and its allies.

Finally, in 1908, in the March issue of Pearson’s Magazine, Porfirio Díaz told the journalist James Creelman that Mexico was ready for democracy and that he planned to step down from the presidency after the elections of 1910. After the Creelman interview, Madero threw himself into politics and in December of 1908, he began to send copies of his book, The Presidential Succession of 1910: A National Democratic Party to his followers. In this book, Madero outlined the criticisms of the current regime and took as his slogans the democratization of the regime, the defense of the Constitution of 1857. It must be made clear that Madero did not seek a revolution, rather political change that would then allow other social changes to take place. Madero’s political program stood for the principles of “Freedom of Suffrage, No Re-election” and began to receive widespread support from the middle classes and some ruling class families opposed to the regime. Madero moved to Mexico City to head the work of the Anti-Reelectionist Center of Mexico. On May 22, the Anti-Reelectionist Center of Mexico was founded and its board of directors was staffed by lawyer Emilio Vázquez Gómez as president and Francisco I. Madero as its vice-president. The board also included other notable figures, among them the prestigious lawyer José Vasconcelos and the journalists Filomeno Mata and Félix F. Palavicini. The Anti-Reelectionists set out to do propaganda work, to organize clubs across the country, to
call for a National Assembly, and to elect candidates of the party for the general elections of 1910. One of the main components of their organizing efforts were the national campaign tours by Madero and other proselytizers. These campaign tours helped rally the political opposition to the side of the Anti-Reelectionists (Portilla 1995, 45–49; Salmerón 2006, 207–208).

![Figure 10. Francisco I. Madero, standing in the center, accompanied by the Anti-Reelectionist Women’s Club “Daughters of Cuauhtémoc.” Source: SECRETARIA DE CULTURA. -INAH.-FOTOTECA NACIONAL.-MEX. SINAFO: Núm: 5966 (1910). Reproducción Autorizada por el Instituto Nacional de Antropología e Historia]

The campaign tours of Francisco I. Madero stand out as making the most extensive use of the railroad for the public organization of a political campaign. According to Salmerón (2006), one of the most remarkable aspects of the electoral campaigns of 1909–1910 is that politics had never been carried out like this before, using the railroad to gather support directly, and in particular drawing upon railroad workers to do so. While the radical Partido Liberal Mexicano
had relied on this vast network of communication to disseminate its literature and ideas, their work was mostly clandestine. In contrast, Madero’s work for the new Anti-Reelectionist Party would be built on the basis of six public tours, where Madero would travel the railroads and establish Anti-Reelectionist clubs at campaign stops in towns along the way. From June 1909 to June 1910, Madero established or visited already established clubs for the new party. There is no doubt that the mobility and reliability of the railroads helped Madero further his cause. Even the smallest of railroad stations and platforms served as public podiums for Anti-Reelectionist proselytism. His campaign tours, which will be described here in detail, allowed him to travel through most of Mexico. A few states, such as Michoacán, Tepic, Morelos, and Chiapas, were not touched by the campaign, and others, like Baja California and Tabasco, were not connected by railroad (Portilla 1995, 53; Salmerón 2006, 209). Nevertheless, some of these were also visited by propaganda teams operating on behalf of the Anti-Reelectionist Party. This new form of politics emerged based on the material circumstances available, such as the steamship lines connecting the states in the Gulf of Mexico but, more importantly, the well-established railroad network that crossed most of the national territory. The accompanying telegraph network and the ever-present liberal press also played an important role in helping to cohere and support Madero’s electoral campaigns. The regime, accustomed to hierarchical forms of governance, counted on its usual system of appointing strongmen to organize its electoral campaigns. The Madero campaign, however, made extensive use of the railroad network’s capacities for mobility (touring the country in a year) and fixity (using stops and train stations for propagandistic speeches), and thus exposed Madero to thousands of Mexicans, making him the most recognizable political challenger to the regime. Numerous local and national grievances from all social sectors channeled their energy to his electoral campaign against the dictatorship of Porfirio Díaz.
The Electoral Campaign Picks Up Steam

Madero’s campaign tours took advantage of the extensive communications and transportation infrastructures built during the Porfiriato, and during a year of incessant political activity, Francisco I. Madero became a nationally recognized figure. During his first campaign tour, his extensive use of the railroad and the steamship lines allowed him to meet diverse social sectors in his travels. In his campaigns, Madero was accompanied by his wife, the typist in charge of his correspondence, and by Félix F. Palavicini, the campaign’s orator. The young and eloquent journalist Roque Estrada joined them as orator in the remaining four campaign tours. Here we must recognize the irony that the railroads that had given so much prestige to the Porfirian regime were the same ones used by Madero and his team of Anti-Reelectionist propagandists (Gorostiza 2010, 53-55).

Before Madero’s tours, his sympathizers had organized in liberal clubs across the country, several of which helped to cohere local opposition to Díaz, and a few of which even had their own newspapers. However, before Madero’s tours, the clubs were not organized at the national scale around a national figure or a national program. By the end of Madero’s campaign, the Anti-Reelectionist Party had more than 100 clubs in 65 cities and 22 states. In Mexico City alone, there were 200 clubs; in Puebla, 7, and in the city of Torreón, the Anti-Reelectionist Club had more than 2,000 members. These clubs had three goals: to strengthen the Anti-Reelectionist cause, propagandize their ideas, and select representative candidates. Thus, the success of the Anti-Reelectionist campaign was undeniable (Salmerón 2006, 209). Early in the campaign, however, Madero’s challenge to the regime did not seem like a threat and, for the most part, he was ignored by the authorities.
Figure 11. Madero speaking from a train car. Source: SECRETARIA DE CULTURA. -INAH.- FOTOTECA NACIONAL.-MEX. SINAFO: Núm: 32497 (1909). Reproducción Autorizada por el Instituto Nacional de Antropología e Historia

Figure 12. Roque Estrada speaking to a crowd in Queretaro. Source: SECRETARIA DE CULTURA. -INAH.- FOTOTECA NACIONAL.-MEX. SINAFO: Núm: 34354 (1909). Reproducción Autorizada por el Instituto Nacional de Antropología e Historia
The first tour\textsuperscript{12} was launched on June 18, and on his way to Veracruz from Mexico City, Madero stopped in the railroad city of Orizaba, a city that had seen government repression in 1907 against textile workers. Although he did not establish a club on his first stop, by mid-November Madero spoke of “a magnificent political club with many members” in a letter addressed to Octavio Bertrand (Madero v. 1, 1985, 487). In the port of Veracruz, a historic League of Railroad Workers stronghold, he was received by 2000 people; a political reunion took place in the Dehesa Theater, and through his efforts in Veracruz, a new club was founded. On June 21, Madero arrived by steamship in the Yucatán Peninsula through the port of Progreso, where he was met by celebrated journalist José María Pino Suárez and other supporters. The visit to Yucatán came on the heels of a genocidal war by the regime against the Mayan peoples that had rebelled against the slave-like conditions in the henequen haciendas, and his campaign denounced these abuses, thus gaining popular support locally (Gorostiza 2010, 55).

Using the United Railroads of Yucatán, Madero traveled to the state capital, Merida, where a crowd of 3,000 people welcomed him. Although the local chief of police had asked Madero not to speak, the Anti-Reelectionists held a large rally at Santa Ana Park on the 26th, where Madero, Palavicini, Pino Suárez, and Calixto R. Maldonado all gave speeches to the crowd. During his stay in Merida, another Anti-Reelectionist club was founded. While in the region, Madero also travelled on the railroad to the capital of the state of Campeche, where he held another meeting at the Renacimiento Theater and where he founded a club despite obstructionist activities by the authorities. The farewell meeting of this leg of his journey was held in the port of Progreso at the Hidalgo Casino, where a new club, headed by José María Pino Suárez, was founded. Madero left Yucatán on July 3, headed to the north, and arrived in the port.

\textsuperscript{12} See map “Campaign Tours of Francisco I. Madero” for reference.
of Tampico, Tamaulipas, where he was unable to install a club because the local opposition was already organized in favor of Monterrey governor General Bernardo Reyes, as successor of Díaz. Nevertheless, this low point in the first tour would be trivial compared to the resounding success obtained by his campaign in the industrial city of Monterrey, the capital of the state of Nuevo Leon and home of Bernardo Reyes.

When Madero arrived at the train station, he was well received and gave a fiery speech to 3,000 people, where he outlined his opposition to Bernardo Reyes as a successor of Porfirio Díaz. According to Madero, the meeting in Monterrey was the most transcendental for the campaign since he spoke in the home territory of Bernardo Reyes, the most likely successor to Díaz at that point in the campaigns. This was quite a coup, since Madero became aware of the unpopularity of Reyes in his home territory and the chance he had to gain the support those dissatisfied with him (Madero v. 1, 1985, 326–27; Portilla 1995, 439).

Madero returned to San Pedro, Coahuila, from July 12 to August 4 and occupied himself with correspondence regarding his political activities. The first tour had been very successful, and this encouraged him and his collaborators to continue working for their cause. Madero’s second tour, from August 5–12, was devoted to organizing the Anti-Reelectionist clubs in his home region where he attained immediate success due to his political history in the region. It is highly likely that there too he moved on the trains that connected the hub of Torreón to Durango, Saltillo, San Pedro de las Colonias, and Parras. Three clubs were founded, including one in Torreón, with 2,000 members, and one in his hometown of San Pedro. In addition, a new club was also founded in the industrial hub of Gómez Palacio, home to many railroad workers of the Central and International Railroads (Salmerón 2006, 210). Madero was forced to postpone the third tour due to health complications and instead boarded the train to the hot springs of Tehuacán.
in Puebla to seek hydrotherapy. During his stay in Tehucán, Madero established his base at the Hotel Mexico throughout November (Portilla 1995, 445). While in Tehuacán, Madero and his collaborators also launched their newspaper, *The Constitutionalist*, which helped disseminate the party’s program and activities of local chapters. Liberal newspapers like *El Diario del Hogar* and *El Heraldo* also joined in support of the Anti-Reelectionists and regularly published articles about their campaign.

Soon after his recovery, Madero embarked on his third tour, which took him to the Pacific and northern states of Mexico. Travelling the railroad, Madero held meetings in Queretaro, Guadalajara, and Colima and established clubs in these cities from December 24–28. In Guadalajara, as in previous occasions, local authorities attempted to stifle the Anti-Reelectionists, and theater owners refused to rent their theaters to Madero. Nevertheless, in Guadalajara he spoke to a crowd of 6,000 from the balcony of his hotel. Madero and Estrada embarked on a steamship from the port of Manzanillo, Colima, to the port of Mazatlán, Sinaloa, and on January 2 held a meeting for 2,000 people in the Atayde Circus, and another club was founded. As Madero made his way north, local authorities continued to undermine his campaign; in some places they succeeded, while in others they were unable to act, due to overwhelming popular support, as was the case in Navojoa, Sonora, where Madero was received by a crowd of 200 people at the train station at midnight. Despite the cold, a “delirious” meeting took place in the open from the balcony of the train car. After the stop in Navojoa, Madero made his way to the northern border where he crossed into Arizona from Sonora and took a train to Ciudad Juárez, in Chihuahua, where he was received by Abraham González, another wealthy landowner, who accompanied him to Chihuahua City (Estrada 2011, 154; Portilla 1995, 439–442).
In Chihuahua, the authorities deployed the police to prohibit public meetings, but due to the strong support of the middle class and the well-organized labor movement in the city that sympathized with Anti-Reelectionists, Madero held a meeting at a smaller theater that was often used by mutualist associations and labor unions. In fact, in Chihuahua, railroad workers lent important union leaders to Anti-Reelectionism, Silvino Rodriguez and Cástulo Herrera among the most well known. Rodriguez, a leader of the Mechanics Union, and Herrera, a seasoned member of the Boilermaker’s Union, attained regional prominence in the campaign against the regime. As Salmerón (2008) has written, Chihuahua was a hotbed of political organizing by mutualist organizations of Protestant and Catholic inspiration that gave rise to strong mutualist
organizations and the Worker’s Political Club. This fertile ground provided a supportive territory for labor organizing among the region’s industrial workers who used the railroad to disseminate subversive newspapers and propaganda against the regime.

Together with the upper classes and middle classes that held deep resentments against the regime, Madero found a ready-made base of supporters for his Anti-Reelectionist Party. The well-known newspaper *El Correo de Chihuahua* and its editor, Silvestre Terrazas, took up Madero’s platforms and supported local opposition candidates. These important connections would become invaluable later in the armed conflict against the regime (94–96). Madero’s third tour was a resounding success, and it proved that Mexicans were ready for a new political alternative, even if they had to defy the regime. The tour also cemented Madero’s alliances with important ruling class sectors in Sonora and Chihuahua that had deep-seated resentments towards local political bosses, foreign capitalists, and the regime’s close allies. In a letter to a close collaborator, Madero wrote that he was “convinced that the political tours are the most efficient method for propaganda and the only way we will be able to organize our party” (Madero v.1, 1985, 532). It is remarkable that Madero recognized the tours as the most “efficient” method of propaganda and pointed to the reliability of the railroad network that allowed him to take advantage of railroad mobility.

Indeed, a political campaign of this nature was a new way of doing politics, and it engaged disgruntled social sectors in the political-electoral process. Madero’s campaign took advantage of the vast railroad network and exploited its mobility to efficiently deploy the campaign and its message to sectors that were not being engaged by Diaz and his Reelectionist Party.
Madero is Stopped in His Tracks

After the success of the third tour, Madero returned to his native San Pedro and continued, through active correspondence, to organize a fourth tour and to prepare the National Convention of the Anti-Reelectionist Party to choose its candidates for the coming elections. Madero began his fourth tour on March 20, in Durango City, where he was received by 4,000 people at the Alameda park and founded a club that would anchor campaign work in that region. He moved south along the central branch of the National Railways and stopped in Zacatecas, where he was received by a multitude of 8,000 students, but the local authorities impeded his public meeting and he was unable to found a club. He boarded a train and traveled south to Aguascalientes, an important railroad hub and home to the repair shops of the National Railways. In that city, he was
received by a large crowd, to which both he and Roque Estrada delivered speeches. On March 26, the city’s Anti-Reelectionist clubs organized a large meeting of 8000 people. In a letter to Emilio Vázquez Gómez, Madero wrote about his recent successes, saying “We’ve held rallies in every place we’ve had the liberty to hold them, which is the most palpable proof that the Mexican people wish for a change away from the current government regime…” (Madero v. 2, 1985, 102).

Madero moved on from Aguascalientes to San Luis Potosí, where a meeting of 2000 people was held and a club inaugurated, despite government repression. In the state of Guanajuato, Madero held rallies in León and Guanajuato, founding clubs in both cities, and receiving large receptions at train stations. After these tours, the regime could no longer ignore the success of Madero’s democratic challenge and began to double down on repression. Thus, as Madero headed to Mexico City to organize the National Convention, Roque Estrada was intercepted by the government on his way to speak in Guadalajara and forcibly dispatched to Mexico City (Portilla 1995, 442–43). Again, the role of the railroad in the success of the campaign cannot be underestimated since Madero was able to visit the most important cities in the center of the country in the span of two weeks, a feat that would have taken two months without the railroad. The campaign also travelled by night in Pullman cars and arrived the following day at their next campaign stop, allowing for daytime rallies, meetings, and campaign activities. Furthermore, the railroad stations served as important public places of agitation and political activity when the authorities closed other venues to the campaign.

Once in Mexico City, Madero and Vázquez Gómez coordinated the different delegations for the National Convention, which was held from 15–17 April 1910. The convention was attended by delegates of the Anti-Reelectionist Party, the Nationalist Democratic Party, and other independent groups that formed a coalition with the Anti-Reelectionist program. In total, 120
delegates attended the convention, representing approximately 35,000 sympathizers of Madero and his cause. The delegates voted to elect Francisco Vázquez Gómez as vice-presidential candidate and Francisco I. Madero as presidential candidate for the party. With this new mandate, Madero met with Porfirio Díaz to express his challenge to the dictator, who agreed to accept the challenge. Nevertheless, the government continued to suppress Madero’s sympathizers, persecuting propagandists and shutting down the party’s newspaper, *El Anti-Reeleccionista*. The Anti-Reelectionists continued their campaign, and on April 20, Madero and Vázquez Gómez presented their campaign platform, which called for a return to the laws outlined in the Constitution of 1857, especially the principles of no-reelection and of free suffrage. Their program clearly aligned with the demands of the liberal movement of the previous decade and called for freedom of the press, public education, and higher wages and improved working conditions for workers. Specifically, Madero sped up the Mexicanization of the railroads, because he promised to hire Mexicans to top posts and to establish technical schools for railroad workers (Gorostiza 2010, 57; Portilla 1995, 58).

Once elected as the presidential candidate of the Anti-Reelectionists, Madero began to campaign, in earnest, as the main challenger of Porfirio Díaz in the upcoming elections. Thus, Madero and his collaborators in the capital launched the fifth campaign tour with renewed vigor, and on Sunday, 1 May 1910, they held a massive demonstration in support of the Anti-Reelectionist Party and its candidates, Madero and Vázquez Gómez. The campaign began in downtown Mexico City, traversed through San Francisco Street and Reforma Avenue, the main thoroughfares, and ended outside the Madero’s home in the Juárez neighborhood. The demonstration not only brought together the clubs in the capital but also drew significant support from the city’s inhabitants. Different reports mention 7–8,000 people. The American Ambassador
to Mexico, Henry Lane Wilson, reported that 50,000 people attended the demonstrations. The numbers and unbounded enthusiasm of Madero’s demonstration stood in sharp contrast with the regime’s sober parade of May 5. The May 1 demonstration gave Anti-Reelectionists optimism and presaged a good fifth tour (Portilla 1995, 54).

The fifth tour focused on consolidating the Anti-Reelectionists in the central region, and Madero and Roque Estrada visited the cities of Guadalajara, Puebla, Jalapa, Veracruz, and Orizaba. In Puebla, Madero was received by an overflowing crowd of 25–30,000 people as his committee travelled from the train station to the city center. In Jalapa, Madero was also received by large crowds in the city’s main square. On his way back to Mexico City from Veracruz, Madero’s campaign made numerous stops in small train stations in Attoyaca, Córdoba, Fortín, and others, where Madero and Estrada gave impromptu speeches from train cars to growing crowds. Speeches like these became more common and allowed Madero to reach populations isolated from the main cities, effectively exposing him to the plight of the peasantry and exposing them to his democratic campaign. The last stop in Orizaba closed the fifth tour with a reception of 20,000 people at the train station and a meeting and parade of 15–20,000 people (Portilla 1995, 443–444). Madero’s campaign had finally freed itself from the government’s sabotage, and the size of the crowds was so large that they blocked police intervention. The regime had clearly underestimated the thirst of the population for a political challenger, and it could no longer ignore the threat posed by Madero.

Encouraged by the effusive receptions in the fifth tour, Madero and Estrada embarked on a sixth tour in the lead-up to the first round of the presidential elections. On 4 June 1910, Madero left from Mexico City’s Buenavista station towards San Luis Potosí and along the way made stops at towns and railroad stations from the railroad car’s balcony, where his committee was
enthusiastically received by local inhabitants. When Madero arrived in San Luis Potosí, he was welcomed by a multitude, and Roque Estrada gave a fiery speech from the train car, stating, “Let our oppressors be warned: the Mexican people are willing to die to defend their rights: And it’s not that I am trying to incite the national territory to a revolution: it’s that they are not afraid of the sacrifice” (Portilla 1995, 55). It is remarkable that at this point Madero’s committee could make campaign stops at different train stations, and at the same time it makes sense that they relied on the railroad’s itinerary, which allowed them to stop at small train stations. Thus, the government was unable to intervene or sabotage the efforts of the Anti-Reelectionists because doing so would have also interfered with railroad traffic.

From San Luis Potosí, Madero continued by train to Saltillo, capital of the state of Coahuila, and was received by a crowd of 1,000 people that accompanied him from the train station to his hotel. A public rally was organized in front of the hotel, and Madero and Roque Estrada gave speeches to the crowd, asking for their support in the upcoming elections. Although the local police tried to stop the rally, the crowd was too large and the people accompanied Madero and Estrada to the train station (Portilla 1995, 444). Madero’s challenge to the regime had been tolerated for too long, and the Diaz administration decided to stop the campaign tours. Madero and Roque Estrada arrived in the industrial city of Monterrey on June 6, but the situation was already tense and the police blocked access to the train station and dispersed the crowd welcoming Madero. The authorities also suspended the electric trolleys of the city, and rural police were deployed to patrol the city on horseback. Despite heavy police presence, Roque Estrada tried to give a speech on June 7, but the authorities tried to arrest him on charges of inciting a rebellion during his speech in San Luis Potosí. Once again, Estrada escaped, but his arrest was imminent.
As Madero and Estrada prepared to depart from Monterrey to Ciudad Victoria on the night train, they took different paths on their way to the station to avoid the police. However, Madero was intercepted at the station, and the police carried out a thorough search of the train to look for Estrada, but he was hiding in a safe-house. Since Madero refused to tell the authorities the whereabouts of Estrada, the police arrested Madero on charges of protecting Estrada. Upon hearing of Madero’s arrest, Estrada turned himself into the police the following day. After their imprisonment in Monterrey, Madero and Estrada were transferred to San Luis Potosí on June 21 to face trumped-up charges of inciting a rebellion and insulting a public official (Estrada 2011, 239–44; Portilla 1995, 55–60).

