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by

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PREFACE AND ACKNOWLEDGEMENTS

The assertion, endorsed by some architectural historians, that "architecture never lies" may sound overly dramatic. However, this dissertation is based on the proposition that the built environment, urban space and its large scale architecture, is a valuable analytic tool for examining the bi-national relationship between El Paso del Norte (in 1888 renamed Ciudad Juárez), Chihuahua, and El Paso, Texas, in the late nineteenth and early twentieth centuries. Industrialization and modernizing forces swept across the U.S.-Mexico border region during this period, enfolding the two towns into an inescapable interdependency that endures to the present. I will use the built environment explore that relationship.

Practitioners in several disciplines have issued calls for more attention to paired borderlands towns through research into the built environment. Daniel Arreola and James Curtis note the need for studies in *urban morphogenesis,* defined as the creation and subsequent transformation of city form. [1] Their analysis is concerned especially with those elements of urban landscape most diagnostic of cultural heritage: town plan, land-use pattern, and building fabric. They contend that urban landscape offers a convenient visual medium for understanding place personality, defined as the result of environment, history, and people interacting in a particular locale and situation. Michiel Baud and Willem Van Schendel invite empirical and comparative studies of a dynamic nature for border situations, whether these involve confrontational attitudes, cooperative alliances or other nuances of interdependency**.** [2] C. Grieg Crysler throws down a further challenge by observing that the status of buildings as signifying systems in the contemporary metropolis remains largely unexamined. Crysler sees architecture as contingent rather than autonomous and self-fulfilling, as enmeshed in circumstance, connected to power and institutional authorities. The constructed architectural object is understood as "text" that signifies

and transmits socio-cultural meanings, but in a manner that is specific to architecture, whether produced through specialized aesthetic judgments or by shared cultural processes.[3] Fitting into Crysler's framework, Tim Dant persuasively insists on the power of "things," humanly conceived and constructed, that incorporate physical presence.[4] Dant's theories help to explain that specific sets of objects in an urban setting share the work, social, political, and economic, that created the *sui generis* ambience in the El Paso-Ciudad Juárez amalgam. The works of Dant and Henry Glassie encourage the use of "architecture" in its broadest dimensions for examining a society.[5] I employ their views of the importance of combining vernacular and formal architecture for study of urban material culture.

The way these calls and assertions were framed led me to draw together a triangular constellation of concepts which form the bounds of this investigation. Theories and pragmatics of borderlands interdependence, material culture, and urban history shape this work. I understand Oscar Martínez's formulation of "interdependence" to mean the direct linkage of the interests of towns or states to the degree that when the position of one shifts the position of the other is affected but not necessarily in the same direction. Interdependency in this dissertation focuses on the mutual relations between two towns within local and state systems but also against a national and international backdrop. Martínez developed the four-part model now generally understood to characterize bi-national borderlands relationships. He identifies states of alienation, coexistence, interdependency, and integration. The history of the U.S.-Mexico borderlands follows a temporal linear progression he outlines. Beginning with a period of alienation from 1848 to 1878 prevailing conditions included warfare, political disputes, intense nationalism, ideological animosity, cultural dissimilarity, and ethnic rivalry. Negotiations at the presidential level reduced this tension-filled climate to a short-lived state of coexistence soon overtaken by the initiation of

interdependency. In Martínez's schema "the greater the flow of economic and human resources across the border, the more the two economies are structurally bonded to each other." He qualifies the categorization by noting that elements of alienation and coexistence sometimes overlap onto the predominating interdependency.[6] My research is aimed at exploring the fluidity between the two El Pasos over their first half-century of fluctuating partnership. While Martínez paints with a broad brush, I try to examine the conceptual construct as it applies to local trans-border conditions at the Pass.

Following up on Martínez's hypothesis, I apply the assertion of Baud and Von Schendel that people ignore borders whenever it suits their convenience. Crysler agrees, seeing cities as "unbounded domains" that carry a special significance in a trans-border setting. Economic organization, social and political activities, and physical constructions overlap international borders far beyond city limits and create new circulatory systems. I identify and analyze the political and economic ideologies and cultural preferences reified in the humanly constructed urban environment at the Pass, in an attempt to understand some of the attitudes and messages those constructions conveyed.

Crysler further declares that architecture is a concrete expression of capitalist ideology, and thus, appropriate as an analytic tool for exploring the development, stagnation, or regression of urban development. Capitalism constructed a built environment in the industrial era by the same logic that mercantilism erected the Baroque structures in Mexico City, and manorialism created the fortified centers of medieval Europe. To attempt to understand buildings outside of their economic context leaves a huge silence. This theoretical principle is an underlying assumption of my study. Capital investment and management in the late nineteenth century was a crucial and controversial element in the towns' shared role as an expanding transportation hub

linking bi-national trade patterns. Growing production and consumption demanded wider and wider distribution, which translated to uneven urban growth on the border. The urban built form became a visual affirmation of economic activity in a new town arising on an architectural *tabula rasa,* and in an old town in the throes of transition into modernization and industrialization.

In addition to themes of interdependency and material culture, urban history underwrites this study. Urban history asks how towns got started, how and why they grew, what problems they have faced, who the inhabitants were, and how their past has shaped their future. Urban history in a borderlands region takes on additional dimensions. Many answers to these questions lie in the non-pedigreed structures taken for granted, the work-horses of municipal life, as well as in highly visible, often costly, civic monuments. I find that urban history is fundamental to a study of the interdependency between this pair of border towns. I treat interdependency as a state of being which originally arose within what Dolores Hayden identifies as the "power of place."[7] More than two hundred years of occupation in the geophysical space at the Pass of the North established a certain urban existentiality. This led to a specific "place personality," a type of urban history expounded by Arreola and Curtis. This is the concept upon which I base the identity of El Paso del Norte/Ciudad Juárez when compared with other settlements in the larger surrounding region during the colonial period. The old town's long history contrasts sharply with the abrupt emergence of the new El Paso. Gunther Barth's concept of the "instant city," offers another mode of urban history for comparing the partnered towns. He structures his model on three characteristics: weak government, a strong or growing economic base, and a past as a colonial outpost.[8] Modernization and industrialization sweeping across the region in the late nineteenth and early twentieth centuries brought simultaneity to transportation and communication, according to Stephen Kern and Amos Rapoport.[9] I note Kern's observations that

instantaneous electronic communication by telephone and telegraph affected the sense of speed, form, and distance, a reality that altered relations in a trans-border bi-national setting.

Edward Soja delves into the need to see urban space as a geographical portrayal of simultaneous relations and meanings that are tied together by a spatial rather than a temporal logic.[10] Soja, a cultural geographer, prefers to see the strata of a specific space in the way that archaeologists uncover layers of civilization, rather than chronologically. Space at the crossing of the Río Grande was originally occupied by people who hunted and gathered natural resources. In the seventeenth century Catholic missionaries and the Spanish monarchy claimed that same space, later to be preempted by Mexico's republicanism, and later yet by democratic principles under the nation's post-Revolutionary Constitution of 1917. Soja's concepts influence understanding of the natural space that contained a layered sequence of competing and overlapping cultural entities in the Pass region.

Methodology and Primary Sources

In my view, iconic monuments which speak forcefully of their designers' and builders' ideologies and embody lofty civic aspirations must be joined with the vernacular and utilitarian architectural environment, all of which mediate social interaction. The grassroots level of the built environment has much to say about the intentions, aspirations, and attitudes of those who constructed the bi-national built landscape in the U.S. southwest and Mexico's far north. A focus on selected sets of structures that populated the towns draws out a more complete picture of two border villages that melded to become one trans-frontier metropolis.

This approach coincides with the observations and recommendations of Celik Zeynep and Diane Favro in their article, "Methods of Urban History."[11] Architectural historians working

on urban topics have broadened the subject matter, now investigating social, economic, political, and cultural issues to explain the built forms of cities. I adhere to their proposition that cities reflect social transformations particularly well. While social histories inform borderlands historiography increasingly more fully, I expect an examination of the material culture to add a certain structural strength, a physical foundation for future social histories. Working through the data has raised questions about a number of issues awaiting dynamic investigation. It is my hope that this dissertation will open the door to a field of further research into the physical environment, the humanly constructed material culture that holds such an important place in the lives of border dwellers.

This study relies heavily on local archives for primary source information which include both towns' City Council Minutes, Minutes of Board Meetings of the El Paso Street Railway Company, Consular Records, and the weekly periodical issued from the Chihuahua State Government Offices. The archives of the International Water and Boundary Commission are useful. Where other sources were non-existent, El Paso's *Herald* and *Times* newspapers carry the burden.

Review of the Secondary Literature

Although a number of general histories and topical works have been published about the history of El Paso and Ciudad Juárez, none have utilized the built environment as an analytic tool. Forming a background for new research are comprehensive histories of El Paso by C.L. Sonnichsen and W.H. Timmons. Armando B. Chávez M. and Martín González de la Vara have penned descriptions of El Paso del Norte/Ciudad Juárez. A welcome addition to the canon is the in-depth research of Guadalupe Santiago Quijada, currently a professor at the Universidad

Autonoma de Ciudad Juárez. She sifts the Ciudad Juárez archives, eliciting useful data about the use and disposition of government owned land.[12] Oscar Martínez's work is essential to a study of borderlands interdependency. His *Border People: Life and Society in the U.S.-Mexico Borderlands* examines the determining role of environmental factors, *Troublesome Border* uses conflict as a unifying theme to examine historical and contemporary relationships, and *Border Boom Town: Ciudad Juárez since 1848* focuses on the economic sphere that binds border towns together.

Secondary works that apply specifically to the El Paso-Ciudad Juárez locale include a study of the *acequia* (irrigation) system in *Salvemos las acequias: La vida del campo dentro de Ciudad Juárez como patrimonio cultural y ambiental (*México: IMIP: JMAS Meridian 107 Editores, 1998) by José Arturo Martínez Lazo, Darío Oscar Sánchez Reyes, and Daniel Chacón Anaya. Land divisions and boundaries embedded in the landscape are described by George McCutchen McBride in *The Land Systems of Mexico* (New York: Octagon Books, 1971 (c1923); *The Ejido: Mexico's Way Out*, by Eyler N. Simpson (Chapel Hill, N. Car.: University of North Carolina, 1937); and *Let There Be Towns: Spanish Municipal Origins in the American Southwest 1610-1810* (College Station: Texas A&M University Press, 1988) by Gilbert Rafael Cruz. J.J. Bowden's study of the origins of the new town is found in *The Ponce de Leon Land Grant* (Southwestern Studies VI, no. 4 El Paso, Tex.: Texas Western Press, The University of Texas at El Paso). Dora P. Crouch, Daniel J. Garr, and Axel I. Mundigo elucidate both town planning and an irrigation system able to sustain a colony in *Spanish City Planning in North America* (Cambridge, Mass.: MIT Press, 1982).

For information about buildings and bridges another cadre of authors appears. Carlos E. Castañeda's collection of colonial documents offers descriptions of some of the seventeenth

century buildings constructed at El Paso del Norte in *Our Catholic Heritage in Texas, 1519-1936* (Austin: Von Boeckmann-Jones Company, 1936). The later physical environment of the town is portrayed by Camilo Argüelles's essay, *"El auge de Ciudad Juárez con la vigencia de la zona libre,"* in *"El problema económico de las fronteras méxicanas,"* vol. 1, ed. Ulises Irigoyen (Mexico, D.F., 1935). Lorena May Parlee records the building of the first international railroad bridge in "Porfirio Díaz, Railroads, and Development in Northern Mexico: A Study of Government Policy toward the Central and National Railroads 1876-1910" (Ph.D. diss., University of California, San Diego, 1981). For information about an early civic monument in El Paso, Texas, see Chris Meister's "Alfred Giles vs. El Paso County: An Architect Defends His Reputation on the Texas Frontier," *Southwestern Historical Quarterly* CVIII, no. 2 (October, 2004).

Chronology and Chapter Overviews

The chronology of this study is not evenly divided. Chapter 1 reaches across the two and a quarter centuries of Spanish colonial and Mexican republican history from 1659 to 1880. I explore the long-lasting effects of colonial urbanization at El Paso del Norte and the social institutions that emerged through construction of the earliest European built urban forms in the vicinity. Congregations, sodalities, and regiments glued the mission town into a tight social unit that, bulwarked by its built environment, withstood threats from indigenous raiders, 17th century rebellion in New Mexico, 18th century Bourbon reorganization, and confiscatory military aggression of the United States in1846-1848. Establishment of the official boundary between the U.S. and Mexico gave rise to early efforts at urbanization on the U.S. side. Chapter 1 includes

the origin and later arrested development of the village on the north bank following the U.S. Civil War.

Chapter 2 examines a short two-year period, 1881-1882, when technology and mechanization created the first international bridges and rail travel, physical means for establishing a nascent interdependency between the old town and its upstart fledgling counterpart. Innovations in technology shrank time and distance in communication and transportation between the two towns and beyond. Ease of river-cum-border crossing allowed heightened economic, social, and political interaction, including a trans-border pool of consumers that shopped on both sides of the river. The bridges conveyed unprecedented volumes of goods and people in both directions between Mexico and the United States. I examine the roles of the bridges as mediating agents for education in municipal governance and compliance with international protocols. More than local phenomena, these bridges were the *sine qua non* of rapidly escalating relations between Mexico and the United States in the late nineteenth century. Metaphorically, bridges represented a new era of comity and communication between the two republics, as well as the two towns, tightening the bonds at both centers and margins.

Chapter 3 considers the material culture that embodied complexities and confrontations within the bi-national community from 1882 to1905. Questions revolve around Mexico's tariff reform and El Paso's defensive political reaction against the perceived threat to its economy. The rise of a Ciudad Juárez-based European merchant community housed in "elegant" stores caused fear of infringement on the Texas town's profit potential. Even though a cadre of mercantile houses existed in El Paso, a group of the town's businessmen made a determined effort to remove the perceived threat. Sustained rancor expressed through political action revealed El Paso's deep-seated dedication to free and unbridled enterprise, regardless of the cost to its

neighbor. The trans-river relationship under strain provides a rich field for inquiry. In this case, El Paso's humanly constructed cityscape suggests an error in townsmen's assessment of their economic position as it related to that of its neighbor.

Chapter 4 opens with a decade of recovered amiability at the turn of the century, offering a look into some corresponding cultural institutions and their repositories. Libraries appeared and schools in both towns multiplied and took shape in updated architectural designs. Large hospitals and sanatoriums depict the Texas town's consistent tendency to perceive its world through a lens of economic opportunism, in this instance with an overlay of humanitarianism. The second half of the chapter surveys the devastating effects of the Mexican Revolution on the Juárez cityscape, 1911-1920. It also considers the effects of the conflict on El Paso. Chapter 5 takes up the difficult period of political renewal for Juárez in the face of its economic deficits during the early years of the decade, 1920-1923. This chapter further makes an inquiry into the mix of social forces in El Paso that attempted to resolve the Gordian knot of prohibition era morality versus economic exigencies and the vice industry across the river. The situation entails reexamination of the role of bridges in trans-river relations. I also explore the parts played by socially conservative factions and the business-oriented sector in El Paso's effort to control social interaction between the two towns. School construction in Ciudad Juárez helps to detect shifts and emphases in cultural and political attitudes.

The dissertation closes at the end of the 1920s, when the municipal interdependency appears to have come to terms with the morality versus vice issue, although an economic balance continued to be elusive. New communication and transportation modes, i.e., steel-reinforced concrete bridges, and airports, moved the partnered towns further into the flow of modernity. The built environment had grown to accommodate a combined population of almost two hundred

thousand and El Paso's strong manufacturing sector was a point of pride. In 1930 the border complex was just beginning to feel the effects of the stock market crash which heralded an oncoming decade with unprecedented challenges, yet unknown.

All translations are by the author unless otherwise indicated.

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31, I am indebted to the El Paso Medical Museum Heritage Collection and the personal collection of Mrs. Cheri Spier (d. 14 January, 2010).

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[1] Daniel D. Arreola, and James L. Curtis, *The Mexican Border Cities: Landscape Anatomy and Place Personality* (Tucson: University of Arizona Press, 1993).

[2] Michiel Baud, and Willem Van Schendel, "Toward a Comparative History of Borderlands," *Journal of World History* 8, no. 2 (1997).

[3] C. Grieg Crysler, *Writing Spaces: Discourses of Architecture,Uurbanism, and the Built Environment, 1960-2000* (New York: Routledge, 2003).

[4] Tim Dant, *Material Culture in the Social World: Values, Activities, Lifestyles* (Buckingham: Open University Press,1999).

[5] Henry Glassie, *Material Culture* (Bloomington: Indiana University Press, 1999).

[6] Oscar Martínez, *People: Life and Society in the U.S.-Mexico Borderlands* (Tucson: University of Arizona Press, 1994), 5-9.

[7] Dolores Hayden, *The Power of Place: Urban Landscapes as Public History* (Cambridge, Mass.: MIT Press, 1995).

[8] Gunther Barth, *Instant Cities: Urbanization and the Rise of San Francisco and Denver* (New York: Oxford University Press, 1975).

[9] Stephen Kern, *The Culture of Time and Space, 1880-1918* (Cambridge, Mass.: Harvard University Press, 1983); Amos Rapoport, *Human Aspects of Urban Form: Towards a Man-Environment Approach to Urban Form and Design* (New York: Pergamon Press, 1977).

[10] Edward Soja, *Postmodern Geographies: The Reassertion of Space in Critical Social Theory* (London: Verso, 1989).

[11] Celik Zeynep and Diane Favro, "Methods of Urban History," *Journal of Architectural Education* 41, no. 3 (Spring, 1988): 4-9.

[12] Guadalupe Santiago Quijada, *Propiedad de la tierra en Ciudad Juárez, 1888 a 1935* (Tijuana, B.C., Mexico: El Colegio de la Frontera Norte; Universidad Autonoma de Ciudad Juárez; New Mexico State University; *Ediciones y Gráficos, Eón*, 2002).

ABSTRACT

Material culture theory informs this study of urban history and borderlands interdependency at El Paso, Texas, and Ciudad Juárez, Chihuahua, Mexico, from 1880-1930. Features incised into and structures built onto the natural environment by the first arriving colonists after the mid-seventeenth century endured for more than two centuries. Over that period, the humanly-created material environment, a social product, fed back into the development of social forms—institutions, rituals, practices, modes of interaction, activities, and beliefs. A significant number of these social forms endured into the late nineteenth century and beyond, even after mechanization and industrialization arrived in the region known as The Pass, the area currently occupied by the two cities.

The analysis of the status of buildings as signifying systems on the border reveals shifts in border interdependency not often evident in written records. This work shows large architectural features to be contingent rather than autonomous and self-fulfilling, as enmeshed in circumstance, connected to power and institutional authorities. The constructed architectural object is understood as "text" that signifies and transmits socio-cultural meanings, but in a manner that is specific to architecture, whether produced through specialized aesthetic judgments or by shared cultural processes.

During the nineteenth century large scale shifts in political arrangements intensified the importance of the former supply station on Spain's northern frontier. Mexico's independence from Spain, 1810-1821, and loss of territory through aggressive acquisition by the United States, 1846-1848, created an international border setting. After 1880 arrival of the railroads propelled the two towns into rapid urbanization and modernization. The built environment of the two

towns empowered municipal development, political, social, economic, and cultural. The first international railroad and street railway bridges furthered local and state relations and expanded bi-national trade and commerce in unprecedented ways. Their forms, based on developing trestle technology, added new dimensions to the physical infrastructure of the border towns and created trans-border investment and entrepreneurial partnerships. An attempt to exploit bridges as social agents shows the power of the built environment in its own right.

From 1885-1905 mercantilist architecture reflected Mexico's newly-reduced tariff rates and intentions to equalize economic opportunity in the borderlands. Many of the new-style department stores in Ciudad Juárez, funded and constructed by Europeans, communicated a global entrepreneurship active on this commercial frontier. Perceived as a challenge by El Paso's merchants, the buildings embodied a surge of investment on the Mexican side which engendered a period of fierce and bitter competition within the dual community. Research into El Paso's built environment of the period shows clearly that the town's overheated resistance to commercial success in its sister city was unwarranted and unwise. Mercantile emporiums and stores, warehouses, and railroad depots reified Mexico's experiment with tariff reductions and spawned a bi-national consumer pool.

Specific sets of objects shared the work—social, political, cultural, and economic—that projected the particular character of the built environment of the El Paso-Ciudad Juárez bi-national community. Groups of structures, acting as social agents, provided a means of interaction rather like language, but additional to it. Government halls and customshouses across the combined cityscape depicted and encouraged nationalistic fervor and zealous patriotism. I argue that social forms, for example, sodalities or congregations, are not only contingent on human activities but also depend on the material environment of those activities. Cultural

institutions fit the pattern of objects that, once built, subsequently shape their human creators. Schools, libraries, hospitals, and churches projected powerful visual messages of economic development and cultural ambitions shared by the two towns. In part, the structural forms helped to shape local societies. Moreover, the edifices, many massive and imposing compared to preceding architecture, gave notice to the outside world of modernizing achievements on the fringes of both nations.

The sphere of transportation was especially formative at The Pass. Geographic location invited the physical reality of iron rails and steam engines which spanned the international border, cut through the hearts of both towns, and launched the region into its role as a hub for intersecting railroad companies. Architecturally speaking, railroads redesigned both towns by their preemption of local space, but also by reducing time and space for exchange of goods and movement of people, and by carrying wire connections for vastly-facilitated communication. Later airports served many of the same functions, further compressing time and space, stamping their imprint into the earth as had those first intrepid settlers.

This dissertation is intended as an introduction to the use of material culture as an analytic tool for further exploration into the social, cultural, political, and economic worlds in the U.S.-Mexico borderlands.

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CHAPTER ONE

LAND FORMS, LAND USE, AND A GENEALOGY OF URBAN SPACE, 1659-1880

Introduction

The seemingly unlimited space of the Americas, at the end of the fifteenth century C.E., beckoned to European powers in the guise of imagined opportunities for accumulation of material wealth. Imperial pretensions to spatial domination required mastery and harvest of the physical resources in conjunction with spiritual proselytizing and indoctrination of native subjects. Spain's monarchs proposed to accomplish the goals they set by sculpting onto the landscape cradles of culture. Scattered thinly across the landscape of northern New Spain, three types would serve the intended purpose: the mission, the presidio, and the civilian settlement. The idea of landscape begins with the intricate intermingling of physical, biological, and cultural features of a specific region or territory. [1] Thus, this history opens with the physical geography of the "Pass of the North." Few descriptions of the great river and its environs can match that of Paul Horgan:[2]

> Out of the vast interaction between ocean, sky, and land, the Río Grande rises on the concave eastern face of the Continental Divide in southern Colorado. In all its career the Río Grande knows several typical kinds of landscape, some of which are repeated along its great length. It springs from tremendous mountains, and intermittently mountains accompany it for three fourths of its course. It often lies hidden and inaccessible in canyons, whether they cleave through mountains or wide level plains. From such forbidding obscurities it emerges again and again into pastoral valleys of bounty and grace. These are narrow, at the most only a few miles wide; and at the least, a bare few hundred yards. In such fertile passages all is green, and the shade of cottonwoods and willows is blue and cool, and there is reward for life in water and field. But always visible on either side are reaches of desert, and beyond stand mountains that limit the river's world. Again, the desert closes against the river, and the gritty wastelands crumble into its very banks, and nothing lives but creatures of the dry and hot; and nothing grows but desert plants of thirsty pod, or wooden stem, or spiny defense.[3]

Inside the confines of the mountain ridges, on both sides of the turbulent Rio Bravo del Norte, the land sloped upward, riven by jutting spurs between which undulated gravelly foothills and deep arroyos sparsely carpeted with the native flora, much of which was sharp-spined or otherwise well adapted to the semi-arid climate. Across the flatter river valley, the surface topography was incised by the river's potent force.

Basing her observations on the work of Friedrich Ratzel, a European geo-anthropologist who began publishing in 1884, Ellen Churchill Semple wrote that:

> Nature abhors fixed boundary lines and sudden transitions; all her forces combine against them. Everywhere she keeps her borders melting, wavering, advancing, retreating. If by some cataclysm sharp lines of demarcation are drawn, she straightway begins to blur them by creating intermediate forms, and thus establishes the boundary zone which characterizes the inanimate and animate world.[4]

As Ratzel and Semple predicted theoretically, the agreed upon international boundary line between Mexico and the United States has tended to shift as the power of water worked upon the land. This behavior of the natural world prefigured the nature of borderlands human geography, the many forces in play eroding the receding frontier in some places and building up new social, cultural, and political spaces in others.

The great river's indomitable action re-contoured the surface between the lower forms of the mountain ridges repeatedly. For three hundred years of known history, and undoubtedly for countless previous millennia, "the Río Grande coiled and uncoiled and straightened itself out."[5] The stream, two thousand miles long, fed by tributaries in Colorado, New Mexico, and Texas, drains 180,000 square miles, offering virtually unlimited potential for episodic flooding with far-reaching effects. Floods in 1740 and 1829 seriously affected the mission churches of Ysleta and Socorro downstream from *la Misión de Nuestra Señora de Guadalupe del Paso del Norte.* In 1819, the river's main current flowed about a mile north of both churches, located then in what

would become U.S. territory after the mid-century war. After 1821, the primary course had shifted to a mile south of the structures onto land which would remain in Mexico's possession.[6] Long-time residents at The Pass reported that in 1821, before a town existed on the left bank, "the river had run close to the eastern bluff where its bed was plainly to be seen."[7] The torrential episodic floods inflicted extensive damage on homes, farms, vineyards, orchards, irrigation systems, other property and livestock, all works created and maintained at enormous cost in human labor.[8]

In 1867 the Fort Bliss military post at Magoffinsville on the north bank was swept away and the river pushed on in its determined march south.[9] The most radical shift in the main channel occurred during a violent surge of the stream's waters further into Mexico in 1864. According to a local eyewitness

> The changes were to such a degree that at times during the night the river would wear away from fifty to one hundred yards. There were instances in which people living in houses distant 50 yards from the banks, on one evening, had to fly in the morning from the place on account of the encroachments of the river, and on many occasions they had no time to cut down their wheat or other crops.[10]

By the 1870s the increasing pace of settlement in the upper Río Grande watershed regions of Colorado and New Mexico, driven by mining, railroading, and farming, greatly affected the river's rhythms.

The state of Chihuahua is dominated by arid and semi-arid climates, with nearly three-fourths of the state desert and steppe. The driest areas are the north and northeast, where the dearth of rainfall was (and continues to be) the most important limitation to agriculture.[11] In the northern region of the high Chihuahuan desert precipitation is so slight that agriculture is practically impossible without irrigation, even in the fertile river valleys. The passage between

low mountain ranges known as El Paso del Norte was situated near the center of these dry tablelands, with the river's fords located at a strategic point in the Río Grande basin.

In spite of the enormity of the challenges presented by climate and terrain, hunger for conquest and control impelled traffic north and south along *el camino real de tierra adentro*, New Spain's "Royal Road of the Land Within." This singular artery of communication and transportation intersected the Río Grande at The Pass of the North. In 1659, Franciscan friars García de San Francisco y Zuñiga and Francisco de Salazar established the mission of Our Lady of Guadalupe of the Mansos at a location recommended by Fray Alonso de Benavides, who was also a traveler likely to have crossed at or near that point, circa 1630. [12] The royal road carried more and more traffic as the seventeenth century progressed. New Mexico's Governor Bernardo López de Mendizábal (1659-1661), and his wife, Doña Teresa de Aguilera de la Rocha, traveled its full length, and crossed the Río Bravo, twice. The couple left Mexico City with the yearly supply caravan, and arrived at Santa Fe to assume the governorship in December 1658. Among the creaking *carretas* (wagons, mostly two-wheeled), their large *carossa*, a covered wagon with bedding and curtains, must have appeared quite distinctive.[13] Beginning c1680, as a result of the Pueblo Revolt in New Mexico, the mission expanded to include five settlements known as Socorro, Isleta, Senecú, San Lorenzo, and Tiburcio.[14] Traffic across the stream by 1724 included traders from New Mexico making annual trips to the markets of Chihuahua. By 1800, the trains included hundreds, sometimes thousands, of cattle and sheep on the hoof for sale in the southern markets, some providing fresh meat for the expeditions.[15]

In the latter part of the eighteenth century, the governor of New Mexico built and maintained two bridges, the first known to cross the troublesome stream: one, about two miles above El Paso del Norte, the other a few miles south of Santa Fe.[16] The bridges each measured

over five hundred feet long and seventeen feet wide, simple beds of pine logs supported by eight caissons–wooden crates filled with stone, sand, and clay–sunk into the river bed. Zebulon Pike described the upper bridge as having eight arches, constructed as follows:

> the pillars made of neat woodwork, something similar to a crate, and in the form of a keel-boat, the sharp end or bow to the current, this crate or butment [*sic*] was filled with stone, in which the river lodged sand, clay, etc., until it had become of a tolerably firm consistency. On the top of the pillars were laid pine logs, lengthways, squared on two sides; being joined pretty close, these made a tolerable bridge for horses, but would not have been very safe for carriages, as there were no hand-rails.[17]

The bridge below Santa Fe was repeatedly washed out until 1854; apparently the bridge at The Pass suffered the same fate and neither was rebuilt until the 1880s.[18] The peregrinations of the Río Grande would "cause fatal embarrassments to the citizens and officials of both republics in fixing boundaries and titles to lands, in preventing smuggling, collecting customs, and in the legal punishment of all crimes and misdemeanors committed near the supposed boundary line."[19]

International trade across the Río Grande sprang up when, in 1821, Mexican independence opened the Santa Fe market to traders from Missouri who became active in Chihuahua, bringing goods across the Great Plains to Santa Fe and then southward down El Camino Real, and across the Río Grande.[20] In one month alone, August 1844, eight Mexican merchants took from Santa Fe more than $90,000 worth of American imports to sell in Chihuahua, Durango, and Aguascalientes, all transported across the great river at the "Pass," in the traditional manner without a bridge.[21] During the 1846-1848 war between Mexico and the United States, El Paso del Norte became the western gateway for invasion by the United States Army of the West led by Colonel Alexander S. Doniphan who aimed to reinforce the units of Brigadier General John Wool, thought to be operating in the state of Chihuahua.[22] One means for conveying passengers between El Paso del Norte, Chihuahua, and El Paso, Texas, was a hand-hauled ferry over the Río Grande. In 1868, partners Benjamin Williams and William Pierson paid $16.50 for a license from the state of Texas to operate the ferry service. They posted $1,000

bond, and purchased land adjacent to the ferry dock, then sub-let the business to the Acosta family of El Paso del Norte, who managed the service for many years.[23] For three and a half centuries, residents and newcomers awaited the arrival of a permanent bridge to ease the frequent crossings of the Great River at The Pass of the North.

A Genealogy of Urban Space at The Pass of the North: Division of Lands

Edward Soja argues that space in itself may be primordially given; that is, 'Nature' may be seen as a given context, but the organization of space is a product of social translation, transformation, and experience. [24] Through two and a half centuries narratives of cultural identity embedded themselves into the historic urban landscape of El Paso del Norte in what Samuel Truett has dscribed as "a shifting palimpsest of spaces, each with its own circuits and borders."[25] Long before theorists of history, politics, culture, social organization, and geography articulated premises concerning "space," the practices of Spanish colonization embodied principles now widely recognized and circulated, if not universally embraced. Historical records attest that planting of missions, presidios, and towns created European-styled social spaces, bounded, allotted, and permeated with enduring, cross-cultural interchanges, noticeable in development of agricultural economy, place pattern, culture, and architecture. This social spatiality was anchored in and occupied by physical structures, which in turn *re-acted* upon those who dug the ditches, broke out the virgin land for farms, laid the foundations for buildings, and shaped the adobe blocks. The creators of these spaces were themselves shaped by their productions. In April, 1598, *Capitan-General* and *Adelantado* Juan de Oñate declared possession by the Spanish Crown of all the lands—space—of the Río del Norte

> with all its meadows, pasturelands, cities, villages, founded now in the kingdom and province of New Mexico, with its residents, mountains, valleys and all the

> native indios which are now included in their mountain highlands, even to the stones and the sand of its rivers and the leaves of its trees.[26]

While Oñate and other empresarios looked to the horizons for the limits of their mandates, towns were the vehicle that fixed in place Spain's continental territorial claims, extended limited political control locally and regionally, and offered, or imposed, cultural transformations and experiences.

The most successful towns inevitably locate at the center of communications networks, large and small, in relationship with their suburbs and other towns and communities.[27] When Benavides recommended the intersection of *el camino real de tierra adentro* and the Río Grande as a favorable location for a settlement, his observations adduced that, in addition to the goal of converting the local inhabitants to Christianity, safe passage for non-natives could be assured for a distance of two hundred leagues along El Camino Real. By placing "three or four Religious, with only fifteen or twenty soldiers for escort. . . . Under this security there would be settled many very rich mining camps . . . and splendid ranch sites, with water, and parcels of very good land."[28] Early Spanish explorers encountered a native group which they named the Mansos, living nearby, possibly within, The Pass and guarding the strategic ford and its surroundings. The Mansos had carved out their own version of socially-produced space at the crossing, constructing a nearby *ranchería* (communal habitation) and defending it forcefully.[29] Space at The Pass, unbounded by walls, fences, or other protective devices, had been shaped and molded from historical and natural elements by a political process.