The regime hoped that by imprisoning Madero and Estrada, their challenge would fade away. However, by this point, the Anti-Reelectionist struggle had spread far beyond Madero and Roque Estrada’s campaign tours. For example, the campaign reached a place as isolated as Santa Rosalía in Baja California, a company town of a French enterprise. After a long trip by boat, a small committee representing the Anti-Reelectionists arrived in Santa Rosalía and announced it would hold a public rally. Despite the mayor’s attempts to discourage attendance to the rally, and in open defiance to the mining company’s orders, workers and inhabitants showed up to the rally to receive the committee. Romero Gil (2011) writes that the Anti-Reelectionist cause was especially well received by the railroad workers and that they hung painted banners from the locomotives in favor of Madero. As Gorostiza (2010) has argued, few railroad workers dared to express a dissenting political opinion in public for fear of retaliation. Therefore, it was remarkable that workers in Santa Rosalía defied the local authorities and the company management by publicly siding with Madero.
Enraged by these daring actions, the company and the authorities persecuted the railroad workers who dared to show their support, and one of them was fired and removed from the company-town on a steamship bound for Guaymas, Sonora (36). Despite this repression, local activists continued to circulate newspapers and reports from the opposition against the regime; nevertheless, the tide had turned for the Anti-Reelectionists. During the month of June and in some places before then, the government launched a persecution of Anti-Reelectionist clubs, closing independent newspapers and arresting Madero’s supporters en masse. Liberals and any newspapers favorable to Madero were shut down, and a week before the elections, thousands of Madero’s supporters were imprisoned, many of whom were either deported to Yucatán or drafted into the military. According to Portilla (1995), upwards of five thousand Anti-Reelectionists were imprisoned (60).

The government’s repression foreclosed the democratic means by which the Anti-Reelectionists sought to challenge the regime in the national elections and thus gave way to the revolution of 1910. Nevertheless, the impact of the tours on the population should not be underestimated since a political campaign on this scale had never been carried out before. Historians agree that Madero’s campaign tours allowed him to reach populations isolated from the main urban areas and to expose them to the democratic challenge underway (Portilla 1995; Salmerón 2006). The railroads allowed Madero to knit together a network of clubs at the local and national scale, essentially allowing his campaign to jump scales from the local and the regional to the national. This happened because the campaigns used reliable railroad itineraries to carry out propaganda work, as well as the train stations and car balconies as places of agitation. Furthermore, the open challenge by Madero, Estrada, and others against the dictatorship was well
received by many social sectors that appreciated their bravery and their democratic challenge to the regime—something that was unthinkable at the time.

Madero’s challenge didn’t just focus on the regime but also aimed to challenge political bosses at all levels, including municipal offices. This strategy gained him a large following at the national, state, and municipal scales (Portilla 1995, 55). On June 26, the primary elections were held and all sorts of abuses were committed across the country: some places denied ballots, others turned away individuals, and many votes were fraudulent. The regime and its supporters were at peace knowing that the challenge had been averted, but Madero and his supporters thought otherwise since he interpreted that his imprisonment had caused widespread indignation. The American Ambassador, Henry Lane Wilson, also calculated that the government had overstepped its power, and, in an attempt to shut out Madero, had committed a grave error and turned him into martyr, which gave him more sympathizers (Portilla 1995, 62).

**Madero’s Escape and the Plan of San Luis**

As important as the railroad was for the Anti-Reelectionist’s electoral campaigns, it became even more important as Madero’s movement shifted to clandestine operations to prepare for an armed uprising. Despite the opposition, Diaz had obtained a seventh term in the presidency, and the upcoming centennial celebrations of Mexican independence preoccupied the victorious dictator. Francisco I. Madero, for his part, kept an active correspondence from prison and coordinated newspaper articles, demonstrations, and matters relating to the party’s business. Besides coordinating Anti-Reelectionist protests, Madero also directed his collaborators to exhaust all legal avenues to recall the elections, but the authorities denied every petition and lawsuit. Having run out of legal options, Madero’s democratic campaign would take its next step: a revolution. Before Madero’s arrest, many Anti-Reelectionists were convinced that the
government’s intransigence would lead to an armed rebellion, Madero among them. To anticipate this outcome, Madero’s supporters began to prepare for an armed insurrection as early as the National Convention in April (Madero v. 2, 1985, 275; Portilla 1995, 73).

In the state of Sonora, the governor José María Maytorena, an early supporter of Madero and president of a local Anti-Reelectionist club, had hired the train conductor Paulino Fontes to smuggle weapons and ammunition from the United States. In an interview conducted in 1961 by historians for the Oral History Project from the National Institute of Anthropology and History, Paulino Fontes said that in early 1910 he would travel to American border towns north of Sonora with groups of women, most of them from the middle class and well dressed, that would carry bags of ammunition under their dresses, tied to their legs or tied to their waist. Then they would travel back across the border and store the weapons in Fontes’ house, and on the night shift he would then transport them by train to the governor’s palace in Guaymas (PHO/1/12). In fact, gun smuggling in Sonora is not the exception but the rule. Liberals and Anti-Reelectionists devised all sorts of schemes to obtain weapons. In Texas, they formed “cooperative clubs,” ostensibly for hunting, to which supporters could subscribe to obtain a gun and munitions. American armories along the border were convinced of the coming insurrection since gun sales spiked in the Texas towns, of Eagle Pass, San Antonio, El Paso, Brownsville and Laredo. Mexican authorities on the U.S. border began to report about the tension in the air, and the Díaz regime asked the American Ambassador to prohibit the importation and sales of weapons in Texas, Louisiana, and California. The Americans were convinced that guns were being smuggled across the border at night, and by October, “the tension in the air was electric” (Portilla 1995, 75–77).

While preparations were taking place in the north, Francisco I. Madero, Roque Estrada, and their collaborators managed to devise a plan of insurrection despite heavy police surveillance.
After the centennial celebrations, Madero was given probationary freedom from the State Penitentiary of San Luis Potosí and was put under house arrest at the hotel “El Fiel Pastor” in that city. While he was in San Luis Potosí, with help from the Mascorro family, Madero prepared his escape to San Antonio, Texas. Jerónimo Mascorro was a chief security guard of the railroads, and his wife, Petra Cancino de Mascorro, posed as a washerwoman to deliver news and letters to Madero’s hotel room in the laundry. Together with their sons, Jesús and David, who also worked on the railroad as brakemen, the Mascorros directed a group of railroad workers to prepare Madero’s escape. On the night of October 5, Madero disguised himself as a railroad worker with denim pants, a ripped shirt, dirty shoes, a hat (guaripa), and a red handkerchief wrapped around his neck. From the safe-house Madero and Julio Peña, both dressed as railroad workers, left San Luis Potosí on horseback to the Peñasco station. Once at Peñasco, the Mascorro brothers loaded large cumbersome bulk packages on the express train to Laredo, Texas, to allow Madero and Peña enough time to board. Once they loaded the bulk packages, the Mascorros also boarded the train as passengers (but were actually security guards for Madero), and the messenger of the express train, Paulino Murillo, opened the door for Madero to board the express train. Thus, Madero escaped from San Luis Potosí and crossed the border on the evening of October 5 on the railroad (Alderete 1956, 24–25).

Once in San Antonio, Madero and his conspirators redacted the Plan of San Luis, a manifesto calling the Mexican people to arms. The plan denounced the violation of national sovereignty by the Díaz regime, which had repeatedly violated the rule of law established by the liberal Constitution of 1857 and the principle of no re-election. Furthermore, the electoral results of June and July were declared null and void, and the Plan refused to recognize the government brought to power by these elections. The plan called on Mexicans to revolt against the
government on November 20 at 6pm (Salmerón 2006, 214). Aware of the mounting grievances of the peasantry, the plan also denounced the confiscation of communal lands, indigenous lands, and those lands that had been obtained through fraudulent means by the Ministry of Development and the land surveying companies, and called for them to be returned to their rightful owners.

According to Portilla (1995), this demand was transcendental and expanded beyond the Anti-Reelectionist’s April program but was of strategic significance in a country where 90% of the population was composed of peasants (81).

In effect, the Plan of San Luis closes the electoral chapter of the Mexican Revolution and moves to the armed phase of the revolt—a phase that is known as the Maderista revolution, named after its leader, Madero. As has already been mentioned, preparations were underway along the border, and many of the guns smuggled soon reached the central states, including San Luis Potosí, Puebla, and Mexico City. Although the plan was not supposed to be broadly distributed until a week before the revolt, it became an open secret, and the authorities began breaking into the homes of known Madero supporters. Some Maderistas managed to escape; others, like Aquiles Serdán and his collaborators, were forced to revolt against the regime on November 18, when the police had infiltrated their safe-houses. The three-hour shooting in Puebla, and the capture and execution of Serdán, became national news and gave the signal that the Mexican Revolution had begun (Ávila and Salmerón 2015, 74). In other localities, like in San Luis Potosí, Madero’s conspirators did wait until November 20, but they were unable to cut power to the city, which was the signal to begin the uprising. When they resorted to Plan B and attempted to blow up the walls of the state penitentiary, the police caught on to them and dispersed the rebels (Alderete 1956, 26). Madero was expecting a spectacular armed uprising across the country that would topple the regime within a month, but this did not take place. As in
Puebla and San Luis, many localities saw their insurrectionary plans foiled by the authorities, and the rebels had been dispersed, jailed, or executed.

**The Democratic Revolution and the Railroads**

The spectacular and simultaneous uprising that Madero had called for on November 20 did not go as planned. As has been discussed, the government actively persecuted Madero’s supporters and diffused uprisings in many parts of the country, especially in the central states. Furthermore, Madero expected an urban revolution led by the middle classes—especially his collaborators in the Anti-Reelectionist clubs. However, the organizational capacity of the clubs was not sufficient for an armed revolt, and thus the revolutionary leadership had to go through a period of transitional adjustment when the networks that had been formed for the propagandistic and electoral struggle had to readapt to the realities of an armed struggle. The consequences of this readjustment were several, among them, that many Anti-Reelectionists were not prepared for the armed struggle and thus ceded their role to others more capable of leading insurrection.

Furthermore, although Madero directed the uprising from San Antonio, designating local leaders as chiefs of the rebellion, these assignments didn’t always go according to plan because other leaders emerged organically from the masses once the revolution was underway. In the north of the country, for example, Madero’s call for a democratic revolution to defend suffrage and call for new elections merged with long-running land disputes and democratic grievances. Thus, the political revolution that Madero wanted quickly turned into a social revolution (Ávila and Salmerón 2015, 75).

Most of the uprisings planned by the Maderistas for November 20 failed, except in Chihuahua, due to the strong collaboration and organizational capacities between different social sectors. In the state of Chihuahua, Abraham González was named as the chief of the Revolution
by Madero, and he led to cross-class alliance against the regime led by local rebels he had appointed, among them railroad leader Cástulo Herrera in Chihuahua City, Pascual Orozco, a gunslinging protestant in the Guerrero region, and Doroteo Arango, a figure living on the margins of legality, commonly known as Francisco “Pancho” Villa, in the town of San Andrés. Of the 40 or so uprisings experienced on the 20th, half of these took place in towns, cities, and haciendas of Chihuahua, especially in the western region of the state, where Orozco sieged Ciudad Guerrero, a regional hub for the towns of the western sierra. This region was also well connected to the main railroad trunk from Ciudad Juarez to Chihuahua City by two railroads: the Northwest Railroad, which connected Ciudad Juarez and Casas Grandes, and the Kansas City, Mexico, and Orient Railroad, which connected Chihuahua City to Ciudad Guerrero. The connection between Casas Grandes and Ciudad Guerrero was still under construction when the revolution came, and communication between these two points had to be done on horseback or on foot through a forested mountain range.

In response to Orozco’s siege of Ciudad Guerrero, the federal army sent a military train on the Kansas City, Mexico, and Orient Railroad from Chihuahua City. However, the train was intercepted in a surprise attack at the San Ándres station by the forces of Pancho Villa and Cástulo Herrera. In the attack, the rebels killed lieutenant colonel Yépez, and, unable to defend its position, the military had to retreat. Without reinforcements from Chihuahua City, Ciudad Guerrero succumbed to the siege by Orozco at the beginning of December, and he invited Pancho Villa and other rebel leaders roaming the region to join him there and to restock on guns and munitions. Once in Ciudad Guerrero, Orozco was democratically elected as the leader of the rebellion in western Chihuahua. Meanwhile, Cástulo Herrera, the railroad labor militant, would go to San Antonio to find Madero to return to lead the revolution. Thus, Pancho Villa took over
Cástulo Herrera’s forces since his prestige had fallen as Villa’s rose, when the latter bravely confronted the military in the field (Salmerón 2006, 220). The fall of Ciudad Guerrero and consecutive victories over military gave a boost of confidence to the rebels, who now held an important city in the sierra.

As uprisings in other parts of the country were quickly put out, the government’s attention turned to western Chihuahua, and throughout December, the government sent in reinforcements to Chihuahua City through the National Railways from Torreón, Cuencamé, Querétaro, Durango, Guadalajara, and Mexico City, concentrating over 10,000 soldiers (one sixth of the entire army). Once in Chihuahua City, the military sent troops to recover Ciudad Guerrero. However, the government did not trust railroad workers, because they sympathized with the revolutionaries, who were often extended family members or acquaintances of the rebels (Gorostiza 2010, 67). As the work of Hernandez and Rincon (1992) shows, the army had reason to mistrust railroad workers, especially telegraph workers, who were intercepting army correspondence and sending it to revolutionaries. Such is the case of Eva Flores Blanco, a telegraph worker born in northern Mexico and a supporter of Madero’s electoral campaign in the region. She and her sister were among the first telegraphists to deliver secret messages to Madero while in exile in San Antonio. Once the armed rebellion got underway, Flores Blanco operated as a spy for the Maderistas, constantly informing revolutionaries of the movement of the federal army (35). Therefore, the revolutionary army did not use the Kansas City, Mexico, and Orient Railroad. To retake Ciudad Guerrero, the army was deployed over land during a tortuous two-week advance to recover cities and towns south of the railroad.

As the Díaz regime closed in on the revolutionaries, the battle for vital railroad infrastructure intensified in western Chihuahua. Early on, the federal government, under the
leadership of General Juan N. Navarro, surprised the revolutionaries along the way and recovered the towns of San Andrés and Pedernales, along with their railroad stations. This offensive ran into a rebel ambush in the station of Malpaso, a narrow canyon, but was able to overcome the attack thanks to cavalry reinforcements from Chihuahua City. In addition to the difficulties faced in the battlefield, the army also faced problems in moving the railroads during the height of the confrontations, as railroad workers in the region refused to move military trains since they had been threatened by the rebels not to cooperate. It wasn’t until mid-December when a bulletproof locomotive was sent to inspect the track for explosives and to repair it that the railroad workers returned to work. Once the federal army had secured the railroad tracks, they used the Kansas City, Mexico, and Orient Railroad to move troops west to Ciudad Guerrero, which they easily recovered in early January after it had been abandoned by the rebels (Gorostiza 2010, 69; Salmerón 2006, 224).

While the government’s attention was centered on Chihuahua, other groups began to instigate their own uprisings in areas far from the railroad and the army’s reach. As the confrontations between the army and the rebels centered in western Chihuahua, sympathizers of the Partido Liberal Mexicano, led by the Flores Magón brothers, began to enter the country from the U.S. border via Ciudad Juárez. The Flores Magón brothers and their collaborators in the Socialist Party of the United States and the Industrial Workers of the World had followed developments in Mexico closely. By 1910 the PLM had been deeply radicalized along anarcho-syndicalist lines, after having previously organized two armed uprisings in 1906 and 1908 that had failed to spark the revolution. Thus, although they disagreed with Madero’s leadership and the political limitations of his revolution, they also decided to participate in the uprising to overthrow the Díaz government and began to amass weapons in the lead up to the call to arms.
The Magonista incursion into Mexico was led by Práxedis Guerrero, a passionate young journalist and poet who edited the underground newspaper *Puntos Rojos*. Guerrero had been a close comrade of the Flores Magón brothers and was considered the second most important leader after Ricardo Flores Magón. Madero’s call to arms had caused a split within the PLM leadership, exiled in Los Angeles, and its base, active along the border states. Guerrero and others were impatient to leave the propaganda struggle and to enter the armed struggle, and Guerrero broke ranks and organized a group of 20 revolutionaries to participate in Mexico. Unable to convince Guerrero to remain in the United States, the leadership of the PLM designated Guerrero as the chief of all PLM forces in Mexico (Lomnitz 2014, 265). Guerrero and his comrades crossed the U.S.-Mexico border on December 9 and on the 22nd they held up a train on the Northwest Railroad in Sapelló. They commandeered the train south towards Casas Grandes and destroyed the tracks behind them to slow down any reinforcements that might come from Ciudad Juárez. Once in Corralitos they demanded that the federal army give up Casas Grandes, which they refused to do. Unable to take Casas Grandes, which was defended by more than 100 army troops, the Magonistas abandoned the railroad and ambushed the town of Janos. Despite resistance by the local mayor and the volunteers he had recruited, the Magonistas took the town on the night of December 29. The following day, the army sent troops from Casas Grandes to recover Janos, which the revolutionaries tried to defend in a shoot-out, but when their leader, Práxedis Guerrero, was killed in the battle, the rebels fled. Without a military and political leadership, these Magonistas would eventually merge with the Maderista chief José de la Luz Blanco and would go on to fight the revolution on the side of Madero (Sánchez 2011, 64). This limited but tragic participation of the Magonistas in Chihuahua deeply affected the party, and forced the Los Angeles junta to enter Mexican territory through Mexicali and Tijuana in Baja California.
Meanwhile, back in Chihuahua, the main theater of operations centered along the tracks of the Kansas City, Mexico, and Orient Railroad—a strategically important line connecting rebel territories to the capital. According to Portilla (1995), once Villa and Orozco had been dispersed from Ciudad Guerrero, they participated in limited engagements against the government that consisted of low scale guerrilla warfare and hit-and-run operations, and as soon as they saw a perceived defeat, the rebels would escape (Portilla 1995, 92). With full use of the Kansas City, Mexico, and Orient Railroad, the federal army focused on pacifying southwestern Chihuahua, where skirmishes and shoot-outs took place in the towns of Parral and Batopilas. Throughout this period, the railroad served as a conveyor belt of troops from Chihuahua City to Ciudad Guerrero and as far south as Sanchez station. Besides the southwest of Chihuahua, other rebellions flared up around Casas Grandes and Ojinaga, but out of the twenty confrontations that took place in the state during January, fifteen of these took place in the southwest part of Chihuahua (Portilla 1995, 138). Orozco took advantage of the government’s concentration in the southwest part of the state and moved on horseback to take the border crossing of Ciudad Juárez. At the end of January, Orozco and his forces captured a passenger train in the Moctezuma station on the central trunk of the National Railways. Orozco used this train to move his forces north and took the time to destroy the railroad tracks behind him to slow down army reinforcements from Chihuahua City. As soon as army General Juan N. Navarro learned of Orozco’s plans to attack Ciudad Juárez he returned to Chihuahua City and hastily boarded a train with 1,000 soldiers to fight Orozco in the north. At the same time, Navarro directed lieutenant colonel Manuel G. Pueblita over a telegraph to destroy the tracks south of Ciudad Juárez before Orozco could launch a surprise attack. Pueblita followed suit and on February 1 his forces met Orozco’s vanguard at Tierra Blanca, south of Juárez. Orozco’s forces immediately attacked, and Pueblita had to retreat to Ciudad
Juárez. After this confrontation, Orozco moved to the Northwest Railroad to destroy the tracks there and to gather more forces before he could move on to attack Ciudad Juárez. Once at Bauche station Orozco was intercepted by Coronel Rábago coming north from Casas Grandes. As Rábago was arriving at Bauche station, one of his locomotives derailed, and as they unloaded their cavalry Orozco’s forces attacked Rábago, but the rebels were quickly repelled by the army’s automatic machine gun. In a defensive maneuver Rábago was able to retreat to Juárez with minimal losses from the battle at Bauche station and for their part, the revolutionaries gave up on the assault on Juárez since they did not have enough weapons and munitions and had not received orders from Abraham Gonzalez, Madero’s chief in Chihuahua. Orozco used this opportunity to give his troops a break and allow them to return to their homes in western Chihuahua until further notice (Sánchez 2011, 71–73). For his part, Navarro had successfully rebuilt the railroad tracks and telegraph network that had been destroyed by Orozco’s forces on the main trunk of the National Railways. The federal army also took on the tortuous task of repairing the railroad tracks and 20 bridges that Orozco had destroyed along the Northwest Railroad during his retreat (Gorostiza 2010, 72).

Madero had made several attempts to cross into the national territory to take command of the revolution, but his forces had been pushed back into the United States at the battles in Ojinaga. Nevertheless, Madero was no longer safe in the United States, where the American government was accusing him of violating its neutrality laws with Mexico while he was in its territory. The Díaz regime also requested that President Taft cooperate with his government, and Taft agreed, sending military forces to the U.S. border to stop the contraband of large shipments of firearms into Mexico.
Finally, during the army’s pursuit of Orozco west of Ciudad Juárez, Madero and his collaborators crossed the border into Mexico on February 14 to the east of Ciudad Juárez. At first Madero and his forces captured a passenger train in Villa Ahumada, south of Ciudad Juárez, on the central trunk of the National Railway, and moved south. They decided to abandon the train tracks since the military could move swiftly on these and instead decided to launch an attack on Casas Grandes, the only city in control of the army in northwestern Chihuahua. This was the first trial of fire of Madero leading forces into battle; however, Madero’s 600 men were soundly defeated and put to the chase by 500 army soldiers guarding Casas Grandes.

During the retreat, Madero was also shot in the arm, but his forces were narrowly saved from a massacre by Orozco’s forces, which arrived just in time to help defend Madero’s retreat. Salmerón (2006) asserts that despite his defeat, Madero gained the respect of the revolutionaries of Chihuahua for leading his troops into battle at Casas Grandes (226). Furthermore, Madero’s crossing into Mexico gave revolutionaries across Mexico another reason to redouble their efforts to continue the revolution. After retreating into the Guerrero region, Madero’s forces set up a general headquarters at the Hacienda of Bustillos, an estate requisitioned by the Revolution in Chihuahua. While at Bustillos, Madero introduced a military discipline into the rebel lines and managed to convince revolutionary leaders to unite around his leadership, despite his little experience in the battlefield. The revolutionaries accepted his leadership because he was the only figure with a national profile and because he had made the call for the revolt in the first place. At Bustillos Madero also became acquainted with Francisco “Pancho” Villa, whom Orozco exalted for his bravery and his second in command of the revolutionary forces. These two figures, Orozco and Villa, will become important figures in the subsequent phases of the revolution (Ávila and Salmerón 2014, 79; Salmerón 2006, 227).
The Siege of Ciudad Juárez

During their time in Bustillos, the Maderista troops regrouped and prepared for an attack on Ciudad Juárez. Mexico’s northernmost city along the central trunk of the National Railways was also an important customs station where weapons could be procured from the United States. Furthermore, if captured, it allowed Madero’s government easy access to American territory on the border from where he could negotiate recognition by the United States. Besides military and political considerations, logistically, Juárez was well connected with rebel held territories in Chihuahua to the southwest of the city, especially the towns along the Northwestern Railroads which could provide food, troops, and an escape route to Madera for the rebels (Portilla 1995, 101). Madero also instructed Benjamín Aranda and Rafael Rembao to repurpose the shops of the
Northwest Railroad, established in the mill town of Madera, to cast military cannons for the revolutionaries. Three cannons were delivered to the revolutionaries, and they were baptized “Margarita,” “Effective Suffrage,” and “No Reelection.” These cannons, though impressive, were also quite defective. Madero’s forces left Bustillos on April 7 using the Northwest Railroad. They planned on attacking Casas Grandes, but the city fell peacefully since the federal army had retreated to the Chihuahua city the day before (Sánchez 2011, 99–100).

As Madero’s forces moved north, a small but consequential rupture took place with a small group of revolutionaries north of Casas Grandes. The Magonistas of Galeana, who were flying a red socialist flag, had confiscated food and clothing from local shops and had given it to the poor of nearby towns. Such actions were not approved by Madero and when confronted, the Magonistas held a meeting and wrote a letter to Madero in which they informed him that the alliance between the PLM Liberals and the Anti-Reelectionists had been broken, and they demanded to be allowed to carry out the revolution separately. Madero considered these actions insubordination and commanded Francisco Villa to arrest them. According to Salmerón (2006), Orozco had refused to arrest and disarm the Magonistas, since two of their leaders had previously fought alongside Orozco. Villa, however, carried out the orders, but men close to Orozco escorted the Magonistas to prison in Ciudad Guerrero. Some escaped on the way there, and others escaped once in prison (227). Although this action seemed inconsequential at the time, these Magonistas would continue to pose a problem for Madero in the future.

After the Magonista incident, the Maderistas moved north to Ciudad Juárez on the Northwest Railroad. Seventeen kilometers west of Ciudad Juárez, Madero’s vanguard exchanged fire with the federal army at Bauche station, but, seeing the continuous arrival of rebel reinforcements, the federal army boarded a train and retreated to Ciudad Juárez. On April 16,
Madero’s forces arrived and set up camp at the Flores ranch, northwest of Ciudad Juárez and south of the Rio Grande (Río Bravo). From the camp at Flores, Madero sent a letter to Juan N. Navarro, general in charge of the defense of the city, and asked him to peacefully turn over the city to the revolution. Navarro refused and the Maderistas exchanged fire for a couple of days as they surrounded the city. For its part, the United States deployed 20,000 troops to the border of Ciudad Juárez and El Paso, ostensibly to avoid a spillover of the revolution to the United States, but mostly to protect American interests at the border if need be. Taft also told Navarro and Madero that if the firing reached the American side, the American army would intervene to avoid military conflict. Therefore, with little room for maneuver and advised from Mexico City, Navarro negotiated an armistice with Madero and both camps agreed to cease the hostilities between them in the regions of Ciudad Juárez, Chihuahua City, Casas Grandes, and Miñaca—the regions bordering the central trunk of the National Railways and the Northwest Railroad. The negotiations stalled at first—the regime offered Madero only the vice-president’s post—but through more negotiations, the armistice was extended into early May. The regime lost the capacity to negotiate day by day, not just in Ciudad Juárez, which was effectively under siege, but also because across the country the revolution initiated by Madero had spread.

While it was in Chihuahua where the revolution was strongest and most intensively involved the railroads, Madero’s revolt was not contained to that area. It spread to the Laguna, Durango, Sonora, Sinaloa, Baja California, Puebla, and Morelos right after Madero entered the country in mid-February. As Portilla (1995) has extensively documented, we can see a clear increase in military confrontations, uprisings, shoot-outs, and attacks on the military from February to May. For example, in November of 1910 there were 39 armed conflicts in seven states, and half of these happened in western Chihuahua. In December there were 44 conflicts in
nine states and in January 1911, 52 actions in seven states. But in February, we see a sharp increase in revolutionary activity, with 77 actions in sixteen states; in March, 145 armed actions in April; and 199 conflicts in May. Indeed, while the strongholds of the revolution had been in northern states, by February 1910 the revolution had become a national uprising. For example, in the agro-industrial region of the Laguna, the cotton-picking season that had been exceptionally good after two years of drought finally came to an end in January, and so by February these workers collaborated with the miners and ranchers of Durango to confront army troops through a regional guerrilla warfare. All along, the government troops that arrived in the railroad hub of Torreón coming from Mexico City were quickly sent north to put out the rebellion in Chihuahua. In Sonora, the forces under the Anti-Reelectionist leaders Benjamín Hill and José María Maytorena had also grown rapidly, and the small skirmishes of the beginning of the year had evolved to a statewide rebellion by the end of March. These growing revolts in the north, and the increasingly successful rebellions in Oaxaca, Veracruz, and the environs of Mexico City, placed great restrictions on the ability of the federal government to deploy troops to Chihuahua to stop the revolution (Portilla 1995, 96–105).

Besides the revolutionary activities in the north, another consequential uprising took place in the small state of Morelos south of Mexico City. The valleys of Morelos had been turned to sugarcane plantations during the colonial period and since the sixteenth century, indigenous communities had resented the dispossession of communal lands by the Spanish. Throughout the nineteenth century the communities resisted dispossession by the haciendas. Finally, with the introduction of the railroads and the integration of Morelos into the international sugar market, hacienda landlords intensified their efforts to disposes peasants from their ancestral lands. Emiliano Zapata emerged as a local leader in the town of Anenecuilco and surrounding
communities. His people occupied and cultivated lands expropriated from the landlords. When Madero’s call for a national uprising emerged in the Plan of San Luis, Zapata and other rural leaders joined the revolution because of its calls for land redistribution for the peasants and launched an agrarian rebellion throughout Morelos and neighboring states from February to March 1911. By early May, the peasant armies roaming the countryside controlled the entire state of Morelos, except the capital, Cuernavaca, where the army had concentrated its forces. Zapata’s southern rebellion and the threat it posed to the defenses south of Mexico City greatly constrained the government’s ability to supply troops to the north and instead forced it to defend its rear. The ability with which revolutionaries were able to take the advantage in many parts of the territory is related to their ability to navigate their local geographies, whether in the sierras of Chihuahua or the river valleys of Morelos. Furthermore, from the beginning of the confrontations, we see the federal army’s dependence on the railroad and their focus on maintaining control of capital cities and railroad hubs. As the rebellion grew, the federal army retreated more and more to its strongholds in the different state capitals and only defended strategic transportation railroad hubs like Torreón or ports like Veracruz so as to maintain capacity for mobility. However, in doing so it gave the revolutionaries free reign to roam and recruit new adherents in the countryside so that by May 1911, the government’s room for maneuver was completely compromised. It also bears repeating that the urban and strategic revolution that Madero had hoped for failed everywhere and instead, what we see are scenarios like those that developed in Chihuahua: rebellions led by rural groups and contained, ruling class sectors, the intelligentsia, and to a lesser degree, the urban working class. These cross-class alliances included peasants with and without land, sharecroppers, agricultural peons, indigenous groups, ranchers, muleteers, artisans, and industrial workers in textiles, mining, and railroads. But in addition to these, Madero’s revolution also
included middle class sectors, such as teachers, journalists, lawyers, merchants, and local elites historically displaced by the Porfirian regime (Ávila and Salmerón 2014, 85–86).

So by the time Madero’s forces had laid siege to Ciudad Juárez in early May, the negotiating position of Porfirio Díaz was greatly reduced. However, Madero refused to engage General Navarro in battle to take Juárez by force and instead adhered to the armistice. This situation was unbearable for an army that saw victory close at hand, and Villa and Orozco’s men grew impatient in the rebel camps three weeks into the siege. Madero refused to listen to his generals, so they came up with a plan to finally take over Juárez. On the morning of May 8, a small group of soldiers dressed in radiantly colored shirts advanced close to enemy lines to taunt the army’s soldiers; falling for the provocation, the federal soldiers began to fire on the rebel lines. The rebels fired back and more army soldiers joined in the defense, and by day’s end shots were being fired all along the lines of battle. Meanwhile, Villa and Orozco were on the Texas side, enjoying ice cream surrounded by numerous witnesses, feigning complete ignorance. Madero called on Villa and Orozco to order their men to stop the fighting, but they convinced Madero that it was too late to pull back. The fighting lasted two days and Navarro surrendered on May 10 (Salmerón 2006, 231–230). Thus, the fighting came to an end in Ciudad Juárez, but Madero’s collaborators used the national rebellion to their advantage and forced the government to concede to its main demands: the dismissal of Díaz from the presidency and Ramon Corral from the vice-presidency. Madero’s democratic revolution became a social revolution over a seven-month period that took over or destroyed key railroads and completely overwhelmed the military’s capacity for response. Historians have also observed that the federal army’s dependence on the railroad isolated them to the network and urban centers, giving revolutionaries free range to control the countryside (Portilla 1995; Gilly 2005; Knight 2010). Thus, the army’s presumed
strength became a weakness. This contradiction highlights the fact that the railroad can come with great advantages—such as speed and mobility. At the same time, it points to the limitations that come with overreliance on this infrastructure. Therefore, as the army was concerned with controlling and repairing the railroad, revolutionaries were given free rein to agitate and recruit peasants in towns and villages inaccessible to the railroad. The Díaz regime could have been completely defeated in the field of battle were it not for the political agreement reached by Díaz and Madero (Portilla 1995, 90).

Both Díaz and Madero had enough reasons to end the fighting. For example, Díaz knew that if he continued the fighting it would destroy his overwhelmed and under-confident military. Furthermore, Taft’s deployment of American troops to the border also made evident the lack of confidence on the part of the Americans for Díaz to succeed. Last, Díaz and his ministers were aware that the regime had no social support, and this was expressed by mass demonstrations that took place in Mexico City outside the national palace throughout the month of May. For his part, Madero was eager to negotiate a peaceful transition because the revolution he had called was threatening to surpass his leadership. Furthermore, he was also afraid that the revolution would unleash the class violence simmering under the surface and that had already been seen in places like Torreón, where a mob massacred members of the Chinese community and set fire to numerous businesses. Uncontrolled scenes like these could alarm the Americans enough to cause them to invade Mexico to protect American investments. Last, and more important, Madero did not identify with the calls for social justice emanating from the ranks of the revolution and instead believed that political changes would bring about the social change needed to improve the conditions of the oppressed. Thus, when Díaz agreed to step down and to call for new elections,
Madero declared the fighting over, since the revolution had ostensibly achieved the aims outlined in the Plan of San Luis.

On 25 May 1910, both sides signed the Ciudad Juárez Accords, which was recognized by the existing congress. Among other things, the accords stipulated that hostilities would cease and that the revolutionaries would put down their arms in due time. Despite these important concessions, the treaty maintained the legislative branch, most senators, and the military, intact. Concessions like these caused a split within the Anti-Reelectionist ranks, and even Pancho Villa warned Madero of the dangers posed by the military. Madero did not listen to these warnings from allies or critics and preferred a peaceful transition to power (Salmerón 2006, 236–239).

For Madero, the treaty with the government was satisfactory because it did not compromise the economic advances made by the regime in a costly war. In fact, one of the first points that was carried out in the accords was the repair of the railroad tracks in all of the regions touched by the revolution to achieve a return to normalcy. Never mind that the demands of the revolutionaries themselves had not been achieved; Madero had achieved what he believed to be most important: a peaceful political transition. To celebrate the victory of the revolution, Madero left Ciudad Juárez in early June and embarked on a week-long victory tour from the north to Mexico City on the railroad. Madero’s special convoy stopped in every town, and Madero was received by large crowds, even some federal army soldiers. Crowds would wait on the roofs of train stations and on top of trains and train cars to listen to Madero. In Celaya, Guanajuato, three trains of supporters joined Madero’s victory tour to Mexico City to celebrate his victory over the regime. It was a nation unrestrained. In his account of his involvement in this action, Victorio de Anda mentions the glamour at the train station of Lagos de Moreno, Jalisco. Fifteen years old at the time, de Anda says that it made him very emotional to see Madero and all the trains arriving...
in Lagos and staying for an hour of speeches, received by a multitude (PHO/1/46). Madero’s arrival in Mexico City was equally celebratory, and 200,000 people participated in his victory parade from Buenavista Station to the national palace in the Plaza of the Constitution. Just like Madero had relied on the railroad to carry out his political campaign and to launch his challenge to the dictatorship, the railroad also figured prominently during the revolution. Furthermore, his democratic revolution would culminate on a victory tour on the railroad as well (Gorostiza 2010, 79).

**Conclusion**

The importance of the railroads to the democratic revolution is undeniable since they figure prominently in the strategy of the Anti-Reelectionist movement as well as the armed phase of the revolution, especially along the Northwest Railroad and the Kansas City, Mexico, and Orient Railroad in Chihuahua. The capacities for mobility and fixity and the national network also allowed the revolutionaries to contend with the regime at the local, regional, and national scale, effectively jumping scales and down-scaling as the conditions of the struggle varied. Although railroad workers have been considered an “elusive” social group during the Mexican Revolution (Knight 1984; Gorostiza 2010; Yanes 2010), a re-examination of the oral histories of the National Institute of Anthropology and History, railroad worker histories in *Ferronales* (1956), Madero’s letters (1985), Estrada’s accounts (2011), Salmeron’s (2006) and Portilla’s (1995) work all reveal different degrees of involvement. To be sure, railroad workers do not appear as the most vocal supporters of Madero since they were victims of retaliation, as we have seen in the case of Santa Eulalia. Nevertheless, the role of railroad labor was present with important union leaders like Silvino Rodriguez of the Mechanic’s Union and Cástulo Herrera of the Boilermaker’s Union as founding members of Chihuahua City’s Political Club. These workers connected Madero directly
to their struggles for Mexicanization of the railroad, and they eventually fused with the opposition to create an Anti-Reelectionist Club. The role of the Mascorro family of railroad workers is also important and highlights how railroad workers had an outsized presence at key junctures of the revolutionary events. Based on the actions of these union leaders and those of the railroad telegraphist Eva Flores Blanco, we can see that railroad workers were active in their participation during the electoral campaign and, in some cases, also during the armed phase of Madero’s democratic revolution. Nevertheless, the shift towards armed struggle also saw the rise and fall of rebel leaders. As was the case with other men appointed by Madero, a previously indispensable union leader like Herrera proved incapable of leading in the field of battle, and the others, like Villa and Orozco, emerged from the ranks of the popular classes.

Madero’s use of the railroads and the extensive railroad network built up during the Porfiriato stands out for its innovative approach to political campaigning—at that time, a tactic virtually unknown in Mexico since the regime had come of age with the railroads and Díaz’s indisputable position as president had never forced him to use the railroads for a political campaign. Certainly, the railroads were used for very repressive political purposes, like the deployment of troops to put down uprisings or revolts, but as Salmerón (2006) argues, it was a different way of doing politics—one directly linked to the railroad and its expansive national network. Madero exploited the railroad mobilities available to him for the establishment of Anti-Reelectionist Clubs and his political campaigns—the railroad’s mobility, reliability and infrastructures were indispensable. Once Madero’s democratic movement called for an uprising, the relationship to the railroads by different actors became more complicated and seemed to depend on its ability to offer an advantage or a disadvantage. For example, the federal army’s heavy reliance on railroad mobility allowed the revolutionaries to undermine them by destroying
railroad tracks and bridges. Thus, General Juan N. Navarro had to use extra resources to repair the tracks since his soldiers and their artillery could not be deployed on horseback. Both parties destroyed the tracks when it was to their benefit and repaired them when they needed the railroad as well. For example, as Madero’s forces moved in on Ciudad Juárez through the Northwest Railroad, the revolutionaries exploited railroad mobilities for their benefit. Nevertheless, it is important to highlight here that in guerrilla warfare and in the mountainous terrains of western Chihuahua, the rebels had many more advantages, including what I would like to call an intermodal advantage, because they could use different forms of transportation for mobility, such as horses, but they could also travel on foot. This intermodal advantage, combined with their knowledge of the terrain, gave them superiority in a diverse field of battle.

Thus, we can establish that the railroads impacted the armed phase of the democratic revolution in many ways, but the deployment of troops and armaments seemed to be the main form of usage. Besides this, the destruction of tracks and bridges also figured prominently in this phase. As we saw with Madero’s forces, once a specific territory was under rebel control, the use of the railroad became more widespread and exploited—but when it wasn’t, the track was destroyed to sabotage the enemy. During this phase, the role of railroad labor and the contributions of labor geographies also fell in line with these main forms of use. However, as we will see in the following chapter, the use of the railroads will become even more expansive in the subsequent phase of the revolution, and the participation of railroad workers also becomes more pronounced and dynamic, producing revolutionary labor geographies.
Chapter 5: Rails to Revolution

Madero’s Failed Transition to Power

With the triumph of Madero’s democratic revolution, new prospects opened after three decades of the Porfuiran dictatorship. However, Madero’s negotiated transition alienated the most radical—and in some cases, his most powerful—followers. Furthermore, Madero’s decision to maintain the federal army and the institutions of the regime was a terrible miscalculation for which he was heavily criticized. Since the social contradictions that brought about the conflicts that led to the revolution were not resolved in the first phase, these resurfaced in the second phase of the revolution, known as the Constitutionalist Revolution. As in the first phase, the railroads and railroad workers were also involved in the revolutionary process; this time, however, railroad workers enthusiastically supported the rebels and moved the railroads in the service of the revolution. When these industrialized workers joined forces with the radical peasants and urban middle classes, they began to shape an embryonic national project that reached its zenith in the revolutionary governments in Chihuahua and in the southern commune of Morelos.

Soon after the signing of the Ciudad Juárez Accords, the new interim government was installed. Seeking a peaceful transition, the regime and Madero’s collaborators agreed that Francisco León de la Barra, the former Secretary of Foreign Affairs and Mexican Ambassador to the United States under Díaz, should lead the interim government. The interim government was responsible for three tasks: pacifying the nation, disarming the revolutionary troops, and organizing a new round of national elections. The disarming of the revolutionaries was the most complicated matter, but the Maderista leaders managed to convince their men to exchange their weapons for a financial compensation. Most men turned in their weapons, but another 10,000 remained armed (Ávila and Salmerón 2014, 91). Other revolutionaries were reluctant to disarm
their men since the new government failed to deliver on the third point of the Plan of San Luis, which promised to return the land to the communities that had been dispossessed under the regime. Such was the case of Pascual Orozco, who had hoped to run for the governorship of the state of Chihuahua to enact reforms, but he was quickly sidelined by Madero, who had chosen his longtime supporter Abraham González as governor. Madero’s new Constitutional Progressive Party swept the elections, but Madero’s party program did not address demands for land redistribution or demands for better working conditions for industrial workers (Ávila and Salmerón 2014, 90–100).

Besides a new government, the revolution had also brought with it new ideas about social change and had empowered popular sectors to take matters into their own hands. For example, in 1911 workers from all professions went on strike and demanded better working conditions, higher wages, and the reduction of the 16-hour day to a 10-hour day. Therefore, the Madero administration created the Department of Labor as a mediator between the conflicts of labor and capital. In fact, along with the creation of the Department of Labor, union organizing saw increased activity under Madero’s more tolerant government, and new labor associations were born. Able to organize openly, the union movement began to organize industry-wide labor confederations whose strength could be leveraged against the bosses (Leal 1988, 115–18).

Mexican railroad workers had welcomed the government’s nationalization of several railroads and their unification under the National Railways of Mexico, but they were impatient and expected Madero to deliver results quickly, since the Díaz government had dragged out Mexicanization for four years with minimal results. This nationalization also stipulated the Mexicanization of the National Railways, beginning with changing written materials and communications from English to Spanish, but these changes were slow. Seeking strength in unity,
in early 1910 railroad workers formed an industry-wide union, the Confederation of Railroad Societies, to pressure the government to speed up Mexicanization. However, as the Díaz regime turned its attention to the elections of 1910, their demands to speed up the process were largely ignored by the government (Parlee 1984, 471). For his part, Madero’s Anti-Reelectionist movement had taken up the cause of the railroad workers, and he had vowed to speed up Mexicanization if elected President. Railroad workers began to make important advances and in August 1911, the Alliance of Mexican Railroad Workers became the officially recognized union of office workers in negotiations with the National Railways (Rodea 1944, 131). Two weeks after being sworn in as president, Madero received a delegation of railroad workers. At this meeting, workers discussed the advances made towards Mexicanization; Madero expressed his support for their cause and stated that “the problem should be resolved with prudence but with energy, without sacrificing the rights of workers” (Gorostiza 2010, 131).