Space at The Pass of the North underwent an irreversible metamorphosis when García and Salazar arrived and declared possession of the region by virtue of Spain's evolving set of laws, known by the late seventeenth century as the *Recopilación*. Notions of the use of space derived from Europe but, transformed in the social reality of Mexico and further adapted to

conditions of the frontier, they created unique forms. At the beginning of the modern era Spain's Laws of the Indies of 1573 defined a city as the urban area plus the neighboring hinterland, a concept that dates to the Greeks and the Romans, and is echoed in Oñate's declaration.[30] In compliance with the laws, García chose a site with "access to good roads and passage by water," conditions calculated to promote commerce and establish reliable defensive arrangements.[31] Subsequently, stamped into the earth at The Pass of the North, *la Misión de Nuestra Señora de Guadalupe de los Mansos del Paso del Norte* took shape.[32] Three fundamental forms– land allotments, an irrigation system, and the mission church–marked the horizontal outlay of this important point on the frontier. The basic model of a town plan, a grid pattern emanating from a plaza surrounded by a church, a presidio, and government houses, appeared only much later at El Paso del Norte.

Carved indelibly into New World terrain were many town plans which emphasized the importance of urban development through an orderly arrangement of structures related to each other and to the open spaces in a way that mirrored the double hierarchy of church and state, the dual ordering principles of the pattern.[33] However, the pragmatics of frontier survival dictated that, although the precise site of a town was determined and fortified as much as possible, the laying out of fields and construction of an irrigation system took precedence over formal design of a town built around a plaza.[34] The imperative of creating a self-sustaining agricultural unit, three hundred miles from Santa Fe to the north, and farther from any source of aid from the south, drove the agenda of organization at the mission of Guadalupe. Father García moved first to the physical founding of his enterprise, clearly outlined in Ordinance 90 of the Laws of the Indies, regarding the orderly division of space.

> Separate first the land that is needed for the house plots [*solares*] of the town, then allocate sufficient public land and grounds for pasture where the cattle the

> inhabitants are expected to bring with them can obtain abundant feed, plus another portion for the natives. The rest of the grounds and territory should be divided into four parts: one is for the person in charge of building the town; the other three should be subdivided into thirty lots for the thirty neighbors of the town.[35]

With the Laws to guide him, and a nascent municipal population collected, the priest was ready to designate the physical foundations for the new mission, keeping in mind that the king retained ultimate title to all lands. The physical core of the developing village did not fit the pattern decreed by the Laws, as the discussion regarding the irrigation system will show. Over the next two decades more people settled near or in the mission bounds, and expansion in 1680 resulted in a more formal resemblance to the model recommended by authorities in Madrid. In Spanish colonial towns space was divided into communal and private ownership. Each municipality owned and administered *bienes comunales* (communal lands), woodlands and pasture, as well as a separate well-defined multipurpose area, the *ejido,* which accommodated activities as varied as a public threshing floor, the village slaughter pen, or an area for citizens' recreation. No building was allowed on this space.[36] Heads of Spanish households received enough land, chosen by lottery, to support an average family.[37] Each Indian village, known as a *congregación*, was to be insured in its possession of a plot of land whereon to construct houses, public buildings, and other necessary structures and at least one square league, 4,428 acres, or more if necessary, made up of crop land, pasture, and woodland.[38] Indian-held lands were inalienable, i.e., non-transferable. When Charles III of Spain commissioned the Marquís de Rubí to inspect New Spain's northern frontier, c 1765, two members of his expedition kept records, engineer Nicolás de Lafora and cartographer, Joseph de Urrutia.[39] Urrutia's map, drawn in 1766 shows one large settlement at El Paso del Norte, divided by the main irrigation canal which

served the Spanish segment to the north of it, with a secondary canal branching off to the south serving the Indian portion of the community (see Fig. 1 below).

The Acequia

No sooner had congregants received their land allotments at Our Lady of Guadalupe mission, than Fray García set them to constructing the primary irrigation canal of the mission settlement, a task of "great labor" about which Governor Mendizábal charged that the Indians complained to him often.[40] The phrase "opening an *acequia*," in order to divert water from a river, is a euphemistic description of a work of enormous effort. The typical *acequia* in colonial New Mexico measured four to six meters wide (12 to 18 feet), and half a meter to two meters in depth (18 inches to 6 feet).[41] On the frontier, tools and implements were rarely of metal, more commonly of wood, and the Mansos, who made up the bulk of the labor force, as far as is known, had little, if any, experience in sedentary agricultural practices.[42] Although a substantial amount of the soil was loosened and pushed out of the ditch channel by yokes of oxen dragging crude scraping devices behind them, the enterprise demanded much human labor.[43] The earth removed from the ditch bed formed mounded levees along the edges of the canal, helping to contain the waters.[44]

Determination of a course for the canals was established by a process of trial and error. Following the excavation of a certain stretch of the canal, the water was freed to identify naturally the best route, resulting in an intricate and sinuous course, which by-passed hillocks and other obstructions. The *acequia madre*, the main canal which received water directly from the river through wooden headgates, was placed at a level high enough to allow gravity flow to carry the water into the secondary canals which reached the farm parcels.[45] The system served

both agricultural and domestic purposes. At the most advantageous point in the river, diversion dams had to be installed in the channel of the Río Grande. Workers formed large cylindrical baskets of stakes woven together by tree branches, and filled with earth and stones which they implanted in the river bed when the water level was low.[46] The river's surging fluctuations frequently washed away these fragile structures, requiring replacement with some regularity.[47]

Construction and operation of irrigation canals was not an innovation on the frontier. When early explorers arrived in the territory, they found pueblo groups in New Mexico, Arizona, and along the Río Grande valley ranging from a few miles downstream from The Pass north to Santa Fe who were effectively managing crop watering systems. This region included a community of Piro indians at Senecú who practiced irrigated farming about five miles below The Pass of the North.[48] The push northward into regions with scarce rainfall was conducted by the religious orders carrying with them, in addition to the Christianizing impulse, knowledge of a settled agricultural life. Augmenting the missionaries' store of information, incoming colonists brought a tradition of hydrological methods acquired in antiquity from the Romans and the Moors.[49] These heterogeneous customs converged to sustain a network of newly-established agricultural villages which built on prior knowledge and practices.

The secular sodality of *acequia* management was one of the most deeply entrenched and efficient confraternities within the riverine communities; conditions for survival depended upon its effectiveness.[50] Participation in an enterprise of such magnitude encouraged values of compromise and cooperation across ethnic and cultural divides. Although the mission of Guadalupe was surrounded by wide expanses of stark, inhospitable territory, the river valley's deep richly fertile soil–silt deposited each time the river's seasonal floods subsided–combined with water diverted from the unruly stream, produced abundant harvests, once cultivation

practices were established. Soil, water, and the long, warm growing season offered possibilities for extraordinary agricultural production under systematic agrarian practices. The settlement's Spanish colonists and neophyte Indian farmers together contributed their work and personal resources in order to provide those benefits to the combined community.

Distribution of water, as well as land, was the responsibility of governors and ecclesiastical authorities, who in turn delegated those powers to local town councils. Construction of an irrigation system from "scratch" and its subsequent use required adherence to

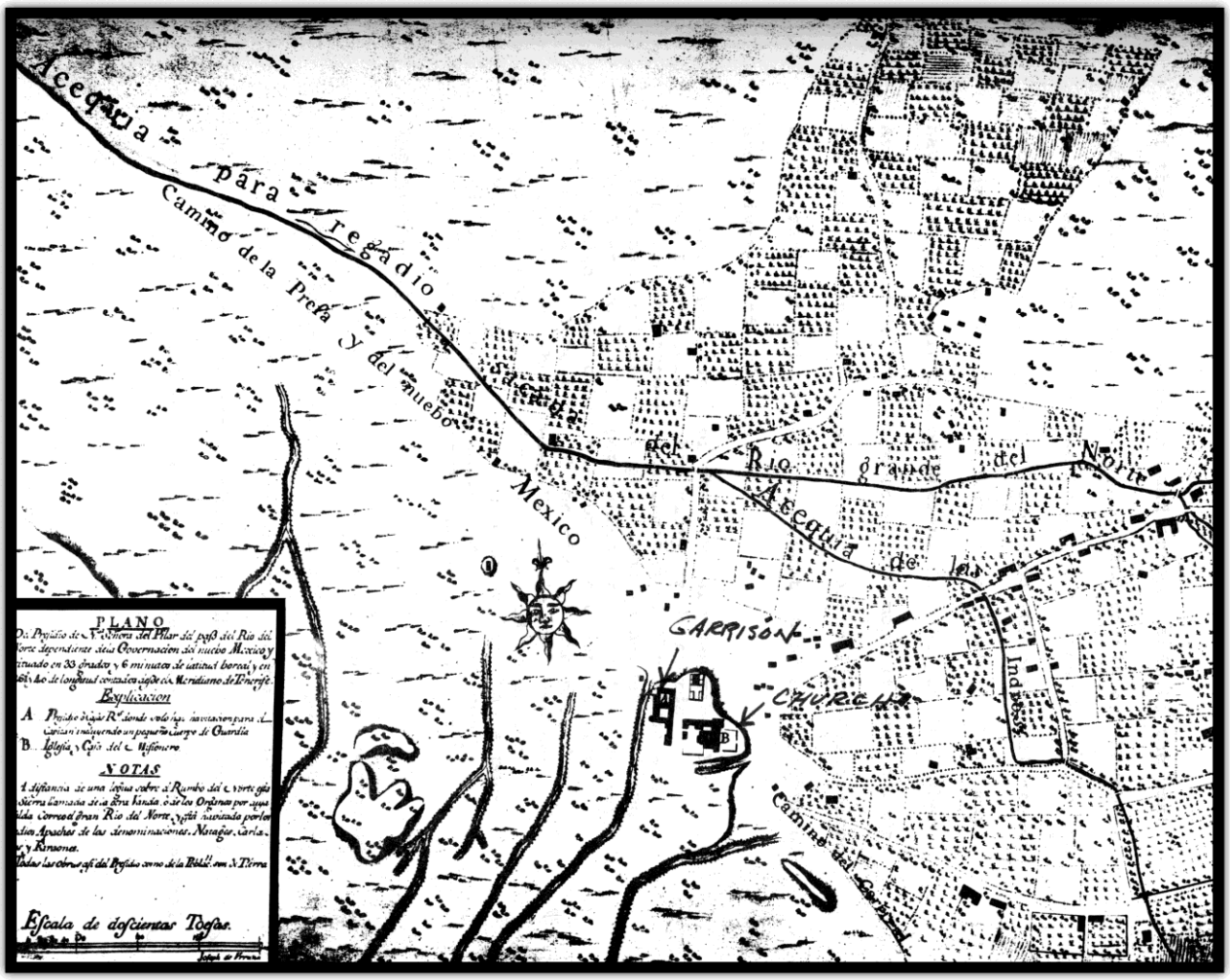

Fig. 1. Urrutia, Map of *El Paso del Norte, 1766.* Courtesy of University of Texas at El Paso Library, Special Collections Department. Reprinted, by permission, from Valencia, "Twentieth Century Urbanization in Latin America and a Case Study of Ciudad Juárez," Fig. 10.

regulations and consideration of other users. The municipal elders often assigned commissioners for daily administration in establishing and distributing water shares, and penalizing non-compliance of regulations. The official was expected to guard the state of the canals vigilantly and to supervise repairs and maintenance, including controlling the numbers of days of service required from each individual, family, or neighborhood.[51] The *acequia* network gave birth to an association which mobilized and controlled a significant cross-cultural work force, as well as an organization whose responsibility it was to solve the problems generated by the distribution and rights to water.[52] Thus, the *acequia* system of Our Lady of Guadalupe mission exerted considerable power and influence over the lives of the users who constructed it with a profound understanding of its role as deliverer of the most basic necessity of existence. Sculpted onto the landscape at The Pass— in the territory presently occupied by El Paso and Ciudad Juárez—the *acequia* system, expanded and further developed over almost three centuries, gives undeniable witness to the power of features incised into the geographic platform that anchors a local society.

The Mission Church of Nuestra Señora de Guadalupe de los Mansos del Paso del Norte

A little more than two years after designating ownership of farm and home plots, and constructing an irrigation system, Fray García felt able to impress another significant feature onto the urban landscape. On 2 April 1662 he laid the cornerstone for the church, *el templo*, to replace the original little branch-and-mud structure he had used until that time.[53] The Laws of the Indies decreed that the temple of a community should be "separated from any other nearby building, or from adjoining buildings, and ought to be seen from all sides so that it can be decorated better, thus acquiring more authority."[54]

For the mission church the priest chose a site at the upper margin of the flood plain, high enough to escape the ravages of the Río Grande, space consecrated to substantiate his vision and that of the Spanish crown. The church has stood for more than three centuries, a witness to the ability of an urban landscape to nurture citizens' public memory. In the act of founding a mission settlement, Father García and his congregants traced the outlines of the community onto the earth's surface. Then, they erected the structures necessary to the newly developing cultural landscape.

Early Spanish construction was much like that of the indigenous pueblo Indians: thick earthen or sod block walls, with flat roofs, layers of clay or soil laid over ceiling beams of peeled logs, or *vigas*. While the pueblo Indians had used puddled adobe for construction of walls, the Spaniards seem to have introduced the technology of forming adobe–a mixture of clay, sand, water and often straw or other plant fiber–into bricks, which were then sun-dried. During the Spanish Colonial era, other refinements included squared, hand-adzed roof beams. Special effects like hand-carving and decorative paintings were usually reserved for churches and important rooms in prominent dwellings.[55]

During the first decades of Spanish colonization in Mexico and South America, professional architects and engineers brought building knowledge to the new provinces. However, neither secular experts nor engineers were among the early colonists in the northern regions. The friars were left to their own devices, with the result that each missionary established the program, evolved the design, and supervised the construction and decoration of the church at his post. The mission churches in the five settlements at The Pass were very similar, two identical in dimensions and structure.[56] The friars executed ambitious building projects for which they themselves were the architects, contractors, foremen, and building-supply agents. By the

terms of a vice-regal contract made in Mexico City in 1631, the King of Spain assumed the expenses of equipment and supplies for the religious establishment of New Mexico. The contract provided that there should be given each friar, the first time that he went to the province, a quantity of tools and materials for building his church. These included ten axes, three adzes, three spits (spades), ten hoes, one medium-sized saw, one chisel, two augers, and one plane. Further enhancing the construction were a large latch for the church door, two small locks, a dozen hinges, some small latches, and 6,000 nails of various sizes.[57] This standard set of supplies and equipment suggests that a normative model for a church existed in the minds of Spanish planners.

Architect Felipe Lacouture has given his later analysis of the primitive splendor of the church of Our Lady of Guadalupe at El Paso del Norte. After having suffered the deteriorations of time, damages of war, and well-intentioned repairs, the mission church was restored in 1967 to what amounts to nearly its original design.[58] Lacouture regards the small building as a true achievement. As he sees it, the architectural problem for its original designer/builder was not only to enclose a wide space more or less skillfully or cleverly. The temple, above all, had to be expressive of the religious and human yearnings of the people it served, and this difficult problem had to be achieved with the few elements available, where the only support for the walls was the joining with the *vigas* (beams) around the perimeter of the ceiling. Lacouture notes that its builder not only took advantage of the innate dignity of available materials, but also used to advantage the transverse rhythms of the beams and their carved support brackets. He employed differences in ceiling levels in order to implement lighting gradations, leaving the nave which accommodated faithful hearers of the sermons in relative shadow, and

illuminating the presbytery, the "place of the holy sacrifice," in order to hold the attention of the celebrants (see Fig. 2).[59]

Spanish in plan, form, and idea, Indian in method of construction and detail, the church of *Nuestra Señora de Guadalupe de los Mansos del Paso del Norte* appears as a simple, yet profound, reification of the organization of space as a material product which embodied the relationship between social and spatial structures of bi-cultural urbanism, the type of site identified by Michel Foucault as a 'heterotopia.'[60] "The church" constitutes one example of heterotopia, a heterogeneous space of sites and relations, contrasted with fundamentally unreal spaces of utopias, capable of juxtaposing in a single real place several spaces, several sites that are in themselves incompatible. Contained on the frontier within adobe walls and ornate carved beams, the ideological content of socially created heterogeneous space served the variety of congregants.

Fig. 2. *La Misión de Nuestra Señora de Guadalupe del Mansos del Paso del Norte*. Courtesy of El Paso County Historical Society, El Paso, Texas.

Fray Juan Talabán, regional custodian, described the dedication of the new temple on 15 January 1668 as a ceremony of "much solemnity," with one hundred baptisms and many marriages, but also celebrated with "joyous dances and much happiness."[61] Talabán, recognizing that the project had been accomplished at a cost of "so much labor," also noted the attraction of food and houses to those who had not enjoyed them previously. The official opening of the *acequia* was celebrated at the same time.

Provincial Capital at the Pass

By the year of the dedication, 1668, the mission population at the Pass had grown to slightly more than 1,000, in spite of periodic droughts; Apache raids closed a number of missions, some not far from that of *la Señora de Guadalupe*. Marriage, baptismal, and burial records show that García's settlement absorbed Piros, Abós, Jumanos, Sumas, Tanos, and Apaches during this period. Numbers of the Spanish residents during that time remained at approximately thirty.[62] While unrest swirled throughout the northern frontier and missions under imminent threat moved or closed, the advantages of place and space anchored El Paso's stability: thriving agriculture thanks to the great river, which in turn nurtured a population large enough to defend itself, and a strategic location on the Royal Road. The site of the Guadalupe settlement was never changed, even during the Bourbon reorganization of the next century.[63]

In August 1680 a number of the pueblo Indians of New Mexico, joined by some Apache, revolted against colonial rule, releasing pent-up fury which resulted in much loss of life and egregious damage within many of the province's settlements. Approximately two thousand refugees, Spanish and Indian, including three hundred Piros, Tompiros, and Tanos, fled southward toward The Pass of the North.[64] Santa Fe officials scrambled to find accommodations

for their dislocated and bereft citizens. Governor Otermin and his aides recognized the imperative of installing their shaken government within a physical plant which would both symbolize and concretize their control as much as possible. To maintain their fragile grip on civil authority, and to serve notice that Spain was not abandoning its claim on New Mexico, the surviving leadership established a temporary provincial capital at El Paso del Norte, a measure that prompted purchase of structures built and owned by the Mansos.

> They . . . bought land and put up new *casas reales* (government buildings): And his lordship bought of the Manso Indians the site in this pueblo on which now his lordship has built some government buildings . . . . Likewise his lordship has bought of the Mansos Indians three other houses adjoining the said government buildings. The one in which he has the guard-room, and which also serves as a jail, has two rooms; the other two adjoining it have, the one, two rooms, and the other, three rooms. Another house, which he likewise bought of the said Mansos, and which is beside the government buildings, has three small rooms.[65]

The "royal houses" were located near the mission church on the hill above the floodplain. The small group of government buildings housed New Mexico's governor and the Santa Fe *cabildo* (town council) from 1680 until the northern province was reoccupied after 1692. The suddenly expanded *Misión de Nuestra Señora de Guadalupe* was to be regarded, temporarily but officially, as the seat of government for the jurisdiction of New Mexico.[66] The remaining mass of refugees found shelter in a constellation of settlements around El Paso del Norte. Many of them, formerly from pueblos adjacent to Santa Fe, would have known how to construct new dwelling spaces.

Adobe buildings are generally very simple, technically and decoratively. Prior to the industrial age, regional architecture was predicated upon an economy of scarcity. Local resources were used in labor-intensive construction methods. Building massing, land use and town planning all manifested folk solutions to making a little go far, illustrating the simple but elegant

frugality of the southwest "pre-railroad" architecture. Single unified contiguous structures characterized the towns. A series of houses with shared walls minimized the amount of surface area exposed to climate changes, thus stabilizing interior temperatures. The heavy mass of outer adobe walls absorbed the sun's heat during the day, and radiated it outward during hours of darkness. Studies have revealed the pueblo to be an energy efficient system that tended to equalize internal energy profiles over the extremes of season and day. By its shape and materials, it provided a consistent level of internal comfort that characterized the built environment at El Paso del Norte for two and a half centuries.[67]

The exodus from the native uprising in New Mexico resulted in creation of new villages or expansion of existing ones, an arrangement of five settlements subsidiary to El Paso del Norte which became permanent homes for many. By 1760, the following numbers were recorded: [68]

TABLE 1

POPULATION NUMBERS, BY FAMILIES, OF SETTLEMENTS ADJACENT TO EL PASO DEL NORTE

	Spanish (creole)	Suma	Piro	Zuma	Total
San Lorenzo	30	21			141
Senecú	29		111	18	618
Isleta	18		And Tigua 85		660
Socorro				46	?
Tiburcio	424 persons				424

By 1773 the number of inhabitants at El Paso del Norte proper had reached 9,363 adults and a few more than 500 children, and included "all classes of people, Indians and whites." The observer noted that "the Mansos . . . are totally extinguished, and on their lands our citizens are living with their farms and homesteads. . . ."[69] An interpretation from Lefebvre finds that space on New Spain's frontier served as a tool of thought and action, a means of control, hence of domination and power; within the form of hierarchical social functions that space was fluid. The "historical" and its consequences, in the sense of what happened at a particular spot or place and thereby changed it, became inscribed in space. For the Mansos, a diversity of additional social groups, and the Spanish, abstract space transported and maintained specific social relations, dissolved others and stood opposed to yet others.[70]

The Presidio and the Plaza de Armas

With New Mexico under belligerent groups ranging and raiding widely in Nueva Vizcaya, and the exiled New Mexicans in residence, the need for increased military protection at El Paso del Norte became urgent. In January 1681 the request for a presidio was approved, to be staffed with fifty paid soldiers whose primary duty was to protect El Paso and its neighboring villages. In 1683 the *Presidio de Nuestra Señora del Pilar y Señor San José del Paso del Norte* arose on the urban skyline near the church.[71]

Officially presidios varied but little in design and construction, although plans, conditions, and instructions from the crown were adapted to "expert" opinions of authorities and residents on the frontier.[72] Located most often near good farming land and built on high ground, presidios were constructed in a square or rectangular shape with walls at least ten feet high; the length of the sides ranged from two to eight hundred feet each. Placed on two diagonal corners,

round bastions, or towers pierced with narrow ports, rose above the wall, an architectural refinement which allowed firing of weapons down the length of all four walls. Roofs of buildings constructed inside the walls served as platforms that allowed defensive fire from directly above. Included inside the presidio were storage facilities, a chapel, and rooms for the officers and men. The only outside opening was the main gate.[73]

Another feature mandated by the Laws of the Indies, the *plaza de armas*, or simply 'the plaza,' appeared during this period in the space facing the entrance of the church.[74] There Governor Otermín mustered the troops for his unsuccessful attempt to reconquer New Mexico in 1681. A decade later Otermin's replacement, governor and captain general Don Diego de Vargas, took over the government at El Paso on 9 August 1692. Again, the *plaza de armas* was the point of departure for a military expedition to the north along the Río Grande toward recovery of Santa Fe.[75] Although town streets deviated from the prescribed model, the plaza at El Paso occupied the position in the town plan decreed in the Laws of the Indies, perhaps by informed intention and practical design. In some ways the built environment of the mission settlement-cum-refugee haven occupied the spatial relationships urged by the Laws of the Indies. The town's overall ground plan, however, was determined by economic exigencies, not by Spanish Law. By the time the plaza appeared, the town had developed in ways that did not resemble a rectilinear street system on a gridiron plan. The community's roads followed the pathways dictated by the gravity flow of the water in the *acequia madre* and the secondary canals.

The Eighteenth Century at the Pass

At the Pass of the North the opening of the eighteenth century began to restore a semblance of stability after the long period of aggressive native resurgence in both *Nueva México* and *Nueva Vizcaya*. Positioned at roughly the half-way mark between the newly resettled towns of upper New Mexico and burgeoning silver mining activity in lower Chihuahua, El Paso del Norte developed as a supply and distribution center.[76] Demand for grain and meat in the mining region stimulated New Mexico's farming and ranch economy and the rise of its textile and livestock industries.[77] Traffic in both directions along *el Camino Real* accelerated. During episodic food shortages in lower Chihuahua maize sent from as far away as El Paso sold at inflated prices. In addition to exporting grain and good wines to the mining communities, the town became known as a way station for rest and provisions, its built environment expanding with the growing population.[78] However, assurance of security ebbed and flowed in the northern provinces during the eighteenth century. Although some native clans and associations chose to make peace, warring indigenous groups, in particular the Apache, continued their campaigns to drive out the European invaders, making all of northern New Spain a hazardous and dangerous frontier.[79] From the 1750s to the 1780s, raids by plains Indians constrained the development and threatened the livelihood of New Mexico, but the following three decades saw a boom in overland trade with other provinces.[80] El Paso del Norte registered a steady growth in its population after the mid-eighteenth century. Widely scattered records yield the following numbers.[81]

In spite of the eighteenth-century vicissitudes swirling around The Pass, in due time the expansion forced on the irrigation system brought handsome returns. It appears that the lush agrarian landscape visually overpowered the "elegant frugality" of the built environment, since

visiting Spanish officials, civil, military, and ecclesiastical, seldom failed to remark on the garden-like properties of the community.

TABLE 2

POPULATION GROWTH OF EL PASO DEL NORTE, 18TH CENTURY

	1749	1760	1766	1773
Population	c 1,200	2,728	c 5,000	9,863

From the earliest days of the mission community when Governor Mendizábal disdained Fray García's missionary efforts as "the establishment of nothing more than a farm" through the next two centuries, the community rooted its basic economy and cultural development in land-water ownership and the resulting abundant productivity. [82] When Governor Domingo Jironza Petrís de Cruzate arrived in 1683, and Bishop Pedro Tamarón of Durango visited almost eighty years later in 1760, both noted the spacious valley dotted with farms planted in wheat, corn, beans, and all kinds of vegetables. Numerous apple, pear, peach, and fig trees enriched the valley's tables. A number of vineyards yielded fruit of superior quality which the growers processed into very good wines and brandy. The consensus of the visitors credited the rich output to the number of irrigation ditches.[83] In 1760 the town's large irrigation ditch took about half of the river's water, being subdivided into many smaller canals that watered spacious valley farms in the vicinity.

The 1766 map shows the central core of El Paso, the church, the garrison, and the government buildings, and the irrigation system, extending to the east for some distance. Farm houses stand in many of the plots, some cultivated and others apparently not farmed (see Fig. 1).[84] The Spanish section veers off slightly north following the river's angle, while Indian lands

extend eastward on the south side of the *acequia madre*. Plots for settlers, both "Spanish" and Indian, appear to be generally of the same size, perhaps bearing out Crouch's assertion that five acres was the amount of land that one man could irrigate in one day.[85] The main street was flanked by several larger structures, probably properties of the more well-to-do.

The Nineteenth Century at the Pass

From the eighteenth century into the first decades of the nineteenth little noticeable change in the architectural landscape occurred at The Pass. But in 1821, when Mexico's struggle for independence concluded, newly acquired territorial sovereignty called for spatial reorganization. The Congress of the new Republic of Mexico, in 1823, divided Nueva Vizcaya into two provinces, making El Paso del Norte part of the larger Chihuahua portion. Three years later, eleven *partidos* (townships), each entitled to a locally elected municipal government, were established within the new state. El Paso del Norte, the newly designated capital of the *Partido del Paso*, later known as Distrito Bravo, was also at this time, because of "its size and importance," categorized by the central government as a *villa* empowered to elect its own city council, or *ayuntamiento.*[86]

In 1824 a new national constitution was adopted, which carried on the mandate for elections of political representatives at local, provincial, and federal levels. Following colonial form, a villa was governed by four *regidores* (aldermen), elected annually by the citizens, and two *alcaldes ordinarios* (magistrates), elected by the aldermen.[87] These officials, collectively the *ayuntamiento*, had the authority to pass ordinances (subject to the governor's approval), to designate wards, and to assign to the citizens house lots and other lands and water rights. The governor was instructed to seek advice from the *ayuntamiento* on all matters of importance. A

new economic mantle fell on El Paso del Norte in May 1836 when the federal government established a customs collection point at the border between the states of Chihuahua and New Mexico, an effort intended to encourage new settlement and increase population on Mexico's frontier.[88] The status of El Paso del Norte was destined to change again a little over two decades later.

The U.S.-Mexico War and its Aftermath

Aggressive military acquisition of approximately thirty percent of Mexico's territory by the United States in the war of 1846-1848 terminated with the Treaty of Guadalupe Hidalgo. The negotiations settling the boundary line proved knotty. The great goal for the United States was a trans-continental railroad which many experts of the day insisted could only cut through the rugged western terrain to the Pacific south of the thirty-second parallel. To Mexico the importance of retaining El Paso del Norte within its national territory held a high priority. Inaccuracy of maps drawn earlier necessitated thorough surveys; drawing of new maps depended on recording actual geographic latitudinal positions.[89] The Treaty set up procedures for locating and marking the international boundary line between the two countries. A bi-national field expedition of commissioners and surveyors traveled from San Diego, California, to the mouth of the Río Grande where it emptied into the Gulf of Mexico, designating the border on "authoritative maps" and placing landmarks, monuments of iron or stone, showing the limits of both republics.[90]

On the U.S. side of the boundary line the importance of asserting ownership of the recently won lands combined a previously thriving farm operation with a U.S. Army Post. Soon a tavern, new stables and corrals, and a new warehouse stood with the three wholesale houses

that had formerly served travelers between Santa Fe and Mexico City.[91] These utilitarian structures comprised the earliest built landscape of the Texas border town at The Pass. In 1852 the federal government designated the first post office for the town named at that time Franklin, and in 1854 established a customs district.[92]

Once the international boundary line was marked and mapped, expectations of westward railroad extension and generous grants of Texas land drew adventurers, opportunists of all ilk, and those intent on investing their resources, human and fiscal, in the newly won, not yet peaceful, territory. Ten years after the war, even with seven companies of infantry and mounted rifles stationed at the post now named Fort Bliss, hostile Indians made sorties outside the town dangerous.[93] As time progressed and settlers arrived, Franklin boasted— under one roof—a store, the post office from 1857-1860, a bar, and space for gaming of all kinds. Nearby a grocery store and a hotel completed the commercial "built environment" of the little village.[94] Near the end of the decade, the Overland Mail Company built a stage station that covered almost a block and shaded customers and by-passers with a lengthy portico. A number of adobe residences rose as newcomers arrived. In 1858 property owners hired a survey and plat of the town, renamed El Paso at the time that the map was approved. Portraying two separate sections, each in a gridiron pattern, the town plat connected on an angle (see Fig. 3, page 27).[95]

During the years following the war with Mexico abundant water flowed in the Río Grande and *acequias* checkered El Paso, Texas. In May 1858 one hundred fifty acres of blooming orchards and thriving fields of grain and vegetables welcomed incoming travelers. El Paso extended along the river somewhat in the fashion of its more established neighbor on the opposite bank. Approximately a mile and a half downstream from the village center, the Magoffin homestead flew the American flag, signifying the presence of Fort Bliss troops

garrisoned there from 1853 until the Civil War interrupted the frontier arrangements. In 1849 pioneer settler James Wiley Magoffin had laid the foundations of Magoffinsville on previously unclaimed land east of the main village.

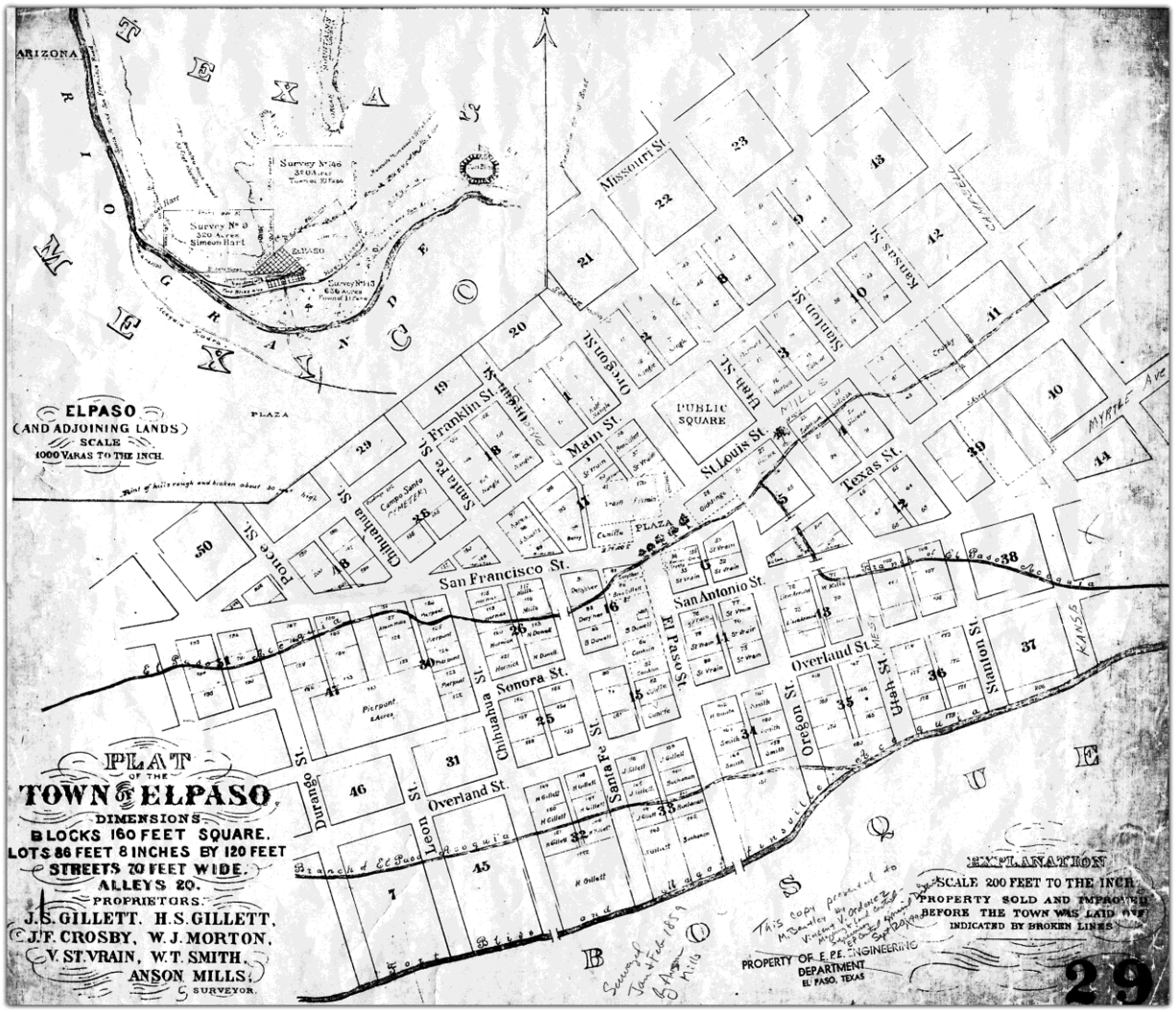

Fig. 3. *Plat of the Town of El Paso,Texas, 1859.* Courtesy of University of Texas at El Paso Library, Special Collections Department.

Starting with a grist mill powered by water from an *acequia,* Magoffin added a plaza surrounded by eight stores and warehouses for the merchandise his wagon trains supplied from San Antonio. His mule farm helped hundreds of California-bound emigrants replenish their worn-out stock. Next came the first phase of what would become an impressive great house.[96] The Magoffin residence was designed in Territorial style, gracefully combining architectural features found in the Southwest and in eastern states. Illustrating a marriage of traditions, generous-sized regularly spaced windows surmounted by Greek-style pediments pierced the thick adobe walls of the Magoffin home. The portion of the structure to be built first was a two-room deep arrangement organized by a central hall which crossed the full depth of the wing. The majority of the rooms had the luxury of wooden floors, while exposed wood-

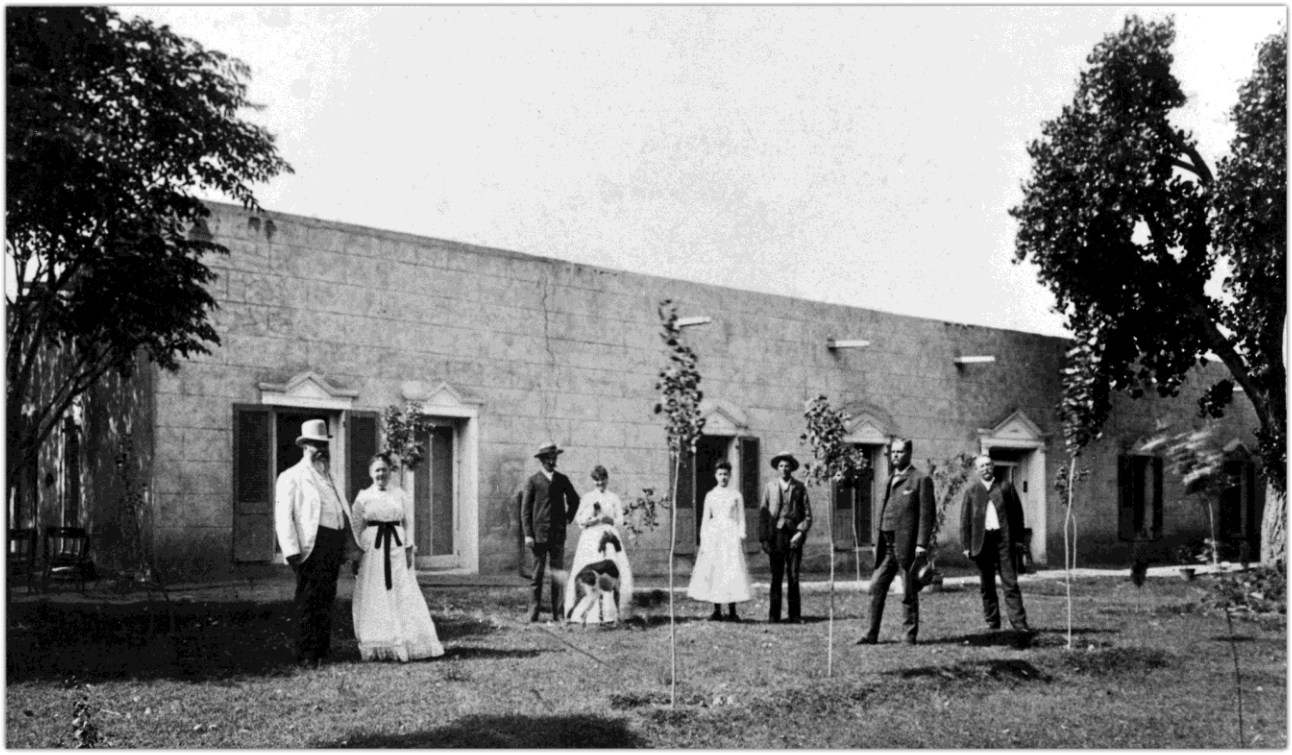

Fig. 4. The Magoffin Home, c 1887. Reprinted, by permission, Magoffin Home State Historic Site, Photo, Texas Historical Commission.

beamed and cross-timbered ceilings perpetuated a mode utilized in homes of the more affluent since Spanish colonial mission days. Fireplaces provided heat for the major rooms.

Later a south wing of three rooms was attached to the main structure to form the patio, and in 1887, an eastern ell was added and the adobe walls were covered with a lime plaster, scored to resemble large masonry blocks. The elegant residence stands today, a museum, some of its Victorian furnishings preserved. It is one of the few existing buildings in West Texas that exemplifies the style known as Territorial, prevalent in the Southwest between 1865 and the turn of the century (see Fig. 4). The siting of the house on the natural contours of the property demonstrates a concern for the relationship of a building to the climatic conditions in the high Chihuahua desert. Representing the passive energy design practices characteristic of the region's architectural tradition, the insulative and conductive properties of the massive adobe walls maintained moderate interior temperatures. The longer wings of the house were oriented to a southerly or northerly exposure for most rooms, limiting penetration of direct sunlight. Few window openings pierce the shorter west-facing walls.[97]

The frontier town was beginning to take on a more definitive shape. Upstream at an advantageous point on the river's bank a large milling operation owned by Simeon Hart included a circular sawmill, one gristmill, and two fanning mills powered by Río Grande water falling over a dam.[98] Unfortunately, the impending War of the Rebellion would impede municipal progress and delay the railroads' arrival by more than twenty years.

The Difficult 1860s and 70s at the Pass

On Mexico's side of the international boundary line, in 1865 a government threatened with extermination took refuge at the Pass of the North, as had the officials of New Mexico

province in 1680. The forces of the French-supported Austrian pretender, Emperor Maximilian, had pushed elected President Benito Juárez and his guard, 300 strong, farther and farther outward from Mexico City. Finding a supportive political climate in the state of Chihuahua with Governor Luís Terrazas holding office, Mexico's president, with his small entourage, retreated to Chihuahua City in August 1865. From the state capital, Juárez was pressed farther north, in October to El Paso del Norte, a haven of last resort. There, at the outermost reach of the Chihuahuan territory, perceived by the beleaguered executive as the final line between defeat and triumph, the republican government entrenched itself.

From that position, Juárez refused to flee further, although he was offered residence in the dwellings at Hart's mill by Brigadier General James Carleton, the military authority in Santa Fe. The executive officer and his staff were settled into the town's post office and the adjacent government building being used by the *ayuntamiento* and, probably, the customs collections officer.[99] In June 1866 the tide of resistance returned the elected government of Mexico to the nation's capital. Benito Juárez's ten-month tenure at El Paso del Norte left a deep historic footprint and characterized the town as a "place" with powerful political memories, solidified in 1888 by its renaming to Ciudad Juárez. But, added to the traditional nucleus around the plaza of church, presidio, city offices and jail, the town's pre-railroad appearance consisted of one east-west street less than ten blocks in length. Smaller streets mainly for pedestrian use crossed the main street, which was populated by "humble dwellings with vineyards and orchards" interspersed with vacant lots. A half-dozen stores stocked groceries and other necessities, including liquor. One small hotel, two inns and some workshops completed the urban ensemble.[100]

On the opposite side of the river, the decade of the 1860s brought a period of reversal to El Paso. In the words of C. L. Sonnichsen, "for all practical purposes El Paso was wiped out by the Civil War."[101] During the 1870s there was no law but military law and little travel except that of troops. The town was nearly deserted due to post-Civil War property confiscations and harsh punitive laws which threatened former supporters of secession. A few landowners recovered their possessions after protracted legal appeals, some culminating in Washington, D.C., but large ranch and business enterprises were ruined; the Hart milling operation was an example.[102] Stage travel to El Paso began in 1866 but all transportation was irregular and dangerous. In 1867, graft and inefficiency reportedly undermined a government contract with the San Antonio and El Paso Mail Company, "leaving the frontier town practically without mail facilities for years."[103] Return to normal life at Magoffinsville was delayed when, in 1867, floodwater washed away half of some newly constructed quarters and all the corrals and storehouses which had lodged Fort Bliss troops, animals, and supplies for significant periods during almost fifteen years.[104] The army was forced to find other accommodations. By the late 1860s much of a citizenry divided and torn by personal and political differences and by competition for the meager resources of the barren countryside defied law and lawmen. Many individuals condoned and practiced frontier justice; lawlessness in a variety of forms prevailed in the Pass region.[105]

The financial panic of 1873 in eastern U.S. markets rippled into west Texas, causing some to give up efforts at settling the frontier and move away. Others who had banked on the arrival of railroads left in discouragement. Struggling to recover, in 1873 the town of El Paso petitioned the state for incorporation. The request was approved on 18 June of that year with the full powers attached thereto. The boundaries of the town were as follows:

> Commencing on the Río Grande at a point five hundred yards north of Hart's Mill; thence east to the northwest corner of what is known as the Cummings' survey to the banks of the Río Grande thence west and north following the banks of said river to the place of beginning.[106]

In August, complying with its new status, El Paso elected a mayor and six aldermen.[107] There followed a period of eight years when El Paso's civic development lagged. City Council met erratically, even though Section 19 of the 1873 "Act of Incorporation of the City of El Paso" mandated regular meetings of the body at stated times at least once in each month. The Minute Books further suggest an informal schedule of called City Council meetings, too often lacking the quorum of four members.

Because of the "boom days" that later came to El Paso after the arrival of the railroads, the decade of the 1870s is sometimes referred to as a "forgotten era" or a "dead period." But to the bench-and-bar sector, the period was the background of a new era. In April 1874 the Texas Legislature passed an act regulating the terms of the Twenty-fifth District Court, which joined El Paso to three other counties in west Texas for judicial purposes and increased responsibilities of judicial officers. In September 1875 a convention in Austin drew up a new state constitution which prompted elections of county and district officers in February 1876. From 1876 to 1880 administration of justice in El Paso County became somewhat more established. According to El Paso's legal historian J. Morgan Broaddus, Jr., without the foundations laid and the progress made during this decade, the effective administration of justice, indispensable to the well-being of the more populous community that was soon to develop, would not have been possible.[108] James Hague, an early representative of the frontier town's move toward a judicial infrastructure, arrived in El Paso in 1871. Having been admitted to the Texas bar the previous year at the age of twenty-two, Hague served as El Paso's district attorney from 1872 to 1874, and by 1879, before

he was thirty years old, he had also filled the posts of County Attorney, County Judge, and District Judge.[109]

Effects of the Civil War long endured in El Paso. In 1877, when James Hague attempted to settle the estate of Simeon Hart, who had died in 1871, much of the land belonging to the miller's heirs remained dormant in value, although when the Galveston, Harrisburg, and San Antonio Railroad bought seventeen acres for $85.10, Hart's land values began to rally, soon to increase many times over.[110] In 1879 El Paso boasted five stores, three saloons, three hotels, a customshouse, a Masonic Lodge, three physicians, six lawyers, one school and no churches.[111] El Paso had long awaited the arrival of railroads; as expected, that event pushed the town's development into a steep upward trajectory in very short order, converting the former frontier village into a bustling transportation and commercial center with a rapidly changing skyline. The long anticipated coming of the railroads would dramatically alter the structural and infrastructural nature of both the new town and its counterpart, El Paso del Norte, across the river.

Summary

In 1880 imprints carved into the earth's surface at The Pass of the North in the seventeenth century remained as evidence of its origins and subsequent history. The irrigation canal system and the city street patterns long continued to speak powerfully about how they came into existence through development of the town's long-established *genius loci,* the distinctive atmosphere or particular character of a place.[112] The animating spirit of El Paso del Norte resided in space organized within a deeply rooted agricultural tradition. As it was for many other settlements, the first and most important act of establishing a town-site on the northern

Spanish frontier was drawing spatial boundaries to enclose and attribute ownership of the basic raw material of nature, the land, for cultivation and habitation. Equally important, and almost simultaneous, was construction of the *acequia* system which would make the most of the land. Thus, agriculture, quite literally, shaped the town's socio-political culture as well as its physical appearance. Adobe from the very earth provided the palpable stuff for enclosing walls and sheltering domiciles. A secondary role as a supply depot for travelers along the corridor between Mexico City and Santa Fe emerged in the late seventeenth century.

Lefebvre's schema for organization of space informs the production and reproduction of space at the Pass. From control by the native group known as the Mansos, to colonial reorganization, superseded by Mexico's sovereignty, the "historical" and its consequences–in the sense of what happened at a particular spot or place–took on forms of hierarchical social functions, particularly fluid in what would eventually become international borderlands. Abstract space, highly complex, "dissolves and incorporates such subjects as the village and town . . . and sets itself up as the space of power [which may] eventually lead to its own dissolution on account of conflicts arising within it."[113]

The form of El Paso del Norte's basic town nucleus—mission church, government buildings, presidio, and plaza—endured from 1659 to 1880. Urbanization, the tool of the Spanish monarchy for exploiting the resources of its immense colony, assumed that people would gather into towns. However, expediency on the frontier dictated that, in general, citizens should build their dwellings within the bounds of the farmland they owned, the better to protect their holdings from predators, human and animal. Pass dwellers declined to cluster around the plaza in a gridiron pattern. Instead, they chose to occupy their farmsteads, plots attached to the banks of the irrigation system like beads along a chain, eventually twenty miles long. The town's roadways

accompanied the waterways where they led. Agrarian culture took precedence over prescribed urban collectivity.

The mission church spoke of its colonial origin, recalling the people who constructed the buildings which took on the stature of sacred precinct and reshaped the local society. The presidio reminded residents that, although the crown, later the Republic, claimed their loyalty and promised protection, most of the necessary labor to provide existence, subsistence, and resistance was, by necessity, theirs. Government buildings long retained the traditional form, contiguous adobe walls with a flat facade broken only by doorways and an occasional window, sometimes protected by extended porticoes.

The perception of El Paso's agricultural nature crystallizes when it is contrasted with other kinds of frontier settlements. The unstable labor force of Chihuahua's mining towns which fed Europe's appetite for silver shifted back and forth between industrialization and traditional lifeways.[114] Neither did El Paso bear resemblance to villages where men were experts in tracking and killing, whose machismo, economic status, and prestige were based on their ability to slay Apache.[115] At the Pass, the permanent staff of fifty professional soldiers, established in 1683, protected its agricultural community, although, no doubt, in times of crisis, citizens were called to arms. By and large, cultivators were free to practice their particular arts, to specialize in viticulture or grain production in a surplus sufficient for trade. Nor was El Paso del Norte a manufacturing town like those in upper New Mexico that exported textile goods of cotton or wool, and leather.[116] Mexico's independence from Spain changed El Paso's agrarian nature little for the next sixty years. Its basic character remained rooted in the soil, its built environment arising from that very soil to create and maintain social relationships through shared efforts, responsibilities, and rewards. In 1848, at the Pass of the North, an involuntary

shift from an isolated agricultural community and trade route way station to a frontier town on an international border offered only faint hints of what the future might hold. From its agricultural base, the original El Paso del Norte had spawned an embryonic entity eventually to be known by the same name, El Paso, in Texas, characterized variously over the next half century as competitor, collaborator, or twin.

In the new town regional architectural tradition dominated for a few decades, but by the mid-1870s the town showed signs of an innovative overlay, first evident in the Magoffin house. Adobe construction adorned with Greek Revival accents hinted at the Victorian age so slowly approaching by mule- or ox-drawn wagon trains, soon to be supplanted by the long anticipated railroads. Tiny El Paso discovered its serendipitous location for the nation's transportation system in the forties, surveyed and mapped its urban landscape in the fifties, struggled to recover from the ravages of war in the sixties, and in the seventies waited for the nation's economy to recover, for sectional hostilities to heal, and for westward migration to resume, as it would soon by rail.

At the Pass, a bi-national essence permeated and complicated what Soja identifies as the "socio-spatial dialectic," the antithesis between town and countryside. Even before the international border existed, urbanization at the Pass rested on such fundamental building blocks as "the segmentation of urban residential space, the geographic unevenness of capitalist accumulation, the role of rent and private ownership of land, the sectoral transfer of surplus value, and the dialectics of nature." Building on the region's centuries of urbanization, vigorous capitalist infusion combined with industrialization would breach the previously somewhat determinative geography.[117] In 1880, both El Pasos were suspended in anticipation of a new era rooted in modernizing technology. The towns' growth would demand new forms of architecture,

some horizontal, others reaching upward. Railroads would bring a new era demanding a constructed landscape to oblige, accommodate, house and facilitate modernization and industrialization at the Pass.

[1] D.H. Meinig, ed., *The Interpretation of Ordinary Landscapes: Geographical Essays* (New York: Oxford University Press, 1979), 2.

[2] Historical documentation uses various names to designate this particular "great river:" Río Grande del Norte, Río Bravo del Norte, or simply Río Grande or Río Bravo, all of which will be used interchangeably, but at the culturally most appropriate points in this author's judgment.

[3] Paul Horgan, *Great River: The Río Grande in North American History* (New York: Holt, Rinehart, and Winston, 1954), 4–5.

[4] Ellen Churchill Semple, *Influences of Geographic Environment on the Basis of Ratzel's System of Anthropo-Geography* (New York: Henry Holt and Company, 1911), 204.

[5] Sheldon B. Liss, *A Century of Disagreement: The Chamizal* (Washington, D.C.: University Press of Washington, D.C., 1965), 2, 9-10, 12; Nestor A. Valencia, "Twentieth Century Urbanization in Latin America and a Case Study of Ciudad Juárez" (El Paso, Tex.: M.A., thesis University of Texas at El Paso, 1969), 31-32; Armando B. Chávez M., *História de Ciudad Juárez, Chihuahua, Mexico*, (México, D.F.: Editorial Pax México, Libreria Carlos Cesarman, S.A., 1991), 309.

[6] Valencia, "Twentieth Century Urbanization," 31-32.

[7] Anson Mills and ed. C. H. Claudy, *My Story* (Washington, D.C.: The author, 1918), 261. Note: Facing downstream from the river's point of origin, the bank on an observer's left hand side is known as the "left bank;" on the observer's right hand side is the "right bank." The river's turn from a north/south direction to flow in a general southeasterly direction, but with occasional serpentine curls, causes some confusion about the use of east, west, north, and south when indicating locations. "The Pass" throughout this dissertation will refer to the distance of the river which passes between two low mountain ranges just after it turns southeast, i.e., the current location of El Paso, Texas, and Ciudad Juárez, Chihuahua.

[8] José Arturo Martínez Lazo, Darío Oscar Sánchez Reyes, and Daniel Chacón Anaya, *Salvemos las acequías: la vida del campo centro de Ciudad Juárez como patrimonio cultural y ambiental* (México: IMIP: JMAS: Meridiano 107 Editores, 1998), 17.

[9] W. H. Timmons, *James Wiley Magoffin: Don Santiago—El Paso Pioneer* (El Paso, Tex.: University of Texas at El Paso, 1999), 87.

[10] Valencia, "Twentieth Century Urbanization," 31–32.

[11] Robert H. Schmidt, Jr., *A Geographical Survey of Chihuahua*, Monograph 37, Southwestern Studies (El Paso, Tex.: Texas Western Press, University of Texas at El Paso, 1973), 17, 23, 47.

[12] Anne E. Hughes, *The Beginnings of Spanish Settlement in the El Paso District* (El Paso, Tex.: Press of El Paso Public Schools, 1935), 303-304; Mark Wasserman, *Capitalists, Caciques, and Revolution: The Native Elite and Foreign Enterprise in Chihuahua, Mexico, 1854–1911* (Chapel Hill: University of North Carolina Press, 1984), 8; Dora P. Crouch, Daniel J. Garr, and Axel I. Mundigo, *Spanish City Planning in North America* (Cambridge, Mass.: The MIT Press, 1982), 277; Eyler N. Simpson, *The Ejido: Mexico's Way Out* (Chapel Hill, N. Car.: University of North Carolina Press, 1937), 133; George M. McBride, *The Land Systems of Mexico*, American Geographical Society Research Series (New York: Octagon Books, 1971), 14–15.

[13] France V. Scholes, "Mission Supply Service: The Supply Service of the New Mexican Missions in the Seventeenth Century. Part II: 1631–1664," *New Mexico Historical Review* V, no. 2 (April 1930): 208–10.

[14] Bishop Benito to the King, August 5, 1731, A.G.I., *Audiencia de Guadalajara*, 104-2-11 (Dunn Transcripts, 1715-1741), 1-6, *The Mission Era: The Missions at Work, 1731–1761*, vol. III, in *Our Catholic Heritage in Texas, 1519–1936*, ed. Carlos E. Castañeda (Austin, Tex.: Von Boeckmann-Jones Co., 1938), 232–35; Lawrence Kinnaird, *The Frontiers of New Spain: Nicolas de Lafora's Description, 1766-1768* (Berkeley: The Quivira Society, 1958,) 13.

[15] Max L. Moorhead, *New Mexico's Royal Road: Trade and Travel on the Chihuahua Trail* (Norman, Okla.: University of Oklahoma Press, 1958), 45; Elliott Coues, *The Expeditions of Zebulon Montgomery Pike, to Headwaters of the Mississippi River, Through Louisiana Territory, and in New Spain, During the Years 1805–6-7* (New York: Francis P. Harper, 1895), 50–51; Horgan, *Great River*, 499.

[16] Donald Jackson, ed., *The Journals of Zebulon Montgomery Pike with Letters and Related Documents* (Norman: University of Oklahoma Press, 1966), 51.

[17] Coues, *Expeditions of Zebulon Pike*, 615.

[18] Jackson, *Journals of Pike* (, 51; Max L Moorhead, "Spanish Transportation in the Southwest," *New Mexico Historial Review* 32 (April, 1957)*:*121; Horgan, *Great River*, 503.

[19] Mills, *My Story*, 262.

[20] Moorhead, "*Royal Road*," 59–63.

[21] Ibid., 82.

[22] Joseph G. Dawson, III, *Doniphan's Epic March: The 1st Missouri Volunteers in the Mexican War* (Lawrence, Kan.: University Press of Kansas, 1999), 103–5; John Roney, "Tracing the Camino Real: The Chihuahua Section," in *El camino real de tierra adentro*, comp. Gabrielle G. Palmer, ed. LouAnn Jacobsen, and June-el Piper, (Santa Fe: Bureau of Land Management, New Mexico State Office, 1993), 93.

[23] J. Morgan Broaddus, Jr., *The Legal Heritage of El Paso* (El Paso, Tex.: Texas Western College Press, 1963), 79; El Paso Department of Planning, *A Short History of South El Paso* (El Paso, Tex.: City of El Paso, 1967), 6.

[24] Edward W. Soja, *Postmodern Geographies: The Reassertion of Space in Critical Social Theory* (London: Verso, 1988), 79–80.

[25] Samuel Truett, *Fugitive Landscapes: The Forgotten History of the U.S.-Mexico Borderlands* (New Haven: Yale University Press, 2006), 8.

[26] George P. Hammond, and Agapito Rey, *Don Juan de Oñate: Colonizer of New Mexico, 1595–1628* (Albuquerque: University of New Mexico Press, 1953), 335.

[27] Witold Rybczynski, *City Life: Urban Expectations in a New World* (New York: Scribner, 1995), 49; Oakah L. Jones, Jr., *Los Paisanos: Spanish Settlers on the Northern Frontier of New Spain* (Norman, Okla.: University of Oklahoma Press, 1979), 241.

[28]Alonso de Benavides, *The Memorial of Fray Alonso de Benavides, 1630,* trans. Mrs. Edward E. Ayer (Albuquerque: Horn and Wallace, 1945), 14.

[29] Ibid., 13–14; Darío Oscar Sánchez Reyes, *Ciudad Juárez: el legendario Paso del Norte: Orígenes* (Ciudad Juárez: Meridiano 107 Editores, 1994), 61-77.

[30] Crouch, *Spanish City Planning*, 27.

[31] Ordinance 37, Quoted in Crouch, *Spanish City Planning*, 27–28

[32] Martínez Lazo, Sánchez Reyes, and Chacón Anaya, *Salvemos las acequias*, 20.

[33] Crouch, *Spanish City Planning*, 32.

[34] Ibid., 75.

[35] Ibid., 11.

[36] Ibid., 11; Simpson, *The Ejido*, 12; Jones, *Los Paisanos*, 248.

[37] McBride, *Land Systems, Mexico*, 50–51; Simpson, *The Ejido*, 10.

[38] Ibid., 13.

[39] Jack Jackson, ed., *Imaginary Kingdom: Texas as Seen by the Rivera and Rubí Military Expeditions, 1727 and 1767* (Austin: Texas State Historical Association, 1995), 71, 73, 75.

[40] Charles Wilson Hackett, ed., "Extracts from papers of the inquisition relative to the affairs of the province of New Mexico, 1629-1671" [Folio 134], in *Historical Documents Relating to New Mexico, Nueva Vizcaya, and Approaches Thereto, to 1773,* vol. 3, collected and trans. Adolph F. A. Bandelier and Fanny R. Bandelier (Washington, D.C.: Carnegie Institution of Washington, 1923), 213.

[41] Martínez Lazo, Sánchez Reyes, Chacón Anaya, *Salvemos las acequias*, 18; Crouch, *Spanish City Planning*, 75–76; Guadalupe Santiago Quijada, *Propiedad de la tierra en Ciudad Juárez*, 1888-1935 (El Colegio de la Frontera Norte; New Mexico State University; Universidad Autónoma de Ciudad Juárez; Ediciones y Gráficos Eón, S.A. de C.V., 2002), 52. In the late nineteenth century, the *acequia madre* at El Paso del Norte measured fifteen feet wide, and distributed water to twenty-seven secondary canals which irrigated 3,896 hectares (9,740 acres).

[42] Fray Tomás García de San Francisco, Apostolic commissary of the Mansos and Zumanas [*sic*], April 9, 1663, *Auto de fundación de la Misión de Nuestra Señora de Guadalupe del los Mansos del Paso del Norte, in Libro primero de casamientos, El Paso del Norte, fojas 74-75,* A.D. 1659, notary and transcriber Fray Antonio Tabares, Bandelier Collection, in Hughes, 306-312. Fray García wrote that he had congregated most of the Manso *rancherías.* Mission records show thirty-one settlers with Spanish sur-names before 1680. (These latter were probably *creoles*, that is, of Spanish descent but born in Mexico.) Three were infants, probably born at the mission. The congregation also included ten families of Christian Indians from the mission at Senecú.

[43] Martínez Lazo, Sánchez Reyes, and Chacón Anaya, *Salvemos las acequias*, 17.

[44] Crouch, *Spanish City Planning*, 75–76.

[45] Martínez Lazo, Sánchez Reyes, and Chacón Anaya, *Salvemos las acequias*, 17–18.

[46] Castañeda, *Catholic Heritage*, vol. III, 233-234.

[47] Alexander de Humboldt, *Political Essay on the Kingdom of New Spain*, Vol. II, trans. John Black (London: Longman, Hurst, Rees, Orme, and Brown, 1811), 317–18; Alice M. White, *History of the Development of Irrigation in the El Paso Valley* (M.A. thesis, El Paso, Tex.: University of Texas at El Paso, 1950), 18; Martínez Lazo, Sánchez Reyes, and Chacón Anaya, *Salvemos las acequias*, 17.

[48] Rudolph Levin Dalager, "The Espejo Expedition into New Mexico, 1582-1583" (M.A. thesis, University of Southern California, 1929), 55.

[49] Martínez Lazo, Sánchez Reyes, and Chacón Anaya, *Salvemos las acequias*, 16; Wells A. Hutchins, "The Community Acequia: Its Origin and Development," *Southwestern Historical Quarterly* XXXI, no. 3 (January 1928): 263.

[50] Martínez Lazo, Sánchez Reyes, and Chacón Anaya, *Salvemos las acequias*, 16.

[51] Hutchins, "Community Acequia," 265–66.

[52] Martínez Lazo, Sánchez Reyes, and Chácon Anaya, *Salvemos las acequias*, 16–19.

[53] Hughes, "Spanish Settlement," 307.

[54] Ordinance 122, Quoted in Crouch, *Spanish City Planning*, 15.

[55] Jerome Iowa, *Ageless Adobe: History and Preservation in Southwestern Architecture* (Santa Fe, N. Mex.: Sunstone Press, 1985), 24.

[56] Castañeda, *Our Catholic Heritage*, vol. III, 234-235.

[57] George Kubler, *The Religious Architecture of New Mexico in the Colonial Period and Since the American Occupation* (Colorado Springs, The Taylor Museum, 1940), 7–8.

[58] Guadalupe Santiago Quijada, and Miguel Ángel Berumen, *La Misión de Guadalupe* (Ciudad Juárez, Chih: Cuadro por cuadro: Imagen y palabra, 2005*)*, 61.

[59] Felipe Lacouture, *Novedades*, 14 June, 1959, Quoted in Santiago and Berumen, *La Misión de Guadalupe* 10.

[60] Soja, *Postmodern Geographies*, 17.

[61] Fray Agustin de Vetancurt, "*De las provincias y conventos de la provincial del Santo Evangelio Mexicano,"* in *Teatro mexicano: Descripción breve de los sucessos exemplars de la Nueva España en el Nuevo mundo occidental de las Indias*, Vol. III, ed. Jose Porrúa Turanzas (*Madrid, 1960*), 265; Darío Oscar Sánchez Reyes, "*Testimonio del estado que tiene la conversión de los Mansos y dedicación de su iglesia",* in *Ciudad Juárez: El legendaria Paso del Norte: orígenes* (Ciudad Juárez, Mexico: Meridiano 107 Editores, 1994), 127-8; Hughes, "Spanish Settlement," 308.

[62] Cruz, *Let There be Towns*, 42; Hughes, "Spanish Settlement," 312.

[63] Hughes, "Spanish Settlement," 368.

[64] Martín González de la Vara, *Breve História de Ciudad Juárez y su region* (Tijuana, B.C., México: Colegio de la Frontera Norte; Las Cruces, NMx.: Center for Latin American and Border Studies, New Mexico State University, 2002), 31-35.

[67] Cruz, *Let There be Towns*, 49; "Certification of the cabildo [of Guadalupe del Paso], August 26, 1685, "*Autos sobre los Socorros*, folio 128," Cited in Hughes, "Spanish Settlement," 365.

[66] Castañeda, *The Mission Era: The Finding of Texas, 1519–1693*, vol. I, *Our Catholic Heritage in Texas, 1519–1936* (Austin: Von Boeckmann-Jones Company, 1936), 258.

[67] Iowa, *Ageless Adobe*, 9, 13.

[68] Castañeda, *Catholic Heritage*, vol. III, 232-235; Lawrence Kinnaird, *Frontiers of New Spain:* 13. These records do not mention Tompiros and Tanos, originally part of the exodus from New Mexico.

[69] (AUTHOR PENDING)"Description of the Most Notable Characteristics of the Settlement of El Paso del Río del Norte, as Given by one of its Citizens, after Seven Years' Residence There. It is as Follows. September 1, 1773," in *Historical Documents*, vol. III, ed. Charles Wilson Hackett, 506-509.

[70] Henry Lefebvre, *The Production of Space*, trans. Donald Nicholson-Smith (Oxford: Blackwell, 1991), 26, 32, 37, 50.

[71] Castañeda, *Catholic Heritage*, vol. III, 276.

[72] Chávez, *História*, 150.

[73] Odie B. Faulk, "The Presidio: Fortress or Farce?" in *New Spain's Far Northern Frontier. Essays on Spain in the American West, 1540–1821*, ed. David J. Weber (Albuquerque: University of New Mexico Press, 1979), 67-76.

[74] Ordinance 113, quoted in Crouch, *Spanish City Planning*, 13.

[75] José María de Lachaga, *La Misión de Nuestra Señora de Guadalupe del Paso del Norte in Ciudad Juárez, Chih.* (Ciudad Juárez, Chihuahua, México: Librería Parroquial; Documentación fotográfica del Pbro. Isidro Payán y Mario Barba, 1991), 7; J. Manuel Espinosa, *Crusaders of the Río Grande* (Chicago: Institute of Jesuit History, 1942), 32; Kinnaird, *Frontiers of New Spain*, 14.

[76]Cheryl English Martin, *Governance and Society in Colonial Mexico: Chihuahua in the Eighteenth Century* (Stanford: Stanford University Press, 1996), 20–22.

[77]Oakah L Jones, Jr., *Nueva Vizcaya: Heartland of the Spanish Frontier* (Albuquerque: University of New Mexico Press, 1988), 125.

[78] Martin, *Governance and Society*, 111.

[79] Jones, *Nueva Vizcaya*, 194–98.