For their part, American railroad workers were not content with the Mexicanization, and in February 1912, the American Brotherhood of Locomotive Engineers and the Order of Railway Conductors sent a petition to the management of the National Railways demanding that they be recognized as the official representatives of the American workers and that the company establish exams, train orders, and instructions in English and Spanish. When management refused to meet their demands, the American train engineers and conductors went on strike in mid-April. For their part, Mexican conductors and engineers were waiting for this opportunity, training for years at clandestine technical schools, and when the strike came, the National Railways asked the Mexican unions for support. Taking advantage of this opportunity to speed up Mexicanization, they stepped in and replaced the American conductors and engineers without interruption in service along the network. Defeated, the members of the Brotherhood of Locomotive Engineers
and the Order of Railway Conductors closed their chapters in Mexico and abandoned the country. By 1913 only 400 U.S. citizens, mostly in management, worked for the National Railways (Parlee 1984, 473). Increasingly confident, labor unions began making more demands on the railroad companies, and after the American Brotherhoods had been defeated in the strike of 1912, the Mechanic’s Union began to make demands on the National Railways. The mechanics demanded an 8-hour day, a joint committee to plan schedules, fixed salaries, a one-hour break, holidays, and clear entry requirements for different posts. The company refused to agree to these demands and, in response, the mechanics went on strike with the support of boiler-makers, painters, and carpenters. By the end of 1912, 20,000 railroad workers were on strike and the National Railways were on the defensive. Taking advantage of the situation, the Mutualist Society of Railroad Telegraphists workers also threatened to go on strike, and, unable to replace these workers, the company caved in. By the end of January 1913, the National Railways agreed to all the demands of striking mechanics and telegraphists, giving rise to Mexico’s first collective contracts (Leal 1988, 144–51).

Madero had managed to bring labor unions into the fold, but he faced a bigger challenge with disgruntled peasant leaders. The disarming and disbanding of the revolutionaries proved to be a thorny issue, and the Agrarian Commission created by the Madero government fell far too short of the hopes raised by the Plan de San Luis, which had promised land redistribution to those unjustly dispossessed by the haciendas. Under Emiliano Zapata, a radical peasant leader in Morelos, the movement for land redistribution found a new leader and a new program. Zapata and his followers issued the Plan of Ayala, which called Madero a traitor to the revolution and called on revolutionaries to overthrow him and to finish the revolution that Madero had started. The Plan de Ayala also identified Pascual Orozco as a true agrarian leader and proposed him as the leader
of the insurrection. Orozco was reluctant to become involved in a rebellion against Madero; however, he received support from other disgruntled groups like the PLM, as well as the wealthy Terrazas-Creel clan, which sought to destabilize Madero’s new government by financing Orozco’s rebellion (Ávila and Salmerón 2014, 181–85).

Orozco’s rebellion achieved initial success, and it became a real danger to the stability of Madero’s government. Faced with this new threat, Madero relied on the military and sent the effective but ruthless General Victoriano Huerta to suppress the uprising. Besides Huerta, forces loyal to Madero also joined the government, including Francisco “Pancho” Villa, who had retired to private life after the signing of the Ciudad Juárez Accords. Villa’s guerrilla tactics were effective but he soon gained the enmity of Huerta, and after disobeying orders in the field, Huerta decided to send Villa to the firing squad. However, Madero’s brothers saved Villa from the firing squad and instead he was sent to prison in Mexico City (Salmerón 2006, 282). Besides Pancho Villa, Eugenio Aguirre Benavides also joined the fighting against Orozco. The Benavides and the Madero families had extensive business ties in the Laguna region; they had been staunch supporters of Madero’s Anti-Reelectionist party and had also fought alongside him in the revolution. Under Madero’s new government, Eugenio Aguirre Benavides had become mayor of the railroad hub of Torreón in the fall of 1911, and with the support of Rafael M. Rivera, Santiago Ramírez, and León J. Rodríguez—all railroad workers—he organized the Battalion of Railroad Volunteers. The ranks of the Railroad Volunteers grew rapidly as Orozco’s supporters in the region produced scarcity and insecurity in Torreón, and the battalion faced off against the rebels in numerous battles. However, with the arrival of Huerta, the battalion became fully incorporated into his army as an infantry brigade and in charge of logistical deployments of artillery and munitions (Leal 1988, 152–53). The experience gained by the Railroad Battalion would become
invaluable in future years and would gain railroad workers a place in the revolutionary movement.

Huerta’s vicious campaign against Orozco’s rebels had managed to isolate them in the north, and soon infighting within Orozco’s ranks undermined his military capacity. Furthermore, the American government prohibited weapons sales at the border, and this action further undermined Orozco’s rebellion and as his movement began to collapse and by May 1912, Orozco retreated to the mountains to regroup (Ávila and Salmerón 2014, 108–10). With the support of the federal army and the American government, Madero was able to put down peasant rebellions and to regain control of the territory.

**Apostles of Democracy**

A year after coming to power, Madero’s government seemed to be in a secure place, having overcome important obstacles. Nevertheless, Madero’s peace had been obtained by relying heavily on the army, and this was a weakness that was beginning to expose an unstable government. Under these circumstances, the army became a relevant force in the nation’s politics, something it had never been under Díaz, and aware of its newfound power, the higher ranks in the army began plot against Madero (Ávila and Salmerón 2014, 108–10). By late 1912, rumors of conspiracies became widespread and they reached those close to Madero, including the rebel General Pancho Villa, who had been sent to prison in Mexico City. In December 1912, Villa was in the Military Prison of Tlatelolco, and the rumors of Madero’s impending doom precipitated his escape from Tlatelolco on December 26. Villa eventually reached El Paso, Texas, and from there he wrote to Abraham González, reporting for duty and to inform him of the rumors about a coup against Madero. González was aware of these rumors and he knew he might need to raise a new rebellion if something happened, so he sent money to Villa and instructed him to stay put in El Paso until further notice.
The plot against Madero turned out to be true, and on 9 February 1913, the high-ranking General Manuel Mondragón orchestrated a prison break for Porfirian Generals Bernardo Reyes and Félix Díaz. Mongradón’s plot had been in motion for some months now, and other high-ranking generals critical of the regime were invited to participate, including Victoriano Huerta. Meanwhile, U.S. Ambassador Henry Lane Wilson negotiated with Huerta and his allies, and he began to orchestrate diplomatic pressure against Madero. On February 18, Francisco I. Madero and José María Pino Suárez, the vice-president, were both detained and sent to Lecumberri prison on Huerta’s orders. While in prison, they were promised that if they resigned their posts, their lives and those of their families would be spared and they would be exiled in Habana, Cuba. Soon after they signed their resignations, Madero and Pino Suárez were shot and their bodies dumped in the outskirts of Mexico City on February 22. During this chaotic period known as the “Decena Tragica,” Huerta secured the support of the army, the conservative Congress, and the American Embassy. Stunned and paralyzed, the nation mourned Madero and Pino Suárez as “Apostles of Democracy,” and they became important symbols in the ongoing struggle for democratic rights and social justice in the next wave of the Mexican Revolution (Ávila and Salmerón 2014, 115–18).

Soon after coming to power, Huerta began to staff his cabinet with close allies from different political currents that had been hostile to Madero’s liberal reformist government, including supporters of Félix Díaz and Bernardo Reyes, as well as Catholics and Porfirian politicians. Huerta was also aware of the military and logistical importance of the railroads and recruited renowned railroad leaders with the promise of implementing a speedy Mexicanization process. Figures such as José de Echegaray, Fedrico Rendón, Teodoro Larrey, and others joined the Huerta government and occupied top posts in the railroads (Yanez Rizo, 2010).
the unions into Huerta’s government also coincides with the formation of the Confederation of Railroad Unions in May 1913, a period which Leal (1988, 151) defines as the most organized for railroad labor until then. Consequently, this alliance with the counterrevolution undermined an organized intervention by railroad unions in the ranks of the revolution. This helps explain, in part, the absence of an organized railroad labor movement in the revolution, and thus my emphasis on small groups that did participate in the fighting as opposed to labor unions. Last, Huerta legitimized his regime by gaining the support of Pascual Orozco and his peasant army. Effectively, Orozco had joined the counterrevolution and thus gained the enmity of former allies. Besides seeking allies to legitimize his government, Huerta also got rid of his most powerful enemies and immediately imprisoned Abraham González, governor of Chihuahua and the heir to Madero’s political legacy. By early March, Huerta had full support of the army and the conservatives and the recognition and financial support of foreign powers (Ávila and Salmerón 2014, 121–25).

However, those loyal to Madero and the revolution organized their forces against Huerta’s coup d’état. Right away, the newfound sense of democracy and progress for labor unions that had been ushered in by Madero’s government began to close under the dictatorship. The coup also brought with it new plans for rebellion. Besides the Zapatistas, which continued to fight for land reform in the south under the Plan of Ayala, the governor of the northern state of Coahuila, Venustiano Carranza, declared himself in rebellion and launched the Plan of Guadalupe on 16 March 1913. In the Plan of Guadalupe, Carranza refused to recognize the usurper Huerta, arguing that he was violating the Constitution and the democratic process, and he called on others to support his Constitutionalist Revolution against the new regime. With the call for the Constitutionalist Revolution, new adherents from Sonora, Chihuahua, the Laguna Region, and
Coahuila joined Carranza in their fight against Huerta and supported him as the Supreme Leader of the Constitutionalist Army. Like Madero’s Democratic Revolution, the Constitutionalist Revolution was led by a moderate and sought to restore the rule of law. However, it also unleashed more radical forces in the north composed of small landowners, peasants, industrial workers, and radicalized middle classes loyal to Madero’s democratic project but wishing to take the social revolution further.

**Revolution in the North**

As soon as the uprisings against Huerta were declared, railroad workers were among the first to know. Railroad telegraphists, especially, were the ones to find out about uprisings, troop movements, and political shifts taking place under Huerta’s government. Their position at key intersections of information networks between Mexico City and the north allowed them to play an important role as informants throughout the Constitutionalist phase of the revolution, just as they had done during Madero’s revolution. Aware of the importance of railroad workers for the mobility of armaments and personnel, Carranza held a meeting in Monclova, Coahuila, in which he informed workers that the revolution needed their services to move military trains and that he needed volunteers to do so, since at the moment, the coffers of the revolution could not pay for their services. Moved by their loyalty to the slain Francisco I. Madero, railroad workers joined Carranza in the rebellion in large numbers. The maderista supporter Donanciano Martínez was the first to accept Carranza’s invitation, and he was joined by five more train conductors. These forces were also joined by several mechanics who had deserted the federal army’s military trains. The support of railroad workers proved invaluable to Carranza, and he quickly formed the Constitutionalist Railroads, headed by José Dominguez as administrator.13

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13 Besides José Dominguez, the following men also joined the Constitutionalist Railroads: Silvano Pruneda as assistant; Francisco G. De la Cerda as chief dispatcher; Ángel Peña, Secundino Sáenz, and Antonio Pruneda as chief
However, not all railroad workers joined Carranza; others sought out old rebel leaders. As Adán Uro García attests, he, a conductor, and three brakemen left to Ciudad Juárez, where they joined Francisco Villa’s Northern Division (PHO/1/41). The Constitutionalist Railroads allowed Carranza a great deal of maneuvering in the state of Coahuila, and the railroad connected him to the border town of Piedras Negras, across from Eagle Pass, Texas, which was an important point of contact with American diplomats and, even more important, guns and munitions. But despite his prestige and mobility in the region, Carranza managed to muster only 400 rebels under his direct orders. Furthermore, the well-defended federal army garrisons of Torreón, Monterrey, and San Luis Potosí made it difficult for Carranza to hold any important cities, and his stronghold at Monclova was vulnerable to attacks from these well-connected cities.

A series of uprisings in the western reaches of the Laguna region in March and April of 1913 allowed Carranza to stave off the full brunt of the federal army. Eugenio Aguirre Benavides, mayor of Torreón under Madero and former head of the Battalion of Railroad Volunteers, managed to muster a large force of former maderistas—including Raúl Madero, brother of the slain president—from the cities of the Laguna. Together with smaller groups from Tlahualilo, Lerdo and Gómez Palacio, Aguirre Benavides, and Raúl Madero conducted guerrilla warfare against the federal army throughout the spring and summer of 1913. Besides these guerrillas, other popular leaders like Rosalío Hernandez Cabral, Trinidad Rodríguez, Manuel Chao, and Maclovio Herrera joined the fighting and continuously harassed the federal army and its supply lines in Coahuila, Chihuahua, and the Laguna (Salmerón 2006, 303–10).

In addition to these forces, numerous contingents in the state of Durango declared themselves in open rebellion against Huerta’s government. Among these were popular agrarian telegraphists; Margarito Barrera as chief machinist; Federico Rodriguez as rail chief; and as patio chiefs Margarito Herrera in Piedras Negras, Cruz Cantero in Sabinas, and Jesús Rodriguez in Monclova (Gorostiza 2010, 134–38).
leaders like the “Lion of Durango,” Tomás Urbina, as well as Calixto Contreras, Domingo Arrieta, Severino Ceniceros, Orestes Pereyra, and Martín Triana. These men and their forces occupied small territories in their localities, which extended to a third of the territory of the state of Durango by the end of April. Nevertheless, these haphazardly organized forces managed to become a veritable army when they organized under the discipline and leadership of Tomás Urbina. By early June, these forces had managed to isolate the capital city of Durango from the army garrison at Torreón by occupying the railroads and, once isolated, they prepared for an offensive against that state capital. It was during the siege of Durango that a small group of railroad workers stole a locomotive and escaped the city to join rebel ranks. Among these railroad workers was Rodolfo Fierro, until then relatively unknown, but who would become one of the most famous—and feared—men of the Mexican Revolution. With a well-planned attack and a large force that outnumbered the federal army 2:1, the forces of Urbina managed to capture the city of Durango in twenty-four hours. Once in power, the agrarian leaders named an interim governor, they forced loans on the oligarchy to finance the revolution, and they armed and trained all volunteers who wished to join the revolutionaries. Besides these measures, they also extended a law of agrarian land reform and began to redistribute land to peasants, a policy that went against the wishes of legalist and conservative elements like Carranza, but who couldn’t oppose it by any means (Salmerón 2006, 323–29).

In an interview about his experiences at the time, the young railroad worker Gilberto Nava Presa, fifteen years old at the time, and his friends enlisted with the revolutionary forces in the ranks of Calixto Contreras and under the orders of General Natividad Reza. By early July, these newly reinvigorated forces extended their territory to the western reaches of the Laguna region near Torreón. Gilberto Nava Presa recalls leaving Durango on a military train to fight near
Pedriceña, where the machinist in the locomotive told him “Well, here we are, we have nothing left but to take the heat. There’s going to be a big battle here and you’re coming as my fireman.” Nava Presa remembers he could barely carry his heavy rifle but accepted anyway (PHO/1/26).

The battles in Pedriseña lasted for three days, and victory allowed the revolutionaries of Durango to be within reach of Torreón. However, they decided to wait for Carranza and his forces before launching an attack on the city. Upon the arrival of Carranza, he attempted to bring the forces of Contreras, Pereyra, and Urbina under his command—a total of 4,000 men. However, the plebeian elements at his disposal and the quarrels between rebel leaders undermined Carranza’s abilities and authority to organize his forces with military discipline. Thus, during the week-long confrontations, the rebel forces fought halfheartedly, and some deserted from the field of battle altogether. Unable to command these forces and unwilling to accept Carranza’s leadership, they all parted ways and vowed to continue the fighting on their own terms (Salmerón 2006, 331). The failure to command these forces in battle underscored the lack of authority that Carranza exercised with popular elements of the revolution. After the embarrassing episode in Torreón, Carranza travelled on train to Durango and then through the sierras to Hermosillo, Sonora, where a group of generals eagerly awaited the Supreme Leader of the Revolution.

As the revolution began in fits and starts, it is clear that railroad workers began to be attracted to different leaders of the Constitutionalist Revolution. For example, several joined Carranza, a wealthy landowner with official recognition as the Governor of Coahuila and the man who issued the call against Huerta. Other railroad workers, like Rodolfo Fierro, Nava Presa, and their comrades, joined plebeian leaders seeking radical reforms. Therefore, just like the revolution developed a radical and a conservative wing, railroad workers were also divided along these fault lines and looked to these two camps for political and military leadership. In this context, railroad
in small numbers began to join the revolutionary forces in small groups and to operate the railroads in the service of the revolution.

Figure 16. Rodolfo Fierro posing on horseback. Source: SECRETARIA DE CULTURA. -INAH.- FOTOTECA NACIONAL.-MEX. SINAFO: Núm: 15316 (ca.1915). Reproducción Autorizada por el Instituto Nacional de Antropología e Historia

The Return of Pancho Villa and the Birth of the Northern Division

One of the lessons from Madero’s democratic revolution is that the shift from a propagandist-electoral strategy to an insurrectionary movement forced new leaders to emerge. The shift from the electoral struggle to the armed struggle also brought needs for mobility in the vast northern deserts. These demands inevitably turned the railroad into a critical infrastructure to sabotage or control. The new call to arms issued by Carranza also led to new alliances and the rise of new leaders. Railroad workers had pledged to join the side of the revolution, and they rallied around influential figures that arose from the new conditions of struggle. Venustiano Carranza,
the First Chief of the Revolution, managed to ignite a rebellion in the northern state of Coahuila and to join his rebellion with that of other rebels from the Laguna and the state of Durango. Unlike the states of Coahuila, the Laguna, and Sonora, the state of Chihuahua had lost its leader in Abraham González after he was murdered by Huerta’s soldiers. The forces that had been loyal to Madero deeply resented this attack by Huerta and declared themselves in revolt against his dictatorship. Nevertheless, these forces were mercilessly persecuted by the federal army and forces loyal to Pascual Orozco, who had aligned himself with Huerta after a series of negotiations. Thus, without a clear political or military leader—effectively, a leadership vacuum—the rebels in Chihuahua focused on local campaigns. This leadership vacuum would be filled by Francisco “Pancho” Villa, whom we had last seen in El Paso awaiting orders from Abraham González. When Madero was murdered, Villa reactivated his contacts from Chihuahua and met with them at the bar of the Emporium Club in El Paso, Texas. Although Villa held meetings at bars and cantinas, he was a teetotaler all his life, and he much preferred ice cream, milkshakes, and peanut brittle. During the Mexican Revolution, El Paso became a meeting place for revolutionary leaders, reporters, exiles, and spies, and the Emporium was only one of many clubs, hotels, and casinos that saw plots and dealings. Villa also reconnected with his contacts in Chihuahua using homing pigeons, which he kept in his hotel room.

The night of March 8, Villa and eight companions entered the Mexican territory under the cover of darkness, crossing the Rio Grade. They had with them nine rifles, nine rented horses, 500 cartridges per man, two pounds of coffee, two pounds of sugar, and one pound of salt (Katz 1998, 205–06). As Villa entered western Chihuahua, old allies began joining his ranks, and when he arrived in San Andrés, his old soldiers from the first uprising joined him once again. Besides soldiers, other generals also joined him, and by mid-April he had occupied the small town of
Santa Isabel. By mid-May, he had amassed several hundred capable riders, familiar with guns and with the terrain. As previously mentioned, throughout the summer of 1913, the federal army was busy fighting against Carranza and the rebels of the Laguna and Durango. Besides army garrisons in Chihuahua City and El Paso, most of Chihuahua was under the command of the rural police, whose leader, Orozco, had been in Mexico City conducting negotiations with Huerta and who would not return until Villa and the revolutionaries posed a serious threat. Villa and his men sustained a battle with Orozco’s men in Casas Grandes and easily overcame them. After Casas Grandes, Villa settled in La Ascension and there he was joined by Juan N. Medina, an army colonel who had deserted Huerta and who put himself at the service of Villa. Medina helped Villa re-organize his forces along military lines, with regiments, chains of command, and rudimentary military formations. While at La Ascension, Villa also received rebels from Sonora who had left that front upset with Carranza and his new general, Álvaro Obregón. As Villa’s notoriety increased, he also received two envoys from Carranza who asked him to recognize the Plan of Guadalupe and Carranza as leader of the revolution; Villa agreed but with two conditions: that military operations in Chihuahua would not be subordinate to those in Sonora and that he would not have a military chief above him (Salmerón 2006, 319–20).

Though tenuous, the agreement worked and Carranza accepted the conditions; nevertheless, both men represented different wings of the revolution and would constantly be at odds. As the actions by Carranza demonstrated, he was interested in administering a formally military and legalist revolution, whereas Pancho Villa’s actions sought to deepen the social revolution that Madero had aborted. For example, unlike other rebel leaders, Villa did not issue a manifesto; instead, he undertook what the historian Friederich Katz (1998) referred to as “an original political campaign”:
A few days after his arrival in Mexico, he occupied one of the largest Terrazas haciendas in Chihuahua, the estate of El Carmen. Its administrator was particularly unpopular among the estate’s peons. Not only did he claim for himself the right to sleep with the peon’s wives the first night after their marriage, but he was also notorious for having recalcitrant peons lashed to stakes outside the main building of the hacienda. Debt peonage, largely abolished in other parts of Chihuahua, still existed on this estate, and the debts of parents were transmitted to their children. Villa publicly executed both the administrator and an aide, opened up the granaries of the hacienda, and distributed large amounts of food to the peons. He made a speech to the assembled estate laborers, telling them not to tolerate similar treatment in the future and to elect a representative who would oversee the distribution of food from hacienda provisos. He carried out similar acts of retribution and redistribution on the estates of San Lorenzo and Las Animas at Saucito, where the increasingly familiar cry of “Viva Villa!” was accompanied by “May God shield and protect you!” (210)

Villa’s increasing popularity in Chihuahua gained him new adherents and widespread support with the population. This support translated into boots on the ground and by August, Villa was ready to enter the field of battle in earnest. The first real test to Villa’s army came with the retaking of San Andrés, which was now defended by General Félix Terrazas and 980 army soldiers, who faced off against Villa’s 1,025 peasant rebels. At the battle of San Andrés, the federal army had entrenched itself in the little town and built up defenses with two cannons. The rebels decided to isolate the town and directed their attack on the telegraph and the railroad tracks, which prevented the army from receiving reinforcements and supplies. Once isolated, the attack was launched against the artillery, and once lost, the federal army retreated in chaos—of the 900 soldiers under Terrazas, only 50 made it back to Chihuahua City. Villa’s victory at San Andrés raised the morale of Villa’s army and his profile as a capable general. Equally important, it provided him with the loot of seven military trains, two cannons, 421 rifles, and 20,000 cartridges. But Villa didn’t rest on his laurels, and aware of an incoming army battalion to avenge Terrazas, he decided to leave San Andrés and to seek out old allies, whom he found in Ciudad Camargo, a small city on the central railroad south of Chihuahua City. Camargo was occupied by
Maclovio Herrera, and there Villa was received by jubilant crowds. He convinced Herrera to join a new attack on Torreón, until then the undefeated bastion of the federal army and a key node in the railroad network to all cardinal points. From Camargo, Villa and Herrera moved to Jiménez, also on the central railroad, and there they joined Tomás Urbina and other revolutionaries who had dispersed since Carranza’s failed attack on Torreón a few months before. Villa and his new adherents moved further south on the railroads to Bermejillo and took over the hacienda of La Loma. There, he summoned the generals of Durango and the Laguna to devise a new plan to attack the army base at Torreón (Salmerón 2006, 345–47).