[80] Ross Frank, *From Settler to Citizen. New Mexican Economic Development and the Creation of Vecino Society, 1750–1820* (Berkeley: University of California Press, 2000), 13, 123.

[81] Valencia, "Twentieth Century Urbanization," 55; Bishop Benito, in *Catholic Heritage*, vol. 3, 233; Kinnaird, *Frontiers of New Spain*, 14; (AUTHOR PENDING) "Description of the most notable characteristics of the settlement of El Paso del Río del Norte," in *Historical Documents*, vol. III, 508.

[82] Hackett, "Extracts from papers of the inquisition," in *Historical Documents*, vol. 3, 213.

[83] Castañeda, *Catholic Heritage*, vol. 3, 233, 276.

[84] Valencia, "Twentieth Century Urbanization," 53.

[85] Crouch, *Spanish City Planning,* 76.

[86] Francisco R. Almada, *Diccionario de história, geografía, y biografía chihuahuenses* (Chihuahua, Chihuahua: Librero Juárez, 1968), 293.

[87] Ciudad Juárez, (México), Municipal Archives, *Documentos históricos/Archivos municipal de Ciudad Juárez* (Ciudad Juárez, México: 1750-1939), Pt. 2, Roll 38, Book 3, Frames 0003, 0007, 0020, 0025, 0040, 0060. January 1878 records show that the *ayuntamiento* of El Paso del Norte registered four aldermen under the presidency of the *jefe político*.

[88] David J. Weber, "From Hell Itself: The Americanization of Mexico's Northern Frontier, 1821–1846," Border Studies Symposium (University of Texas at El Paso, 1983), 10–11; Chávez, *História,* 202–3.

[89] Joseph Richard Werne, *The Imaginary Line: A History of the United States and Mexican Boundary Survey, 1848-1857* (Fort Worth, Texas: Texas Christian University Press, 2007), 10, 12-13, 53, 55-56, 71, 219.

[90] International Boundary and Water Commission, United States & Mexico, United States Section, United States, *Treaty of Peace, Friendship, Limits, and Settlement Between the United States of America and the Mexican Republic* (United States: s.n. 196?), Articles 5, 6.

[91] U.S. Department of State. "Relating to Case No. 4, Known as 'El Chamizal,'" in *Proceedings of the International (Water) Boundary Commission, United States and Mexico.* Treaties of 1884 and 1889. Equitable Distribution of the Waters of the Rio Grande. United States Section. Vol. I (Washington: Government Printing Office, 1903) 62; J. J. Bowden, *The Ponce de Leon Land Grant,* Southwestern Studies, vol. VI no. 4 (El Paso, Tex.: Texas Western Press, University of Texas at El Paso), 6.

[92] *An Act creating a Collection District in Texas and New Mexico, Statutes at Large* 10, 335*; An Act to facilitate the Collection of the Revenue in El Paso County, Texas, and in the Territory of New Mexico, Statutes at Large* 12, 761.

[93] Mills, *My Story*, 50.

[94] C. L. Sonnichsen, *Pass of the North: Four Centuries on the Río Grande* (El Paso, Tex.: Texas Western Press, University of Texas at El Paso, 1968), 147.

[95] Mills, *My Story*, 51-53.

[96] W. H. Timmons, *James Wiley Magoffin: Don Santiago—El Paso Pioneer* (El Paso: Texas Western Press, 1999), 49-50.

[97] Bart Fischer, "Preservation Plan and Program for Magoffin Home," in *Portals at the Pass: El Paso Area Architecture to 1930,* ed. Evan Haywood Antone (El Paso, Tex.: El Paso Chapter, American Institute of Architects, 1984), 11–13. Fischer emphasizes the need for escaping from the desert heat. For more information about the Magoffin property history see http://www.thc.state.tx.us/hsites/hs_magoffin.aspx?Site=Magoffin. Accessed 2.06.10.

[98] Rex W. Strickland, *Six Who Came to El Paso: Pioneers of the 1840s* (El Paso: Texas Western College Press, 1963), 37; W.W. Mills, *Forty Years at El Paso, 1858-1898* (El Paso, Tex.: Carl Hertzog, 1962), 7-8.

[99] Chávez, *História,* 263-264.

[100] Camilo Argüelles, "*El auge de Ciudad Juárez con la vigencia de la zona libre,"* in Ulises Irigoyen, "*El problema económic de las fronteras Mexicanas,"* vol. 1 (México, D.F., 1935), 362. Argüelles served as alderman of El Paso del Norte in 1885 and as customs agent in 1888.

[101] C.L. Sonnichsen, *Pass of the North*, 168; W.H. Timmons *El Paso: A Borderlands History* (El Paso, Tex.: Texas Western Press, University of Texas at El Paso, 2004), 173.

[102] *An Act to suppress Insurrection, to punish Treason and Rebellion, to seize and confiscate the Property of Rebels, and for other Purposes, Statues at Large* 12, 589-592 (1862); Timmons, *El Paso: A Borderlands History*, 178-179; Sonnichsen, *Pass of the North*, 170-172.

[103] W. W. Mills, *Forty Years at El Paso, 1858-1898* (El Paso, Tex., C. Hertzog, 1962), 131, 133.

[104]Allan W. Sandstrum, "Fort Bliss: The Frontier Years" (M.A. thesis, University of Texas at El Paso, 1962), 114–5.

[105] Sonnichsen, *Pass of the North*, 176-210; Timmons, *El Paso:A Borderlands History,* 185-192; Paul Cool, *Salt Warriors: Insurgency on the Río Grande* (College Station, Tex.: Texas A&M University Press, 2008), passim.

[106] "The Act of Incorporation of the City of El Paso," Sec. 2, El Paso City Council Minutes Book A, 18 June 1873.

[107] Broaddus, *Legal Heritage,* 124.

[108] Ibid., 119-132.

[109] Lillian Hague Corcoran, "He Brought the Railroads to El Paso: The Story of Judge James P. Hague," *Password* 1, no. 2 (May 1956): 52.

[110] "Satterthwaite Addition File," Lone Star Title Company (El Paso, Texas).

[111] Broaddus, *Legal Heritage,* 130.

[112] For this concept, I am indebted to Bruce C. Webb's "Introduction" in *Ephemeral City:* Cite *Looks at Houston,* ed. Barrie Scardino, William F. Stern, and Bruce C. Webb (Austin, Texas: University of Texas Press, 2003), 2–7.

[113] Henri Lefebvre, *The Production of Space,* trans. Donald Nicholson-Smith, 37, 50-51.

[114] Martin, *Governance and Society,* passim.

[115] Ana Maria Alonso, *Thread of Blood: Colonialism, Revolution, and Gender on Mexico's Northern Frontier* (Tucson: University of Arizona Press, 1995), passim.

[116] Frank, *Settler to Citizen*, passim.

[117] Soja, *Postmodern Geographies*, 78

CHAPTER TWO

THE FIRST INTERNATIONAL RAIL BRIDGES; DEVELOPING MUNICIPAL POLITICS, 1880-1883

Introduction

A mediating object carries communication between people—information, emotions, gesture, touch, or expression—as Tim Dant reminds us. The form of the mediating object, the functional possibilities it incorporates, and the way it commands attention determine how it fits into material culture and competes with the message from other objects and from humans. As a concrete manifestation of ideas and ideologies, beliefs and philosophies, political persuasions and systems, bridges not only carry messages—they ARE messages.[1] In this chapter railway bridges, heavy and light, embody the importance of the material environment in forming human social and economic relations. At The Pass bridges functioned as teachers in development of municipal procedures and international borderlands relations. Bridges, human intrusions in the environment, according to Henry Glassie, are "a way to imagine a distinction between nature and culture, and then rebuild nature to human desire, shaping, reshaping, and arranging 'things'" to facilitate human lives.[2]

Bridges--timbers and trestles, ties and rails--were the *sine qua non* of rapidly escalating relations between Mexico and the United States in the late nineteenth and early twentieth centuries. Metaphorically, bridges represented a new era of comity and communication between the two republics, as well as the two towns, tightening the bonds at both centers and margins. Bridges across the borderline visibly represented the portfolio of common interests and political agreements that had been hammered out at ministerial levels in Washington, D. C., and Mexico City. Bridges funneled traffic through customs check points and immigration controls, thus

constituting barriers against infringement upon national pride and prerogatives. Conversely, as carriers they boosted cooperation and economic expansion by way of the bi-national transport network which opened enormous new vistas for development on both sides of the river. Once the age of railroads dawned at the international border, bridges became important points for collection of customs revenue, in the nineteenth century the single largest source of income for both countries.[3] Customs offices grew in importance measured by the amount of goods they processed, increasingly accelerated by improved rail communications.

Construction of international bridges required cooperation of officials at federal, state, and local levels, engaged wide-ranging entrepreneurial interest, and introduced other forms of utilitarian urban architecture. On the Texas side of the boundary line, local citizens enthusiastically welcomed the arrival of the railroads, soon to number five companies, and adjusted El Paso's urban space to fit around the iron rails.[4] When the Atchison, Topeka & Santa Fe Railroad Company pre-empted the lower five blocks of El Paso's main street leading to the river and built its bridge from that point, a group of investors organized to construct a second bridge for use by streetcars, pedestrians and animal-drawn vehicles.[5] Subsequently ownership, planning, and construction of a trans-border street railway dominated El Paso's municipal affairs for the better part of two years. The amount of attention and effort poured into bridge-building gives a measure of the importance officials, citizens, and news media attached to cross-border social and economic relationships. Entrepreneurs in El Paso awaited opportunities to tap the large consumer market in El Paso del Norte and beyond for developing mercantilist and distributive enterprises. In both towns, profit-motivated private enterprise collaborated with the town power structure; street railway owner/operators often held municipal offices.

Although the arrival of the transcontinental railroad on the Texas side evoked a wary reserve in El Paso del Norte, records show a more welcoming attitude in the older town to creation of trans-river streetcar service in the following year. Completion of railway connections between the partnered communities expanded circulatory patterns that enabled exchanges of people and goods on an unprecedented scale. Construction of the first international bridges between the United States and Mexico exploited new technologies and promoted cooperative trans-boundary partnerships.

At The Pass of the North through the crucial years of 1880-1882, the politics of space which extended a U. S. chartered railroad onto Mexico's soil embraced a wide range of issues which reached from the border towns at The Pass to Mexico City and Washington, D.C. In spite of the Porfirian drive to modernize the country, a major sticking point was Mexican lawmakers' perceptions of potential spatial and political encroachments attached to foreign economic investment in their nation's infrastructure. At the local level resistance to violation of long-established urban form at El Paso del Norte combined with railroad managers' alleged insensitivity to property owners' legal rights created a contentious atmosphere. The trans-river bridge and rail connection profoundly altered the built environment of this former mission/presidio/villa, for centuries a deeply agricultural community.

The First International Bridge between the United States and Mexico

In one of the many guides to travel in Mexico, an author and observer wrote that "Since the concentration of several railway lines here, El Paso has ceased to be a draggle-tailed little suburb of El Paso del Norte and has become an enterprising, thriving frontier town--with all the crudeness and rawness and painful ugliness that an enterprising, thriving frontier town must

necessarily have."[6] Officially chartered by the state as a city in 1873, not until 1881 did the frontier village awaken from the lethargy which had bound it through three decades of adjustment to the reality of an international boundary line and the destruction wrought by the Civil War. El Paso burst into life after the arrival of the first locomotive with a population increase of 1,311.4%, from less than one thousand in 1880 to more than 10,000 in 1890.[7] The stresses accompanying this near explosion in its demographics called for careful consideration and steadiness on the part of town officials, without loss of vision for the future.

In short order, rail communication altered the relationship between the two towns that sometimes competed, at other times cooperated or enjoyed complementary roles, bound as they were by the new linkage across the Río Bravo. The message of a railroad "lay not exclusively in things it transported but in the acceleration of movement and the dimensions and structures of the cities it created," according to Stephen Kern, Ohio State University professor and author of works in cultural history. Railroad depots, warehouses, guard houses, and customshouses were the first dimension of the built environment to be changed by the railroad's arrival. Within five years mineral ores, earlier laboriously transported by pack trains, flowed along rail routes across the international border at previously unimagined speeds, generating industrial installations. Kern cites William Gladstone's observation that "each train that passes a frontier weaves the web of the human federation." The two small towns at the Pass lived the reality that arose in the consciousnesses of thinkers as far away as Paris and Brussels, who realized more and more "that nations can never again be entirely separated. Impassable walls to enclose and protect them are things of the past."[8]

At the outer limits of the two young republics, nature and history had collaborated to isolate these two towns from others of appreciable size. The Pass towns lay roughly at the center

of a five hundred mile north/south stretch between Chihuahua City, capital of the state of Chihuahua, and Albuquerque, New Mexico. They were located a little west of center in the eight hundred fifty mile east/west span from San Antonio, Texas to Tucson, Arizona. However, on the United States' side of the flood-prone Rio Grande, the region's topography offered to travelers by horseback, stagecoach, or rail an extraordinarily advantageous low altitude, snow-free east-west passage through the often near-impassable Rocky Mountains that stretched across latitudes to the north. Its geographic location made the border complex a natural center for rail connections between the east and west coasts of the U.S., as well as for traffic from Chicago and its surrounding mid–west grid to as far away as Mexico City, opening the way to international transportation and communication.

Lawrence Herzog has observed that international law essentially consists of a set of global legal principles associated with governance of space. Spatial or territorial questions deal with land boundaries, territorial jurisdiction, extradition, and treatment of aliens. As the sites where these forms of spatial control meet head-on, national borderlands have proven to be highly vulnerable to changing social, economic, and political developments within contiguous nations.[9] On the North American continent, between 1877 and 1881, Mexico and the United States negotiated the limits of their land-based spheres of influence, sometimes by diplomatic parry and thrust, at other times by military action.

Nation building during the coincident presidencies of Porfirio Díaz in Mexico and Rutherford B. Hayes in the United States brought the adjoining borderlands of the two countries into sharp focus in the national consciousness of both citizenries. Building political bridges between the two nations involved questions of legitimacy that affected both presidents. The disputed election he had experienced in 1876 made Hayes particularly sensitive to the

constitutional basis of political office holders.[10] For some months following the Porfirian accession to power, the Hayes administration withheld acceptance of Díaz's right to govern Mexico, debating whether the United States should, in good conscience, establish diplomatic relations with a president who took office by violent means. Hayes waited cautiously to learn whether Díaz could, in fact, bring order to his country with its history of political chaos.

Over the three decades after the U.S.-Mexico War, bitter contentions between the two polities included borderlands control and pacification, extradition and reciprocity, and military presence. Suspicions concerning expansionist ambitions of the United States, fomented by inflammatory nationalistic journalism in both countries, confounded bi-national harmony. Fear of becoming a protectorate of the United States transformed esteem and admiration into feelings of distrust, suspicion and even hatred on the part of many Mexicans.[11] However, by the 1870s efforts on the parts of both countries brought improved conditions to the fractious frontier. By late 1879, the swelling interest in establishing increased commercial relations tended to eclipse irritating political issues.[12] This shift in emphasis and Díaz's apparent grip on legitimate power prompted the Hayes administration's formal recognition of the Porfirian government. This action opened the way for more amicable diplomatic and trade relations between the two republics.[13] Hard bargaining at the ministerial level, both before and in the year following Díaz's recognition by the U.S. government, bore long-delayed fruit. Díaz won a diplomatic triumph, fiercely resisting further territorial encroachment, and Hayes a commercial victory, persuading Mexico to accept economic investment from outside sources.[14] Beginning in the 1880s Mexico began to modernize, employing technology in general, mechanization in particular. Improved public services, modern transportation and communication facilities, and a new consumer culture reached from the nation's core to its margins. However, persistent problems delayed and

obstructed the modernization Díaz so ardently desired for his nation. A number of Mexican political factions viewed foreign investment very cautiously, while foreign investors saw internal disorder and lawlessness as serious obstacles to financial ventures, especially railroads and mining in the northern tier of states. Perceived as attempts to bring Mexico under dominion of the United States, proposals for protection of capital interests within Mexico aroused hostility.[15] Any concession for rail construction had to be ratified by Mexico's Congress which feared such grants might endanger the independence and future of the country.[16]

Over the course of some three years, following improved border relations, some of President Díaz's advisers began to relax their previous opposition to foreign investment in Mexico. Interest developed within the Mexican Congress regarding this formerly closed field, and American investors began to secure their desired aims.[17] Railroad concessions signaled a shift toward closer economic relations with the United States. Paving the way as early as 1877, the Congress in Mexico City, because of the drought in some of the northern states, authorized the duty-free importation of flour and grain from the United States. On the west coast large shipments of corn, flour, rice, beans, lard, and lumber were exported by ship to Mexico in exchange for hides, salt, cedar and primavera wood, and furniture; the volume of trade was larger than it had ever been, intensifying the urgency for rail transportation.[18] The contiguous nation-states moved on an erratic trajectory toward closer commercial ties. Many Mexican political and commercial figures, though not all, recognized the advantages of a railroad from Mexico City to the Río Grande.[19] Memory of the 1848 loss of territory to the "colossus of the north" long tainted the bi-national relationship. In spite of lingering suspicions, by March 1879 the general tone changed somewhat; the press in the United States began to talk of trade advantages rather than political difficulties.[20]

As the potential for expanded trade became more palatable to Mexico's political community, railroad corporations competed furiously for routes which would open doors to the southwestern asset base of the United States, and to the wealth of metal ores, stock-raising, and timber in Mexico's north. Cities as well, for instance New Orleans and St. Louis, contended for the advantage of international rail connections.[21] Local merchants, landowners, miners, and industrialists viewed rail access as the key to their future prosperity. Businessmen on both sides of the border held the view, perhaps exaggerated, that the presence of railroads increased the value of property, stimulated commercial and industrial enterprises, offered employment, and promoted the material interests of a region.[22] Possibly overstated was the prediction that "if a railroad passed through a town, it would expand, becoming the county seat, the center of commerce, and all its citizens would amass great fortunes," but recent railroad history gave some credence to a substantial increase in the prosperity of towns privileged by the effects of this powerful new technology.[23]

At the inaugural ceremonies honoring the arrival in El Paso of the Southern Pacific Railroad, Judge Allen Blacker declared that only the winter before the Governor of Texas had remarked to him that "if he was [*sic*] a young man he would settle in the valley of El Paso, with the firm belief that it would be within his power to become a millionaire—that it was the best and the last place in the United States to make a fortune in a single lifetime."[24] The competition between Galveston and Houston exemplified municipal rivalries for railroad routing in east Texas that was ultimately dominated by Houston.[25] Unlike Houston, El Paso had no competitor for railroad concentration. In west Texas, El Paso managed to shift the county seat from San Elizario into its own domain within two years after the arrival of its railroad connections to the nation at large.

Greeted with joyous celebration, the Southern Pacific arrived in El Paso in May 1881, followed two weeks later by the Atchison, Topeka & Santa Fe Railroad. On 2 August 1881 the ATSF celebrated its extension through El Paso across the Río Grande into Mexico, where it became the Mexican Central Railroad Company. The railroad bridge across the Río Grande had been under construction since February.[26] Incorporated in 1880 under the General Railroad Laws of Massachusetts and the auspices of the Atchison, Topeka & Santa Fe, the Mexican Central Railroad received a large grant from the Mexican government. The concession included the right to import materials for construction, repair, and operation for fifteen years, and exempted the line from all taxation for a period of twenty-five to fifty years.[27] The ATSF's parent relationship to the Mexican Central Railroad fostered the subsequent growth of international rail traffic and exchange destined to pass through the two border towns. A variety of alterations were in store for the urban space of El Paso del Norte–shifts which the town's material appearance would manifest.

Months before the arrival of the first locomotive, rising before the eyes of expectant officials and citizens in both El Paso and El Paso del Norte, the international railroad bridge was under construction.[28] When completed the structure spanned the river from the south end of El Paso Street, the Texas town's principal thoroughfare, and joined the main north-south road which intersected *Calle Principal* (soon renamed *Calle Comercio*, and in 1921 *Avenida* 16 *de Septiembre*) in El Paso del Norte. The ATSF tracks took control of El Paso Street at its intersection with 7th Street and continued south to the bridge, becoming the Mexican Central Railroad directly above the international boundary line, i.e., the center of the river's deepest channel.[29] The railroad thus dominated and connected space of primary importance in the two towns.[30]

Fig. 5. Atchison, Topeka, & Santa Fe-Mexican Central Bridge. Courtesy of University of Texas at El Paso Library, Special Collections Department, Laurence Stevens Papers, MS 114.

Local Opposition to the Advent of the Railroad

In spite of the anticipated benefits attached to railway transportation and communication, some influential people of El Paso del Norte viewed the new developments with considerable alarm. Sending word to the state governor, El Paso del Norte's City Council protested against the bridge which they viewed as a violation of the known principles of river management. Citizens further organized against the railroad's infringement into their urban space, enlisting backing from the local military garrison.

On 13 June 1881 Jacobo Ugarte, *jefe político* (mayor) and president of the *ayuntamiento* (town council), and the council's members composed an urgent entreaty to Chihuahua State

Governor Luís Terrazas. They reminded the governor that generations of townsmen had learned that any blockage in the great river could cause grave damages by changing the course of the current toward the Mexican side, resulting in a loss of national and local territory, "without the slightest hope or expectation of recovering the loss." They and their ancestors had used diversion dams to direct water into their *acequias* since the beginning of the settlement's existence. In a similar manner, pilings sunk into the river's depths could be expected to serve as a cross-current row of dikes which would be quite likely to deflect the natural current, threatening the property of El Paso del Norte's residents. [31] The communication from the border closed with a plea on legal grounds. The group argued strongly to state officials that the boundary between Mexico and the United States had not been clearly and definitively decided, and that, since the natural course of the Río Bravo tended to wander and shift, the bridge piers posed a risk of grave damages to the general interests of the Republic and to those of the local municipality. Reinforcing the local argument, the *ayuntamiento* charged that earlier construction on the left bank of the river had already altered the river's course to the extent that Mexican officials claimed the Santa Fe railroad station in El Paso sat partially on Mexican soil.[32]

When, in light of the high probability that local concerns were valid, the government inspector on site refused to allow construction on the bridge to continue, the president of the Mexican Central wired the company's representatives in Mexico to warn President Díaz that if the bridge was not completed, the Central could not transport materials needed for construction of the railway south toward Mexico City.[33] In response to a telegram from George Anthony, general superintendent of the work in Chihuahua, the *Secretaría de Fomento* (Ministry of Development) instructed the government inspector to allow work on the bridge to proceed. [34] Once diplomatic and political obstacles to railroad building in Mexico disappeared, Mexican

Central-ATSF officials and crews bent their efforts to make the bridge and track a physical reality, even while the village elders continued to resist. In the end, national and international economic interests superseded local worries. On 2 August 1881 townspeople and officials of the Atchison, Topeka, & Santa Fe and the Mexican Central Railroad Companies jointly dedicated the first international railroad bridge in the Americas.[35]

The advent of the railroad presaged an architectural transition period for El Paso del Norte. In February 1882, six months after the completion of the railroad bridge into Mexico, construction of the Mexican Central railroad station began in El Paso del Norte. Some two hundred and fifty thousand adobe blocks were used in the structure, along with stone for the foundation, quarried a few miles north of El Paso, Texas.[36]

Fig. 6. Mexican Central Railroad Depot. Courtesy of University of Texas at El Paso Library, Special Collections Department, Kohlberg Family Papers, MS 369.

Traditional adobe wall construction stuccoed over and painted white combined with a hipped roof presented an architectural bridge into modernity. The depot's interior, furnished with all modern conveniences, contained many offices fitted up with wainscoting and fine woodwork

in yellow pine and California redwood. Visitors to the Pass seldom failed to remark on the large and handsome building, called by one the finest railroad depot west of St. Louis (see Fig. 6).[37]

Before 1881, the garden-like scene of farms and orchards in El Paso del Norte impressed many visitors, but after the railroad arrived observers judged El Paso del Norte from the point of view of its urban form. Described by life-long resident Camilo Argüelles:

> Its main avenue was crossed by nine smaller streets on which were located adobe homes, vineyards, orchards, and empty lots. The business sector consisted of three main establishments which sold clothes, groceries, drugs, hardware goods, and other items, in addition to small shops which specialized in foods and meats. A small hotel, described by a contemporary observer as "dirty and unhealthy," and the usual artisan shops also formed part of the landscape.[38]

Beginning 2 August 1881 two daily trains roared along El Paso del Norte's main north-south business street, a veritable machine in the garden, disrupting the quiet calm of the community. Almost from the first day that the bridge across the Río Bravo opened, irritations concerning cultural intrusions surfaced between officials conducting the installation of the Mexican Central Railroad and citizens of El Paso del Norte. Merchants and other property owners in El Paso del Norte had manifested great alarm when the surveying party of the railroad began immediately to place stakes for the right-of-way through the heart of their town before consulting with the town council. Local authorities complained that the foreign engineers and surveyors treated them "with disdain," relegating them to the position of "mere observers" in the whole process. Citizens further objected to railroad officials' penchant for condemning property without first settling the matter of indemnification; in some cases, existing structures had even been destroyed despite the protests of the owners.[39]

Consequently, the landowners of El Paso del Norte formed a resistance organization with the backing of the local army garrison to protect their property rights. At Díaz's request, Chihuahua Governor Luís Terrazas intervened to prevent an open clash between the local

property owners and the railroad employees. In a meeting of all concerned parties, the Central agreed in the future to consult with local authorities before surveying and to pay just compensation for all property condemned. Three months later, to improve its public image, Mexican Central officials invited prominent families of El Paso del Norte to enjoy the inaugural ride along the first twenty-seven kilometers of track completed.[40] In spite of this attempt at amicability, disagreements about the railroad's use of urban space continued to color the relationship between the railroad's officials and employees and local residents. Only three days after the opening of the bridge, a letter to the El Paso del Norte *ayuntamiento* from George Anthony proposed changing the natural drainage channels through two of the town's *arroyos*. Anthony tried to assure the council that the changes would be in the best interests of both the company and the municipality.[41] In October 1882 the *ayuntamiento* registered another complaint regarding damage to a street, action that indicated continuing dissatisfaction with the railroad's presence within the town's municipal space.[42]

Governance of space in the international borderlands took on new meanings with an emphasis on commerce and trade, dependent on the construction of an extensive transport network.[43] Local dissent aside, the expanding web of roads and bridges essential for transportation, communications, defense, and trade was vital to the physical and conceptual construction of nationhood (see Fig. 7).

In the border towns guardhouses, customs houses, bonded warehouses, railroad stations, immigration control plants, and other auxiliary structures associated with the bridges created an entirely new urban built environment for both towns. Because of the transnational character of

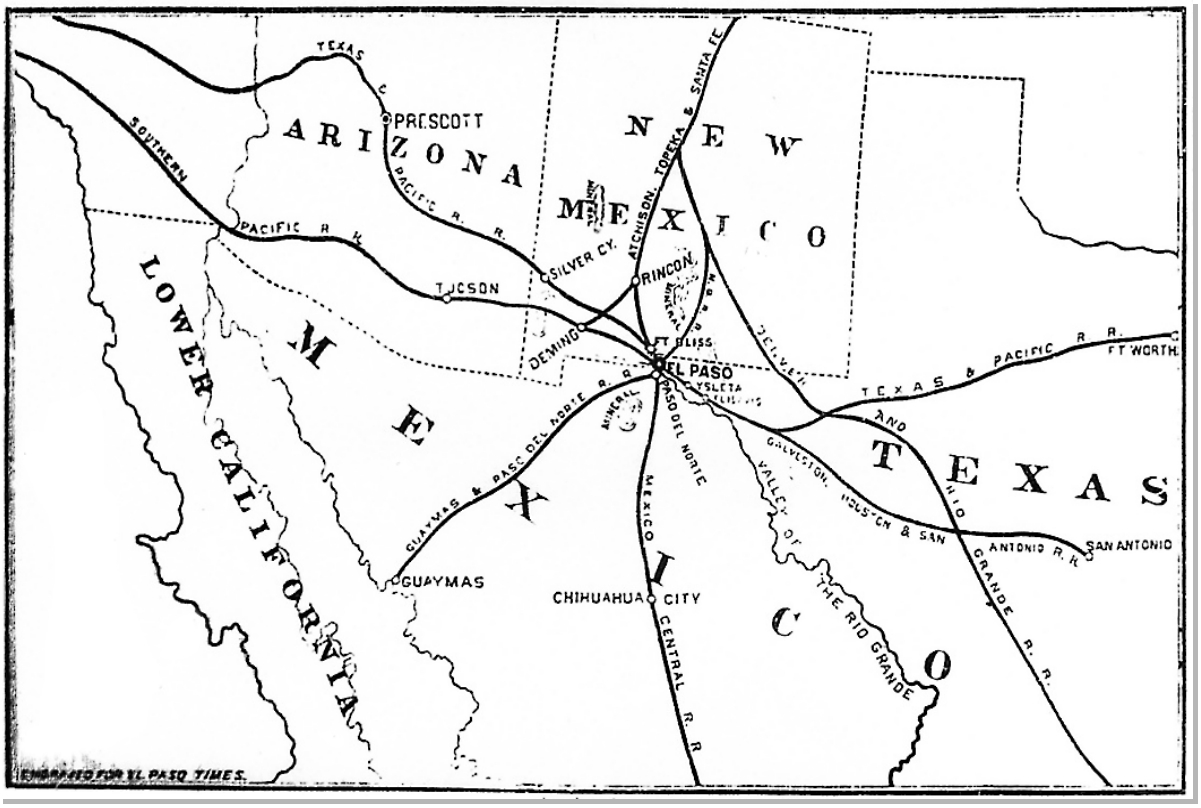

Fig. 7. Railroads through El Paso, 1882. *El Paso Times,* 1 January 1882.

technological development, nations erected national identities along with their bridges, virtually assuring that relationships at the border would continue to be freighted with obstructions, both physical realities and local political objections.[44] The "culture" surrounding railroads ensured that the border complex at the pass would occupy increasingly urbanized space that was more than simply the physical container of land uses and people woven together in a functional living environment.[45] No longer hidden away in an isolated geographic pocket of space, the two El Pasos would thenceforth be obliged to function within larger circles of political, economic, and social relationships. The new status called for new urban forms in architecture and in use of municipal space.

Trans-river Transportation Modes: Boat or "Pasadera"

The heavy rail bridge designed to carry long-distance trans-national loads of goods and passengers, while a significant technological leap forward, failed to fulfill local demands for communication and transportation. For example, El Pasoans who wished to hear Mass in the mission church or attend a fiesta at El Paso del Norte crossed by boat, on foot, or on someone's back. Efforts to address Pass residents' need to cross the Great River met some of the same problems encountered by ATSF-Mexican Central railroad builders. State and federal requirements and permissions, municipal politics, and various degrees of resistance by local objectors inhibited entrepreneurial innovation aimed at providing more convenient means of transportation. In 1878, the same year that Mexico and the United States re-established formal diplomatic relations, Colonel James Marr, formerly of Philadelphia, in addition to operating a ferry service between the two towns, originated a transfer–and–hack business to carry goods and people between El Paso, Texas, and El Paso del Norte, an enterprise requiring that some kind of bridge be built across the river.[46]

Very likely, the flimsy arrangement would be destroyed, as had the earlier and sturdier log bridges, perhaps in the springtime flush of water rushing from the stream's origins in Colorado and New Mexico; nevertheless, Marr constructed his bridge (see Fig. 8). An English writer and traveler described his trip across the Río Grande in one of the "numerous hack-waggons [*sic*] with canvas tops, drawn by seedy mules" which were plying between the Texas town and El Paso del Norte.[47] In spite of outsiders' disdain and competition from traditional modes of crossing Marr's transfer service was thriving. In its early years, the Díaz administration was taken up with consolidating power and strengthening the executive hand, working from the nation's center outward. So, not until a little over three years after Marr's business start-up did

news come to the border on 3 December 1881 that the Transfer Company's bridge had been disallowed by Mexico's central government. A local officer had, the day before, closed the bridge on the Mexican side and prohibited its use. Before constructing the bridge, Marr had secured consent from both El Paso del Norte's municipal authorities and customs officials to lay

Fig. 8. *Pasadera* type of bridge, El Paso, 1880s. Reprinted by permission, from Historical Publishing Network, K. Flynn, *Historic El Paso: An Illustrated History*, 94, photo research by H.R. Clark.

his *pasadera* (literally, "stepping stone") across the river's bed, and for three years that permission obtained. But, as in the case of the railroad bridge, Porfirio Díaz's hand reached to the very fringes of the republic in 1881, overriding local autonomy; Marr learned that he could not operate his transfer business until he received permission from the federal authorities in Mexico City.[48] Editor Simeon H. Newman of the *Lone Star* regretted in print that receipt of official authorization to reopen Marr's primitive bridge might take a month or more, and a local festival was in the offing in El Paso del Norte. However, by 7 December, less than a week later, trans-river travel across the bridge resumed, "a dispatch having been received from the Secretary

of Foreign Affairs of the Republic of Mexico, authorizing its use."[49] The annual festival invited bi-cultural participation across the international boundary line and the bridges beckoned people to attend. In El Paso del Norte as throughout Mexico, fairs, fiestas, and regional dances which began on 8 December were followed by religious ceremonies honoring the *Concepción Immaculada de Nuestra Señora de Guadalupe*. From 16 through 25 December people celebrated with *posadas* (reenactments of the circumstances around the birth of the Holy Child), fireworks, and dances, and on December 28 throughout Mexico, an all-fool's day, similar to the April Fools' Day of the United States, took the stage.[50]

A month in advance of the celebration of 1881, El Paso del Norte's newspaper, the *Progresista,* solicited the aid of the *Lone Star* in publicizing the annual celebration, both describing preparations for the planned activities.[51] The old town's ancient mission church received plaster and whitewash in preparation for the festivities. Dominating the town's central plaza, a large building was erected to accommodate booths, refreshment halls and gaming tables with "nearly all the gambling devices known in Mexico represented." Fiesta managers had secured large grounds near the military barracks for enclosing an "amphitheater" one hundred and eighty feet in diameter that would accommodate a series of contests between forty wild bulls and "six of the best trained bull fighters" to be brought from Chihuahua City. On the final evening of the Feast, a "great illumination" would appear in the plaza, featuring elaborate pieces of fireworks, especially one replicating *Nuestra Señora de Guadalupe*. The Texas newspaper promised that Americans would have an opportunity to witness some Mexican scenes known to them only through books of travel and adventure.[52]

The fiesta offered opportunities for trans-river commerce, as well as cultural and social interaction. A bidder from El Paso, Texas, won the contract for constructing the bull pen; he

furnished the materials and the labor for erecting and removing the facility at a cost of $1,200. For the first time, managers of the feast dispatched an agent along the line of the Santa Fe railroad through New Mexico and Colorado with handbills and circulars to advertise the celebration. The ATSF-Mexican Central Railroad bridge, opened the previous summer, allowed promoters to anticipate their largest crowds ever, with visitors expected from towns in New Mexico, Texas, Arizona, Kansas, Chicago, and other places in the United States, since the ATSF was "giving an excursion, and probably the Southern Pacific also." By 7 December, the *Lone Star* reported that El Paso's streets were crowded with people and the hotels were full to overflowing. On 17 December, just up the road in New Mexico, Las Cruces' *Río Grande Republican* noted that trains passing through its town to El Paso had been crowded during the past week with visitors bound for the Mexican feast. On the same day, the *Lone Star* claimed that "by actual count, 2,400 people had crossed the bridge" to attend the Feast in El Paso del Norte; the number, likely exaggerated, probably referred largely to the railroad bridge rather than to Marr's primitive "bridge."[53]

Unexpectedly, on 30 December 1881 at the end of the festival, the Marr Transfer Company's privilege to operate expired, and again the *jefe político* of El Paso del Norte ordered the bridge dismantled.[54] This order, presumably, applied to the half of Marr's temporary, but effective, bridge which extended to the Mexican side of the river. But the affair had not ended. In a dispatch to the Chihuahua state offices on 30 December 1881, Mexican Consul Jesús Escobar y Armendariz (1878-1892) discussed the suit brought by José Acosta of El Paso del Norte against James Marr and his partner, Ben Schuster, concerning the "provisional" bridge built by the Texans.[55] It appears that the Acosta family may have been running a competing ferry service from the south bank.

Taking into consideration that Marr had received permission from both governments to construct his bridge in conformity with treaties in effect, Consul Escobar, from El Paso, pointed out the possibility that river traffic between the two communities might be paralyzed if Texans who owned river front property exercised their legal rights to deny entry to foreign crafts. In fact, Escobar had learned of an agreement between Marr and property owners along the left bank; in the event that officials of El Paso del Norte insisted on enforcing the order to dismantle half the bridge, the Texans could block "navigation." Escobar, a life-long participant in Mexican government and foreign relations matters, noted that control of their river access was legal under the laws of Texas, and had been affirmed by the opinion of attorneys consulted. Escobar also discussed the treaty terms between the two countries regarding use of the river, suggesting that denial of the license solicited by Marr & Company could comprise an infraction of the international treaty which "guarantees free navigation." This local incident stretched out over some months, resonating with international implications. Perhaps more importantly, it demonstrated the locally perceived imperative for unrestricted trans-river communication and transportation. At the same time, negotiations and compromises would be necessary to manage affairs between communities whose boundary lines touched above the deepest current of a wandering river.

Less than a year after the opening of the railroad bridge, on 24 March 1882 Inspector Benito León Acosta reported to *jefe político* Ugarte what he considered to be a threat to El Paso del Norte. Several days earlier on the right bank of the Río Bravo, a short distance upstream from the Mexican Central Railroad bridge, a plank or beam from Marr's bridge had become lodged into the shoreline. In view of the rise of the water he now detected, Acosta feared that the force of the water might put afloat the piece of debris, which could then be dragged by the current to

collide with the railroad bridge supports, and, caught in its pilings, might form a dike. As Acosta well knew, this blockage could result in disastrous consequences, especially if it happened at night when a river watch might be inactive. Removal of the plank not being easy, Acosta suggested securing it in its present place with a strong cable. Apparently the benefits and pleasures of trans-pontine access had reduced opposition to the existence of bridges. The inspector's report showed particular concern that cross-river traffic should not be interrupted.[56]

One week later, on 1 April 1882 Acosta warned *jefe* Ugarte that the river was rising even higher. Acosta considered it not impossible that Marr's entire *pasadera* might be washed away. If bridge components subsequently became lodged against the railroad bridge piers, they could create a damming effect. Repeating his concern for the destruction of "communications," Acosta urged the greatest vigilance by the parties at risk against potential damage which might be caused by further rise of the river's water.[57] Inspector Benito León Acosta's actions appear rooted more solidly in municipal protection than those voiced by José Acosta in his suit against Marr earlier, at least on the surface. The inspector's concern further emphasized the importance local residents attached to uninterrupted bridge access between the two towns. Another week later, a yet stronger report from the inspector to the mayor repeated his worry that the weakness of Marr's *pasadera* established in the river might cause blockage, and having observed a light rise in the water level, the inspector again declared conditions a danger to the railroad bridge. This time he built a stronger case against the fragile character of Marr's bridge, which, in fact, he now argued should have been destroyed for several reasons. First, legal permission to construct the bridge was granted to Marr only for the duration of the fair of El Paso del Norte which took place in December 1881. Second, any unexpected rise in the river level would very likely destroy Marr's bridge which lay flush with the river bed. All the materials–planks and beams–if released

and carried by the current, could strike the railroad bridge pilings, compromising the stability of the structure to a greater extent than the single beam lodged in the river bank. No further record has been found as to whether Marr's bridge was removed in 1881. If it endured for three more years, the massive flood of 1884 would have washed it away in the first rush of the waters.[58]

Municipal Politics and the First International Street Railway Bridge

If "instant" cities are measured by the speed with which they became transformed from frontier wilderness to a state of early urban modernization, El Paso, Texas, ranks in the top echelons of the type.[59] Characterized by a weak, young municipal government and a long-anticipated railroad boom that nevertheless seemed almost instantaneous, the Texas village experienced the onset of industrialization. The railroads produced an economic base for a rapidly expanding population composed of a great variety of people of differing ethnic origins and social levels.[60] The little town developed at a dizzying rate, in jerks and spurts, learning as it went, shouldering the burden of self-invention within a trans-national borderlands environment.[61] Unique in these very particular ways, the Texas border burg was also a participant in the Porfirian drive to mechanization and other technological development, securely chained to Mexico's progressive ambition by bridge architecture across the Río Grande. El Paso's serendipitous location and ambitions toward becoming a transportation center presented its citizens with the formidable task of converting a frontier town into an orderly city that recognized and met its civic responsibilities. By 1881 diplomatic agreements between the U.S. and Mexico and onrushing industrialization ushered in an epoch of formally and informally recognized reciprocity, not always harmonious or balanced, in the trans-border arenas of

agriculture, mining, railroad expansion, and myriad auxiliary industries. Kern sums up the era thus:

> As the economy in every country centralized, people clustered in cities and political bureaucracies and governmental power grew; . . . railroad timetables necessitated a universal time system to coordinate life in the modern world. . . .the railroads destroyed some of the quaintness and isolation of rural areas . . . .[62]

The railroads ended the sanctuary of remoteness at the Pass. Borderlands dwellers were sucked into the mainstream of national and international markets by railroads that united the landmasses to sea lanes in a single vast commercial unit.[63] Locally, as technological vectors drew the two communities closer together, their early experiences in this new "marriage" taught them the significance of their gradually dawning status as international portals.

Control of municipal space by elected officials proved to be a complex business, influenced by citizens' demands and media pressure. Conflicts of interest affected municipal affairs; business owners and government officials, sometimes embodied in the same person, occasionally rendered flawed decisions, as evidence will show. Municipal government on the border learned the important lesson that trans-river associations could not be ignored. In 1880 expectation of the benefits attached to the coming of a railroad were molding the town's constructed character. Yet, El Paso's community leaders had not fully grasped the role their town was destined to play on the international stage. The politics attached to creating a trans-border street railway system taught city council members and their constituencies much about procedures necessary to function within a trans-border context. Through trial and error, fits and starts, revisions and additions, El Paso's public and corporate officials created proper municipal protocols for installing a trans-border street car service. Intersections of political and economic power, embodied in townsmen, were not a guarantee of success on first attempts to create the

transit system for which the public clamored, but the process was the earliest visible sign that the two towns would comprise an interdependent complex.

During the nine month period from July 1880 to April 1881 the El Paso City Council was occupied with constructing the new town's political infrastructure. An election scheduled for July 1881 demanded that ward boundaries be clearly defined, candidates declared, and election judges appointed. Expectation of growth and development known to follow the arrival of a railroad–in this case multiple railroads–generated almost feverish activity and investment in El Paso. Participants in the resulting wave of municipal growth envisioned a reliable potable water supply, gas and electrification, a sewerage system, and a street transport system. Some time elapsed before El Pasoans enjoyed the conveniences of gas, electricity and good quality water. Rapid transit of the day took first place on the agenda for city improvements in a town that was in a hurry to modernize. A bridge to the old town would shorten time and space, enabling closer social and economic interplay. In addition to social and cultural linkages, the community of more than ten thousand persons in greater El Paso del Norte offered a significant consumer pool for products arriving by rail, thus broadening the range for mercantile enterprises by El Paso businessmen.

Groups of progress-minded businessmen, some of whom held seats in the city's government, formed corporations for the purpose of constructing and operating bi-national street railways. The process required that a corporation of local investors register its intentions in the office of the Texas Secretary of State, and receive an official charter, after which the corporation must seek congressional approval from Washington, D.C. A petition was then submitted to the El Paso City Council for a franchise to construct, maintain, and operate a street railway. These steps were not always accomplished in this order. The El Paso Street Railroad Company

presented the first petition to the El Paso City Council on 14 January 1881 requesting ownership of space, known as "right-of-way," for a period of fifty years. Notions of the track routes in this primary appeal appeared sketchy and under-developed.[64] Formal legal language gave the document a dignified tone, but the petition contained flaws which would become controversial and result in considerable delay before the plan could become reality. Vague about several vital aspects of such a project, perhaps the most glaring omission was failure to consider an international bridge across the Río Grande to connect El Paso with El Paso del Norte via streetcar service. This request preceded the arrivals in El Paso of the Southern Pacific and the Atchison, Topeka & Santa Fe railroads by five months. Although flawed, it indicated the accelerated push the town would make toward growth in urbanization and industrialization in a very short time span.

El Paso City Councilmen Joseph Magoffin and James P. Hague, who were organizing members of the El Paso Street Railroad Company, represented the convergence of political and economic power. Joseph Magoffin was an El Paso native and son of early settler James Wiley Magoffin, who had developed a homestead with buildings spacious and substantial enough to house Fort Bliss troops for a decade and a half. From 1875-1887 the younger Magoffin contributed to the local built environment by expanding the family's hacienda-style residence on the property he inherited. Fellow townsman and lawyer James Hague, who held the positions of El Paso's district attorney, county attorney, county and district judge from 1872-1879, was frequently paid in land, which eventually amounted to many acres of valuable city property. As early as 1873, he and his partner at the time, W. W. Mills, deeded a generous allotment of space to the Southern Pacific Railroad Company for the future depot which they anticipated.[65] This gesture did not become a fait accompli until the deeds were recorded 25 January and 8 June 1881

but Hague had, with this donation, staked a strong claim to his part in shaping the city's "landscape anatomy."[66]

When the El Paso City Council met 14 January 1881, with Mayor Schutz absent, Alderman Magoffin took his seat as president pro tem of the Council.[67] In due course, the El Paso Street Railroad Company, capitalized in the amount of $25,000 and headed by Magoffin, petitioned City Council for a share of public space, asking for a fifty-year contract with the city, and indicating the four streetcar lines they wished to install on city streets.[68] The first line would connect the Southern Pacific railroad depot, north and east of San Jacinto Plaza, to El Paso Street, the town's main business avenue. The remaining three lines were described in terms of the "most practicable route," intersecting with other vaguely planned points. In addition to its failure to consider a bridge to El Paso del Norte, the petition omitted an estimated time frame for completion. In spite of omissions and uncertainties in the plan, the right and authority to operate the street railroad as petitioned was granted by the Council on the first reading, with Magoffin in the mayor's seat and as the first signatory on the list of the petitioners.

During 1880-1882 City Council created many political offices for managing the town which was growing so rapidly in numbers of newcomers and in establishment of businesses and housing. Between March and December 1882 Council established the offices of jailor, city health officer, city physician in charge of the pest house, streets and fire commissioners, fire chief with two assistants, and a sanitary committee. A city engineer was commissioned to survey and map the city. Operational units of the Council recognized at the 22 August 1881 meeting included: (1) a Committee on Revision of Ordinances and Rules, Police and License; (2) a Committee on Finance Claims and Accounts; and (3) a Committee on Streets, Grades and Public Improvements. Distributed among the six aldermen, two from each of three wards, council

members' duties became more specialized. The duties of the Committee on Streets, Grades and Public Improvements included review of petitions for ownership of space within the town's limits. Although the El Paso Street Railroad Company's petition had been submitted to City Council on 14 January 1881 and approved on the same date, eight months later, on 22 August 1881, the proposal was referred to the Committee on Streets, Grades, and Public Improvements for review under a new name, El Paso Street Railway and Bridge Company.[69] The revised title corrected the most significant lapse in the original petition and reflected growing understanding of the political and economic ramifications of its position on an international border. Joseph Magoffin's election as mayor in July 1881 heightened the potential for a conflict-of-interest between the responsibilities of his office and his partnership in the privately-funded for-profit street railroad project. The dual roles played by Magoffin demonstrate the tightly-woven complexities inherent in construction of this "instant city."

City Council members were soon to hear a proposal from a second group of citizens who comprised the City Railway Company. These stockholders, who may have learned from the mistakes of the first, stated their plan more precisely with more clearly defined requests to control the needed spaces. Over just a few months, El Paso's municipal persona showed signs that it was growing into its role. On 30 August 1881 the City Railway Company of El Paso came before the City Council, petitioning for a franchise, asking exclusive right-of-way for a period of fifty years on streets clearly named in its accompanying exhibit. The corporation pledged to begin work within ninety days and to construct at least one mile of railroad within twelve months. The proposal declared forthrightly that it was organized for the purpose of connecting the towns of El Paso, Texas, and El Paso del Norte, Mexico, and "for promoting and facilitating travel and intercourse between the two cities." A bridge would be built across the international

boundary line from the foot of either Utah (now Mesa) or Campbell streets, an enterprise which required free use of all the riparian privileges pertaining to the construction of the bridge. The company built into its proposal a forfeiture of its franchise should it fail to meet the conditions of its contract. The plea requested right-of-way for four well delineated railway lines, two of which would reach to the northern and eastern city limits. The company was capitalized in the amount of $100,000, stock shares to be valued at $100 each.[70] Corporation members included Solomon Schutz, immediate past mayor (July 1880 to July 1881) and proprietor of a thriving dry goods business.[71] Joining City Railway's board of directors was Dr. Manuel Samaniego, prominent Paris-educated physician, mayor of El Paso del Norte (1872), governor of Chihuahua (1876), and three-term Chihuahua state legislator. In 1881 he substituted for Governor Terrazas; according to an article in the *St. Louis Globe Democrat*, Dr. Samaniego was "a sincere and consistent friend to American enterprises in Mexico."[72] Samaniego's status was such that he was invited to serve on both of the street railways' boards of directors.

On 24 September 1881 City Railway Company's plea for a franchise came before Council's Committee on Streets, Grades, and Public Improvements, made up of former District Judge Allen Blacker (1875-1880), and Ben Schuster, general merchant and wholesaler, partner in a business in Chihuahua City that held mining claims in the state of Chihuahua.[73] The Committee on Streets & Grades recommended that the franchise be granted, enthusiastically endorsing the proposal on the grounds that competition between two companies would create a healthy and active rivalry which would be a great boon to the population of the two El Pasos, and be of "incalculable benefit" to the poor, who would have occasion to work and labor on both sides of the river.[74] This argument suggests that at least some El Pasoans were beginning to eye their international status with a broader view. The Committee affirmed that the granting of the right-

of-way requested would not interfere or conflict with any rights previously granted. The committeemen, however, took the liberty of inserting a qualifying proviso which stated that the concession granted to the City Railway Company would become void "if the work on El Paso Street is not commenced in ninety days."[75] This short phrase ignited a robust controversy. Under the franchise previously granted to the El Paso Street Railway Company, technically the company could act on its option at any time within the fifty–year life of the contract. The Council commanded little power to see the project started, although the public and the *Lone Star* were clamoring for installation of a city transportation system. While the Streets and Grades Committee's role as a review board did not entitle it to alter a petition, subsequent actions showed that Blacker and Schuster had crystallized the context within which petitions by competing railway companies might be handled. Questions in Mayor Magoffin's mind added to the uncertainty of the situation. When the vote was taken, three ayes to one nay demanded that the mayor declare the motion to adopt and pass the ordinance duly carried, granting the full body of privileges requested by the City Railway Company. However, Magoffin gave verbal notice of intent to veto the Council's action.

At the 22 October 1881 City Council meeting, Mayor Magoffin, in absentia, presented in writing the justification for his veto. The mayor, stockholder in the competing El Paso Street Railway Bridge Company, laid out to the Council members his formal objections to the City Railway's petition. The mayor first noted that the Streets, Grades, and Public Improvements Committee had, without authority, inserted a condition not requested by the company. Magoffin further pointed out that an attempt to force construction of a railway line on El Paso Street by requiring action from one or the other of the companies could generate conflict, or protracted litigation, thus delaying the desired result. A local El Paso historian interprets this action as a

possible exercise of political clout by business owners for the purpose of requiring one or the other of the companies to build on El Paso Street, a strong commercial venue where a "great number" of business houses were located.[76] Parties holding property west of El Paso Street were suspected of encouraging the El Paso Street Railway Company's failure to lay its line on Stanton Street which, if constructed, might have tended to direct the flow of business farther to the east.[77] Stanton Street was clearly a viable choice for construction of the proposed bridge since it had clear access to the river bank, a possibility lost to El Paso Street when the Santa Fe Railroad laid its tracks on the lower section and built its bridge from that point.

Mayor Magoffin's second objection concerned the municipal ownership of space. Streets not yet "dedicated to the city," thus outside City Council's jurisdiction, could not be appropriated to the City Railway Company, since such property was under the control of the El Paso County Commissioners. Although Magoffin remarked that property owners do not always welcome the noise and nuisance of street railways, this argument seems disingenuous since the population of El Paso was growing by leaps and bounds almost daily, already straining the city's territorial limits and housing space.[78] To further weaken the mayor's argument on this point, Alderman Blacker had presented a petition at the end of the 22 October meeting, signed by "numerous citizens," requesting council to take action in such a manner as to cause either company to build street railways.[79] The *El Paso Times* asked rather mildly, "When will the El Paso Street Car Company commence work on its various lines through this city? is the question asked on every hand."[80] The *Lone Star* phrased its favor of the proposition thusly: "Let us have a street railway with a ten cent fare and El Paso will begin to assume metropolitan airs."[81]

The view from over a century later hews to the opinion that Magoffin's third objection was clearly specious: he claimed that City Railway Company's charter filed with the state of

Texas did not grant authority to build a bridge, when, in truth, neither did the original charter granted to the company in which he was a stockholder, the El Paso Street Railroad Company.[82] A fourth, and seemingly more valid allegation, predicted that granting exclusive right-of-way might prove a serious detriment to the city, excluding other companies' rights to build on "said" streets for fifty years. Closely connected to the fourth objection was the fifth: His Honor felt it unwise to grant the unlimited rights the company requested, since locations for side tracks, switches, turn-outs and turn-tables to be erected had not been designated. However, again the mayor appears disingenuous, since the petition of the El Paso Street Railroad Company had been phrased in even more general terms, not mentioning any of the auxiliary architecture necessary for street cars to maneuver along city streets. The measure stalled for lack of Council's action.

Subsequent conduct by the Grades and Public Improvements Committee indicates that each time the City Council received a petition, original, amended, or reintroduced, a review by the Committee was required. On 8 November 1881 the Committee reported on an adjusted version of the City Railway's application for a franchise, which reflected a number of Magoffin's concerns. Further refining the petition, city street grades affected by construction activity of the railway company were explicitly placed under supervision of not only the City Council, and the Committee on Streets, Grades, and Improvements, but also of the City Engineer. A caveat was inserted: in the future, taxes might be assessed against the City Railway Company. Permissions for constructing an international bridge emphasized the necessity of obtaining legal authority from the Mexican government. When the Council met next, the Streets & Grades Committee recommended that City Railway Company's authorization to build, Ordinance 23 (amended), be approved and the motion passed unanimously. In May 1882 Congress authorized the El Paso Street Railway Company to "construct, own, maintain, and

operate a street-railway bridge over the Río Grande River between the city of El Paso, in the State of Texas, and the city of El Paso del Norte, in the State of Chihuahua, Mexico . . ." [83]

While El Paso politicians and business investors were laboring through the necessary formalities for getting a street railway system installed with the all-important bridge connecting the city to its neighbor, similar activities occurred on the opposite side of the border. A group of *empresarios*–cum–políticos of El Paso del Norte, ready to invest in a street railway for their town, included Ynocente Ochoa, Chihuahua ranch owner with property on El Paso Street, former *jefe político* and *commandante* of El Paso del Norte and president of the *Banco Minero Chihuahuense*.[84] Other corporation members were Espiridión Provencio, merchant, ranch owner, and *síndico* (alderman), Jesús Escobar y Armendáriz, Mexican Consul in El Paso, and local merchant José Flores. This group petitioned the Mexican Federal Government for permission to build a street railway in their city, and also to construct a bridge to the edge of the international boundary.[85] The half bridge would be joined to the connecting half to be built from the U.S. side of the river. It appears that the concession from Mexico's federal government to operate a street railway company in El Paso del Norte was granted to the Ochoa-Provencio group rather than to the City Railway Company of El Paso, Texas. [86]

Over the next three months, the request passed through the necessary ministerial channels until it reached the desk of Porfirio Díaz, who granted the concession, dated 24 January 1882, under two conditions.[87] First, the works must be subjected to the S*ecretaría de Fomento* (Ministry of Public Works) to ensure that the navigation of the river would not be impeded or restrained, and second, that permission would be obtained from the state in whose territory the construction would appear, i.e., Chihuahua. Communications between the governor of Chihuahua, the *Departamento de Fomento* (Department of Public Works), and the *Diputación*

Permanente (Legislature) seemed to assume that the franchise, already approved with conditions, had been granted, or would be. A chief concern, as it had been for the El Paso City Council, was for the ownership of public and private space. Ochoa and associates were not to inflict any damages whatsoever to property not owned by the municipality. The document stipulated that the street railways the group intended to construct would not extend outside the *ejidos* (publicly owned land); attached to the various communications were forty-five pages of plans for the bridge.[88] The proposal called for a structure 315 feet long, (slightly more than half that of the projections by the Congress of the United States), to be situated over 600 feet below, or downstream, from the Mexican Central Railroad bridge. In addition to the street car track, it would accommodate pedestrians and wagons and vehicles of all kinds.[89] Far distant from the cores of their respective republics, the two border towns created a workable linkage across the international border through the shaping and arranging of these prominent forms, i.e., bridges, harbingers of a burgeoning material culture.

While political delays hindered the bridge construction's commencement, the *Lone Star* doggedly kept the issue before its readership. Over weeks and months, the newspaper reported progress, or more often the lack of it, on the street railroad system, and continued to predict that streetcar convenience would soon be a material actuality, no longer a dream.[90] However, by late spring of 1882, no bridge had yet appeared. A disgruntled tone rang out from the *Lone Star* on 4 March 1882, when the paper printed six separate items in the "Locals" column. According to Editor Newman, not a single member of the city council fairly represented the present constituency of his ward. The newsman sourly advised a mass resignation. Reviewing suffrage in Texas, he pointed out that property ownership was not a requirement for a voter. In fact, he claimed that "the man who owns not a foot of land frequently makes a better and more impartial

legislator than his purse-proud neighbor" since, in his opinion, the very fact that a man is not a property holder had a tendency to make him an impartial judge between conflicting property interests. Newman went on to predict that by 1 June there would be 500 voters in the city. "Let those voters have a voice in the city government" was his cry. "The enterprising newcomers are the best citizens of El Paso, and they should have a voice in the city government."

It seems that the newsman recognized the dangers of concentration of power in too few hands, especially, in a municipality as small as El Paso, and he tied together the two-pronged issue that touched a large percentage of the town dwellers: the bi-national street railway system and city politics. In spite of all the petitions granted, and the ambition and enterprise behind efforts to render street car service to the public, more than a year after the first franchise was granted, no city street railway system nor international bridge was visible. Newman's sarcasm had little effect, at least where it concerned the mayor. Magoffin was reelected in 1883, thus serving from 1881 to 1885, a formative period in the framing of the "instant" city on the border.

If entrepreneurs on the border were not quick to see for themselves the potential revenue to be collected from privately funded local and international street railway service, the *Lone Star* printed a feasibility estimate. The El Paso newspaper actively promoted the street railway concept from the international perspective, supporting its position by estimating that as many as six hundred people were daily crossing the river between El Paso and El Paso del Norte by train, ferry, or whatever means they could devise. The *Lone Star* calculated that at ten cents per person, the revenue from a street railway bridge would amount to $21,900 per year, and that the cost of constructing the street railway and purchasing rolling stock would amount to seventy percent of one year's intake, leaving thirty percent for operations and profit. [91]

By summer of 1882, still no street railway bridge linked the border towns. A number of factors can be identified to account for the delay. One serious obstruction may have been the small capitalization of the El Paso Street Railroad Company, at only $25,000. As events unfolded, and more information became available, stockholders discovered that the cost of the international bridge alone, without any other of the structures necessary to operate a railway system, would absorb much of the company's capital assets. Perhaps enthusiasm for public service and potential profit had run ahead of the hard financial realities of such a project.

Pre-planning was a slowly developing art in El Paso's street car company ownership, in spite of the eminence of a number of stockholders. A second serious obstacle surfaced: the preferred and controversial route along El Paso Street, granted to the El Paso Street Railway Company, had never been a viable option. El Paso Street from Seventh Street south was occupied by the Atchison, Topeka and Santa Fe rails leading across the Mexican Central Bridge into El Paso del Norte's main north-south throughway. The railroad thus created a barrier to following the simplest, and least expensive, straight line between two points for the street railway. The City Railway Company's franchise granted right-of-way along either Utah or Campbell streets, for the purpose of bridging the river and running its line into El Paso del Norte, but neither of these streets would connect across the river directly to Lerdo Avenue, the best option. At the June meeting of the El Paso Street Railway Company's Board of Directors, the "most practicable route," a turn from El Paso Street east onto Fifth Street as far as Stanton Street, thence south to the river was suggested.[92] By October, company officers had determined this routing to be the one most acceptable.[93]

Other factors forestalled the street railway installation. The healthy competition between two companies, optimistically envisioned by the Committee on Streets, Grades, and Public

Improvements, had not proved to stimulate action toward the desired end. Finally, it is possible that the Mexican Central-Santa Fe Railroad Bridge relieved some of the urgency for getting the mule-drawn streetcar system into operation, but it was not a substitute for a street railway system. The railroad managers discouraged foot and animal-drawn traffic on their bridge by driving sharpened spikes into the roadbed.[94] A total of two trains, one incoming and one outgoing, crossed the bridge each day, and interrupted schedules were not uncommon.[95] Eventually, a solution to the dilemma emerged.

A Merger and a Street Railway Bridge: Modernization Celebrated

Municipal officials in the Texas town continued to grapple with the street railway issue. Conflicts seemed to have strengthened the Council's confidence in its own powers and sharpened its practices of review within the politics of space, although its actions did not go unquestioned. The aldermen continued to search for successful ways and means to establish both a working civic community and a stronger relationship with the neighbor across the river. On 10 July 1882 with all principals in attendance, the mayor called City Council to order. The business of the day focused on franchises, both original and amended, granted earlier to the El Paso Street Railroad and Bridge Company and the City Railway Company. A merger already accomplished seems to have been general knowledge. The record of the meeting shows little fanfare attached to the Council's recognition that the two corporations had combined to form a new entity to be known as the El Paso Street Railway Company. The new company requested that all the rights, privileges and franchises previously granted to both corporations be transferred to the new firm. Solomon Schutz, president of the now defunct City Railway Company, signed the petition as president of the new entity.[96] The motion to grant the petition carried four in favor, one against.

The minutes of the Board of Directors of the company affirm the partnership with the corporation headed by Ochoa in El Paso del Norte, *La compañía del ferrocarril urbano y puente.* The two street railway corporations collaborated on policy matters of setting fares and issuing passes to company and government officials. The boards, or sometimes specially appointed joint committees, cooperated in planning and executing measures for securing the river banks and keeping the railroads and equipment in good operating condition.[97]

On 2 August 1882 an *El Paso Herald* reprint from the *Houston Post* referring to the action taken earlier in Washington, D.C., reflected attitudes and impressions from east Texas. The *Post* noted that a Senate bill to build an international street railway bridge had passed the House of Representatives, an event of "novel and intrinsic importance." [98] The *Post* writer declared that such a bridge would "insure confidence, expedition and permanence" between the two countries, and furthermore, "the fact that Congress has determined to build one is indicative of the decided increase of commercial values about El Paso, and the greater regard in which our Mexican relations are held." The *Post* was a bit puzzled about how a street railway could exist or become necessary or paying without "defined and flourishing termini."[99] Judge Josiah F. Crosby, a director of the El Paso Street Railway Company, sent a rebuttal to the *Houston* newspaper explaining the desirability of a street car line leading from the Southern Pacific Depot in El Paso to the Mexican Central Depot in El Paso del Norte, a distance of about two and a half miles locally, but with an outreach into the major commercial, industrial, and cultural centers of the two nations. The judge assured the Houston paper and its readers that a similar local company was organized by prominent and able citizens of El Paso del Norte, and that a concession had been secured from the Mexican Government for a bridge, half to be built by each of the respective companies, meeting above the international boundary line, the deepest current of the

Río Grande. Crosby affirmed that he had procured rails for the street railways sixty days earlier, and that other necessary materials were also being shipped. Verifying Crosby's statement that iron and lumber had been ordered were the minutes of the Board of Directors' meeting of the El Paso Street Railway Company, 12 June 1882. An assessment upon the capital stock of the company was levied by the company officers for payment of the building materials.[100] As for whether "flourishing termini" existed at the ends of the street car line, Judge Crosby estimated the population of El Paso del Norte at 8,000 and of El Paso, 3,500, his figures perhaps a bit sanguine, "the latter having increased from about 400 a little over a year past."

On 27 September 1882 the *Lone Star* announced that the street railroad was finished; two days later, the street cars had arrived, and on October 7, the cars would be making their first trip across the river. Passengers could ride for a toll of ten cents; pedestrians could cross for five cents. Formally celebrating this feat of technology and mutual cooperation across the international border, on New Year's Day 1883 officials and citizens of both towns gathered to commemorate the realization of an enterprise which had "met with many a difficulty." Congratulatory speeches emphasized, in particular, the symbolism of the street railway in letting bygones be bygones, and expressed hopes that their reciprocal interests, industrial and commercial, would increase and keep in step. Existing relations were expected to grow and communication between the towns to be rendered free-flowing. The pact was sealed with a "splendid lunch" at the residence of Ynocente Ochoa.[101]

As Kern has pointed out regarding modernizing technology, bridges shortened border-crossers' experiences of time and space; at the Pass many eagerly adapted to these alterations which drew the two towns closer together with a firmer grip.[102] Ease of accelerated transportation gave a toehold to the transnational interaction at the local level which would bind

the two in a partnership of convenience, varying at different times from harmonious to adversarial. In 1881 the railroad and in 1882 the street railway inaugurated new patterns of technological communication which ushered in a joint economic, political, and cultural future for the partnered towns. A colorful array of pedestrians and other vehicles accompanied the little mule-drawn trolleys back and forth. In 1883 streetcars were running every fifteen minutes from 5:30 a.m. until 10 p.m. between the two towns.[103] Acceleration of movement between the two towns may be measured by the financial records of the El Paso Street Railway Company. In 1884, the company paid dividends to its stockholders in the months of March, April, May, November, and December. A massive flood in June washed away one end of the bridge; repairs absorbed company capital for the intervening months.[104] During 1885, stockholders received payments in January, April, and October, and in 1886 in January and April.[105] More and more people from cities along the rail lines participated in celebrations of Mexico's culture and history.

The bridge built primarily for street railway travel, enabled expansion of the El Paso Transfer Company, owned by Marr and his partner, Colonel J. F. Bennett. The company bought out its only competitor, exploiting the new technology and broadening its capacity to serve the public. The firm offered seventy horses suited for harness and saddle, two omnibuses, four landaus, five delivery wagons, and several other types of vehicles for hire. It employed more than twenty-five men in maintaining its equipment, valued at $35,000, and became the retail agent for Studebaker Brothers, the largest wagon manufacturing company in the world.[106] Although not all of the company's business was trans-border, by January 1884 Marr was looking to an abandonment of the ferry at the foot of El Paso Street, provided that a mutually beneficial

arrangement could be made with the El Paso Street Railway Company. The transfer firm proposed that its company vehicles pay half fare to cross the international bridge.[107]

Fig. 9. El Paso Street Railway Company Bridge, 1890s. Reprinted, by permission, from Rakocy, *Images/Paso del Norte*, 217.