On September 29, Villa, Tomás Urbina, and Maclovio Herrera arrived at La Loma and were joined there by Orestes Pereyra, Calixto Contreras, and Severino Ceniceros, from Durango, and Eugenio Aguirre Benavides, Raúl Madero, Sixto Ugaldo, and their men, from the Laguna. At the Laguna, the rebels discussed possible captains to lead the attack on Torreón. Tomás Urbina, Pancho Villa, and Calixto Contreras emerged as clear leaders, but after much discussion and vacillation, Contreras declared himself incapable of leading the struggle forward and recommended that they all choose Villa for his organizational capacity, his abilities in the field, and his indisputable bravery. All others present agreed unanimously to hand Villa the leadership of their new army and thus, on 29 September 1913, was born the Northern Division—the most formidable revolutionary army in Mexican history (Salmerón 2006, 347). With the birth of the Northern Division, Huerta’s federal army now had four unified movements organizing against him. By the end of September, Carranza had managed to lead the Northwestern Division based in Sonora, and his followers led the Northeastern Division, in Coahuila and Nuevo León. The Northern Division, led by Villa, and the Southern Liberation Army, led by Emiliano Zapata from his base in Morelos, represented the most radical, redistributive wing of the Constitutionalist
phase of the revolution and their program—really their praxis—corresponded to the demands of the popular classes. Thus, after the meeting at the hacienda of La Loma, the Northern Division represented more than the amalgam of local caudillos or regional demands; it represented a whole new social project in embryo, which started to establish a new social order as it began to claim territory—often literally—in northern Mexico.

With the newly formed Northern Division under his command, Villa planned the attack on Torreón and divided into brigades. The forces of the northern division descended upon the outskirts of the city, where the vanguard of Villa’s rebels confronted federal army outposts, including at the train station of Avilés, where the federal army was soundly defeated and where the railroad workers joined the side of the rebels and sabotaged the locomotives of the federal army before it could make its retreat to Gómez Palacio, an industrial suburb of Torreón. On September 30, the suburbs of Lerdo and Gómez Palacio fell to the brigades led by Villa and Herrera. By day’s end, the army had withdrawn deep into Torreón, and wishing to avoid the inevitable, General Eutiquio Munguía retreated toward Matamoros, in the early hours of the morning, guarded in the rear by Bejamín Argumedo, a general of Orozco. With Torreón under his control, Villa gained the respect of his men and those that had been loyal to Madero, among them several members of the Madero family that now fought in Villa’s ranks. Furthermore, unlike Carranza’s failed attempt to take Torreón, Villa had taken the strongest federal stronghold in the Laguna, a city considered the pride of Porfirio Díaz’s regime for its productivity, rapid urban growth, and industrialization. Villa’s takeover avoided looting and immediately resorted to enforced loans on the local aristocracy to fund the revolution. He also designated Eusebio Calzada as his railroad superintendent, aided by Julio and Natividad Reza Pérez, and Rodolfo Fierro, whom he made responsible for organizing the military railroads for Villa’s next campaign. Villa
reorganized his men and supplied the Northern Division at a feverish pace before moving north. Though an important node in the railroad network, Torreón was vulnerable since the federal army had bases in the north, east, and south of that city. Villa did not wait for a confrontation and instead moved to Chihuahua, where he planned to take over the capital of that state, Chihuahua City, and where he directed his troops on October 2 (Salmerón 2006, 348–51; Garciadiego 2013, 142).

**Revolutionary Chihuahua**

After taking Torreón successfully, Pancho Villa and the Northern Division left the Laguna and moved north to Chihuahua, which contained several revolutionary strongholds and where Villa enjoyed great popularity. He gathered his forces in Ciudad Camargo, on the central railroad, where he was joined by Carranza’s man on the ground, Manuel Chao, and moved on to the outskirts of Chihuahua City, establishing a rebel camp in Ávalos, six kilometers south of the capital. The city was well defended by 6,500 men, 4,000 of whom belonged to the forces of Pascual Orozco. On November 6, Villa began the attack on the city with heavy artillery firing on enemy positions and followed these with a large frontal attack on the city. However, the defenses of the federal army resisted the attack, and these advances were met and pushed back by equally determined forces at every turn. Seeing the futility of his attack, Villa decided to stop the frontal attacks on the following day and made a strategic change; instead of taking Chihuahua, the Northern Division would take Ciudad Juárez. Thus, Villa ordered General Manuel Chao to retreat with the trains, artillery, infantry, and women to the safe heaven of Parral, while he would move north. The plan was carried out, and on the evening of November 12, Chao moved south sounding locomotive whistles as loudly as possible to throw off the federal army. Meanwhile, Villa and his men moved north by horse at full speed, reaching the station of El Sauz by the evening of the
following day. Luckily for them, a train loaded with carbon was arriving at the station. The conductor and the telegraphist were unaware of Villa’s presence and the rebels ambushed the train and captured it at the station (Salmerón 2006, 357–60).

What followed is one of the great exploits of Villa known as “Villa’s Trojan Train”; Villa ordered several brigades to destroy the rails south towards Chihuahua and to remain with the artillery at the nearby hacienda of El Sauz, while he and a group of 2,000 unloaded the coal train and embarked on the cargo cars. Victorio de Anda, a Madero supporter who joined Calixto Contreras to fight in Torreón, was among the men who were charged with unloading the coal and joining Villa on the Trojan Train. The revolutionaries then forced the telegraphist to message Ciudad Juárez, reporting that the carbon train had been derailed and could not move south due to destroyed track. The dispatcher in Ciudad Juárez ordered the conductor to resolve the problem as best as he could and to return to Ciudad Juárez, reporting the whereabouts of the train at every stop as it moved north. The revolutionaries moved north, doing as they were told and then cutting the telegraph wires as they moved south, and past midnight in the early morning of November 15, the train reached Ciudad Juárez and pulled into the station, which became the base of the attack. Caught off guard, in the casinos and saloons of the city, the federal army garrison of 600 guarding Ciudad Juárez was easily overcome by the surprise attack. De Anda and his group took the city by surprise, surrounding the four army barracks. After two hours of fighting, the federal army forces surrendered, although many escaped north to the American side in El Paso, while forces loyal to Orozco managed to get on their horses and escaped south to Chihuahua City. Besides being an important victory, Villa’s control of Ciudad Juárez allowed him to tax gambling houses, resources that he used to form a commercial agency in charge of procuring armaments and munitions for his forces in El Paso and other U.S. cities (Salmerón 2006, 360–61; PHO/1/46).
This feat earned Villa fame across Mexico and across the border, where the American government had deployed a sizable number of soldiers and had warned the revolutionaries that it would intervene if the fighting spilled over the border. Villa could not risk losing Ciudad Juárez to an American intervention since it was the main entry point of guns and munitions for the Northern Division. Thus, he resolved to confront the federal army’s offensive near the train station of Tierra Blanca, in the desert south of Ciudad Juárez. Villa chose the location based on its geographic terrain and took up positions in the northern reaches, choosing the firm ground and the availability of water. He left the dry, sandy terrain for his enemies, who arrived on the night of November 22 and had no choice but to set up camp in the area Villa had chosen for them.

The Villistas had the upper hand throughout the confrontation, thanks to steady supply lines supported by trains from nearby Ciudad Juárez. Nevertheless, the harsh desert weather affected both camps. Awake since five in the morning and waiting for orders, the railroad worker turned rebel fighter, Victorio de Anda, wrapped himself in a thick blanket to stave off the freezing temperatures. A photograph of the camps at Tierra Blanca gives us an idea of the place and its conditions, and in it we also see Pancho Villa (wearing a white hat and a blanket with white stars, near the tracks on the bottom right) and his men around. In this bustling scene, we also see men on foot, on horses, and a railroad locomotive.
As the battle raged on, de Anda experienced hunger and thirst in the desert sun, made worse by the attacks that had to be carried out crawling through desert shrub. Few advances were made by either side. On the second day of the battle, in an act of desperation, the government forces unloaded the artillery from their trains and prepared to attack the Villista lines. But while Salazar’s troops prepared the artillery, they became stuck in the sandy terrain, and Villa and his
soldiers saw an opportunity to launch a swift cavalry attack that swept through enemy lines. De Anda witnessed the attack by Maclovio Herrera, who “mounted an offensive with his whole brigade of 500 men and launched himself into battle like a cyclone, a grand offensive to vanquish or perish.” The panic-stricken army soldiers scurried back to their trains, and as the army began to retreat, Rodolfo Fierro engaged in one of those legendary moments of the revolution, when he jumped on his horse and galloped at full speed behind a government train. In Pancho Villa’s memoir, he recalls that “in a rain of bullets Fierro leaped from his horse to the train and climbing from one car to another reached the brake cylinder, released the air, and stopped the train. A beautiful feat!” (Guzman 1975, 122). Villa’s army surrounded the escaping trains and, as de Anda recalls, they slaughtered the army “like sheep.” The victory at Tierra Blanca decisively boosted the morale of Villa’s troops, and this important victory allowed Villa to consolidate his power in the north. In addition to three captured trains, Villa also amassed ten cannons, including two large ones, “El Roro” and “El Chavalito,” which, combined with “El Niño” that had been captured in the battle of Torreón, meant that Villa had considerable firepower in his possession. The battle at Tierra Blanca earned Villa the trust of his generals and made him the undisputed leader of the revolution since he was more famous and far more popular than Carranza (Salmerón 2006, 362–64; Aguirre Benavides 1965, 73–74; PHO/1/46).

After Villa’s victories in Ciudad Juárez and Tierra Blanca, the federal army’s garrison in Chihuahua City felt vulnerable, and they retreated to Ojinaga, abandoning the state capital. The forces of Manuel Chao and Pereyra immediately set up camp along the railroad tracks outside the city and waited for Villa’s return to the capital. On December 8, Villa’s Northern Division travelled south on the railroads and made a triumphal entrance into Chihuahua City, where he was received by enthusiastic multitudes. That same day, Villa became the governor and immediately
got to work to improve the economic and living conditions of the people of the state of Chihuahua. Chihuahua had been in an uninterrupted state of war for five years, since Madero’s democratic revolution, and Villa knew that he had to make concrete reforms to appease the rebels that had taken up arms. To carry out his revolutionary project, Villa invited the politicians who had been in office with Abraham González, the maderista governor murdered by Huerta. The state’s politicians had been exiled in El Paso and, hearing of Villa’s exploits, returned to join him. One of the men among these figures was Silvestre Terrazas, a well-known journalist and partisan of Madero who became a loyal supporter of Villa’s cause. Together with Chao and Terrazas, Villa enacted a set of reforms that quickly gained him the trust of the popular classes as well as the middle classes. Four days after coming to power, Villa issued the “Decree of the Confiscation of Properties of the Enemies of the Revolution,” which confiscated the properties of members of the local bourgeoisie, naming the families of Terrazas and sons, Creel, Falomir, the María Sánchez family, the Culity brothers, the Luján brothers, Francisco Molinar, “and all of their family members and their accomplices that joined them in their dirty dealings and fraudulent associations that in previous times was called politics” (Ávila and Salmerón 2014, 210). The expropriation allowed Villa to sell large herds of cattle to exchange for weapons and munitions in the United States and to procure artillery and other materiel for his troops. He also reduced the price of meat to 15 cents a kilo and provided daily food rations for the unemployed. Numerous railroad workers who participated as soldiers or train workers during this period attested to the selling of cattle, among them Victorio de Anda and Manuel Mendoza Domínguez, who claimed that Villa had a group of hacienda administrators and emissaries that worked in El Paso selling expropriated cattle by the thousands (PHO/1/46; PHO/1/155). One of Villa’s most controversial measures was the confiscation and expulsion of the Spaniards of Chihuahua. Villa reasoned that since the colonial
period, they had supported the most reactionary forces that had oppressed Mexicans and that they
had, until recently, supported Huerta as well and therefore were no longer welcome in the state of
Chihuahua.

During his time as governor, Villa also repaired the railroads and named Eusebio Calzada
administrator of railroads and telegraphs for the Villista-dominated regions. In addition, Villa
named Rodolfo Fierro the superintendent of the railroads. With these measures, railroad traffic
became regularly scheduled between Ciudad Juárez, Chihuahua City, and Jiménez, all along the
central railroad, the spinal cord of the state of Chihuahua. Guillermo Fernández Flores, a railroad
worker, labor activist, and supporter of Madero who had joined the Northern Division also
witnessed the changes in Chihuahua. He saw an improvement in their salaries since both Villa
and Carranza “had achieved their military objectives thanks to the help that we gave them…the
movement of troops for the combats was based on the movement of trains and those of us who
moved the trains were important factors” (PHO-Z/1/122). Besides the railroads, the Northern
Division also seized the “Rio Florido” textile factory and repurposed it to make uniforms and
boots for his troops. Villa and his advisors also created the Bank of the State of Chihuahua and
backed its assets with those they repossessed from the Mining Bank of Chihuahua and the
500,000 pesos in silver they had found hidden in one of the walls of the bank. Together with the
assets of the haciendas and the Mining Bank, the new State Bank issued its own currency with the
face of Madero on one side and that of Abraham González on the other.

Besides important reforms, Villa also delivered to the mass of peasants that had joined his
army and he immediately began to engage in land redistribution and promised every member of
his army a parcel of land which would be supported by an agricultural bank and an agricultural
school to teach farmers the best way to grow their crops. In keeping with the democratic
principles of Madero but imbuing them with a popular spirit, the state also granted autonomy to its municipalities and political representation based on social sector or union membership, a measure inspired by social Catholicism of people like Silvestre Terrazas. As Villa prepared himself for future battles, he created the Sanitary Brigade—the only one in the Revolution—which consisted of hospital trains for his soldiers, staffed by doctors, nurses, and railroad workers. José Nonaka, a Japanese immigrant to Mexico, became part of Villa’s Sanitary Brigade, and he remembers that Villa cared for his soldiers and spent resources on medicine and hospital facilities for them (PHO/1/57). Seeing the tremendous success of Pancho Villa in Chihuahua, numerous followers of the slain Madero also flocked to his side and supported his revolutionary government. One of these men was General Felipe Ángeles, a cultured man of principles, the former rector of the military college, and a staunch supporter of Madero. He was also highly regarded for his command of military artillery, and since Villa needed an artilleryman for his next battle to re-take Torreón, Ángeles became immediately useful for the Northern Division (Ávila and Salmerón 2014, 209–17; Salmerón 2006, 384–407).

Figure 19. Soldaderas cooking on the roof of a train car. Source: SECRETARIA DE CULTURA.-INAH.-FOTOTECA NACIONAL.-MEX. SINAFO: Núm: 6388 (ca. 1914). Reproducción Autorizada por el Instituto Nacional de Antropología e Historia.
Figure 20. Soldiers and a woman washing in a railroad yard. Source: SECRETATIA DE CULTURA.-INAH.-FOTOTECA NACIONAL.-MEX SINAFO: Núm: 6251 (1914). Reproducción Autorizada por el Instituto Nacional de Antropología e historia

Figure 21. Twisted rails, 1912, by Hugo Brehme. From Miguel Ángel Berumén, Mexico: Fotografía y Revolución (2009).
Figure 22. Campaigns of the Northern Division 1913–1914.
Rails to Revolution

During Villa’s time as governor of Chihuahua, the Northern Division became the most well organized and best equipped of the military divisions of the Constitutionalist Army. During the three months it was based in Chihuahua, the Northern Division used the railroad that connected to Ciudad Juárez and El Paso as a conveyor belt, bringing arms and munitions south and sending cattle and agricultural goods north. Relying on the entire agricultural and industrial base of the state of Chihuahua to support its revolutionary efforts, the Northern Division began to move south in an offensive against Huerta’s armies that had re-taken the Laguna region. In short, the capacity of mobility achieved by the Northern Division during this period is directly tied to the expropriation of the ruling classes of Chihuahua. With the support of the state, the railroad and the railroad workers, the Northern Division could jump scales from the local to the regional, and the national arena by relying on vast infrastructures and resources in the state of Chihuahua and the Laguna region. Nevertheless, the scalar tensions would reassert themselves once the Northern Division tried to advance south outside of its regional base in the north (Herod 2003; McFarland 2014; Savage 2006 Smith 1992).

In mid-March, the trains began departing south from Chihuahua, transporting 20,000 soldiers, their horses, the artillery, three cannons, women, children, and the press, among them the American journalist John Reed. Reed was sent on assignment for Metropolitan Magazine and he arrived in Chihuahua just in time to take part in Villa’s march south to Torreón. In his reports Reed painted some of the most eloquent portraits of life on the railroad during these heady days. From his writings, we can glimpse some of the most picturesque descriptions by any observer of the daily life of the thousands of men and women who lived on the trains as the Northern Division moved to the front.
John Reed wrote of his travels on the first leg of the trip south, and notes at length the movement on the railroads:

I went south from Chihuahua on a troop train bound for the advance near Escalon. Attached to the five freight cars, filled with horses and carrying soldiers on top, was a coach in which I was allowed to ride with two hundred noisy *pacificos*, male and female. It was gruesomely suggestive: car windows smashed, mirrors, lamps and plush seats torn out, and bullet holes after the manner of a frieze. The time of our departure was not fixed, and no one knew when the train would arrive. The railroad had just been repaired. In places where there had once been bridges we plunged into arroyos and snorted up the farther bank on a rickety new-laid track that bent and cracked under us. All day long the roadside was lined with immense distorted steel rails, torn up with a chain and a backing engine by the thorough Orozco last year. There was a rumor that Castillo’s bandits were planning to blow us up with dynamite sometime during the afternoon…

Peons with straw sombreros and beautifully faded serapes, Indians in blue working clothes and cowhide sandals, and squat-faced women with black shawls around their heads, and squalling babies—packed the seats, aisle and platforms, singing, eating, spitting, chattering… farther to the rear two men sat across the aisle from each other, each with a white sack containing something that moved and clucked. As soon as the train started these bags were opened to disgorge two large roosters, who wandered up and down the aisles eating crumbs and cigarette butts. The two owners immediately raised their voices. “Cockfight, señores! Five pesos on this valiant and handsome rooster. Five pesos, señores!” The males at once deserted their seats and rushed clamoring toward the center of the car. Not one of them appeared to lack the necessary five dollars. In ten minutes the two promoters were kneeling in the middle of the aisle, throwing their birds. And, as we rattled along, swaying from side to side, swooping down into the gullies and laboring up the other bank, a whirling mass of feathers and flashing steel rolled up and down the aisle. That over, a one-legged youth stood up and played “Whistling Rufus” on a tin flute. Someone had a leather bottle of *tequila*, of which we all took a swig. From the rear of the car came shouts of “*Vamonos a bailar!* Come on and dance!” And in a moment five couples, all men, of course, were madly two-stepping. A blind old peasant was assisted to climb upon his seat, where he quaveringly recited a long ballad about the heroic exploits of the great General Maclovio Herrera. Everybody was silently attentive and showered pennies into the old man’s sombrero. Occasionally there floated back to us the singing of the soldiers on the box-cars in front and the sound of their shots as they caught sight of a coyote galloping through the mesquite. Then everybody in our cars would make a rush for the windows, pulling at their revolvers, and shoot fast and furiously.