The Stanton Street Bridge, six hundred ninety feet long, was supported by poles driven twenty-five feet beneath the bed of the river. The flooring allowed ample room for vehicles and foot passengers alongside the car track. In 1883, out of a total of three and three-quarter miles, the main line ran from El Paso to El Paso del Norte, a distance of two and one-half miles; in addition, a branch ran east along San Antonio Street toward the Magoffin residence, creating a site selection inducement for the anticipated County Court House. In 1889, a second international street railway bridge, similar in dimensions and appearance, spanned the river boundary, connecting Juárez Avenue on the south side and Santa Fe Street on the north.

The newly laid stretch of rails and ties constructed by the Santa Fe Street Railway Company joined existing routes and conveyed passengers and goods in a circuit providing uninterrupted passage ready access to the towns' principal public buildings. Thus, the completed street railway gave the border community unprecedented directional and spatial unity through

fluid and unimpeded connections.[108] Time and space shrank; urban modernity at the pass leaped forward. Bridges and street railways lifted both towns out of pre-industrial torpor. Rigid rails contrasted dramatically with the wandering ways of streets directed by water flow of *acequias*. The newly-comprehensive armature of the settlements created a subtle and effective, but definitive, frame of the community's combined formal essence, creating a strong organic unity at The Pass. Handmaidens to business along the main avenues, bridges and street railways comprised an operational unit that endured the strains of the oncoming decade.

Throughout history the centrifugal force of population growth pushed urban bounds outward, but a limit was always imposed by the distance a person could travel on foot or by horse. With the growth of rail systems in the late nineteenth century, that limit was extended to include not only "street car suburbs," but at the border, international complexes. Older spatial forms broke down; the new technology cracked open conventional forms of doing work and conducting social relations.[109] Many dramatic changes came to the frontiers of Mexico and the United States. Everywhere, technology of steel rails and wheels provided a compelling force for altering old patterns, but perhaps not, in many other regions, so abruptly.

Summary

In August 1881 the accelerating drive for increased industrial and commercial exchange between the United States and Mexico spanned the powerful but unreliable, sometimes meandering, river which constituted the international border. The first trans-river bridge gave undeniable visual evidence that technological advance coupled to a growing hemispheric impulse for stronger trade relationships had pushed aside political alienation and distrust. Entrepreneurs, investors, and political authorities worked through the maze of international

restrictions, daunting financial challenges, and geophysical logistics to move toward exploiting the undeveloped mineral and agricultural resources of the region. Symbolically and substantially the structure of complex wooden trusses, new forms of material culture, afforded and encouraged wider coexistent and integrated dimensions. Long anticipated and received with jubilation on the Texas bank, the nudge toward modernity was welcomed somewhat more reluctantly on the opposite side of the stream. Citizens' objections to the preemption of the main streets in El Paso del Norte and what they saw as high-handed methods employed by railroad management in plotting its route tainted reception of the railroad's snorting engines and iron wheels screeching along iron rails. Added to the climate of irritation at the invasive machines were weeks of worried watch regarding possible damming and diverting effects of bridge piers in the river's current when the unpredictable, but inevitable, rises in water levels occurred.

Inaugurated a little over a year after the railroad bridge opened, a second eloquent and potent architectural link invited even greater opportunities at the grass roots level for cross-cultural sharing and economic integration. Locally conceived and financed, street railways reached across the international border to join ties and rails from Stanton Street in El Paso to Lerdo Street in El Paso del Norte. Cooperation in constructing a bridge and street railway system opened the way to further exercises in transnational interaction. During 1881 and 1882 creation, ownership, and stewardship of rail travel fully engaged municipal leaders at the Pass of the North. Holding center stage in the public eye through the years following the Texas town's introduction to industrialization were the municipally-owned streets upon which the population ardently wished to see the flagship of their modernization, the street railway and its mule-drawn cars. The politically charged process of achieving that goal under the pressures of rapidly

accelerating demographic growth precipitated El Paso's emergence from village infancy into early municipal adulthood.

The genesis of the Mexican Central Railroad, connecting El Paso del Norte outward into the heartlands of both nations, heralded an urbanizing, at times uncomfortable, shift in the town's fundamentally agricultural nature. However, to municipal leaders street railway service was equally as important to the town on the south bank as it was to the town it had spawned, manifesting growing and strengthening ligatures between the two towns. While streetcar service within the towns was an important innovation, after the original fits and starts in planning records from the period stress the imperative of trans-river passage. Any breakdown of unhindered travel across the international bridges fomented high anxiety on both sides of the river. The architectural infrastructure of the bi-national urban complex both enabled and reflected the birth pangs of the epoch. At the daily local level the first international railway bridges presented unprecedented opportunities accompanied by the inevitable barriers to be overcome.

Railroad freight cars hauled, with relative ease, the heavy machinery necessary for development of mining and smelting and commercialization of agriculture across southwest United States and Mexico's northlands. Increasing railroad activity prompted changes in the material environment: depots and great warehouses, customshouses and checkpoints, guard stations and maintenance facilities began to alter the towns' appearance. Telegraph communications linking the border towns to the world at large brought ever more immediate awareness of up-to-date technologies, broadening the potential for lucrative exploitation of a wide variety of natural resources. The railroads also conveyed a flood of entrepreneurs and opportunists into the borderlands, many with capital to invest. New architectural forms sprang to

life to accommodate the vigorous expansion. Time and space shrank as urban modernity leaped forward, impelled by new forms of energy and innovative technology. Construction of international bridges was an imperative. The first bridges across the Rio Grande, symbolically and existentially, unified the partner towns and contributed significantly to the growing commerce between the neighbor nations.

Heightened levels of growing interdependency resulted when Mexico's tariff experiments encouraged commercial activity and generated bitter competition between the two towns' mercantile sectors. The next two decades wrought large changes in the material environment accompanied by a shift to an unprecedented consumer culture.

[1] Tim Dant, *Material Culture in the Social World* (Buckingham: Open University Press, 1999), 153-154.

[2] Henry Glassie, *Material Culture* (Bloomington: Indiana University Press, 1999), 1.

[3]Annual Report of the Secretary of the Treasury on the State of the Finances for the year 1881 (Washington: Government Printing Office, 1881), iii; Annual Report of the Secretary of the Treasury on the State of Finances for the year 1885 (Washington: Government Printing Office, 1885), xxxvi; Wm. McKinley, *The Tariff: A Review of the Tariff Legislation of the United States from 1812-1896* (New York: G. P. Putnam's Sons, 1904), 69-72; William E. Gibbs, "Spadework Diplomacy: United States-Mexican Relations During the Hayes Administration, 1877–1881" (Ph.D. diss., Kent State University, 1973), 222.

[4] The railroad companies first to arrive included, in May 1881, the Southern Pacific; in June 1881 the Atchison, Topeka & Santa Fe extending into Mexico in August 1881 as the Mexican Central. The Texas & Pacific and the Galveston, Harrisburg & San Antonio began service to El Paso in January 1882.

[5] The Atchison, Topeka & Santa Fe Railroad Company will sometimes be referred to as the ATSF or simply the Santa Fe.

[6] Dorothy Ward, annotator, "Tourist Attractions in El Paso (1885): An Excerpt from The Mexican Guide," *Password* XXXI, no. 1 (Spring 1986): 90.

[7]Oscar J. Martinez, *Border Boom Town: Ciudad Juárez since 1880* (Los Angeles: University of California at Los Angeles, 1975), 159.

[8] Stephen Kern, *The Culture of Time and Space, 1880-1918* (Cambridge, Mass.: Harvard University Press, 1983), 232.

[9] Lawrence A. Herzog, *Where North Meets South: Cities, Space, and Politics on the U.S.-Mexico Border* (Austin: Center for Mexican American Studies, University of Texas at Austin, 1990), 20.

[10] Gibbs, *Spadework Diplomacy*, 52; Robert Danforth Gregg, *The Influence of Border Troubles on Relations Between the U.S. and Mexico, 1876–1910* (Baltimore: Johns Hopkins Press, 1937), 27; Daniel Cosío Villegas, *The United States Versus Porfirio Díaz*, trans. Nettie Lee Benson (Lincoln: University of Nebraska Press, 1963), 56.

[11] Horgan, *Great River*, 859–62; Cosío Villegas, *The U.S. v Díaz*, 56, 107, 238.

[12] Gibbs, "Spadework Diplomacy," 156.

[13] Ibid., 154.

[14] Ibid., Chapter VIII, passim; Cosío Villegas, *The U.S. v Diaz*, 237.

[15] Gibbs, "Spadework Diplomacy," 224–25, 248.

[16] Ibid., 225.

[17] Ibid., 216–18.

[18] Ibid., 220.

[19] Ibid., 222–27.

[20] Ibid., 236.

[21] L. L. Waters, *Steel Trails to Santa Fe* (Lawrence: University of Kansas Press, 1950), 74–75, 94; Gibbs, "Spadework Diplomacy," 238.

[22] Lorena May Parlee, "Porfirio Diaz, Railroads, and Development in Northern Mexico: A Study of Government Policy toward the Central and National Railroads, 1876–1910" (Ph.D. diss., University of California, San Diego, 1981), 70.

[23] Waters, *Steel Trails*, 94.

[24] Joseph Leach, "Farewell to Horseback, Mule-Back, 'Foot-Back' and Prairie Schooner: The Railroad Comes to Town," *Password* 1, no. 2 (May 1956): 41.

[25] Waters, *Steel Trails*, 95.

[26] Parlee, "Diaz, Railroads, Development" 71.

[27] Ibid.

[28] Ibid., 69.

[29] International Boundary and Water Commission, United States and Mexico, United States Section, United States, "Treaties Applicable to the International Boundary and Water Commission: United States and Mexico: U.S. Section [extracts]," Article 5 (United States: s.n. 196?), 1.

[30] Francisco Garma Franco, "*Reseña sobre los principles ferrocarriles construidos en Mexico, 1892* (Review of the Principal Railroads Constructed in Mexico, 1892)*," in Railroads in Mexico: An Illustrated History Vol. II* (Denver, Colo.: Sundance Publications, Ltd, 1988), 311. When completed, the bridge measured 184 meters (603.52 feet) in length, with four 30 meter (96 feet) wooden center spans supported on piles driven 12 meters (38.4 feet) deep into the river bed. The deck for the rails was covered with wood planks.

[31] Ciudad Juárez (Mexico) Municipal: *Documentos históricos,/Archivo Municipal de Ciudad Juárez* (Ciudad Juárez, Mexico: s.n., 1750–1939), Part 2, Roll 54, Book 4, Frames 88–90.

[32] Parlee, "Diaz, Railroads, Development," 71.

[33] Ibid.

[34] Ibid., 72.

[35] Ciudad Juárez, *Documentos historicos*, Part 2, Roll 56, Book 4, Frame 0009; *El Paso Herald*, 28 January 1905.

[36] *Lone Star*, 1 February 1882.

[37]Ibid.; *El Paso Herald*, 18 October 1882, 11 March 1883, 13 May 1883, 4 November 1883, 15 June 1884.

[38] Camilo Argüelles, "*El auge de Ciudad Juárez con la vigencia de la zona libre,"* in *El problema económico de las fronteras Mexicanas; Tres monografías: Zona libre, puertos libros y perimetros libros*, vol. I, ed. Ulises Irigoyen (Mexico, D. F., 1935), 362.

[39] John H. Coatsworth, *Growth Against Development: The Economic Impact of Railroads in Porfirian Mexico* (DeKalb: Northern Illinois University Press, 1981), 167.

[40] Parlee, "Diaz, Railroads, Development," 72–3.

[41] Ciudad Juárez, *Documentos historicos*, Part 2, Roll 54, Book 4, Frame 486.

[42] Ibid., Frame 592.

[43] Gregg, *Influence of Border Troubles*, 186.

[44] Gregory Dreicer, "Building Myths: The 'Evolution' from Wood to Iron in the Construction of Bridges and Nations," *Perspecta* Vol. 31, Reading structures (2000): 139.

[45] Herzog, *North Meets South*, 6.

[46] Owen White, *Out of the Desert: The Historical Romance of El Paso* (El Paso, Tex.: The McMath Co., 1924), 151.

[47] Emilia Gay Griffith Means, "An English Tourist Describes the 'Booming' Frontier," in *Password* xxix, No. 2 (Summer 1984), 60.

[48] *Lone Star*, 3 December 1881.

[49] Ibid., 7 December 1881.

[50] George E. Fay, *Fiesta Days of Mexico* (Greeley, Colo.: University of Northern Colorado, 1970), 22–24.

[51] *Lone Star*, 11 November 1881; 3 December 1881.

[52] Ibid., 11 November 1881; 3 December 1881; 10 December 1881; 12 November 1881.

[53] Ibid., 19 November 1881, 12 November 1881, 17 December 1881.

[54] Ibid., 30 December 1881.

[55] Ciudad Juárez, *Documentos históricos*, Part 2, Roll 56, Book 6, Frames 145–147.

[56]Ibid., Book 5, Frame 0036.

[57]Ibid., Book 5, Frame 0211.

[58] *Lone Star*, 11 June 1884; *El Paso Herald*, 22 June 1884.

[59] Gunther Barth, *Instant Cities: Urbanization and the Rise of San Francisco and Denver* (New York: Oxford University Press, 1975), xiii.

[60] Ibid., 6.

[61] Ibid., xiv-xvi.

[62] Kern, *Culture of Time and Space*, 34.

[63] Ibid., 208, 213–14.

[64] El Paso City Council Minutes Book B, 62.

[65] J. Morgan Broaddus, Jr., *The Legal Heritage of El Paso* (El Paso, Tex.: Western College Press, 1963), 113.

[66] Corcoran, "He brought the Railroads," 51; Daniel D. Arreola, and James R. Curtis, *The Mexican Border Cities: Landscape Anatomy and Place Personality* (Tucson: The University of Arizona Press, 1993), 8–9.

[67] El Paso City Council Minutes Book B, 49.

[68] Ibid., 59-64.

[69] Ibid.,187.

[70] Ibid., 256-261.

[71] *El Paso, Texas, and Paso Del Norte, Mexico, Business Directory for 1885* (Albuquerque, N.M.: Rackliff & Wainey, 1885), 12.

[72] *St. Louis Globe Democrat*, reprinted in the *El Paso Herald*, 30 December 1883; Ciudad Juárez, *Documentos históricos*, Part 2, Roll 56, Book 4, Frame 0084; Roll 54, Book 3, Frame 0023; Armando B. Chávez, *História de Ciudad Juárez, Chihuahua, Mexico.* (Mexico, D.F.: Editorial Pax Mexico, Libreria Carlos Cesarman, S.A., 1991), 280; *Lone Star*, 2 November, 1881. In 1883 Samaniego would serve as lieutenant governor, as well as president of a bank in Chihuahua City. A businessman and property owner in El Paso del Norte, his name was first on the list as a donor to humanitarian relief for hardship brought on by the region's 1880 drought, and in January 1881 he was again first on the list to contribute funds toward gas lighting for the streets of El Paso del Norte. After the merger of the El Paso Street Railway Company and the City Railway Company in 1882, Samaniego's name does not appear in the firm's minute book.

[73] *Lone Star*, 21, 24 January 1883.

[74] El Paso City Council Minutes Book B, 256-261; *El Paso Herald*, 12 October 1881.

[75] El Paso City Council Minutes Book B, 216.

[76] Ronald E. Dawson, *Streetcars at the Pass* (New York: IUniverse, Inc., 2003), 8; El Paso City Council Minutes Book B, 157.

[77] *El Paso Times*, 1 October 1887.

[78] *Lone Star*, 23 November 1881. The newspaper reported that construction was booming, "for contractors have all they can do for the entire winter and there is much talk of houses to be commenced soon."

[79] El Paso City Council Minutes Book B, 245.

[80] *El Paso Herald*, 10 June 1881.

[81] *Lone Star*, 13 October 1881.

[82] El Paso City Council Minutes Book B, 61-65.

[83] *An Act authorizing construction of a street railway and wagon road bridge over the Rio Grande*, Senate Bill 1620 stipulated that "said bridge may be built with unbroken and continuous spans, and of the following dimensions, to wit: Six hundred feet in length, twenty feet in width, ten feet in height above high-water level, and with twenty-eight spans, twelve of which [must] be thirty feet in length and sixteen of which [must] be fifteen feet in length . . . . at the cost and expense of the owners of said bridge . . . ." *Statutes at Large* 22, 179 (1882).

[84] Ciudad Juárez, *Documentos históricos*, Part 2, Roll 57, Book 2, Frame 0127; Part 2, Roll 56, Book 3, Frame 0112; Part 2, Roll 57, Book 2, Frame 180; *El Paso Herald*, 11 February 1883. While the Juárez presidency was functioning from El Paso del Norte, 1866-67, Ochoa was granted six *sitios* (approximately 25,000 acres) of ranch land south of, and within the jurisdiction of, the *villa*, presumably for support and services rendered.

[85] Ciudad Juárez, *Documentos históricos*, Part 2, Roll 55, Book 2, Frame 0258.

[86] The concession from Mexico's federal government to operate a street railway company in El Paso del Norte was granted to the Ochoa-Provencio group rather than to the City Railway Company of El Paso, Texas, documented in International Boundary and Water Commission Files, "Stanton Street Good Neighbor Bridge," March 1923 through April 1976, " Composite Concession in accordance with the Railway Law of April 29, 1899, between Mr. Leandro Fernandez, Secretary of State and the portfolio of Communications and Public works, As representative of the Executive Branch of the government, and Mr. Harry T. Edgar, as representative of the El Paso and Juárez Traction Company, for the operation of the international bridges and street railways of that city, owned by said company; as amended by mutual agreement on October 21, 1909; February 13, 1911 and March 9, 1923." This document verifies the date of the first concession as 24 January, 1882, executed by the Mexican Federal Government, and it lists subsequent actions by both Mexican authorities and companies allowed to install this type of public transport bridging the Rio Grande up to 1923.

[87] International Boundary and Water Commission Files, "Stanton Street Good Neighbor Bridge,

[88] Ciudad Juárez, *Documentos históricos*, Part 2, Roll 56, Book 5, Frames 0013–14, 0020, 0011.

[89] *Lone Star*, 7 December 1881.

[90] Ibid., 13 October, 16 November, 19 November, 7 December, 1881, 21 January, 1 February, 1 March, 1882.

[91] Ibid., 25 January 1882. Anticipatory projections proved too high; at the opening of the bridge fare was five cents for a pedestrian, ten cents per person for trolley fare.

[92] Noyes Rand and Joseph Magoffin, Executive Committee, EPSRC, Minutes of the Directors [*sic*] meeting of the El Paso Street Railway Company, 12 June, 1882, 3, photocopied, courtesy Ronald Dawson, Railroad and Transportation Museum of El Paso.

[93] *Lone Star*, 13 October 1881.

[94] *El Paso Herald*, 28 September 1881.

[95]*Lone Star*, 1 January 1882.

[96] El Paso City Council Minutes Book D, 103, 113; Book J, Pt. 1, 226.

[97] EPSRC Board, Minutes, 45-47, 48-49, 52, 73, 84, 86, 100, 103, 129, 156,

[98] *An Act authorizing construction of a street railway and wagon road bridge over the Rio Grande. Statutes at Large* 22, 179.

[99] *El Paso Herald*, 2 August, 1882.

[100] EPSRC, Directors' Minutes, 12 June, 1882

[101] *El Paso Herald*, 10 January 1882.

[102] Kern, *Culture of Time and Space*, 3.

[103] *Lone Star*, 23 June 1883.

[104] *Lone Star*, 11 June 1884; *El Paso Herald, 22 June 1884.*

[105] EPSRC Board, Minutes, 53-96.

[106] *El Paso Times*, 16 April 1883.

[107] EPSRC Board, Minutes, 45-47.

[108] William L MacDonald, *The Architecture of the Roman Empire: An Urban Appraisal* (New Haven, Conn.: Yale University Press, 1982), 8.

[109] Kern, *Culture of Time and Space*, 208.

CHAPTER THREE

THE TRANS-BORDER BUILT ENVIRONMENT TAKES ON NEW FORMS: GOVERNMENT HOUSES, MERCANTILE EMPORIUMS, A SMELTER, 1884-1905

Introduction

The built environment at The Pass from 1884 to 1905, examined in this chapter, depicted the growing urbanized economic interdependency of the two border towns. The advent of the railroads and construction of international bridges at the Pass demanded new forms of civic, commercial, and industrial architecture, creation of a built environment which would enable and enhance rapid modernization and mechanization of the region. Complex architectural forms introduced an unprecedented verticality to the combined cityscape and encouraged fresh visions for entrance into an oncoming age of modernity. Elegant two and three story Victorian styled structures housed city and county governments, monuments to both towns' growing political status, while commercial and industrial architecture—mercantile establishments, smelters, and foundries—contributed a robust musculature to the swelling border complex.

The material evidence for this chapter suggests an underlying empirical basis that contradicted the conscious awareness in the collective mind of the El Paso business community. Tim Dant argues that social forms, e.g., relationships, are not only contingent on human activities but also contingent on the material environment of those activities. The material environment is not natural or given; it is itself a social product and as such it feeds back on the development of social forms—institutions, rituals, practices, modes of interaction, activities, beliefs.[1] The built environment at the The Pass spoke of a reciprocal connection overlooked in the heat of resistance on El Paso's part to "government-supported" prosperity in Ciudad Juárez.

El Paso's businessmen and merchants had not yet grasped the certainty that financial and economic success of the entire border metroplex at The Pass was ineradicably interwoven.

El Paso's public monuments began to appear in 1885, testaments to its growing self-image as an important rail hub and of civic leaders' aims to create a true "city" in the broad region that abutted the border with the state of Chihuahua, Mexico. Important structures displaying and accommodating the town's rapid development would follow over the next two decades. Declaration of a tariff-reduced space across northern Chihuahua by Mexico's President Porfirio Díaz in 1884 invigorated the border economy. In Ciudad Juárez bonded warehouses stored increasing volumes of goods arriving by rail and supplied mercantile emporiums newly established along Calle Comercio (Commerce Street, in 1921 renamed 16 de Septiembre). Lowered tariff rates conversely raised revenues collected at the old El Paso del Norte customs office. Together these economic stimuli led to erection of an impressive government house, known ever since as *La Aduana* (the customshouse), the architectural style of which added a French flavor to the mercantile section of El Paso del Norte.

Increasing trans-border trade accelerated the growth of a bi-national consumer pool which encompassed an international dividing line. However, the concept of a bi-national border-specific interdependency, founded in the economic success of both municipalities, had not yet penetrated the consciousness of the business community at The Pass. As a result, the combined commercial sector suffered from obstructionist measures promoted by shortsighted citizens on the Texas side. Determined political action abolished the railroads' bonded cartage and warehouse privileges, and, beginning in 1895, stifled trans-border commerce for a ten-year period. The general economic slump that affected both countries in the second half of the 1890s

further impeded the construction boom begun in the early 1880s at the international crossroads. Substantial building did not resume until after the turn of the century.

As Greig Crysler has pointed out, monumental civic and industrial architecture anchored in the horizontal landscape, stands as a constructed form of capitalist ideology. In his view, and mine, "architecture in all its forms is dependent on economic forces for its very existence, and not to analyze buildings and their surroundings in such terms constitutes a huge silence."[2] This chapter probes the rather abrupt transition from traditional subsistence agriculture carried out with low level technology into the industrial era accompanied by a nascent consumerism. Study of the built environment in this chapter will rely substantially on the economic development it empowered and enhanced.

El Paso's First Civic Monument: the County Court House

No sooner had the arrival of the railroads at the Pass launched the incipient town into whorls of urbanization and economic expansion than El Paso's citizens recognized that their isolation deprived all but a privileged few from litigation at the federal district level. The physical difficulties and enormous expense attached to presenting a case in the nearest court, San Antonio, 700 miles away, resulted too often in "ruinous compromises," or total abandonment of the defense or prosecution of rights guaranteed by the Constitution. A petition to authorities argued that the five trunk lines of extended rail service meeting at El Paso made the growing city a natural location for the establishment of a United States District Court, with Circuit Court jurisdiction and powers. Railroads were bringing together people engaged in myriad interests, many who needed access to Federal Courts. Pleading that justice should be served cheaply and conveniently, the petitioners asked that a Federal Court be established at El Paso.[3]

Within a month after receiving the plea, Congress passed a bill providing for terms of court to be held in El Paso by the western judicial district of Texas.[4] While not granting a separate federal district, judges would thenceforth hold court sessions in El Paso which up to that time had been held only at San Antonio.[5] Clearly, El Paso would need to construct an appropriate venue for fulfillment of its newly-won status. In concert with its juridical ambitions, and true to the pattern for an "instant city served by railroads," demographic growth and political motivations had furnished El Paso the muscle to wrest the county seat from neighboring Ysleta via an exercise in frontier politics.[6] Erection of an elegant new County Court House in 1885 validated El Paso's rapid development.[7] Opened in January 1886, El Paso's first civic monument stood in the center of the block bounded by San Antonio, east Overland, south Kansas, and south Campbell streets, a few blocks east of the city's main commercial and railroad core. [8] Designed by Alfred Giles, a well-known architect based in San Antonio, most of the construction was carried out by local contracting firm the Buchanan Company at a cost of $135,000.[9] The three-story brick structure was built in French-inspired Second Empire style, augmented by Italianate tendencies with concessions to available materials and workmanship. Pavilions marked its four corners and gold-tipped ironwork crested the roofline above cornices of galvanized metal.[10]

Fig. 10. El Paso County Court House, 1885. Courtesy of El Paso Public Library, Border Heritage Collection, Aultman Collection, A5590.

According to Gelernter, when the French Second Empire mode influenced Italianate buildings the overall effect was a sumptuous richness controlled through its underlying Classical geometry. An imposing presence in far west Texas, the building's projecting entrance bays with their pilasters and piers centered on all four sides of El Paso's Court House emphasized, perhaps, public accessibility.[11] Patrons could enter the courthouse by any one of four portals; above each stood a Goddess of Justice, blindfolded and holding a balance scale. The dome which surmounted a tall, pierced cylinder symbolized more than El Paso's achievements of less than half a decade; it spoke of the young city's lofty aspirations. Proud citizens expected the edifice to "inspire the stranger with the push and enterprise of our people, and to impress the tourist with the permanency and continued growth of our city and country at large."[12] El Paso's first architectural icon accommodated federal officials of the U.S. circuit and district courts, the district attorney, the U.S. commissioner, the deputy U.S. marshal, the deputy internal revenue collector, County Commissioners' court, the sheriff, and a handful of city officials(see Fig. 10).

With volumes of traffic increasingly flowing across the international bridges, a transition in customs architecture carried very strong messages about the territorial hegemony claimed by the United States and Mexico, as well as the oncoming surge into modernity for both towns. Soon after the conclusion of the U.S-Mexico War, 1846-1848, both countries established customs stations for inspection and revenue collection at the newly determined international border. In 1881 customshouses for both nations manifested loyalty to traditional adobe construction. From the pre-railroad decades until 1888, the El Paso del Norte customs office occupied space within a long territorial–style bank of spaces, one-room deep, with contiguous walls. In the new El Paso, a twelve-room quadrangle, also adobe, housed customs affairs. With one side open, all three sections one room deep with contiguous walls, the structure upon completion was judged to be "one of the handsomest [buildings] in the city."[13] However, El Paso's urban space soon depicted evolving architectural preferences. By 1884, the *El Paso Times*, reflecting a changing outlook, privileged cultural preferences over environmental logic by

declaring "the old filthy adobe buildings at the head of El Paso Street ought to be torn down and removed from sight."[14]

Demonstrating growing municipal pride and, possibly, resistance to the region's Spanish legacy, buildings of scarce lumber and kiln-fired bricks challenged local subordination to normative design conventions.[15] By December 1882 El Paso's customshouse, built only a little over a year earlier, was deemed "an inferior one-story adobe structure, inconvenient as to location . . . entirely too small to meet the increased necessities."[16] Ensuing changes in customshouse architecture enabled and reflected the rapidly-growing tariff collections at The Pass. Copious clerical work attached to the ballooning volumes of trade pushed the border customs affairs into new larger offices at the corner of Second and Utah Streets, a location halfway between the two international bridges.[17] By January 1884 constantly expanding trade prompted Street Railway Company officials, in agreement with the current customs collector, to request that both governments designate the Stanton Street Bridge as the only port of entry between El Paso and El Paso del Norte.[18] Subsequently the company constructed a check point at the north end of the bridge, and by 1888 receipts from mounting bridge traffic permitted the directors to construct brick offices, new stables and car sheds.[19]

In El Paso del Norte, the history of customs architecture followed an entirely different path to a visibly impressive culmination. In 1888 the old customs office, although remodeled once, soon would be supplanted by an almost startlingly modern structure commissioned and funded by the Díaz administration. Between 1885 and 1905 tariff reform and experimentation produced economic and commercial change, manifested by the built environment of both towns.

Mexico's Free Zone; Strained Trans-River Relations

In August 1881 the Atchison, Topeka & Santa Fe Railroad crossed the bridge it had built over the Rio Grande to become the Mexican Central Railroad. In 1882, the rails reached the Chihuahua state capital, and by 1884 arrived in Mexico City, a miracle of modernizing

technology. However, when the railroad arrived in 1881, citizens of El Paso del Norte found themselves in an economic downturn brought on by a three- to four-year drought and impacted by their country's exceptionally high import duties. At times the great river had run dry; gardens and orchards were in many instances destroyed, forcing some residents to leave their holdings and find sustenance elsewhere. Mexico's excessive import tariffs, enforced at the river's edge, severely inhibited procuring of basic necessities by inhabitants of El Paso del Norte. Primitive transport modes seriously impeded circulation of goods within Mexico, few of which reached the northern Chihuahuan border region. Hemmed in by the difficult terrain and long distances to the south and by Mexico's steep tariff wall on the north, the people of El Paso del Norte were at a severe disadvantage. When the first railroad arrived in El Paso and crossed the river into Mexico from the United States, access to products and goods became immediate. But protectionist customs duties put even necessities out of reach of all but the most affluent consumers in the old town. The Chihuahuan border inhabitants were deprived of the benefits of modernizing technology, much to their discomfort and dissatisfaction.

Recall that two railroads entered the Pass region in May and June 1881. In May 1881 a group of El Paso del Norte's citizens directed a petition to the Chihuahua State Legislature, eloquently painting their current plight in near desperate terms. Right up front, they asked for declaration of a tariff free zone. Their settlements were backward and in decline, they informed state representatives. They blamed the arrival of the railroad for a loss of population. Without local jobs and no way to earn a living for families, local citizens could— indeed were forced to—travel considerable distances from home to find work. The petitioners pointed out that borderlands dwellers, who had in 1846-1848 constituted the first line of defense against incursion from the north, currently were unable under such adverse circumstances to obtain even

the most indispensable necessities of life–flour, corn, wheat, meat. They saw their town's inhabitants and capital disappearing. The writers openly confessed to envy of the commercial and industrial development in the town across the river, convinced that it was at their expense. [20] They asked for an extension across Chihuahua of the historically successful Free Zone in the states of Tamaulipas, Nuevo León, and Coahuila.

The document pictured clearly the close relationship between the two towns at this early stage, citing the rapid progress of the neighboring community in comparison to stagnation in El Paso del Norte. It pointed out that with the approach of the railroads, in less than six months the city of El Paso, Texas, had increased its population from less than 1,000 to more than 3,000 inhabitants and its wealth to over $2,000,000. A description of the competing built environment reinforced their argument. Three banking houses, several wealthy mercantile houses, other new edifices, and multiplied value of its real estate depicted the new town's growth while "everything on our side persists in the same state of discouragement, without any increase in the population, or any improvements in the cities; furthermore there has not been a single mercantile house opened without her managers having the character of simple tributaries of American commerce."[21]

The petition arrived in Chihuahua City, probably not coincidentally, during a time when Dr. Mariano Samaniego, well-known resident of El Paso del Norte, was serving as interim governor. Throwing his support behind the petition, Samaniego appointed Ynocente Ochoa, a leading citizen also of El Paso del Norte and almost certainly one of the petitioners, to shepherd the recommendation through the legislature, thence to the executive office in Mexico City.[22] On 7 June 1881 the Chihuahua State Legislature approved the request for a tariff free band along its northern border, defending its action by citing the expected benefits. The lawmakers judged that

it would be an unquestionable convenience for the interests of the state to raise "public and rich elements in their northern frontier, through increase of cities with enterprises and capital, and national interests better guaranteed."[23]

Knowledge of their partner city's plea prompted three years of worried anticipation on the part of El Paso business leaders, who feared that a tariff exempt climate just across the bridges would draw a mass migration of its commerce, both wholesale and retail, into the Free Zone. Dreams of a "future immense" for their town seemed in dire jeopardy.[24] The possibilities prompted investigation into legal, cultural, and political conditions for business in El Paso del Norte. According to research carried out by a local newspaper, Mexican law prohibited foreign ownership of real estate within sixty miles of the United States border, except by special permission from the federal government. The investigating reporter interpreted the law as insuring that an entrepreneur from the United States would be relegated, except in special instances, to the role of tenant, lacking choices or preferences in constructing the built environment adapted to his needs, without a voice in local political affairs, and without the protections afforded by government to which he was accustomed in his own land.