All the long afternoon we ambled slowly south, the western rays of the sun burning as they struck our faces. Every hour or so we stopped at some station, shot to pieces by one army or the other during the three years of Revolution; there the train would be besieged by vendors of cigarettes, pine-nuts, bottles of milk, *camotes*, and *tamales* rolled in corn-husks. Old women, gossiping, descended from the train, built themselves a little fire and boiled coffee. Squatting there, smoking their cornhusk cigarettes, they told one another interminable love stories (Reed 2011, 149–51).
Reed was one of the few American journalists on the ground during the Mexican Revolution, and the only American to accompany the advance guard of the Northern Division on its way to the front. His writings depicting life on the railroad are lifelike, as are those where he relates life off the railroad, on the side of the trains waiting in the desert for the repair car to fix the destroyed rails and bridges. As the Northern Division moved south to Torreón, it approached Bermejillo, the railroad intersection with Mapimí and Tlahualilo. At Yermo the mass of soldiers began to prepare their horses. Again, Reed’s observations allow us to picture ourselves in the middle of the commotion:

At Yermo there is nothing but leagues and leagues of sandy desert, sparsely covered with scrubbly mesquite and dwarf cactus, stretching away on the west to jagged, tawny mountains, and on the east to a quivering skyline of plain. A battered water tank, with too little dirty alkali water, and demolished railway station shot to pieces by Orozco’s cannon two years before, and a switch track compose the town. There is no water to speak of for forty miles. There is no grass for animals. For three months in the spring bitter, parching winds drive the yellow dust across it. Along the single track in the middle of the desert lay ten enormous trains, pillars of fire by night and of black smoke by day, stretching back northward farther than the eye could reach. Around them, in the chaparral, camped nine thousand men without shelter, each man’s horse tied to the mesquite beside him, where he hung his one serape and red strips of drying meat. From the fifty cars horses and mules were being unloaded…

Late in the afternoon the Brigade Zaragoza rode away southeast over the desert, and another night came down. The wind rose steadily in the darkness, growing colder and colder. Looking up at the sky, which had been ablaze with polished stars, I saw that all was dark with cloud. Through the roaring whirls of dust a thousand thin lines of sparks from the fires streamed southward. The coaling of the engines’ fire boxes made sudden glares along the miles of trains. At first we thought we heard the sound of big guns in the distance. But all at once, unexpectedly, the sky split dazzlingly open from horizon to horizon, thunder fell like a blow, and the rain came level and thick as a flood. For a moment the human hum of the army was silenced. All the fires disappeared at once. And then came a vast shout of anger and laughter and discomfiture from the soldiers out on the plain, and the most amazing wail of misery from the women that I have ever heard. The two sounds only lasted a minute. The men wrapped themselves in their serapes and sank down in the shelter of the chaparral; and the hundreds of women and children exposed to the cold and the rain on the flat-cars and the tops of the box-cars silently and with an Indian stoicism settled down to wait for dawn. In General Maclovio Herrera’s car ahead was drunken laughter and singing to a guitar…” (Reed 2011, 171–78)
Rich and dazzling, Reed’s descriptions also convey some of the human suffering and the hardship of those involved in the revolution, especially women\textsuperscript{14}. Elena Poniatowska (1999) remarks that women, especially those that went to the front, “…ended up with the worse of the Revolution” (13). Most women who participated in the revolution did so as soldaderas, a word of Aragonese origin that describes a soldier’s wages, their “soldada,” which they used to hire a female servant who would cook for them and accompany them to battle. Poniatowska writes that this occupation was one way of making a living and supporting children and that though most were attached to a man, they were also free to work for someone else. Most soldaderas, however, followed the troops, selling beef jerky and making tortillas and food for their soldiers. Some participated in prostitution and many also joined the men fighting at the front, although, for the most part, the generals regarded soldaderas as a nuisance that came with the war. Besides Zapatistas, most generals, including Pancho Villa, rarely took special considerations for their wellbeing and comfort (17). The role played by women in the social reproduction of the revolution is also understudied. It is evident, however, that while railroad mobility often meant time-space compression to the revolutionaries, for many women it also meant time-space expansion and fixity since they usually stayed behind to guard the encampments, to procure food, to feed the hungry and tend the wounded (Katz 2001; Jung and Anderson 2016).

Poniatowska writes that the locomotive “is the great heroine of the Mexican Revolution. She too is a soldadera who moves with confidence, huffing and puffing, arriving late, true, but only because she’s overloaded. She lets off steam and comes to a stop at the platform so that the men can penetrate her again with their rifles held up straight. There the troops get on and sit on

\textsuperscript{14} See PHO/1/94 Medina, Severino.
top of her. She bears everything. That’s why the enemy forces want to blow her up to the sky” (26). Though an allegorical comparison, the role of the locomotives, like that of women, has been overlooked in the historiography of the Mexican Revolution, and the contributions of women to the social reproduction of the revolution are mostly absent from standard histories. This absence completely ignores their contributions as informants, fighters, spies, nurses, scouts—and of course, cooks—a key support network for operations in the field. From Reed’s writings, it is obvious that their role in food preparation was key; even if it was just coffee and tortillas, women were also indispensable and in his accounts, this is evident. While the troops moved, the soldaderas also moved with them, and while the troops fought, the women set up camp, defended the camp, and waited for their soldiers, who would arrive hungry or in need of nursing. These actions don’t often make the pages of history, but no doubt are indispensable to its making.

As the Northern Division arrived in the northern reaches of the Laguna region in mid-March 1914, skirmishes between the advanced guard of the rebels and the federal army gave way to what would be the largest and bloodiest military confrontation of the Mexican Revolution: the second battle of Torreón. By late March, when Villa’s forces were on the offensive south, the federal army had turned the Laguna region into a militarized base, with three defensive perimeters in its northern approach where the Villistas would arrive. The defensive strategy consisted of three defensive perimeters, built with trenches along the irrigation canals and with makeshift fortresses in the surrounding hills, stocked with machine guns and light artillery. The cities of Lerdo and Gómez Palacio were turned into militarized zones, and these were used to defend Torreón, the command center of two brigades of the federal army. In this battle, the Villistas had the upper hand with 12,000 to 14,000 rebels to the army’s 7,000 soldiers, who, nevertheless, had 19 cannons, 35 machine guns, and good defenses. The strongest defenses of the federal army
were the surrounding hills overlooking Torreón, with the hill of La Pila being the most fortified and strategically important (Salmerón 2006, 417–18).

Villa’s strategy consisted of fighting for different positions, and Villa’s forces were divided into two columns, one following the railroad tracks near Gómez Palacio to take the neighboring city of Lerdo in the southwest. Meanwhile, the other advance, led by Eugenio Aguirre Benavides, moved in a southeastern direction to take the agricultural colony of Tlahualilo. This plan was carried out over three days of fighting, until Aguirre Benavides, Maclovio Herrera, and Pancho Villa captured their objectives. It was during this attack in which so much was on the line that there occurred an incident between the forces of the Northern Division and the railroad crews working for them. During these battles, Villa’s advance was slightly held back because the train carrying water and provisions was thirty minutes late. Mad with fury, Villa took out his rage on Rodolfo Fierro, who remained quiet during the scolding, but when the train finally arrived, Fierro boarded the train and shot the machinist before he could explain his delay. This was only the latest injustice that railroad crews had been subjected to, and the friction between the railroad workers and the Northern Division had been growing since Fierro had shot a railroad worker several weeks prior when he accidentally bumped into a drunk Fierro on the streets of Chihuahua. Due to these actions on the part of Fierro, and the importance of the railroad workers for the Northern Division, Villa demoted Fierro as superintendent of railroads but still kept him as one of his closest guards (Gorostiza 2010, 194).

The fighting for the Laguna continued and by March 23, the Villistas took positions near Gómez Palacio and launched two costly frontal attacks on the hill of La Pila. These attacks were repelled by the federal army, and Villa’s forces had to retreat to their positions. On the night of March 26, Villa attempted to take Gómez Palacio with a night attack on the railroad roundhouse,
but when the Villistas stormed the railroad yards they realized the army had retreated to Torreón. With Gómez Palacio under their control, the Northern Division transferred its command center to that city and as the rebels took positions, a soldier of the Zaragoza Brigade found a map of the fortifications of Torreón and gave it to Raúl Madero, who shared it with the generals. According to the interview of railroad worker Gilberto Nava Presa, a locomotive was used as a weapon against the artillery defenses of Torreón, referred to as a “maquina loca” (literally, a crazy machine), which became a widespread tactic along the military front. In the case recounted by Nava Presa, a machinist named Marines had caused a deadly accident days prior, and as punishment he was forced to lead the attack on Torreón. Nava Presa recalls that they ordered him to lead a train full of rocks and dynamite into the city defense, and if he refused the worker would be shot. In the interview, Nava Presa described the harrowing experience:

…we boarded the train in the morning. I remember that we stoked the locomotive with wood, and many sparks flew up like an inferno and we were sitting on a cannon and we had a car loaded with dynamite, and a brakeman, myself as fireman and the machinist Marines and as soon as we left the station and the federal army saw the smoke of the machine, they began to bombard us intensely, and Marines and I kept on feeding the fire. I mean, I was young then, I was strong, and we stoked the fire and the locomotive was moving, until we came to a switch, and after the rail switch there was the track that led to the main track which led directly to the artillery and Marines got off the train to make the switch without ordering the brakeman to do it, and he disconnected the regulators, and the dynamite car kept going, the cannons were raining fire on us and I thought to myself, if they hit the machine with a cannon or anyone of us, that’s going to be it for us. The coal car looked more like a strainer because it had been shot up so much, and the locomotive was spilling water and we almost ran out of water… the train arrived at its destination and it exploded, and that was the signal for all the troops to attack Torreón. (PHO/1/26)

Nevertheless, despite the toil of these intrepid workers, the federal army resisted the attack and the rebels were forced to retreat. For five days, the Northern Division sieged Torreón, attempting numerous strategies to take positions in the city that lay across the Nazas River. Advancing inch by inch, the rebels began to take positions in nearby houses, penetrating the last
defensive perimeter. Meanwhile, the army made its last push and carried out a heavy bombardment against the rebels, simulating the beginning of a counterattack, but this was a maneuver to create chaos and burn off its shells as it made its retreat to San Pedro de las Colonias in the east along the tracks of the International Railroad. Thus, the Northern Division entered Torreón triumphantly on April 3, received by jubilant crowds. This had been the costliest battle yet, and both sides experienced large casualties. The Villistas had lost 2,000 men and 2,000 others had been injured. Between deaths, injuries, desertions, and prisoners, the federal army had lost more than 6,000 men. Villa’s generals did not allow the federal army to reorganize its forces, and they followed them to nearby San Pedro, hometown of the slain Madero and home of the Madero family’s estates. The fighting was drawn out over ten days, until finally, on 13 April 1914, the federal army retreated in tatters to the city of Saltillo. The second battle of Torreón and the final defeat of two military brigades in San Pedro de las Colonias gave a mortal wound to the federal army. Meanwhile, the Northern Division’s control of the Laguna also gave it control of a vast industrial and agricultural region (Salmerón 2006, 423–33). Salmerón writes that the conquest of the Laguna turned Pancho Villa into a national leader; he controlled more men and resources than any other revolutionary chief, and the power of his army and his prestige as a caudillo had no parallel in the rebel ranks. “Villa administered his resources directly, without the intervention of the First Chief and that was more than what Carranza could tolerate” (435).

The Villa and Carranza Split

After the victories of the Northern Division in the Laguna, the federal army concentrated most of its forces on Zacatecas, a city along the main railroad and the key passage to Mexico City. Carranza understood that Villa’s soaring prestige and autonomy posed a challenge to his authority as First Chief, so he travelled from Sonora to Chihuahua City to establish his command
center. As soon as Carranza arrived in Chihuahua he attempted to limit land re-distributions and to take control of the haciendas, the State Bank, and the railroads. Although he was unable to fully consolidate power in that state, he ended Villa’s free distribution of meat for the poor. Villa travelled north to meet the First Chief and during a meeting held on April 19, their differences in policy and project became evident. For example, during the American intervention and occupation of the port of Veracruz, Carranza denounced Wilson’s interventionism as a violation of national sovereignty. Aware of his dependence on American weapons and access to El Paso, Villa wrote to Wilson stating that Carranza’s declarations were a personal position and that the conflict was between Wilson and Huerta, not Mexico and the United States. Carranza felt discredited and undermined, incensed; he scolded Villa and prohibited him from making public comments on this and other matters.

Besides a personal rivalry, however, what was coming to the surface was a struggle for power—a struggle that many of Carranza’s generals sought to avoid since they knew that Villa’s Northern Division was the most powerful and best equipped of the rebel armies. This power struggle would also translate to a fight for control of the railroads and for influence over railroad workers. Thus, Carranza decided to place obstacles in front of the Northern Division and to undermine Pancho Villa. For example, although the city of Zacatecas was the next obvious military objective, Carranza ordered Villa to divert his forces to take Saltillo (Ávila 2014, 147–50). Although Villa was opposed to this command he acquiesced, but not without fighting with Carranza for resources. Paulino Fontes, a railroad worker from Sonora loyal to Carranza, remembers that the Villa-Carranza split began to have a negative impact on the morale of the revolutionary forces, especially railroad workers who were being turned against each other by the intrigues of Carranza. Carranza ordered Fontes to prepare the military trains to attack Saltillo, but
Villa’s superintendents reorganized the trains, thinking they were going to take Zacatecas. The incident infuriated Carranza, who felt undermined, and he scolded Villa’s railroad superintendent, Eusebio Calzada, demanding that he reorganize the trains for their departure to Saltillo immediately. Fontes recounts:

Carranza, scolding and rushing, ordered the conductor to organize the trains, screaming “and hurry up!”—to which the superintendent replied defiantly; “well these are not beans, these are not enchiladas!” Incensed, Carranza replied “don’t answer me like that, don’t be rude, I am the chief and you have to respect me”—the superintendent then replied, “Well, I don’t work for you, I work for my general Villa”—“Well I am going to have you shot so you behave properly” and so Carranza ordered the arrest of the superintendent and the two patio chiefs and ordered a colonel to send those individuals to the firing squad (PHO/1/12).

After this fit of rage, Fontes intervened on behalf of Calzada and the patio chiefs, begging Carranza not to execute them, telling the First Chief that if he did so, the railroad workers would turn against the revolution, and that since the revolution was just getting underway they needed to have the railroad workers on their side—otherwise they would desert the rebels and join the enemy. Finally, after much pleading, Carranza ordered the superintendent and the patio chiefs to remain under arrest and be sent to jail in Saltillo (PHO/1/12). This incident divided railroad workers, and they became aware that they had to choose sides between Carranza and the Constitutionalist armies and Pancho Villa and the Northern Division.

Ignoring Carranza’s machinations, Villa proceeded to take Saltillo, and after a ten-day offensive, Villa entered triumphant on May 20. Villa then hurried back to Torreón to prepare the offensive on Zacatecas, but when he arrived he learned that Carranza had already ordered the attack. Villa understood that he had been sent to Saltillo as a diversion so that Carranza could take control of Zacatecas and thus cut off Villa’s advance south to Mexico City. Unfortunately for Carranza, the attack on Zacatecas failed, and he ordered Villa to send reinforcements. Enraged, and aware of the schemes to undermine the Northern Division, Villa and his generals held a
heated exchange over telegraph with the First Chief. Over the three-day exchange, Villa and his generals accused the First Chief of scheming against them and of undermining their forces. They refused to send reinforcements to Zacatecas, and instead, in an act of open insubordination, the Villista generals told Carranza they would march south to take Zacatecas under the orders of Villa. This last telegram was signed by all the generals of the Northern Division. And with that telegraphic exchange, the dispute for power between the Northern Division and Carranza was out in the open (Ávila 2014, 151–56).

On June 15, the Northern Division rode south to take Zacatecas with 17 trains and 38 cannons. The colonial mining city, located in the middle of a deep valley and surrounded by hills and mountains, was where Huerta’s army made its last stand. The federal army’s defensive positions consisted of fortified parapets with machine guns and cannons on the main hills, El Grillo and La Bufa. Villa’s attack began on 23 April 1914, and to take the hills he surrounded the city, while Felipe Ángeles, with the artillery, protected the ground troops with fusillades over enemy positions. The fighting for the city lasted a day, and once the Villistas took the hills of El Grillo and La Bufa, they dominated the entire valley of Zacatecas. As the federal army attempted to make its escape, they were ambushed by the Northern Division and massacred. After the battle of Zacatecas, the Northern Division defeated the federal army and their allies, the forces of Pascual Orozco. This victory was the death blow of Huerta’s regime; after this defeat, the morale of the federal army sank and thousands deserted. Victorious, the Constitutionalist armies advanced practically unopposed over the rest of the territory. After his victory in Zacatecas, Villa was ready to move south to take Aguascalientes and then Mexico City, but Carranza cut off Villa’s coal supplies, and this made his march south impossible, since the Northern Division had reached such a large scale that it could not keep its power without the railroads. In addition, the
American weapons embargo in El Paso began to affect Villa’s forces, and a shortage of munitions made his advance impossible. Aware of his limitations, Villa returned to Torreón and then retreated to his base in Chihuahua. Meanwhile, Carranza’s loyal generals, Alvaro Obregón and Lucio Blanco, marched on to Mexico City, and on 12 August 1914, Eduardo Iturbide, mayor of Mexico City, handed over the capital to Alvaro Obregón. By this time, the defeated dictator Victoriano Huerta had already escaped on a steamship bound for Europe. Carranza’s sabotage of Villista railroads and logistics had paid off, and he outmaneuvered Villa and his generals to become the official winner of the Constitutionalist Revolution (Ávila 2014, 156–62).

With Huerta defeated, a new struggle for power began, with Venustiano Carranza and Alvaro Obregón on one side and Francisco Villa and Emiliano Zapata on the other. Wishing to avoid a civil war between these camps, generals, politicians, and intellectuals from both bands met in the neutral city of Aguascalientes on October 10 to inaugurate the Convention of Aguascalientes. There, 155 military generals, governors, and representatives met to discuss a transition program to pacify the nation and to represent the demands of the revolution. Over a four-week period, the Convention of Aguascalientes made several pronouncements, and it incorporated the labor demands of the Plan of Ayala, which included important reforms that had been fought for by railroad workers. Under its decree of socio-economic reforms, the convention established a minimum wage and a state monopoly over telecommunications, electricity, water, and transportation. The convention decreed that the maximum workday would consist of nine hours, and conceived of the state as the arbiter of relations between capital and labor, with the goal of establishing a fair salary for workers and the interests of capital. It also decreed that men and women should be properly trained to receive skilled jobs and that workers should have one day of rest. The assembly of the convention recognized Carranza’s contributions to the revolution
but declared that instead of giving him the presidency, an interim government should call for free and democratic elections. Indignant, Carranza rebelled against the convention and withdrew from its agreements. His rejection of the convention thus paved the way for civil war, a prospect that the convention tried to avoid but that was inevitable due to the irreconcilable national projects represented by Carranza and those represented by Villa, Zapata, and their generals (Ávila and Salmerón 2014, 225–34; Ávila 2014, 307).

Conclusion

The involvement of railroad workers in the Mexican Revolution began as cautious support for Madero’s political campaign to challenge the dictatorship of Porfirio Díaz and increased as Madero’s national profile and his network of political clubs reached national prominence. Then, when the Democratic Revolution got underway, railroad workers became more involved in the course of revolutionary events but mostly in those territories where the revolution had deepest social roots and more radical aims. Therefore, although limited, the interventions by railroad workers mattered greatly based on their location within the social division of labor, giving them a key position in the transportation industry to have a direct impact on the course of events. Thus, with Madero’s overthrow, the gains they had made became immediately threatened as the dictatorship of Victoriano Huerta set out to militarize Mexican society, especially through the military draft that affected industrial workers. Furthermore, the strong social support for Madero’s democratic movement also won Huerta the enmity of broad social layers. Taking advantage of Madero’s tenuous hold on power, the military coup that overthrew him also unleashed the most radical forces of the revolution that had been temporarily suppressed and thus, a new chapter of social struggle was inaugurated.
Railroad workers participated openly in the Constitutionalist Phase of the Mexican Revolution and enthusiastically aided revolutionaries like Carranza and Pancho Villa to move the railroads for the cause of the revolution, mostly without pay and often at the risk of their lives. Others were coerced into the revolutionary cause, but in areas under the control of the revolutionaries, like Villa’s Chihuahua, the railroads and the railroad workers were actively integrated into the revolution, taking advantage of their possession of railroad infrastructures for logistical support during battle. As many recounted in their oral histories, the railroads were key in a period before automobiles and highways existed; the revolutionaries knew this and therefore had special deference for railroad workers on the front—though not without bitter disappointments. Railroad workers participated willingly in the revolution and took advantage of their knowledge of the railroads to repair the tracks, refurbish the machines, and, when necessary, to use the locomotives as “maquinas locas”—crazy machines—which they loaded with dynamite and unleashed on enemy lines. Thus, the revolution changed the railroad and the railroad changed the revolution; this dialectical relationship played out between these social processes with railroad workers at the center of the action. The participation of the railroad workers and other industrial sectors was reflected in the inclusion of progressive labor demands in the Convention of Aguascalientes when they were added to those of the Plan of Ayala. Nevertheless, these gains were undermined with the rupture between Villa and Carranza. As the theater of military operations expanded into a civil war, the use of railroads became more widespread, and the hardships faced by railroad workers also became more pronounced. In that phase of the revolution, railroad workers shifted allegiances because Carranza and Obregón appealed to the demands of the industrial working class, including the railroads. The Villa and Zapata alliance did not actively integrate the railroad workers and the industrial working class in their plans. Once the
radical currents of the revolution were defeated, many of those workers went into exile in the United States. Others were coopted or recruited into the Constitutionalist Railways, operated under the conservative Carranza and later, Álvaro Obregón. Those who shifted allegiances and supported the new government continued to press for their demands and saw these finally included in the new Mexican Constitution of 1917.
Chapter 6: Discussion and Conclusion

Introduction

This dissertation began as a study of the participation of railroad labor in the Mexican Revolution and the impact of railroad infrastructures on the conflict. Since research on this specific subject has been sparse, I first had to find out some very basic information, such as who the railroad workers were that participated in the Mexican Revolution, where they came from, and why they decided to participate. In the process of answering these questions, I delved into the labor history of Mexican railroad workers and learned that they had developed their labor associations in response and opposition to the presence of American workers who occupied the best-paid jobs within the industry. Within a twenty-year span, the organizational forms of Mexican workers transitioned from mutualist associations to craft unions—modeled on the American brotherhoods—to industry-wide unions. Along the way, they founded newspapers, union chapters, meeting halls, and political associations that allowed them to organize and make demands from the American-owned railroad companies and later from the nationalized National Railways of Mexico. However, several findings of this work also point to the complex and contradictory role of railroad labor once the Mexican Revolution got underway.

As Yanes (2010) points out, railroad workers were not the most enthusiastic supporters of the revolution, since they had so much to lose, especially after a decade’s worth of battles for Mexicanization. Despite this consideration, many railroad workers actively supported Francisco I. Madero and his democratic challenge to the regime, especially because he endorsed their labor demands and promised to speed up Mexicanization. Furthermore, railroad workers were not only concerned with labor issues, and many supported Madero based on his democratic platform and challenge to the regime at the local and national level. Thus, we see examples of support for
Madero among railroad workers during his campaign and during his escape from San Luis Potosí, when he calls for an armed rebellion. Nevertheless, it is remarkable that railroad unions did not endorse or support Madero openly during his campaign and once the rebellion against Díaz was launched. As Yanes (2010), Knight (1984), and Gorostiza (2010) have argued, railroad unions tended to be more conservative and instead adopted the slogan “Peace and Work.” Despite the lack of formal endorsement from unions, railroad workers participated in the revolution as individuals and in groups, especially in areas where the revolution was the most fierce, as is the case in Chihuahua and the north in general. After Huerta’s coup d’état, the moral, political, and military prowess of the revolutionary forces pulled many social sectors into the revolution, and it is in this phase of the revolution that railroad workers became much more involved and centrally important to the revolutionary armies. It is worth repeating that Huerta’s co-optation of railroad union leaders into his government contributed to the lack of union-wide involvement in the revolution, and consequentially, most participants in the uprising joined in small groups.

One of the most important conclusions from this study is that even though workers did not participate on a union-wide scale, the small groups of workers who did participate were crucial to the operations of the railroad during the revolution and contributed directly to the success of the revolutionary armies. This is quite remarkable, since it shows that a small group of well-organized workers in the service of a revolution can have a significant impact on the course of events. This is because their knowledge of the operation and maintenance of the railroads allowed them to make key contributions to the revolutionary process that none of the other social sectors involved could have made. Of course, as this study shows, railroad workers did not always agree with the leaders of the revolution, and the violent excesses of Villista generals like Rodolfo Fierro strained relationships with railroad workers. Another important finding is that the involvement of
railroad workers was also susceptible to the political shifts of the conflict, and they, like other revolutionary forces, were also divided by major ruptures within the Constitutionalist leadership, especially after the split of Villa and Carranza. Although the Convention of Aguascalientes aimed to reconcile the social projects represented by these revolutionary leaders, the incompatible political visions they represented prevented a reconciliation and instead opened a new period in the revolution marked by civil war. In that new period, the contributions of railroad workers would play an even more decisive role in the course of events and the Mexican Revolution.

**Summary of Findings**

The railroad workers who participated in the revolution originated from the working class and artisanal sectors. These workers were incorporated into the railroad labor force in a variety of different ways and along different branches of the railroad infrastructure. This produced a highly-stratified workforce that was divided by both pay and occupation. Moreover, workers within the industry were also divided by the presence of American employees who occupied the upper echelons of railroad labor and administration. This aspect contributed to the formation of Mexican unions along nationalist lines. As is to be expected, workers faced entrenched opposition to their demands for better working conditions and higher pay from management, bosses, and the authorities. Nevertheless, they took advantage of the press, telegraphs, and railroads themselves to build networks of craft unions, mutualist associations, and industry-wide unions in the Mexican railroad industry. The embrace of nationalist politics led Mexican railroad workers to support plans for Mexicanization, but these nationalist politics became a handicap to organizing opposition to Díaz’s government once the railroads were nationalized. Nevertheless, the period of labor organizing from 1900 to 1909 gave workers important concessions, and their grievances also won support from the urban middle-classes and the enlightened bourgeoisie. Thus, when
Madero launched his call for arms in the Plan of San Luis, railroad workers were reluctant to participate openly because of the important gains they had made in a decade of struggle. Besides these unifying trends, railroad workers had very diverse experiences, and their involvement in labor and political organizations varied widely. Nevertheless, many were involved in some type of political or labor association prior to the revolution. Furthermore, most of those whom I identified in primary sources were influenced by progressive or radical publications during the Porfiriato.

These findings can be corroborated with the testimonies from the oral history project—Archivo de la Palabra (PHO)—of the National Institute of Anthropology and History (INAH) as summarized in Appendices A through C. For example, in Appendix A we learn that most participants were in their late teens or early twenties when they joined that revolution. From this data, we can also see that most come from a working-class background and have received some form of schooling, elementary at least, since literacy and mathematics were required for many railroad positions. A survey of Appendix B shows us that most of the participants interviewed also belonged to or participated in some form of political organizing prior to the revolution. It is especially notable that most of these individuals identified themselves with the liberal movement and Madero’s Anti-Reelectionist clubs, and at least half of them begin their revolutionary participation as adherents of Madero. However, very few participants, less than half, seem to have participated in some form of labor activism. Perhaps this is due to the limitations of the PHO itself, as will be discussed below, but it is still a remarkable difference. Nevertheless, what is clear from these interviews is that these workers participated extensively in the revolution, some entering in the early phase with Madero, and others joining after Madero’s death. This is evidenced by the fact that most of them achieved a military rank within their battalions.
As railroad operators, railroad workers had a special relationship to this infrastructure, and this contributed to their widespread participation in the revolution. Many of these workers witnessed history in the making, especially those travelling with Francisco I. Madero on his campaign tours. Indeed, Madero influenced them directly, and many statements from the oral histories reveal a deep affinity for Madero, especially among young workers. The role of the Mascorros is also deeply illustrative of this relationship between workers and the means of production. The Mascorros were a family of railroad workers, and their knowledge of timetables, railroad stops, and political connections allowed Madero to escape to San Antonio, Texas. Unlike mechanics, workers who moved the railroad had an explicit advantage of mobility and their knowledge of the vast railroad network. Because of their occupation, these individuals were in a privileged position to help Madero escape. There are also other examples that demonstrate the advantages of railroad workers. For example, railroad workers helped with the distribution of clandestine newspapers along the railroad network. This same mobility allowed railroad workers to play a key role in gun smuggling from the U.S. into Mexico in preparation for the revolution. More important, however, was the role railroad workers played operating the locomotives and the trains that moved the rebel armies in the north along the towns and cities that saw military confrontations. Workers risked their lives, providing logistical support and delivering munitions and supplies to the front lines. Others participated in more harrowing actions and drove “maquinas locas”—locomotives full of dynamite—straight into enemy lines. In effect, their relationship to these infrastructures allowed railroad workers to tap into the railroad mobilities and to contribute their labor geographies to the revolution.

While the railroads afforded revolutionaries many advantages, they also came with important limitations. As an extensive transportation infrastructure at the service of capital
accumulation, the railroad is a product of the dialectic between mobility and fixity, and, therefore, this dialectic also played out during the revolution. In many ways, railroad workers were able to exploit the dialectic of mobility and fixity to their advantage with much more success than the government. The government became dependent on the mobility of the railroads to deploy its army from different garrisons located in urban centers. In response, revolutionaries destroyed railroad tracks, bridges, and water infrastructure to sabotage the military’s capacity for deployment. Since revolutionaries were riding on horseback or conducting guerrilla attacks on foot, they had an intermodal advantage over the military, which relied on one mode of transportation: the railroad. Furthermore, with tracks destroyed, the army lost the advantages of the railroad and had to dedicate resources to rebuild it. Once revolutionaries controlled an extensive area, they often repaired the railroad as one of their first tasks, as we see with Villa in Chihuahua, and these cases are illustrative of the revolutionaries’ use of the railroad’s mobilities. In other cases, like Villa’s “Trojan Train” to Ciudad Juárez or the “maquinas locas,” the mobility of locomotives was used as part of a military attack—one that relied on their destructive capacity. The different uses of the railroads during the revolutionary events demonstrate its elasticity and multiple functions. Nevertheless, when the rebels appropriate the railroads, they also inherit its disadvantages, among them their limitations to run on a designated track, as well as their reliance on coal for fuel. Thus, after the split between Carranza and Villa, Villa is stopped “in his tracks” because Carranza cuts off the coal supplies to the Northern Division.15

Primary and secondary sources support my findings and confirm that the railroads and railroad workers played a very important role in shaping the geographies of the Mexican

15 By 1905 petroleum—or diesel—locomotives were being introduced in Mexico, but until 1920, most locomotives burned coal. In some cases, some railroad workers adapted locomotives to burn firewood, but these locomotives were not as efficient. See Sosa Pavón, PHO/1/48.
Revolution. Important patterns emerge along the railroad network. For example, the different branches of the League were founded along the railroad and important railroad hubs. Similarly, Madero’s campaign tours all relied on the railroads, and the clubs that were founded mostly corresponded to cities that had a railroad station. Aware of the role of the railroad station in public life, Madero agitated and distributed propaganda from railroad cars and train platforms, turning these into political platforms. Of course, this whole process was facilitated by railroad workers who fixed the locomotives, dispatched the trains, sent the telegrams, repaired destroyed tracks, and even fought alongside revolutionaries on the military front. Due to their relationship to the means of transportation, railroad workers faced numerous hardships, and they often had to carry armies to battle, even against their will. This was the case in areas that were not under the influence of revolutionary governments, where many workers had to move trains for the federal army, just as they did for Madero. However, it is telling that even though railroad workers only composed a relatively small group within the overall scale of the revolution, their relationship to the means of production allowed them to play a disproportionately large role in the conflict and to shift the course of the revolution to a greater degree than workers from other industrial sectors.

Implications of Findings

INAH’s PHO archives contain invaluable resources that can further our understanding of the role of railroads and railroad workers in the revolution, and thus point to the possibility of finding more anecdotes like the ones included in this work. While this research focused on key interviews of men who had worked on the railroads, the PHO archive is far from exhausted, and it is highly likely that it contains more references to the use of the railroad and the role of railroad workers in the conflict. For example, the PHO contains interviews of railroad workers who were active with the Zapatistas in the south and my work only focused on the north. Therefore,
historians of railroad labor and the Mexican Revolution should reconsider the PHO as a key resource. Similarly, the newspaper *El Ferrocarrilero* offers great insights into the life of railroad workers and their hardships. Like the PHO, it should also be reconsidered as a key source by researchers who wish to learn about the organization of the League and the history of railroad labor.

Based on the contents of these archives, I have also produced several maps using geographic information systems (GIS) that are the first of their kind to appear in geographic research on the Mexican Revolution. Furthermore, since the publication of the historical atlas *La Revolución Mexicana: Atlas Historico* (1986), only a few sources (Portilla 1995; Salmerón 2006; Gorostiza 2010; García Diego 2013) have incorporated maps into their analysis of the revolution. For example, the map on the locals of the League is entirely new, and such a map has not been created before in Spanish or English literature. The map of Campaigns of the Northern Division is also original, and although the map on Madero’s campaign tours is based on maps in Portilla (1995), both maps are available in English for the first time. These maps reveal the extensive use of railroads in the history and geography of the Mexican Revolution.

It is indisputable that railroads in general played an important role as an infrastructure of mobility and that the Mexican railroad specifically was an essential infrastructure that was key to the course of the revolutionary process. This finding serves as an important correction to the conclusions advanced by Knight (1984), when he argued that the role of the working class “…was largely reflexive; it responded to events rather than initiating them” (51). I argue that railroad workers didn’t just respond to events but openly participated in them and made important contributions at key junctures of the struggle. Thus, it is necessary to understand the railroad in order to understand the Mexican Revolution, and these findings therefore make important
contributions to the historiography of the Mexican Revolution, partly filling in the “substantial hole in the historical scholarship of Mexico, the American west, transportation history, and border studies” that Lewis (2007) noted. Future research could shed light on the role of railroads and railroad labor during the third phase of the revolution, which is the civil war, and the fourth phase, which is the power struggle between Carranza and Obregón.

In addition to the contributions to Mexican historiography, these findings represent important contributions to the labor history and the labor geographies of the Mexican Revolution by studying railroad labor before and during the conflict. The work of Bringas and Mascareño (1988), Parlee (1984), Shabot (1982), and Miller (1974) served as a foundation for my research on the League, but besides Parlee, they don’t engage directly with the newspaper of the League, *El Ferrocarrilero*. In this sense, my work makes original contributions by analyzing the development of the League and its influence on the labor movement. My research revealed that the League faced many challenges in cohering an industry-wide union and that their organizing efforts were cut short after their defeat in the strike of 1908. This labor union also experiences scalar tensions and corroborates with the spatial challenges faced by labor in scale jumping (Smith 1992; Herod, 2003; Savage, 2006; McFarland, 2014). My research on the involvement of railroad workers during the revolution also makes important contributions to our understanding of the role of labor during the revolution, and I contend that although labor unions did not intervene as an organized force, the role of small groups and individual railroad workers cannot be underestimated. For example, the role of railroads and railroad labor is crucial in the scale jumping from the local to the regional as the Northern Division launched its military campaigns from 1913–14. Thus, my research corroborates the findings of existing works (Leal and Villaseñor 1988; Salmerón 2006) but also goes beyond the analyses presented by Gorostiza
(2010), Guajardo (2010), and Yanes (1910), since I also deploy concepts from mobilities, transportation geography, and critical geography.

One of the most important findings of this research is how much Mexican railroad infrastructures are directly tied to social change. From the outset, my work sought to engage transportation geography with critical geography and mobilities literature (Shaw and Sidaway 2011). It also took up the call from Keeling (2007) to explain why transportation is fundamental to society and to engage with railroads since these have become “the stepchild of transport research” (222). Throughout this work, I have sought to engage transportation with social, political, and economic processes that situate the railroad within its socio-spatial context. For example, Madero’s campaign tours illustrate the deeply political and contested nature of the railroad and its train stations. Thus, I can conclude that this work improves the state of the literature in the field and that it confirms my argument that transportation is deeply imbricated in the process of social change.

Besides the theoretical contributions to transportation geography, my research makes a novel use of political-economic and mobilities frameworks to understand my research questions. Revolutionaries took advantage of the mobilities and fixities of railroad infrastructures to advance the revolution in various ways. For example, labor organizers like Casasola, politicians like Madero, and revolutionaries of the Northern Division exploited the capacity of time-space compression. When it was more suitable, different forces also sought to interrupt the mobilities afforded by the railroad by cutting telegraph lines, destroying bridges, and sabotaging the rails to impede the mobility of federal troops. Railroad workers also had an enormous capacity to help the Northern Division jump scales from the local to the regional; at the same time, the railroads were themselves limited, since their supplies of coal were limited. Thus, there are always scalar
tensions between local, regional, and national processes, like a revolution. While the railroads bring the capacity for time-space compression, they also relegate others to fixity through time-space expansion, especially soldaderas or others unable to access mobility. Last, although we only see a glimpse of the possibilities for social change, we can conclude that the Mexican Revolution transformed the railroad from a means of capital accumulation to a means of social liberation by linking it with the demands and actions of railroad workers and the revolution.

**Evaluation of the Study**

Although this work was able to take advantage of an extensive bibliography and several archives to advance its contributions, important limitations in the field, in the quality of the sources and their availability, inevitably influenced these contributions. Throughout a two-year period, I gathered and analyzed information from a variety of archives in Mexico City, Aguascalientes, Torreón, and Puebla. Nevertheless, several key sources of information remained missing. For example, very few secondary sources focused on the role of railroad workers in the hub of Aguascalientes in the period of labor strikes (1906-1909), and even fewer recorded their activities during the revolution. Medrano de Luna’s *La Morena y Sus Chorreados: Los Ferrocarriles en Aguascalientes* (2006) is a notable exception. In the book, Luna recounts the importance of Aguascalientes in October and November of 1914, when the convention between Villistas, Zapatistas and Carrancistas was taking place. Vito Alessio Robles, chronicler of the convention, writes that hundreds of cars roamed the paved streets of this provincial capital.

All cars had their tops down and on them rode military men with Texan sombreros. The railroad station was congested with military convoys and all important caudillos brought sleeper cars for their general staff and their security guards. All the city’s hotels were full of guests and joy prevailed everywhere. Outside and in the courtyards of hotels one could hear musicians playing “La Valentina,” “La Cucharacha,” “La Adelita” and “Jesusita of Chihuahua” out of tune at all hours; joined by enthusiastic howling choirs.” (Sergio Ortiz Hernán cited in Medrano de Luna 2006, 17–18)
Besides hosting the Sovereign Convention, Aguascalientes also housed the most important railroad workshops in the country and the largest concentration of mechanics, assistants, carpenters, boilermakers, and a significant number of administrators. Therefore, I was surprised to find very little material during my field visit. Since the National Railways of Mexico were privatized in the mid-1990s, Aguascalientes lost much of its railroads and, with it, much of its archives. Therefore, the mechanics and shop workers of Aguascalientes are largely missing from my research. Although their work in the Mexican Mechanics Union is highlighted by *El Ferrocarrilero*, their traces are lost during the revolution except for the strike of 1912. This might be related to the relative stationary occupation of workers who labored in railroad yards and shops and who, unlike conductors, had an occupation fixed in place. These complex repair infrastructures were not common at every station, and only few cities hosted workshops.

During the railroad privatization of the 1990s, many materials were lost, but thanks to the work of the National Institute of Anthropology and History, Mexican archivists, researchers, and librarians carried out a rescue operation to recover materials of historical significance to Mexico’s railroad heritage. These sources are housed in the CEDIF, in Puebla, Mexico, and this research institution provided important support for my work. Nevertheless, few of their primary sources dealt with the period of the revolution. In other research sites, like Torreón, I was able to collect interesting sources relevant to the city’s urban and economic history at the Historical Research Center of the Universidad Iberoamericana de La Laguna. Like Chihuahua, the Laguna Region and its largest city, Torreón, are considered the cradles of the Mexican Revolution in the north. Torreón was an important railroad hub, and many railroad workers were active in the city, so I had hoped to find documents of the Aguirre Benavides administration that came to power after Madero’s revolution and that organized the Battalion of Railroad Volunteers. However, the local
municipal archive had lost data from 1890–1920 to neglect. As with the railroad workers from Aguascalientes, there is an absence of testimonies, demographics, and documents from railroad workers from Torreón and other Laguna cities, many of which participated in Aguirre Benavides’ Battalion of Railroad Volunteers.

I made up for these deficiencies by relying on secondary sources and triangulating them with memoirs, testimonies, oral histories, and the important records of the labor newspaper *El Ferrocarrilero*. This newspaper was published from 1904 to 1906, despite being censored by the authorities at the behest of railroad companies. *El Ferrocarrilero* offered an important glimpse into the organizational period of the *Gran Liga Mexicana de Empleados del Ferrocarril* (the Great Mexican League of Railroad Employees) under the leadership of Félix C. Vera and Manuel Moreno Casasola. Unfortunately, my research was unable to track down these two key figures of the railroad labor movement after they lost the strike of 1908 and the collapse of the League. All traces of Moreno Casasola were lost in 1906 when he abruptly resigned as the field organizer and secretary of the League. Similarly, Vera’s trajectory is unclear in the years after *El Ferrocarrilero* is shut down by government censors, but it seems that he emigrates to the United States to escape a third prison term under Díaz. A few years later, his writings appear in the opposition press leading up to 1910, and a document from the Secretariat of Defense recognizes his participation in Madero’s democratic revolution of 1910–11 but without providing details of his activities in that conflict (Alvarez Palacios, 1973). His role in the revolution is then lost, and he resurfaces as a journalist in Guadalajara in 1918.

The newspaper *El Ferrocarrilero* and the League are important anchors of my work in the period of labor organizing that preceded the revolution. Nevertheless, despite its rich contents, *El Ferrocarrilero* has many limitations, especially geographic. For example, the newspaper is based
in Mexico City and has more extensive coverage of labor conflicts in Mexico City, Veracruz, and Puebla—states with railroad hubs in the capital. The branches of the League in these states were some of the most active, especially in contrast to the branches in cities like Aguascalientes and San Luis Potosí. In Aguascalientes and Chihuahua, the League also found itself competing for members with the Mechanics Union, and its first branch in the north was not in the industrial city of Chihuahua, but instead a secondary one like Jiménez, where it established its first chapter in Chihuahua state.

These geographic limitations also impact my study, especially since the labor activities of the Mechanic’s Union in an important city like Chihuahua are mostly missing. Furthermore, since the League was disbanded through government repression, it had very little effect on the events of the revolutionary period; other organizations, like the Mechanic’s Union, the Alliance of Mexican Railroad Workers, and the Mutualist Society of Railroad Telegraphists took the lead in labor disputes. The shifts in labor leadership and organization from 1909–1914 also complicate my research, and the entry of several unions into the government of the dictator Victoriano Huerta also impedes the participation of unions in the revolution. Consequently, the relationship between these unions and the revolution remains limited in my work. Future studies will have to explore the archives of the local newspaper, El Correo de Chihuahua, which is likely to contain reports on the activities of the Mexican Mechanic’s Union in Chihuahua City. Archives for the other unions remain to be located, but special importance should be placed on those who joined the government and sided with the reactionary government of Victoriano Huerta to provide a holistic understanding of railroad unions during this period.

Throughout this work, I sought to emphasize the role of individual railroad workers and their contributions to the labor geographies of the Mexican Revolution. Overall, I believe this
attempt has been successful at producing an overview of the activities of railroad workers before and during the revolution. Nevertheless, the oral histories I relied on have important deficiencies, especially when it comes to highlighting the importance of railroad infrastructures during the revolution. These deficiencies occur as a result of several factors, the first of which is the obvious utility the machines had for all groups involved; therefore, the railroads and the activity of railroad workers were often taken for granted. Furthermore, the oral histories that I relied on for my work are not specifically tailored to a study on the role of railroads since the questions used by interviewers did not seek to bring out this aspect in the interviews with participants. The interviews of the Oral History Project (PHO) housed in the National Institute of Anthropology and History also have other shortcomings. Pedro Salmerón (2006) notes these and writes that the interviewers often lacked in-depth knowledge of the subject, the world, and complexity before and during the revolution. This is evidenced by the types of questions asked. Salmerón also notes that interviewers often interrupted the veterans of the revolution as they were about to expand on interesting anecdotes. It is also the case that interviewers themselves influenced the course of the interviews in other ways, since in some cases they expressed personal opinions that influenced the point of view of the interviewee (30). Much of this is understandable, since oral history was a still developing form of historiography in 1972, when the PHO began to take shape.