The business community in the young town sensed an attack on its profit potential, judging that a tax advantage to its neighbor's growth potential would amount to a subtraction in its own prospects. Merchants feared that their Mexican customers, and probably some from El Paso, would shop in the Mexican town instead of in El Paso (Texas). Realization had not set in that economic profitability for the two municipal entities would be closely aligned. Aiming to discourage any El Pasoans who might be contemplating a move across the river to benefit from uncommonly low import taxes, the writer pointed out further disadvantages to business in the Chihuahuan port of entry which would obtain for the foreign investor. The foreign merchant or

wholesaler would be forced to straddle the dissimilar legal stipulations of the two nations, and to adjust to unfamiliar legal jurisdiction. Punctuating his caveat, the writer invoked the ghost of petty revolutionaries over which "Mexican authorities exercised little control."[25]

While El Pasoans continued to inveigh against what they saw as a potentially crippling impairment, arguments against the Free Zone held no currency downstream from The Pass. Officials in Tamaulipas and Nuevo León spoke out strongly in favor of the arrangement which had proven successful in their regions. Taking a broad view, in 1882, the United States Consul-general to Mexico, Warner P. Sutton, having resided in the Tamaulipas *Zona Libre* for a number of years, saw an on-coming stimulus for trade in manufactured items newly available in Chihuahua and beyond from the United States by rail. Markets for American products manufactured in the nation's interior, at St. Louis, Chicago, Cincinnati, New York, New Orleans, and Galveston, would be almost sure to expand. Sutton declared himself in favor of the extension of the Free Zone across the northern frontier as far as the western Chihuahua state boundary, since it was, in his view, "the only chance of anything like even handed competition with the left bank."[26] Sutton's projections did not calm the tensions in the west Texas town. Officials of both countries registered opinions in favor of extending the privileged status across the northern borderlands. As early as 1879 Minister to Mexico John W. Foster had argued that

> The decline in price of manufactured goods in the U.S., and our increased spirit of commercial enterprise, enables the American merchants on the Texas side of the river to compete successfully in many classes of goods with the merchants in Mexico, who import from Europe. The practical result is that, in cotton fabrics and many other articles, the Mexican frontier is supplied almost entirely from the United States,[27]

For many of the same reasons which drove El Paso's hostility, determined and bitter opposition arose among the business community in the interior of Mexico. The furtherance of the Free Zone along the border was viewed as an unfair trade benefit favoring business and

commerce within the duty free band, "a privilege prohibited by Mexico's Constitution."[28] Nevertheless, ignoring all naysayers, on 25 March 1884 President Porfírio Díaz issued the tariff reform act, long anticipated or dreaded, depending upon the point of view.[29] The *Zona Libre* would reach across the northern Mexico border from the Gulf of Mexico to Nogales, Arizona.[30]

Inauguration of the Free Zone along Chihuahua's border severely strained the trans-river relationship at The Pass. Once Díaz's decree was officially declared, a group of almost forty El Paso business and civic leaders directed a strong protest to their congressmen, Senator Richard Coke and Representative S. W. T. Lanham.[31] Led by State National Bank President C. R. Morehead and Mayor Joseph Magoffin, the concerned collective voiced fears that, because of "sharp and unequal competition with Mexican merchants" American industries and business operations in El Paso would be "paralyzed" and "legitimate business demoralized." The worried writers further suggested that if Mexico insisted on maintaining the Free Zone, the United States Government should establish a region on its side of the international boundary commensurate with Mexico's favored trade territory.[32] In the face of this perceived blow to its future, the town geared up to reinforce its self-confidence and public image. As though to reassure the townspeople of El Paso, the *Lone Star*, 3 October 1885, published a concise listing of El Paso's history and growth.

A tally of business start-ups aimed at bolstering confidence and attracting newcomers; for example, the *Lone Star* reported that "during July 1885 fourteen new business houses opened."[33] The *El Paso Times* devoted the entire 1 January 1886 edition to the city's history, emphasizing "factors of success and prosperity," and carrying thumbnail sketches of the city's many successful business proprietors and entrepreneurs. Concerned merchants organized the El

Paso Bureau of Information, forerunner to the Chamber of Commerce, for promoting the city's interests.[34]

The Free Zone, Prosperity, and Architectural Achievements

As rail transportation reached farther south into Mexico, the network of bi-national rail connections identified the border complex as a key commercial site. Rail traffic closely bound the gateway cities in their relations with each other and with the outside world, pumping revenue into the interdependent local economy. By 1888 northern border cities imported thirty-nine percent of all goods shipped into Mexico, over three quarters of which passed through Nuevo Laredo, Nuevo León, and Ciudad Juárez (formerly El Paso del Norte), siphoning off volume from Vera Cruz and other seaports.[35] Customs figures for export activity indicated vigorous growth in the international trade passing through El Paso del Norte into the United States (in U.S. dollars):

1884: $2,564,648.13[36]
1885: $7,153,452.59[37]
1886: $8,714,664.42[38]
1888: $31,059,626.66[39]

Bonded warehouses were an important concession not only to importers but also to warehouse owners who collected storage fees, and to railroads entitled to freight charges. These large storage units, of necessity built alongside railroad lines or spurs, were repositories owned or leased by the government or by private importers. They stored merchandise that was undergoing customs examination or pending final release from customs custody. Bonded warehouses owners in El Paso included ATSF (1885), Ketelsen & Degetau (1888), Schutz

Wholesale Company (1888), and the Santa Fe Street Railway Company (1890). In Ciudad Juárez, government-owned warehouses stood along the rails that passed near the customshouse.

As expected, Chihuahua's band of inclusion in the Free Zone attracted increased commercial activity. Beginning with the advent of the railroads at The Pass in 1881, followed by Díaz's declaration of the *Zona Libre* in 1884, an irreversible metamorphosis engulfed El Paso del Norte's structural appearance. Businessman and político Camilo Argüelles served as alderman in 1885, customs collector in 1888, in 1895 temporary manager of the newspaper *El Centinela*, customs agent in 1896, and secretary of the Ciudad Juárez City Council in 1921.[40] In 1926 Argüelles wrote his recollections of the changes wrought in the built environment of El Paso del Norte by duty free, a little later duty-reduced, commerce along *Calle Principal* (later *Avenida Commercio*). The street began at the bluffs rimming the west side of the village. Its point of origin marked by the city jail and the meeting room of the City Council, it stretched eastward through the *partidos*, precincts organized around the irrigation system. In 1881, both sides of the throughway were lined with small adobe dwellings, vineyards, and orchards, interspersed with vacant lots. Three general stores, owned by leading townsmen Ynocente Ochoa, José María Flores, and Espirídion Provencio, sold clothing, groceries, liquor, hardware, medicines, and other miscellanea. A few smaller shops also stocked groceries; two meat markets held meager offerings. The one drug store was operated by an "American *curandera*" or healer; some vendors sold small curios worked in primitive style.[41] The 1885 inauguration of the tariff-free zone brought a dramatic change in the urban landscape of El Paso del Norte. Fulfilling the expectations of the Zone's advocates, investors soon began to arrive.

In 1886-1887, within two years after the duty free strip was decreed, important structures rose along *Avenida Comercio* (Commerce Avenue). Some entrepreneurs modified existing

buildings for commercial use, but as more businessmen began to set up their ventures, the old-style adobe walls fell before modernization. New construction, much of it in brick, appeared on vacant lots, "notable structures with elegant facades for retail business and business offices."[42] The first was Blumenthal's large retail store, *La Tienda de Europa,* richly stocked with clothing largely from Europe and Asia. Blumenthal chose an advantageous location on the corner of *Calle Principal* and Lerdo Street, along which ran the street railway from the Texas side of the river to the Mexican Central Railroad Station.[43] Always a crossroads for long-distance trade, the urban landscape soon took on a cosmopolitan complexion. Felix Kalm & Brothers, of France, raised a costly building for their enterprise, similar to those on the opposite side of the border, with great stocks of merchandise largely from their homeland. Considered unmatched for its luxurious line of products, the firm aimed to satisfy consumer demand of the populations on both sides of the international border, clearly recognizing existence of the combined consumer pool. Bunsow & Company of Germany added to the mix by tearing down Provencio's old general store to put up a modern brick department store elegantly appointed, facing Blumenthal's. A rich merchant who had started out in the port of Matamoros in Tamaulipas, Francisco Armendáriz of Spain, imported products from his home country, as well as from France, the interior of Mexico, and the United States.[44]

Confirming in a small degree the anxieties of conservatives who feared a migration of El Paso's business, a few El Paso-based firms opened branch outlets in Ciudad Juárez. These included Ketelsen & Degetau in 1889, long-established in Chihuahua City and in El Paso since 1882, wholesalers in drygoods, hardware, groceries, agricultural implements, mining supplies, wagons, and sewing machines. The company also functioned as an agent for the Banco Nacional of Mexico in Ciudad Juárez. Another El Paso cross-over, the W. G. Walz Company, offered

embroidered silk robes and kimonos, sandal wood, and ivory wares, cloisonné, fine china ware, and Mexican curios. J. P. Deiter and George Sauer, from across the river, remodeled one of the modest residences on the main street to open a wine and tobacco store combined with a *cantina*.[45] In addition to the general merchandise businesses opened by El Pasoans, Arthur Kline & Company, partnering with Camilo Argüelles, functioned as brokers and commission merchants in both El Paso and El Paso del Norte.[46] The Fenchler Brothers, too, straddled the border with their abundantly stocked meat markets, and according to Argüelles, amassed a virtual fortune. The incoming entrepreneurs altered the town's built landscape permanently. The community's economy blossomed, and the booming commerce sector of El Paso del Norte would soon be graced by an important government installation, constructed simultaneously with a fundamental alteration in the town's political status.

On 4 August 1888 a decree issued from the Chihuahua State Government Offices declared, "In consideration of the current progress of El Paso del Norte and the glorious acts it performed during the French intervention, the villa is hereby elevated to the category of city under the name of Ciudad Juárez."[47] El Paso del Norte qualified for its advancement by being a nucleus of population endowed with communications, urban services, and administrative buildings; the town was also functioning as a regional economic and cultural center. In meeting these criteria, the newly upgraded community counted among its attributes rail and telegraph service through the state capital, Chihuahua City, to the nation's capital 1,225 miles distant. Moreover, Ciudad Juárez could boast of a district court established for the first time as well as schools being funded and opened, and international street railway service linking it to its Texas counterpart; in 1887 it counted a population of 12,000.[48] Further emphasizing its connection with Mexico's Emancipator from the French Intervention, the city built a new post office on the site

where President Benito Juárez held offices during his sojourn at the border,1865-66, and set up a bust of its patron figure on a stone pedestal at the center of the *Plaza de Armas.* [49]

Coinciding with its new civic status, a stunning new government house adorned the built environment of Ciudad Juárez. On the south side of *Avenida Comercio* the Federal Government purchased land on which to construct a visual imprint of its power.[50] The crowning example of early progress in the former frontier town, it was the politically and culturally charged new customshouse, *La Aduana*. The growing amount of customs receipts from imports bound for interior Mexico and collected at Mexico's border entrepôt had translated into material substance in short order, and the importance of Ciudad Juárez was forthrightly reflected in its architecture. Unmistakably a monument to Porfirian goals of modernization, order, and progress, Ciudad Juárez's customshouse, officially designated *La Aduana y Oficinas Generales,* formally occupied in 1889, stood as far more than an expression of the markedly improved economy generated by the customs reduced *Zona Libre* (see Fig. 11).[51]

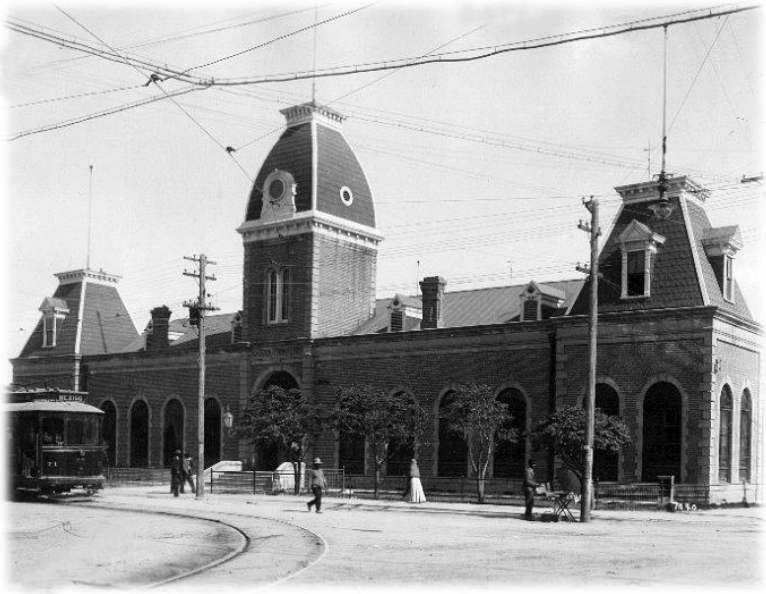

Fig. 11. *La Aduana*, Ciudad Juárez customshouse, built1888-89. Courtesy of El Paso Public Library, Border Heritage Collection, Aultman Collection, A5242.

The new government buildings in both towns displayed Second Empire French influence by their roofs with ridge lines chopped off, caps appropriate to the rationally symmetrical corner

pavilions. They also followed Second Empire fashion seen in the U.S. by combining a rectangular tower with a steep but short double-pitched mansard roof, topped with iron trim. Quoins, wedge-shaped stone blocks, often accented the external corners of these buildings. In the cultural realm, *La Aduana's* distinctive style portrayed the Díaz regime's profound admiration for all things French as the epitome of cultural superiority. The mansard roof line, a style which originated in France, contrasted decidedly with the traditional form of the mission church and the remaining single-story flat-roofed buildings along the main street. The contrast was softened somewhat by the brick mercantile structures rapidly springing up and strengthening the town's commercial character. The construction of the graceful customshouse in Chihuahua's main border town, the town's first monument to modernity, complemented and cemented the grant of official status as *ciudad to* El Paso del Norte. Situated in the northern territorial margins more than a thousand miles from the national core, this federally mandated building carried nationalistic concerns to the very edge of Mexico's borderlands. As the 1881 petition from townsmen of the border pointed out, they had not forgotten the 1846-48 conflict between Mexico and its confiscatory neighbor, a struggle that had thrust them into the front lines of the fray that cost the nation so much territory. For the next thirty years Mexico's territorial integrity was a burning issue, a source of much conflict only settled in 1879, through hardheaded negotiations between Porfirio Díaz and U.S. President Rutherford B. Hayes a mere ten years earlier than construction of *La Aduana*. In order to resolve the nationalist differences Hayes had formally conceded Mexico's inviolable territorial sovereignty in exchange for investment and trading concessions by U.S. firms.

National boundaries remained a sensitive point, projected in this case by a building, the customshouse. Josiah Heyman emphasizes the importance of a border customs collection house

by asserting that "the port is where the laws of the nation first take hold for people who ostensibly agree to follow them."[52] When the immediate historical and political background is considered, it does not seem an overstatement that *La Aduana* was a forceful declaration of Mexico's nationalistic assertions. As Charles Maier explains, "territory is not just a background factor in history; it assures a stable sense of community only when 'identity space,' the unit that provides the geography of allegiance, is congruent with 'decision space,' the turf that seems to assure physical, economic, and cultural security."[53] Mauricio Tenorio-Trillo further elaborates the meaning of nationalism. In his view, nationalism requires the "constant influence, transformation, destruction, and reinvention of local traditions and identities. The destinies of the various identities within a nation are constantly being negotiated in the framework of modern nationalism."[54] The economic and architectural traditions of Ciudad Juárez were being reconstructed before its inhabitants' eyes. The fashionable new customshouse surely fortified the sense of zealous patriotism, experienced when "identity space" overlapped "decision space" for citizens of the newly designated Ciudad Juárez. The grant of the up-to-date government house must have imprinted *juarenses* with assurance of physical, economic, and cultural security; perhaps it also reinforced their determination to withstand the competition from the neighbor across the river.

La Aduana stood proudly in response to the domed dignity of El Paso's first civic monument, its federally financed county Court House, which also manifested French influence on the architectural trends of the day. These standout specimens faced each other little more than a mile apart in silent conversation. The two civic monuments spoke volumes about contesting national ambitions, and growing civic self-awareness on the Texas-Chihuahua frontier-cum-

borderlands. The elegant architectural expressions represented firm local intentions of joining the community of modern cities extant in both nations.

The Free Zone Falters; Short-sighted Opposition by El Paso

In December 1885 with the privileged tariff status in place less than a year, the Mexican government modified its original decree. Goods manufactured inside the twelve-mile wide band from duty-free imported raw materials would pay regular tariff fees in full if exported for consumption into greater Mexico.[55] This early adjustment sounded the death knell to the manufacturing opportunities border dwellers in El Paso del Norte had hoped would attract substantial investment and provide jobs. Evidence that the "duty-free" status was subject to change undermined the stable business climate necessary for substantial long-term ventures. As a result, Chihuahua's major northern port-of-entry was limited to light manufacturing, a pernicious condition which revealed the contradictions inherent in the arrangement. Even though government re-imposition of a small percentage of tariff duties created uncertainty among potential industrial investors, a service sector on an unprecedented scale appeared within the next decade in central Ciudad Juárez. Complementing the emporiums with their luxury offerings, firms licensed to operate in 1888 included the Erie Telegraph & Telephone Company, two transport companies and a retail gasoline dealer. A full range of personal services also became available.[56]

As major development in Ciudad Juárez began showing signs of weakness, El Paso's conservative "old guard" fixed its attention on coercing the Mexican government into abolishing the Free Zone. Bank president Morehead believed that abolition could be accomplished by suspension of the bonded railroad routes bringing sealed, tariff exempt imports from U. S.

seaports into the *Zona Libre*. Beginning 3 January 1889 a series of press pronouncements that the Zone should be neutralized as soon as possible were founded on a conviction that "the Free Zone is based largely on our charity and indulgence. The harm it is doing us is incalculable and it should be nipped in the bud."[57] The next day the attack came from a different angle: "Realizing the losses sustained by the merchants and business men of El Paso through the smuggling constantly carried on between this place and Juárez, the *Herald* calls attention of the proper authorities to the extent of this illicit trade." On the third day, the paper called public attention to Morehead's convictions that "the evil can best be remedied by stopping goods coming through in bond."[58] Taking no comfort in El Paso's growth and in spite of mounting evidence of its prosperity, Morehead continued his unrelenting opposition to the Free Zone and insisted that bonded railroad routes were an egregious detriment to his town's potential.

Evidence presented by El Paso's material environment shows that the bitter opposition to Mexico's reduced tariff zone was largely unwarranted. Some citizens of the Texas town remained convinced that their economy suffered from "unfair" tariff reductions imposed by their neighbor nation, even though growth and expansion continued. Perhaps El Paso expectations had been conditioned by the near explosive progress of its first five years in the railroad era. But, within the seven years since 1881 with a population fully ten times greater, an ever-increasing built landscape testified to solid and continuing growth. In December 1888 local contractors had enjoyed a building boom and were struggling to keep pace with demand. Construction companies raced to put up structures ranging from a new, but modest, City Hall and a new public school to a variety of business offices and production plants. Also in 1888 a census showed El Paso's population at 10,601 persons living within city limits.[59] Population numbers of the two towns were, for the first time, roughly equal. El Paso had caught up with its parent.[60] Moreover,

structures which spoke of power, industrial and federal, multiplied within the landscape on the left bank. Nevertheless, supporting the views of some of its most influential readers and advertisers, a potent vocal minority, El Paso newspapers fulminated against "unfair," even "destructive," conditions of competition believed to be curtailing profitability. The same newspapers, often in the same issues, regularly reported lively activity and expansion in El Paso's solid commercial base.

El Paso: Its Industries, the Merrick Building, and the Federal Building

In 1887 smelter smokestacks bracketed El Paso's built landscape, defining the city's skyline. A large operation to the west, echoed by a smaller firm on the eastern margins pushed the industrial district outward. In 1888 the El Paso smelting works produced over $2,000,000 in bullion, and in 1889 the out-put increased by twenty-five per cent to $2,500,000.[61] Evolving integrated industry spawned the El Paso Foundry and Machine Company, which started up in a one-room adobe house five blocks east of San Jacinto Plaza in the town's growing industrial center.[62]

Cultural preferences or prejudices sometimes made a sharp distinction between users of adobe and those who built in brick. In 1908 El Paso boasted that it had a right to be proud of the fact that "it is a solid, substantial brick city," a reaction perhaps to it historical and structural past.[63] In 1882 a large brick manufacturing concern had begun operations in El Paso. Its kiln produced 250,000 bricks per firing of good quality.[64] The chameleon-natured brick adapted readily to the many styles of El Paso's architecture, but brick is more than a building element. A tangible yield of human conduct, brick as a historical artifact unfolds in many directions at once. Brick embraces contradictions in simultaneity, and opens multiple routes to significance. To put

it simply, brick was (and is) many things to many people. Consideration of the ubiquitous utilitarian brick recalls Glassie's assertion that material objects carry communication between human beings, sometimes reporting thoughts and actions that resist formulation.[65] The use of brick wraps around cultural divides, class divisions, economic strategies, and political controls, to name only a few of its purposes and characteristics.

William Deverell finds attached to brick manufacture raging racial prejudice toward the population of Mexican origin exploited for two or three generations as the labor-mechanism for a Los Angeles brick manufacturing firm complete with a company town. Manipulation of the totality of workers' lives solidified class divisions while, in a "contradiction in simultaneity," the employees produced the very bricks that characterized a social class closed to them. Thus, brick was the class separator, the signatory of a cultural divide which represented, from the Spanish American past, regional understandings of race and racial heritage.[66]

In El Paso, Texas, brick assumed the role of political control in the name of citizens' protection when the City Council in April 1882 put into force an ordinance making unlawful the use of combustible material in the construction of, or repair of, any building within an explicitly specified fire district.[67] The wording of the dictum implicitly recognized the fire-resistant qualities of adobe as well as brick by prohibiting the use of lumber without the express permission of the City Council. The ordinance, written fully and firmly in the context of fire control, went into effect seven or eight months after the arrival of three railroads which gave access to lumber from distant areas. Even though the Council granted a number of special permits that allowed structures to be built of wood, brick was a fundamental building material, both figuratively and literally, in El Paso's development. Abundant local sources of clay, often referred to as adobe, and shale encouraged the steady growth of the city's brick manufacture. A

pillar of El Paso industry from 1882 when output was adequate for the city's demand, by 1897 the El Paso Brick Company reported an order of one million paving bricks per month to be shipped to Mexico City. The *El Paso Herald* pointedly reported owners' and builders' names along with addresses of brick building projects.[68]

On the other side of the river, many of the mercantile establishments that sprouted up in the old town in the later 1880s utilized kiln-fired brick, thus attaching it to entrepreneurial capital investment and mercantile prosperity. In 1895 Ynocente Ochoa, wealthy banker of Ciudad Juárez, put up a new brick residence, considered the most comfortable and costly in the town by a news reporter.[69] Thus, at The Pass the political and economic proved almost inseparable from brick culture, and moderately determinative of class.

To focus only on the social implications of the use of burnt brick is to ignore some pragmatic properties such as long-lasting durability and resistance to environmental forces. It is also to deny that many structures continued to be built of adobe and to ignore the cross-over of masonry techniques that applied to both adobe and brick construction. In 1913, the Revolution in Mexico forced Pascual Reyes, third generation stone cutter from Aguascalientes, Mexico, to take refuge in El Paso. Also skilled as a mason, Reyes contributed to construction of a number of El Paso's public monuments: the U.S. Post Office,1917, El Paso High School and the College of Mines, Central Baptist Church, San Francisco Xavier Catholic Church and Manhattan Presbyterian Church.[70] One of the most outstanding examples of the developing mercantile sector in El Paso, Charles Merrick's three-story brick building, housed a retail dry goods business on the first floor; a residential hotel occupied the second and third floors. The original Merrick store-front had glass panels in wood frames with cast iron columns. Modular terra cotta panels, cast iron columns, a tin acanthus leaf cornice, projecting bays of tin facing and patterned

tin shingles are among the variety of materials and construction methods that set forth the distinctive character of this edifice. Designed by local architects John J. Stewart and William J. Carpenter, the Merrick Building stands today, representative of the extensively detailed buildings on south El Paso Street (see Fig. 12).[71]

The Merrick Building fully personified El Paso's early flowering. It celebrated the diversity of El Paso's available resources and flourishing technology; it spoke to the city of its own burgeoning vitality. Although the region lacked wood for construction purposes, home industry converted raw materials from the very earth into malleable sheets of tin and columns of cast iron, wrought iron tracery and durable terra cotta panels. Brick laid in common bond formed plain walls and at the same time, arranged ornamentally, enhanced the rounded arches above decorative windows. Plate glass, stained-glass and projecting bays added visual interest to exterior wall surfaces and heightened the entrance of light to the interior. Completed in 1887, the structure should have hinted, at least, to the town naysayers that they had little to fear from competition in Ciudad Juárez.

Fig. 12. Merrick Building. Courtesy of Historic American Buildings Survey, Photograph by David Kennedy, 1980.

The amalgam of industrially-manufactured building materials used in the Merrick Building spoke assuredly of El Paso's thrust into the mainstream of late nineteenth century Victorian architecture. By 1888 El Paso's built environment had undergone the changes that a

building boom brought, in both business and public construction. A new city hall, built at a cost of $10,000, arose at the corner of West Overland and Santa Fe streets. Two stories, brick with galvanized iron trim, it provided convenient quarters for a centralized fire department and for city officials, many of whose offices were previously accommodated by the increasingly crowded County Court House.[72]

Regardless of all the stout assertions of the city's power and prosperity, projected by its flourishing built environment, some in the El Paso business community continued to agitate against Chihuahua's *Zona Libre*. Difficulties arising simply from increased trade were often blamed on the special Mexican trade territory.[73] Borderlands progress and prosperity seems to have been regarded as a zero sum game: any addition to the progress of one half of the community appeared as a subtraction from the other half. The built environment thoroughly refuted this misconception.

In 1888 El Paso's business community renewed, if indeed it had ever relaxed, its opposition to the privileged trade zone. Induced by El Pasoans, in the early months of 1890, Texas Senator John H. Reagan tried repeatedly--without success--to have American bonded railroad routes to Mexico suspended until Mexico abolished the Free Zone.[74] Warnings about possible unintended consequences fell on deaf ears. The concept of a bi-national interdependency, contingent on the success of both, had not penetrated the local consciousness nor, apparently, that of the Texas State House. The stiffening of El Paso's attitude toward its neighbor was evident in press behaviors. From 1881 to 1885 El Paso newspapers had often printed flattering articles about the attributes of Mexico's landscape to tourists and investors alike.[75] Tourism and other travel into the underdeveloped, largely unexploited physical beauty, even grandeur, of Mexico's varied geophysical terrain meant money in the pockets of El Paso's

business community. After President Díaz extended the duty reduced zone across Chihuahua's northland, the tone in the local press changed. Fewer articles spoke of Mexico's charms. El Paso was caught on the horns of a dilemma: as a point of railroad connections in tourist travel as well as commercial trade exchanges, community prosperity depended on as much rail travel as possible, including that into Mexico. Reluctance to promote that travel reduced potential income. Some influentials in El Paso were unable to come to terms with this conundrum for another decade. Relentlessly they lobbied political authorities against the Free Zone, eventually inflicting severe damages on its close neighbor and partner, as well as on its own economy to a lesser degree.

With smelters, foundries, and other industries rising rapidly, with street railways and bridges connecting the towns, the momentum of El Paso's forward progress kept the pace of expectations lively. When the meteoric trajectory fell to a somewhat softer curve at the end of the decade, the turn of events was described as an "absence of a special boom," even though taxable property values had almost tripled, from $2,809,157 in 1883 to $6,200,000 in 1889.[76] A comparison of imports and exports with entry ports downstream for 1889 showed El Paso/Ciudad Juárez volume at $21,439,767.94, roughly three times the amount passing through Laredo/Nuevo Laredo, and about five times that through Eagle Pass/Piedras Niegras.

Plans for El Paso's long-awaited customshouse, later known as the Federal Building, witnessed to the booming buzz of the previous five years and promise for the future. As early as January 1886, Congress authorized the purchase of land and erection of a suitable building, appropriating funds in the amount of $150,000.[77] Although the structure had been originally conceived as a customshouse, expanding federal affairs on the frontier demanded space for judicial activities and postal service. Disagreements about site selection and difficulties in

obtaining property titles hindered progress, seemingly interminably. Five years after the original authorization, a St. Louis firm won the construction contract.

Gelernter emphasizes the transformation in social values of the second half of the nineteenth century, such as "The Gospel of Wealth" and "The Age of Enterprise," trends that shaped a new order which was not without unrest. Architects sought an "exuberant" architectural expression to match. The French Second Empire Classicism of Napoleon III, mentioned above, fit the need in some cases. In keeping with the assertive nationalism of the entire nineteenth century, many architects at mid-century continued to seek a national style. Also evident was an increasing willingness to adapt traditional architectural bases to American conditions, tending toward a new style more brazen than refined, more muscular than delicate. Buildings in the new Western towns followed the architectural styles of the Eastern regions with some delay, given the distances involved. While a great deal of experimentation permeated the architectural design field after the 1870s, assertive verticals came to mark an important civic building; bold forms proclaimed the brash self-assurance of the age.[78] El Paso's Federal Building seems to have fit into these developing patterns. Rising land values and an increasing desire to build for maximum return led developers to exploit new technologies and build dramatically taller structures. Four stories with a yet higher dominant tower made a powerful statement on its corner location between the town's rapidly growing commercial district and San Jacinto Square, the town's nod to the City Beautiful movement. Compared to the County Court House, the Federal Building projected a business-like, even utilitarian, impression, although the entrance was graced by neoclassical Greek-style columns; the structure housed the postal service and a fire-fighting company, as well as a single jail cell for holding a person awaiting trial, (see Fig. 13).

Fig. 13. El Paso Federal Building. Courtesy of El Paso Public Library, Border Heritage Collection, Aultman Collection, A5021.

Architecture at The Pass from 1881-1889 evolved from territorial style adobe to brick, stone, and a limited quantity of lumber in a variety of Victorian styles. Overshadowing long, low, flat-roofed forms, the urban contours stretched upward. Two- and three-story government buildings surmounted by domed or gambrel rooflines spread across articulated ground plans which were complemented by corner pavilions. Symmetrical facades centered on dignified portals, symbolizing a new sense of order and purpose for the dual community. Plants for heavy and light industry spoke of rapidly growing economic power bent on exploiting the rich natural resources of the broad surrounding trans-border environs. Lining the towns' main streets, mercantile establishments provided goods across a spectrum from the most prosaic necessities to luxurious apparel and frivolous trifles. Importers stored their wares in the great bonded warehouses which arose alongside rail lines, repositories to facilitate merchandising speculation aimed at maximum profit-taking. Stylish railroad depots often stood nearby.

Shared utility services–telephone, telegraph, and gas for street lighting–tied the trans-river community firmly together.[79] A full circuit of street railway service, with trolley cars crossing two international bridges on every twenty-five minute round trip, carried passengers and goods along the two main thoroughfares. The partnered bi-national corporations providing trans-pontine transport were privately funded. However, the public service they rendered uniquely yoked the two communities in a sometimes amiable, sometimes fractious affiliation.

The 1890s--Economic Stagnation, Lost Railroad Routes, Sluggish Construction

In the early 1890s broad-ranging national trends brought a moderate economic slump to The Pass. The McKinley tariff taxed previously duty-free lead and silver ore imported from Mexico at one and one/half cents per pound, an amount equal to from one third to one half the market price of lead.[80] The increased impost forced the El Paso Refining and Smelter Company to shut down four of its six furnaces until it arranged to purchase ore from New Mexico mines. A national silver panic in 1893 was accompanied by a short but sharp stock market decline, and was followed by a succession of problems that included the largest number of U. S. business failures on record, fifty-one percent more than in 1892.[81] Financial recovery began in 1894, but that year cold weather and drought plagued the cornbelt, further shrinking the economy.[82] In spite of distress in the several spheres, regional agricultural differences helped to keep rail freight moving, important at The Pass. The cotton crop yielded normal harvests allowing the south to announce a gain over the previous year of about seven per cent. According to Bradstreet, western states showed a generally healthful condition of affairs.[83] As the hub connecting eight railroads from east-west and north-south, El Paso could not escape economic fluctuations experienced by the national economy. Some signs of stress appeared, although the western borderlands felt the effects of the slowdown less than northern and eastern regions of the country. Construction activity proceeded at a slower than normal pace for about five years. After government agencies moved into El Paso's Federal Building in 1892, no civic monuments, industrial plants, nor merchandising emporiums appeared until a new City Hall arose in 1899.

Judging from the intensity of advertising in newspapers on both sides of the river, entrepreneurial overlap, regardless of up-tics and downturns, treated the dual community as one indistinguishable consumer pool. At least one company in Juárez delivered to El Paso customers,

at no cost, purchases of more than five dollars.[84] Nevertheless, as the decade ground on, competition from Ciudad Juárez added to the recession of 1893-94 shut down or shrank a small number of the better known companies in El Paso. L. B. Freudenthal & Company in El Paso declared bankruptcy in 1895. [85] Calishers' California Store sold out in 1895, but by 1897 had resumed business. W. G. Walz cut off its branch on the right bank and confined its efforts to its El Paso location on the second and third stories of Myer's Opera House on El Paso Street.[86] Hardware dealers Krakauer, Zork, and Moye, closing out in Juárez, ran front page ads for many weeks between July 1894 and January 1895. Advances and retreats of mercantile entrepreneurship blurred the already fuzzy international boundary but did not soothe the discontented element in El Paso.