Furthermore, the government’s official history still weighed heavily on the history of the revolution, and it wasn’t until after the 1970s that a “revisionist” wave of studies began to offer a more complex and bottom-up perspective to the revolution. For example, Adolfo Gilly’s *La revolución interrrumpida*, a landmark work of radical interpretation that became a must-read for historians, was not published until 1971. In the case of the railroad workers, it is evident that interviewers were not familiar with the history of the labor movement during the Porfiriato, and
only a few testimonies reveal a direct connection between the labor organizing of 1904–1909 and the revolutionary movements after 1910. Despite these limitations, both the breadth and content of the interviews allowed me to reconstruct important episodes of railroad and railroad worker participation in both phases of the Mexican Revolution.

Unable to follow the career of journalists like Vera and Moreno Casasola throughout the revolution, I had to limit their participation to the period of the development of the railroad worker’s labor movement and, therefore, Chapter 4, on Madero’s democratic revolution, emphasizes the participation of different railroad workers under different conditions. This is similar to Chapter 5, on the Northern Division, although here there is more continuity between Madero’s supporters under Villa, Zapata, and Carranza. The tables of Appendix B and C attest to these broken threads in the narrative. Very few of the oral histories of the PHO were given by the workers who participated in the labor movement, in Madero’s democratic revolution, and in the constitutionalist revolution against Huerta. To overcome these limitations, I followed a chronological retelling of the revolution through the main turning points in the historical narrative where railroads and railroad workers clearly made a difference. These include episodes in the formation of labor unions like the Great League and the activities of the Mexican Mechanics Union, as well as the extensive use of railroad infrastructures whose mobility facilitates Madero’s electoral campaign. Of course, some of the most important activities of railroad workers are often clandestine, such as helping Madero and Roque Estrada escape from San Luis Potosi, or spying on the federal army by station chiefs and telegraphists. Thus, I can highlight the participation of these forces in the process of social change unleashed by the revolution by relying on a chronological retelling of the Mexican Revolution through the lens of labor geographies and the reliance on machine ensembles.
Conclusions and Future Research

In this project, I set out to understand the impact of railroads and railroad workers on the geographies of the Mexican Revolution. Through a mixed methods approach that involved extensive archival research, I am able to shed light on this exhilarating period of Mexican history. Early on, I laid out the historical and political context that fostered the development of a vast railroad network and the rise of a labor movement that aimed to organize workers in this new industry. Then I traced the political movements that centered on democratic change in Mexico while also emphasizing the role of the railroad and railroad workers during Madero’s democratic campaign and during the democratic revolution. Then, as the revolution reached broader social layers, we saw railroads and railroad workers play an increasingly active role. This process culminated in the Convention of Aguascalientes, where the delegates of the Convention supported the historic demands of the railroad movement for increased wages, better working conditions, and a shorter workday. This progress was interrupted by the split between the reformist and radical camps of the revolution that led to the civil war of 1915.

Nevertheless, the dearth of research on the subject leaves open many avenues for future research, and new questions emerged in the process. For example, the role of organized railroad unions remains a mystery, and other than their inclusion in Huerta’s dictatorship, very few sources consider these railroad workers. Relatedly, although I focused exclusively on the role of railroads and railroad workers in the Northern Division, future studies on the relationship of railroad workers to the Northwestern and Northeastern Divisions would help complement a broader panorama of railroad labor’s involvement. An equally important study on the relationship of the Zapatistas to railroads and railroad workers remains missing. The geographies of the southern revolution and its emphasis on the demands of the peasantry shaped this relationship in
different ways than in the north. Therefore, as radical counterpart of the Northern Division, the role of railroad workers in the ranks of the Zapatista armies should be studied.

The last and most important question that remains open is that of what happens to the railroads and the alliances between the revolutionaries and the railroad workers during the civil war of 1915. This question was beyond the scope of this study because of its political complexity and extent into new geographical regions, but research in this direction could help answer why Francisco Villa and Emiliano Zapata ended up losing the revolution to conservative currents represented by Carranza. My hypothesis is that unlike Carranza and Obregón, the revolutions led by Villa and Zapata had a regional strategy that was not able to jump to the national scale. In contrast, Carranza and Obregón had a national perspective, and they actively courted railroad workers and their unions to help them jump from the regional to the national scale. This is something that Villa and Zapata failed to do and that many historians have not accounted for in the defeat of the radical currents. Researching that question could also offer important lessons to the revolutionary struggles of the future.
### Appendix A: Biographical Information

<table>
<thead>
<tr>
<th>PHO Code</th>
<th>Name</th>
<th>Year</th>
<th>Locality</th>
<th>Schooling</th>
<th>Social Class</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHO/1/3</td>
<td>Arturo Pérez Flores</td>
<td>1899</td>
<td>Guanajuato</td>
<td>Secondary</td>
<td>Working class</td>
<td>Labor union secretary</td>
</tr>
<tr>
<td>PHO/1/12</td>
<td>Paulino Fontes</td>
<td>1883</td>
<td>Sonora</td>
<td>Primary</td>
<td>Urban middle class</td>
<td>Railroad brakeman, conductor</td>
</tr>
<tr>
<td>PHO/1/26</td>
<td>Gilberto Nava Presa</td>
<td>1897</td>
<td>Durango</td>
<td>Primary</td>
<td>Working class</td>
<td>Railroad workshop assistant</td>
</tr>
<tr>
<td>PHO/1/33</td>
<td>J. Jesús Arias Sánchez</td>
<td>1896</td>
<td>Jalisco</td>
<td>Primary</td>
<td>Working class</td>
<td>Railroad station chief, train dispatcher</td>
</tr>
<tr>
<td>PHO/1/41</td>
<td>Adan Uro García</td>
<td>1894</td>
<td>Nuevo Leon</td>
<td>Primary</td>
<td>Working Class</td>
<td>Hat maker, RR messenger/telegraphist</td>
</tr>
<tr>
<td>PHO/1/43</td>
<td>Adalberto López Jara</td>
<td>1900</td>
<td>Mexico City</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>PHO/1/46</td>
<td>Victorio de Anda</td>
<td>1896</td>
<td>Lagos, Jalisco</td>
<td>Primary</td>
<td>Small land owners</td>
<td>Farmer/Rancher</td>
</tr>
<tr>
<td>PHO/1/48</td>
<td>Manuel Sosa Pavón</td>
<td>1888</td>
<td>Puebla</td>
<td>Primary</td>
<td>Working class</td>
<td>Railroad conductor, telegraphist</td>
</tr>
<tr>
<td>PHO/1/49</td>
<td>Justino López Estrada</td>
<td>1888</td>
<td>Morelos</td>
<td>Technical</td>
<td>Urban middle class</td>
<td>Railroad warehouse inspector</td>
</tr>
<tr>
<td>PHO/1/55</td>
<td>Jesús Herrera Calderon</td>
<td>1896</td>
<td>Chihuahua</td>
<td>Primary</td>
<td>Working class</td>
<td>Railroad telegraphist, Chihuahua NW RR</td>
</tr>
<tr>
<td>PHO/1/57</td>
<td>José Nonaka</td>
<td>1888</td>
<td>Ciudad Juarez</td>
<td>Primary</td>
<td>Working class</td>
<td>Hospital assistant, nurse, doctor</td>
</tr>
<tr>
<td>PHO/1/77</td>
<td>Francisco Díaz Pacheco</td>
<td>1887</td>
<td>Chihuahua</td>
<td>Primary</td>
<td>Working class</td>
<td>RR construction, station chief, telegraphist</td>
</tr>
<tr>
<td>PHO/1/79</td>
<td>Félix Delgado Luna</td>
<td>1896</td>
<td>Zacatecas</td>
<td>None</td>
<td>Working class</td>
<td>Trolleys of Torrón, Durango-Torreón RR</td>
</tr>
<tr>
<td>PHO/1/80</td>
<td>Eduardo Andalón Félix</td>
<td>1881</td>
<td>Sonora</td>
<td>Primary</td>
<td>Working class</td>
<td>Miner</td>
</tr>
<tr>
<td>PHO/1/81</td>
<td>José Martínez Rodríguez</td>
<td>1892</td>
<td>Monterrey</td>
<td>Secondary</td>
<td>Urban middle class</td>
<td>Railroad workshops, boilermaker</td>
</tr>
<tr>
<td>PHO/1/94</td>
<td>Severino Medina</td>
<td>c.1885</td>
<td>Tamaulipas</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>PHO/1/98</td>
<td>Silvestre Cadena Jaramillo</td>
<td>1897</td>
<td>Durango</td>
<td>Primary</td>
<td>Peasant</td>
<td>Ranch hand, railroad worker</td>
</tr>
<tr>
<td>PHO/1/103</td>
<td>Rafael Mora Valdés</td>
<td>1885</td>
<td>Zacatecas</td>
<td>Secondary</td>
<td>Urban middle class</td>
<td>Railroad station chief, telegraphist</td>
</tr>
<tr>
<td>PHO/1/108</td>
<td>Jesús Hurtado Ramirez</td>
<td>1889</td>
<td>Zacatecas</td>
<td>n/a</td>
<td>Working class</td>
<td>Miner, railroad assistant in El Paso</td>
</tr>
<tr>
<td>PHO/1/124</td>
<td>Francisco Muñoz Pedroza</td>
<td>1892</td>
<td>Jal/Aguascalientes</td>
<td>Primary</td>
<td>Working class</td>
<td>Railroad workshop assistant</td>
</tr>
<tr>
<td>PHO/1/131</td>
<td>José Luna Lara</td>
<td>1892</td>
<td>Sonora/Veracruz</td>
<td>Primary</td>
<td>Working class</td>
<td>Railroad workshop chief, mechanic</td>
</tr>
<tr>
<td>PHO/1/155</td>
<td>Manuel Mendoza Domínguez</td>
<td>1898</td>
<td>Ciudad Jiménez</td>
<td>Secondary</td>
<td>Small land owners</td>
<td>Student</td>
</tr>
<tr>
<td>PHO/1/156</td>
<td>Pablo Cano Martínez</td>
<td>1895</td>
<td>Ciudad Camargo</td>
<td>Primary</td>
<td>Peasant</td>
<td>Farmer, printer</td>
</tr>
<tr>
<td>PHO/1/163</td>
<td>Andrés Araujo</td>
<td>1896</td>
<td>Tamaulipas</td>
<td>Primary</td>
<td>Working class</td>
<td>Blacksmith, railroad carpenter</td>
</tr>
<tr>
<td>PHO-Z/1/122</td>
<td>Guillermo Fernández Flores</td>
<td>1892</td>
<td>Orizaba, Veracruz</td>
<td>Secondary</td>
<td>Working class</td>
<td>Textile worker, railroad fireman, engineer</td>
</tr>
</tbody>
</table>

**Notes:** Selected Interviews from the Oral History Project (PHO) of the Archivo de la Palabra. Instituto Nacional de Antropología e Historia. Mexico, 1972.

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16 The average individual was born in 1892 and, therefore, around 18 years old when the revolution started.
## Appendix B: Political and Labor Activity

<table>
<thead>
<tr>
<th>PHO Code</th>
<th>Political Currents</th>
<th>Political Organizations</th>
<th>Labor Activism</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHO/1/3</td>
<td>Villismo</td>
<td>Casa del Obrero Mundial of Irapuato</td>
<td>Labor activist with Casa del Obrero Mundial</td>
</tr>
<tr>
<td>PHO/1/12</td>
<td>Maderismo, Carrancismo</td>
<td>Anti-Reelectionist</td>
<td>n/a</td>
</tr>
<tr>
<td>PHO/1/26</td>
<td>Maderismo, Villismo</td>
<td>Father was Anti-Reelectionist</td>
<td>n/a</td>
</tr>
<tr>
<td>PHO/1/33</td>
<td>Villismo, Carrancismo, Obregonismo</td>
<td>Anti-Reelectionist</td>
<td>Railroad labor activist</td>
</tr>
<tr>
<td>PHO/1/41</td>
<td>Magonismo, Villismo</td>
<td>Anti-Reelectionist; brother in PLM</td>
<td>n/a</td>
</tr>
<tr>
<td>PHO/1/43</td>
<td>Villismo, Carrancismo</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>PHO/1/46</td>
<td>Villismo, Obregonismo</td>
<td>Anti-Reelectionist</td>
<td>n/a</td>
</tr>
<tr>
<td>PHO/1/48</td>
<td>Zapatismo, Obregonismo</td>
<td>Anti-Reelectionist, Reyes militia reserves</td>
<td>Alliance of Mexican RR, Order of Drivers and Conductors</td>
</tr>
<tr>
<td>PHO/1/49</td>
<td>Maderismo, Villismo</td>
<td>Supports Liberal press, <em>Diario del Hogar</em></td>
<td>n/a</td>
</tr>
<tr>
<td>PHO/1/55</td>
<td>Villismo, Carrancismo</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>PHO/1/57</td>
<td>Maderismo, Villismo</td>
<td>Anti-Reelectionist</td>
<td>n/a</td>
</tr>
<tr>
<td>PHO/1/77</td>
<td>Maderismo, Villismo</td>
<td>Anti-Reelectionist</td>
<td>n/a</td>
</tr>
<tr>
<td>PHO/1/79</td>
<td>Maderismo, Carrancismo, Villismo</td>
<td>Anti-Reelectionist</td>
<td>n/a</td>
</tr>
<tr>
<td>PHO/1/80</td>
<td>Maderismo, Villismo, Carrancismo</td>
<td>Madero sympathizer</td>
<td>Mining activist persecuted for organizing rebellion in 1911</td>
</tr>
<tr>
<td>PHO/1/81</td>
<td>Maderismo, Carrancismo, Villismo</td>
<td>Anti-Reelectionist</td>
<td>Labor organizing, propaganda</td>
</tr>
<tr>
<td>PHO/1/94</td>
<td>Constitutionalism</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>PHO/1/98</td>
<td>Villismo</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>PHO/1/103</td>
<td>Carrancismo, Obregonismo</td>
<td>Liberal Club of Dolores Hidalgo</td>
<td>n/a</td>
</tr>
<tr>
<td>PHO/1/108</td>
<td>Maderismo, Villismo</td>
<td>Anti-Reelectionist</td>
<td>n/a</td>
</tr>
<tr>
<td>PHO/1/124</td>
<td>Carrancismo</td>
<td>Read <em>El Jocoso</em></td>
<td>Participated in Aguascalientes strike of 1912</td>
</tr>
<tr>
<td>PHO/1/131</td>
<td>Carrancismo, Obregonismo</td>
<td>n/a</td>
<td>Aware of 1909 strike; no longer RR worker</td>
</tr>
<tr>
<td>PHO/1/155</td>
<td>Villismo, Carrancismo</td>
<td>Read <em>El Padre Padilla, La Madre Martiana</em></td>
<td>n/a</td>
</tr>
<tr>
<td>PHO/1/156</td>
<td>Maderismo, Villismo</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>PHO/1/163</td>
<td>Magonismo, Maderismo</td>
<td>n/a</td>
<td>Treasurer in Grand League of Carpenters</td>
</tr>
<tr>
<td>PHO-Z/1/122</td>
<td>Magonismo, Maderismo, Carrancismo</td>
<td>Anti-Reelectionist Club Luis Moya</td>
<td>Circulo de Obreros Libres, Mexican Mechanics Union</td>
</tr>
</tbody>
</table>
### Appendix C: Participation in the Revolution

<table>
<thead>
<tr>
<th>PHO Code</th>
<th>Participation in the Revolution 1910-14</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHO/1/3</td>
<td>Enters armed conflict after Zacatecas in 1914, fights with Villa/Fierro in civil war, returns to civilian life after defeat in León</td>
<td>Lieutenant coronel</td>
</tr>
<tr>
<td>PHO/1/12</td>
<td>Joins revolution supporting Maytorena and Madero in 1910; Supports Carranza in Sonora in 1913 and throughout civil war</td>
<td>Colonel, Deputy</td>
</tr>
<tr>
<td>PHO/1/26</td>
<td>Nava Presa joins Calixto Contreras in 1913; Participates in Battle of Torreón, Trojan Train, Zacatecas and Aguascalientes Conv.</td>
<td>Lieutenant coronel</td>
</tr>
<tr>
<td>PHO/1/33</td>
<td>Joins revolution in 1914 under Villa, attack on Torreón, Zacatecas, Leales de Camargo; joins Carranza and later Obregón</td>
<td>Division General</td>
</tr>
<tr>
<td>PHO/1/41</td>
<td>Incorporated in 1913 under Manuel Medinabeitia; joins Villa’s general staff; fights in civil war, retreats to RR work</td>
<td>Major</td>
</tr>
<tr>
<td>PHO/1/43</td>
<td>Enters revolution in 1913; moves to Zacatecas front in 1913; joins Carranza after surrender in civil war</td>
<td>Second sergeant</td>
</tr>
<tr>
<td>PHO/1/46</td>
<td>Rebels with Calixto Contreras in 1913; Participates in Trojan Train, Tierra Blanca, Battle of Torreón; fights in civil war</td>
<td>Lieutenant coronel</td>
</tr>
<tr>
<td>PHO/1/48</td>
<td>Joins revolution in 1913 with Zapata, smuggles trains; Zapata names him RR chief and Major, leads railroad squadron</td>
<td>Brigadier general</td>
</tr>
<tr>
<td>PHO/1/49</td>
<td>Joins Madero’s rebellion in 1911 under José de la Luz Soto; joins Villa Brigade; follows Angeles to join Villa in 1914</td>
<td>Major</td>
</tr>
<tr>
<td>PHO/1/55</td>
<td>Joins revolution with Maclovio Herrera, Participated in battles from 1913-14, Tierra Blanca, Chihuahua, Jimenez, Torreón</td>
<td>First captain</td>
</tr>
<tr>
<td>PHO/1/57</td>
<td>Joined Madero after Battle of Casas Grandes in 1911; joins Villa and prepares military hospitals, works on RR sanitary brigade</td>
<td>First captain</td>
</tr>
<tr>
<td>PHO/1/77</td>
<td>Used telegraph to spy on army and inform rebels; worked as RR dispatcher for Abraham Gonzalez; joins Villa in 1916</td>
<td>Major</td>
</tr>
<tr>
<td>PHO/1/79</td>
<td>Rebels with Luis Moya and Jesús Agustín Castro in 1910; joins RR volunteers of Torreón; joins Brigada Zaragoza in 1913</td>
<td>Lieutenant coronel</td>
</tr>
<tr>
<td>PHO/1/80</td>
<td>Joined Madero in Ciudad Juárez; railroad battalion with Abraham González; Trojan Train; Tierra Blanca, Torreón, Zacatecas</td>
<td>Division General</td>
</tr>
<tr>
<td>PHO/1/81</td>
<td>Joined revolution with Jesús Carranza, then joined Fierro; fought in Tierra Blanca, Torreon, San Pedro and Bajio campaign</td>
<td>Major</td>
</tr>
<tr>
<td>PHO/1/94</td>
<td>Joined revolution; participated in arms smuggling; moved to the United States</td>
<td>n/a</td>
</tr>
<tr>
<td>PHO/1/98</td>
<td>Rebels with Pancho Villa; fought alongside with Leales de Camargo Brigade under Rosalio Hernández</td>
<td>Major</td>
</tr>
<tr>
<td>PHO/1/103</td>
<td>Forced to move army troops under Huerta in 1914; sympathized with revolution; defected to Obregon in 1914</td>
<td>Lieutenant coronel</td>
</tr>
<tr>
<td>PHO/1/108</td>
<td>Fought for Madero in Chihauhua, bought weapons in Fort Bliss; joins Villa after 1913</td>
<td>Colonel</td>
</tr>
<tr>
<td>PHO/1/124</td>
<td>Associated with Maderista railroad workers; joins revolution after 1913 with Martin Triana, and Natera in the Central Division</td>
<td>Cavalry lieutenant</td>
</tr>
<tr>
<td>PHO/1/131</td>
<td>Abstained from politics, forced into conflict in 1914; defended Veracruz; supplied Carrancista troops of NE Division</td>
<td>Colonel</td>
</tr>
<tr>
<td>PHO/1/155</td>
<td>Joined in 1914 with Leales de Camargo Brigade under Rosalio Hernández; joins Carranza after 1917</td>
<td>General</td>
</tr>
<tr>
<td>PHO/1/156</td>
<td>Fought for Madero in 1911; Joined Leales de Camargo Brigade under Rosalio Hernández after 1913, Dorados under Villa</td>
<td>Brigadier general</td>
</tr>
<tr>
<td>PHO/1/163</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>PHO-Z/1/122</td>
<td>Rio Blanco 1906; Worked on Interocenic RR from 1913-14 and fought Zapatistas with Carranza; 1914-15 fought in Yucatán</td>
<td>Brigadier general</td>
</tr>
</tbody>
</table>
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Archivo de la Palabra del Instituto de Investigaciones Dr. José Ma. Luis Mora
PHO 1/3 Arturo Pérez Flores
PHO 1/12 Paulino Fontes
PHO 1/26 Gilberto Nava Presa
PHO 1/33 J. Jesús Arias Sánchez
PHO 1/41 Adan Uro García
PHO 1/42 Adalberto López Jara
PHO 1/46 Victorio de Anda
PHO 1/48 Manuel Sosa Pavón
PHO 1/49 Justino López Estrada
PHO 1/55 Jesús Herrera Calderon
PHO 1/57 José Nonaka
PHO 1/77 Francisco Díaz Pacheco
PHO 1/79 Félix Delgado Luna
PHO 1/80 Eduardo Andalón Félix
PHO 1/81 José Martínez Rodríguez
PHO 1/94 Severino Medina
PHO 1/98 Silvestre Cadena Jaramillo
PHO 1/103 Rafael Mora Valdés
PHO 1/108 Jesús Hurtado Ramírez
PHO 1/124 Francisco Muñoz Pedroza
PHO 1/131 José Luna Lara
PHO 1/155 Manuel Mendoza Domínguez
PHO 1/156 Pablo Cano Martínez
PHO 1/163 Andrés Araujo
PHO-Z 1/122 Guillermo Fernández Flores

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