Although a variety of determinants beyond the borderlands shaped El Paso's relatively mild sag, Bank President Morehead remained focused on Mexico's slender reduced-tariff belt as the source of the town's "ills." In 1895 Morehead ploughed ahead in his campaign to have the bonded railroad routes from U. S. seaports to Mexico's *Zona Libre* suspended. The frontier banker and his cohorts failed to recognize the short shipping distance from Galveston to Mexico's improved deep-water east coast ports of Tampico and Vera Cruz, bypassing the inland *Zona Libre.* In 1892 the Mexican government authorized a government customs office on prime Tampico waterfront property adjacent to newly built warehouses, docks, and terminals large enough to handle the unloading of six steamships or vessels at one time. Later, government subsidies in the amount of three million pesos permitted dredging of Tampico's harbor and construction of a customshouse at the main docking area.[87]

Ignoring wide knowledge of financial and industrial fluctuations and generally broader development, Morehead continued to push Texas congressmen to suspend bonded railroad routes

to the Free Zone. Morehead's pamphlet titled *The Free Zone of Mexico, Its Baneful Effects on the Commercial Interests of the Republic and those of the United States,* appearing in 1895 in Congressional debates, may have influenced a Texas legislative resolution favoring suspension. Morehead's pamphlet charged "an ill feeling between the border inhabitants which is daily growing in intensity and magnitude. These causes and the consequent estrangement are the growth of many years and have a tendency to result in a complete alienation." [88] Consul-general Sutton, Texas Senator Crain, and customs inspectors along the Mexican border in Coahuila, Nueva León, and Tamaulipas vehemently denied this to be a true representation of border activities. Nevertheless, El Paso's Representative Jeremiah V. Cockrell on 27 February 1895 introduced a resolution in the House of Representatives that called for suspension of American bonded routes to Mexico's *Zona Libre* "so long as the Mexican Free Zone law exists."[89] Cockrell's attempt to get the measure passed prompted fiery opposition from lower Río Grande constituents facing Tamaulipas and Nuevo León across the border, long since adapted to the benefits of the Zone downstream.[90] In spite of the considerable disapproval, Cockrell's measure passed on 1 March 1895.[91]

For at least five years, many voices had pointed out the likelihood of an undesirable backlash against Morehead's push for suspension of the bonded railroad routes into Ciudad Juárez. Congressional debates brought out the possibility that Mexico might not, in fact, be coerced into abolishing the Free Zone by suspension of the U. S. railroads' bonded cartage privilege. The Mexican government had disallowed bonded railroad routes from its coastal ports of entry to the Free Zone, perhaps as a sop to opposition sustained by the business community in Mexico's heartland. Full duties were required on all goods entering at Tampico, Vera Cruz, and Guaymas regardless of the ultimate destination. This restriction had forced all shipments from

foreign countries destined for Mexico's Free Zone through American seaports and inland over American railroads. The U.S. rail companies had up to 1 April 1895 what amounted to a monopoly on the carrying trade to the Free Zone.[92] This enormous advantage was what Morehead and his followers managed to shut down. A month later the U.S. State Department received notice that the Mexican government had established a bonded railroad system for the transmission of foreign merchandise to the Free Zone from the ports of Guaymas on the Pacific coast, Vera Cruz, and Tampico on the east side.[93]

In the United States realization soon set in that diversion of traffic to Mexico's ports was a reality, amounting to many dollars lost by U. S. railroads. Large bonded warehouses in the commercial district at The Pass had given evidence that regional markets linked to the international railroad network comprised an almost unlimited field for expansion and development in the years from 1880 to 1895. With bonded routes to Mexico's Free Zone suspended, the warehousing and brokering of bonded goods plummeted. Not quite one week after passage of the resolution, customs officers at all entry points of the United States were being notified that foreign products intended for the Free Zone would no longer be received for shipment in bond.[94]

The shift in shipping and rail routes left the Free Zone in Ciudad Juárez without the prop of its international connections. Within a year the *Mexican Herald*, published in Mexico City, painted a grim outlook for the border town. According to its evaluation, a large part of the blame fell on policies of both governments. The newspaper writer asserted that Mexico's land and tax policies tended to choke development along the border. Combined with the closure of the bonded goods privilege to railroads through the U.S., agriculture had for ten years been strangled by a lack of water for irrigation which was "unduly appropriated at points in the United States

territory." Warehouses were largely unused, little money circulated, and farms were being abandoned. Employment was scarce; as a result population numbers had fallen to less than 8,000 from the approximate count of 12,000 in 1888.[95] Members of the mercantile community began to move their department store enterprises across the river to El Paso, or to other cities in Mexico.[96] Repeal in 1900 of the act suspending bonded railroad routes could not repair the damage done by the realignment of transportation routes.[97]

In 1905 Mexican lawmakers abolished the Free Zone, a failed experiment with unfortunate consequences. The explanation contained in the decree stated that originally the economic isolation of northern frontier settlements from the remainder of the Republic had motivated granting of the special franchise known as the *Zona Libre*. The author of the document noted that by 1905 Mexico's developing railway system had put the border towns that consumed the most, for example, Matamoros, within easy reach of the rest of the country. However, it seems that the formerly strategic location of Ciudad Juárez had worked against the Chihuahuan port of entry in this instance. The writer asserted that prices had leveled in relation to foreign imports, and that prices of goods produced within the Free Zone were not lower, in general, than those of the same type manufactured outside the Free Zone in Mexico. The long period during which the Zone was in effect had failed to form important centers of population, and rather than favoring development of riches in the region, it had obstructed progress by impeding free circulation of its products, and as a consequence suppressed development of its natural resources through remunerative industries. Secretary of the Treasury Jose Íves Limantour signed the decree.[98] The Zone closed with neither a bang nor a whimper, but rather with a sigh of relief.

Although mercantile activity was falling dramatically in Ciudad Juárez, privatization and commodification of land presented new opportunities for capitalist investment. Liberalization of

Mexico's land policies had begun with the 1883 Law of Occupation and Alienation of Uncultivated Lands which opened the door for conversion and mobility. The new law allowed purchase of plots from the federal and local government through formal "denunciation" of *ejido* lands owned by municipalities.[99] "Denunciation" was the legal process by which applicants could petition for the right to ownership of a plot of publicly-owned land, usually for a nominal fee. In 1892-93 denunciations were being carried out by all types of persons from merchants, farmers, members of the City Council, and prominent townsmen to citizens of El Paso.[100] The law eliminated the obligation to settle on a purchased property; it was no longer necessary to "prove up" rights to ownership. Although the enactment guaranteed legal possession, surveying and drawing property lines presented difficulties since people had earlier settled on plots the shapes of which were determined by the flow of the *acequias*.[101]

Property long under private ownership outside *ejido* lands entered the market. The old established precincts, especially Lerdo and the much larger Mejia, with the railroad line running along their west borders, constituted some of the town's prime real estate (see Fig. 14.).[102]

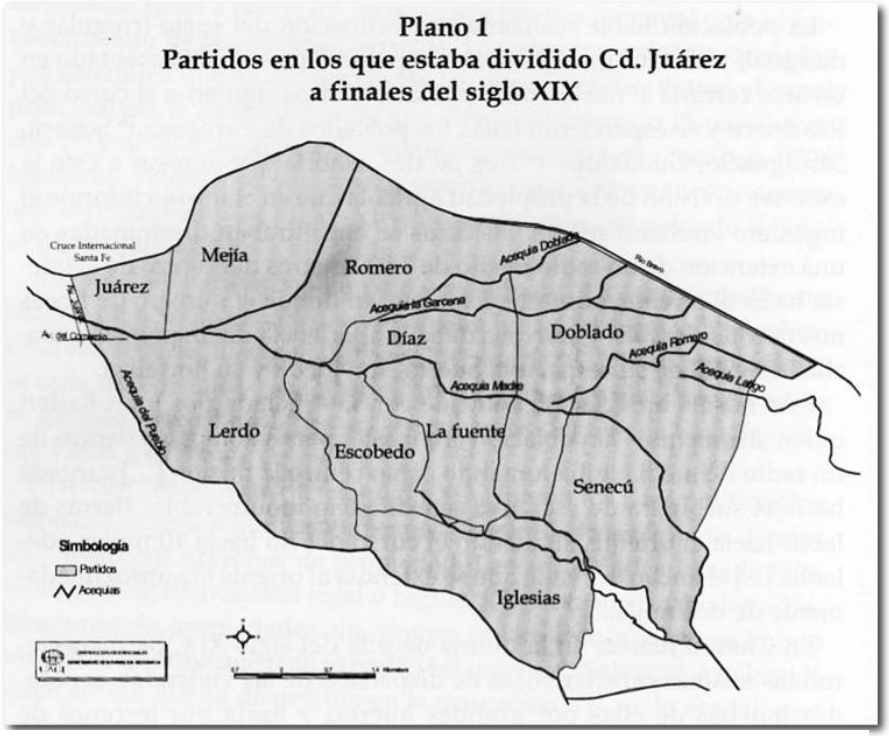

Fig. 14. Ciudad Juárez, c 1890s. Reprinted, by permission, from Santiago, *Propiedad de la Tierra en Ciudad Juárez, 1888-1935*, 115.

Denunciations of government owned lands in Ciudad Juárez pushed density of spatial utilization south and east of the traditional town center. A sequence of uneven, but constant, subdivisions divided plots into smaller and smaller blocks of property. High priced properties in prime locations increased in value even more when the electric street railway became a reality in 1902.[103]

Land sales were sensitive to the increased shortage of irrigation water and rising tariff rates which discouraged manufacturing ventures. Capitalism supplanted traditional attitudes toward ownership; land which might have passed through generations of inviolable possession by right of occupation and use became a commodity for speculation. Development of banking and credit lending facilitated exchanges in land ownership. For the first time people were able to borrow money with their land as loan guarantees.[104] For those with capital to invest, even very small amounts, land speculation provided an opportunity to profit. Santiago argues that as the turn of the century approached, with Ciudad Juárez commerce damaged, few possibilities of industrial activity, and little support from the central government, as an alternative *juarenses* turned to entertainment and recreation in order to establish a working economy. In 1904 Governor Enrique Creel attempted to reverse the failing financial climate by inaugurating a project to modernize the city and make it more attractive to investors, straightening and widening streets and strengthening public utilities, but with modest success. The improved appearance and new constructions raised land prices which, in turn, encouraged speculation. Small real estate companies appeared. Some foreign investors became citizens of Mexico in order to take advantage of the land market in Ciudad Juárez. Not until after the treaty of 1906 between Mexico and the United States went into effect, guaranteeing a specified amount of Río Grande water for irrigation, did vibrancy return to the agricultural sector. [105]

At The Pass: Another City Hall and Trans-border Electrification

By early 1897 El Paso was beginning to regain its momentum and, once again fulfilling its self-assigned role as primary city booster, the *El Paso Herald* published a rousing issue touting the *"*Evolution of a Great City.*"* The lengthy report included in the "Great City" several Juárez firms. During the first six months of 1899 El Paso's citizenry pumped substantial amounts of investment into its public buildings, manufactories, and residences.[106] The classic adobe, porticoed Overland Mail Company building, constructed in 1858 at the corner of El Paso and East Overland Streets, fell to progress in March 1897.[107] El Paso's determined push into modernization demanded its demolition to clear this actively commercial street for more lucrative ventures. However, the most visible sign of recovery was the neo-classical City Hall constructed on an eye-catching triangular site across San Antonio Street from the County Court House.

El Paso's previously built municipal monuments, the County Court House (1885) and the Federal Building (1892), had been designed and financed by the federal government. In preparation for replacing the modest city hall built only eleven years earlier, El Paso's City Council held an election in May 1892 for public approval of a bond issue for purchase of land and erection of a new architectural expression of its prosperity.[108] Even though the bond issue passed, the economic set-back of 1893-1894 delayed further action toward construction of a new edifice. Not until 1898 did the city fathers feel confident to proceed.

When considerations resumed, the building committee laid down strict specifications: only architects residing in the city of El Paso would be permitted to enter the competition for design of the building, the cost of which could not exceed $30,000; plans must be drawn to scale—no perspectives nor brushwork would be accepted; materials and mode of construction

were precisely stipulated; floor space was allotted in advance to the various projected tenant agencies; provisions must be made for exterior landscaping with an eye to future landscape maturity.[109]

El Paso had reached a milestone: the new city hall would be designed, funded, and built by El Pasoans. Near the end of the long preparatory period, city voters passed a second bond issue to finance the project.[110] Site selection, always controversial for a public building, was settled by a gift of land to the city, the triangular plot at the junction of San Antonio, Myrtle, and Kansas Streets.[111] In October 1898 City Council accepted the architectural plans of Maydwell and McClintock, and in November the governing body let the job to local contractors Buchanan and Powers. The work was to begin immediately and to be completed by 3 March 1899.[112]

Fig. 15. El Paso City Hall, 1899. Courtesy of El Paso Public Library, Border Heritage Collection, Aultman Collection, A5368.

El Paso rightly took great pride in its "noble and imposing monument to the city."[113] Westward moving people brought with them familiar architectural preferences and mores, generally following the favored eastern styles as they gradually moved west along the railroad lines.[114] Philosophically City Hall embodied the four cardinal values that the architectural world considered characteristic of this particular design configuration: nationalism, democracy, personal ambition, and spiritual harmony.[115] On a cruciform plan, El Paso's

designers placed a nicely proportioned dome elevated on a balconied drum surrounded with recessed windows. Visitors entered simple porticoes through three tall, narrow arched openings which led into the lower story of rusticated blue limestone masonry. These open spaces with their weighty surrounds and walls gave substance to the ground level, solidly supporting the second story of yellow pressed brick with pavilions set flush above, the smoother surfaces and simple elegance of slender Ionic columns surmounted by pediments rendered in classic Greek simplicity. Choices in public monuments generally reflect the goals and intentions of decision makers in material form. El Paso's municipal authorities evidently intended to place a lofty standard of cultural principles before the public eye (see Fig. 15).

A leap in modern technology followed on the heels of El Paso's newly updated architectural face. The miracle of electrification, produced by the International Electric Company in El Paso, would revitalize the twin cities' relationship, which had stretched almost to the breaking point. A survey of businesses needing electricity for lighting as well as street car service showed that "the two cities, El Paso and Juárez, may be considered as one. The same plant will serve for both, as the present plant is doing."[116] Preparations for installing the anticipated system included purchase of heavier, up-to-date equipment. Street railway company owners sought permissions from their respective governments for converting their transit systems from animal power to industrially produced energy.[117] A complicated weave of proposed mergers, pending consolidations, and preempted plans finally culminated in an ordered pattern.[118] The tapestry took on a clarified definition when in June 1901 a consortium of investors, some local and others from out-of-state, purchased the totality of franchises and property associated with installing an electric street railway system across El Paso and Ciudad Juárez. The conglomeration of acquisitions included that of some existing companies, e.g., El

Paso's two electric light plants, as well as the gas works. The franchises extended to about ten miles of street railway service in El Paso. On 11 January 1902 hundreds of enthusiastic citizens in both towns celebrated the formal inauguration of the system.[119]

Summary

The two decades that reached from 1885 to 1905 saw the development of an interdependent relationship between The Pass cities characterized all too often by envy and bitter opposition. An overheated spirit of competition on El Paso's part revealed a lack of comprehension of the economic nature of a trans-border complex. The rapidly growing town's built environment belied the claim that the tariff-reduced Free Zone across northern Chihuahua endangered its opportunities for profit maximization. The thriving built environment on both sides of the river denied the validity of a rather blindly reciprocal fervor for "getting a leg up" on the other's erstwhile partner. While iconic monuments and solid mercantile establishments arose on both sides of the border, a cadre of dissidents in El Paso charged that growth of its counterpart was at its expense. Myopic political action produced less than the expected salutary results when U.S. congressional action yielded to El Paso's insistence that bonded railroad routes must be suspended. Subsequently authorized bonded routes from Mexico's ports via Mexico's rail lines did not protect the Chihuahuan border town from slipping into decline. The elevated political status achieved by Ciudad Juárez in 1888, represented by its important customshouse, outpaced its economic development. Díaz's experiment in tariff reform had failed; a drop from exorbitantly high rates to a mere 3% was followed ten years later by an increase to 10%. The shifting policies created an uncertain economic climate that discouraged industrial and manufacturing investment. Agricultural recovery awaited the Treaty of 1906 for a guarantee of

irrigation water to revitalize production of food and fiber. Although land sales and speculation contributed some vigor to the Juárez economy, the town turned to reliance on the early stages of an entertainment and recreation industry for survival.

An economic slump in the U.S. caused a mild slowdown in El Paso during the 1890s; only one major civic building appeared before 1899. By the end of the decade, without the help of the federal government, El Paso managed to design, fund, and construct its new neo-classical City Hall, an architectural gem that signified cultural maturity and its recovered economy. As the twentieth century opened, joint electrification provided by the International Electric Company based in El Paso created a new and even more inviolable evidence of interdependency at The Pass, whether amicable or agitated. A regular schedule of electric street cars hourly symbolized the union. After the turn of the century, a decade of relatively harmonious relations ensued. Both towns began to invest in buildings to accommodate a new emphasis on cultural development.

[1] Tim Dant, *Material Culture in the Social World: Values, Activities, Lifestyles* (Buckingham: Open University Press, 1999), 12.

[2] C. Greig Crysler, *Writing Spaces: Discourses of Architecture, Urbanism, and the Built Environment* (New York: Routledge, 2003), 115.

[3] *Lone Star*, 29 December 1883.

[4] *An act to amend sections four, five, and nine of an act approved February twenty-fourth eighteen hundred and seventy-nine, entitled "An act to create the northern judicial district of the State of Texas, and to change the eastern and western judicial districts of said State, and to fix the time and places for holding courts in said districts," and to provide for holding terms of the court of the western judicial district of Texas at the city of El Paso, and for other purposes, Statutes at Large* 23, 35 (1884).

[5] *An act to create the northern judicial district of the State of Texas, and to change the eastern and western judicial districts of said State, and to fix the time and places of holding courts in said districts, Statutes at Large* 20, 318-319 (1879); *Lone Star*, 26 January 1884; *El Paso Herald*, 8 June 1884; Doris Wallingford Busalacchi, "*History of the Federal Judiciary District of Western Texas* (Seminar paper, Texas Western College, 1950), 2-5.

[6] *Lone Star*, 21, 24 November, 5 December 1883.

[7] J. Morgan Broaddus, Jr., *The Legal Heritage of El Paso* (El Paso, Texas: Western College Press, 1963), 151–52.

[8] *Lone Star*, 19 December 1883. Demonstrating the power of place over time, the El Paso County Court House today occupies the same block as did its antecedent in 1885.

[9] *El Paso Times*, 5 August 1884.

[10] Chris Meister, "Alfred Giles vs. El Paso County: An Architect Defends His Reputation on the Texas Frontier," *Southwestern Historical Quarterly* CVIII, no. 2 (October 2004): 200–01; Mark Gelernter, *A History of American Architecture: Buildings in Their Cultural and Technological Context* (Manchester: Manchester University Press, 2001), 169.

[11] Gelernter, *History of American Architecture*, 159, 169.

[12] Rudolph Eickemeyer, *Letters from the Southwest* (New York: Press of J. J. Little & Co., 1894), 55; *Lone Star*, 3 June 1885.

[13] *El Paso Herald*, 12 October 1881.

[14] *El Paso Times*, 1 July 1884. These buildings were not the customshouse just described. They may have dated from before the 1846-1848 war.

[15] Crysler, *Writing Spaces*, 68.

[16] *Lone Star*, 27 December 1882.

[17] *El Paso Times*, 1 January 1882.

[18] El Paso Street Railway Company (EPSRC), Board of Directors' Minutes, 45–47.

[19] Ibid., 99, 109, 111, 112, 113, 114.

[20] Armando B. Chávez M., *História de Ciudad Juárez, Chihuahua, México* (México, D.F.: Editorial Pax México, Librería Carlos Cesarman, S.A., 1991), 291–95.

[21] "Actions of the Chihuahua Legislature in Regard to the Zona Libre," trans. Andrew Godey in *El Paso Herald,* 26 October 1881.

[22] Guadalupe Santiago Quijada, *Propiedad de la tierra en Ciudad Juárez, 1888 a 1935* (Tijuana, B.C., México: El Colegio de la Frontera Norte; New Mexico State University; Universidad Autonóma de Ciudad Juárez; Ediciones y Gráficos, Eón, S.A. de C.V., 2002), 65.

[23] *El Paso Times*, 26 October 1881.

[24] *El Paso Herald*, 4 February 1883.

[25] *Lone Star*, 26 November 1881.

[26] *El Paso Herald*, 4 October 1882.

[27] Matías Romero, *Mexico and the United States: A Study of Subjects Affecting Their Political, Commercial, and Social Relations, Made with a View to Their Promotion* (New York and London: G. P. Putnam's Sons, 1898), 447.

[28] Romero, *Mexico and the United States*, 439.

[29] Romero, *Mexico and the United States*, 440. Romero dates the promulgation of the Decree on 24 January, 1885, Díaz having succeeded President González on 1 December, 1884.

[30] Congress, Senate, *Extension of the Zona Libre in Mexico*, 50th Congress, 1st sess., S. Ex. Doc. 130, 5 (1887).

[31] Ibid., 3-4.

[32] Congress, Senate, *The Mexican Zona Libre*, 50th Cong., 1st sess., S. Doc. 130, 28 (1887).

[33] *Lone Star*, 5 August 1885.

[34] *El Paso Times*, 10 April 1885.

[35] Lorena May Parlee, "Porfirio Díaz, Railroads, and Development in Northern Mexico: A Study of Government Policy toward the Central and National Railroads, 1876–1910" (Ph.D. diss., University of California, San Diego, 1981), 175.

[36] Eugene O. Fechet to William Hunter, Second Assistant Secretary of State, October 10, 1884, Paso del Norte Consular Despatches [*sic*], LXI, RG 59, NA.

[37] J. Harvey Brigham to James D. Porter, Assistant Secretary of State, January 19, 1886, Paso del Norte Consular Despatches [*sic*], XXIII, RG 59, NA.

[38] J. Harvey Brigham to James D. Porter, Assistant Secretary of State, December 21, 1886, Paso del Norte Consular Despatches [*sic*], XLIV, RG 59, NA.

[39] J. Harvey Brigham to George L. Rives, Assistant Secretary of State, December 24, 1887, Paso del Norte Consular Despatches [*sic*], XCIII, RG 59, NA.

[40] Ciudad Juárez (México) Municipal Archives, *Documentos históricos/Archivo municipal de Ciudad Juárez* (Ciudad Juárez, México, 1750–1939), Part 1 Roll 16, n.p.

[41] Camilo Argüelles, "*El auge de Ciudad Juárez con la vigencia de la zona libre*," in *El problema económico de las fronteras mexicanas;Tres monografías:Zona libre, puertos libros y perímetros libres,* vol. I, ed. Ulises Irigoyen (México, D. F., 1935), 362.

[42] Argüelles, "*El Auge de Ciudad Juárez,*" 362.

[43] Ibid; Eickemeyer, *Letter*s, 15.

[44] Argüelles, "*El auge de Ciudad Juárez,"* 363.

[45] *El Paso Times*, 1 November 1887.

[46] Ibid., 18 August 1886; El Paso Directory Company, *Directory of the City of El Paso, 1888* (El Paso, Texas: El Paso Directory Company, 1888), 116, 118, 122.

[47] México, *Periódico oficial*, Part 2, Roll 12, 4 August, 1888.

[48] Chávez, *Historia*, 295.

[49] *Classified Business Directory of the Cities of El Paso, Texas and Ciudad Juárez, Mex.* (El Paso, Texas: El Paso and Juárez Directory Co., 1892–93), 93, 168; Eickemeyer, *Letters*, 31 August, 1888.

[50] Argüelles, "*El auge de Ciudad Juárez*," 364.

[51] Chávez, *Historia, 297.*

[52] Josiah McC. Heyman, "U.S. Ports of Entry on the Mexican Border," in *On the Border: Society and Culture between the United States and Mexico*, ed. Andrew Grant Wood (Lanham, MD: SR Books, 2004), 222.

[53] Charles Maier, "Consigning the Twentieth Century to History: Alternative Narratives for the Modern Era," *American Historical Review* 105, no. 3 (June, 2000): 816.

[54] Mauricio Tenorio-Trillo, *Mexico at the World's Fairs: Crafting a Modern Nation* (Berkeley: University of California Press, 1996), 68, 71, 73, 81, 235-236, 241, 244, 247-249.

[55] Congress, Senate, *The Mexican Zona Libre*, 50th Cong., 1st sess., S. Doc. 130, 26-137 (1887); Romero, *Mexico and the United States*, 433.

[56] Ciudad Juárez, *Documentos históricos*, Part 2, Roll 63, Book 5, Frame 164. Three hotels and four rooming houses offered public lodgings supported by two public baths, two drugstores, and three barbers. Two cigar stores and one bowling hall provided relaxation and entertainment. Five bakeries, eight butchers, twenty-eight cafes, five grocers, and twenty-six small general and grocery firms served the daily needs of households that had so recently lacked access to the most basic dietary necessities. A sewing machine retail store and a pawn shop completed the frontier constellation.

[57] *El Paso Herald*, 3 January 1889.

[58] Ibid., 3, 4, 5 January 1889.

[59] El Paso City Council Minutes Book E, Part 1, 230.

[60] Oscar J. Martinez, *Border Boom Town: Ciudad Juárez since 1880* (Los Angeles: University of California at Los Angeles, 1975), 158. Population figures vary significantly depending upon who is reporting. For example, when the American Consul to El Paso del Norte wanted a raise in his salary, he reported what appears to have been a somewhat inflated number. Other reports based on other agendas fluctuated accordingly. An estimate of "roughly equal" populations must allow for 10 to 20 % variance, in this case.

[61] *El Paso Times*, 2 January 1890. In 1899 the Guggenheim conglomerate bought the smelter, and its name was changed to the American Smelting and Refining Company; *El Paso Times*, 21 March 1888.

[62] *El Paso Herald*, 12 May 1923.

[63] *El Paso Directory for 1908* (Dallas, Texas: John F. Worley Directory Company, 1908), 3.

[64] *Lone Star*, 25 February 1882.

[65] Henry Glassie, *Material Culture* (Bloomington: Indiana University Press, 1999), 41, 47.

[66] William F. Deverell, *Whitewashed Adobe: The Rise of Los Angeles and the Remaking of its Mexican Past* (Berkeley: University of California, 2004), 12; David Dorado Romo, *Ringside Seat to a Revolution: An Underground Cultural History of El Paso and Juárez, 1893-1923* (El Paso, Tex.: Cinco Puntos Press, 2005), 216.

[67] El Paso City Council Minutes Book C, Part 1, December 27, p. 58-59.

[68] *Lone Star*, 25 February 1882; *El Paso Herald*, 24 July 1895, 17 March, 15 July 1897, 20 December 1905, 9 December 1909, 29 August 1914, 13-14 March 1915.

[69] *El Paso Herald*, 24 July 1895.

[70] Leonora Mosier, "History of Manhattan Presbyterian Church" (M.A. thesis, University of Texas at El Paso, 1956), 9.

[71] Evan Haywood Antone, *Portals at the Pass: El Paso Area Architecture to 1930* (El Paso, Texas: El Paso Chapter American Institute of Architects, 1984), 15.

[72] El Paso City Council Minutes Book J, 439, 445; *El Paso Times*, 4 January 1888.

[73] Samuel J. Bell and James M. Smallwood, *The Zona Libre, 1858–1905: A Study in American Diplomacy* (El Paso, Tex.: Texas Western Press, 1982), 50.

[74] Congress, House, *Mexican Free Zone*, 55th Cong., 2d sess., H. R.702, 20-22 (1896).

[75] *Lone Star*, 12 November 1881, 29 August, 10 November 1883, *El Paso Herald*, 2, 16 November 1881, 20 September, 18 October 1882, 4 February, 11 March, 15 April, 13 May, 15 July, 2, 9, 28 September, 16 December 1883, *El Paso Times*, 30 March, 4, 20, 23, 25, 27 May, 10 June 1883.

[76] *El Paso Times*, 1 January 1890.

[77] *An act for the erection of a public building at El Paso, Texas, Statutes at Large* 24 Chap. 585, 107 (1886).

[78] Gelernter, *History of American Architecture*, 164-171.

[79] Ciudad Juárez, *Documentos históricos*, Part 2, Roll 66, Book 1, Frame 1, "A written contract by which the El Paso Gas and Coal company promises to establish gas street lighting in Ciudad Juárez in accordance with the

stipulations agreed to by the City Council;" Part 2, Roll 64, Book 13, Frame 7, "The file concerning the contract for gas lighting which contains permission to pass tubes along the bridge of the Mexican Central."

[80] Mary Antoine Lee, "A Historical Survey of American Smelting and Refining Company, 1887–1950" (M.A. thesis, Texas Western College, 1950), 22–23.

[81] *New York Times,* 30 December 1893, 30 December 1895.

[82] *El Paso Herald*, 24 April 1894.

[83] *New York Times,* 28 September 1895; *El Paso Herald,* 30 December 1895.

[84] *El Paso Herald,* ad, 28 March 1894.

[85] Samuel J. Freudenthal, *El Paso Merchant and Civic Leader from the 1880s through the Mexican Revolution,* researched and notated Floyd S. Fierman (El Paso, Tex: Texas Western College, 1965), 7.

[86] *El Paso Times,* 1 November 1894; *El Paso Herald,* 8 March 1895.

[87] Parlee, *Díaz, Railroads, Development,* 202–3.

[88] Congress, House, Representative Cockrell of Texas speaking for the Joint Resolution in reference to the Free Zone along the northern frontier of Mexico and adjacent to the United States, H. Res. 277, 53d Cong., 3d sess., Congressional Record 27, (27 February 1895): 2850-2852.

[89] Congress, House, *Mexican Free Zone,* 53rd Cong., 3d sess., H. R. 702, 24-25 (11 March 1898).

[90] Congress, House, Representative Cockrell of Texas speaking for the Joint Resolution in reference to the Free Zone along the northern frontier of Mexico and adjacent to the United States, H. Res. 277, 53d Cong., 3d sess., *Congressional Record* 27 (27 February 1895): 2850-2852.

[91] Ibid.

[92] Congress, House, *Mexican Free Zone,* 53rd Cong., 3d sess., H. R. 702, 27 (1898).

[93] Charles E. Wesche to Edwin F. Uhl, Assistant Secretary of State, May 3, 1895, Paso del Norte Consular Despatches [*sic*], (unnumbered), RG 59, NA; *El Paso Herald,* 13 May 1895.

[94] *El Paso Herald,* 7 March 1895.

[95] *Mexican Herald*, reprinted in the *El Paso Herald*, 4 May 1896.

[96] *El Paso Herald,* 22 March 1897, 23 February 1900; John Guice, "The White House Department Store: Its Evolution" (Seminar paper, Texas Western College, 1953), 1.

[97] Congress, Senate, Senator Jones of Nevada speaking for the bill on *Merchandise in Transit,* H.R. 3334, 56th Cong., 1st sess., *Congressional Record* 33, pt. 6 (17 May 1900): 5581.

[98] Ulises Irigoyen, "*Decreto por el cual fue suprimida la concesion de la zona libre en las poblaciones fronterizas del norte*," in *El Problema económico,* vol. 1, 311–14.

[99] William Morris, ed., *American Heritage Dictionary of the English Language* (Boston: American Heritage Publishing Company and Houghton Mifflin Company, 1975), 33. Alienation in the legal sense means the act of transferring property, or title to it, to another.

[100] Santiago, *Propiedad de la tierra*, 61.

[101] Ibid., 31, 50; Armando B. Chávez M., *Sesenta años de gobierno municipal: Jefes politicos del Distrito Bravo y presidentes del municipio de Juárez, 1897-1960: Actuación política y datos biográficos* (*México: Gráfico Cervantina, 1959),* 17-18.

[102] Santiago, *Propiedad de la tierra*, 59, 61.

[103] Ibid.

[104] Ibid., 58, 61, 68-9.

[105] Ibid., 133-135.

[106] *El Paso Herald*, 19 July 1899.

[107] Ibid., 26 March 1895.

[108] *El Paso Times*, 7 May 1892, 18 June 1893.

[109] *El Paso Herald*, 22 July 1898.

[110] El Paso City Council Minutes Book J, Part 2, 576-580, 600-610.

[111] *El Paso Herald*, 26 August 1898.

[112] El Paso City Council Minutes Book J, Part 2, 576-580, 600-610.

[113] *El Paso Herald*, 30 December 1899.

[114] Gelernter, *A History of American Architecture*, 161, 164.

[115] *El Paso Herald*, 30 December 1899.

[116] Ibid., 31 December 1898.

[117] Ciudad Juárez, *Documentos históricos*, "Contract celebrated between the City Council of Ciudad Juárez and Mr. Felipe Seijas, agent for the El Paso and Juárez Traction Company for the construction of the electric street railways of this city, March 16, 1900," Part 2, Roll 36, no book no., no frame nos.; El Paso City Council Minutes Book K, 517, 26 July 1900; *El Paso Herald*, 3 August 1900.

[118] Ibid., 5, 18 May, 14 October, 11 December 1899, 13 April, 3, 10 May, 28 July 22 November 1900, 11, 19 April, 25 June, 27, 28 July, 1 August 1901.

[119] El Paso City Council Minutes Book K, 215; *El Paso Herald*, 3 August 1900, 26 June 1901; *El Paso Times*, 10 January 1902.

CHAPTER FOUR

CHANGING PATTERNS OF INTERDEPENDENCY, 1900-1920

Introduction

Across El Paso and Ciudad Juárez from 1900 to 1911, parallels in cultural ambitions, economic advancement, architectural expression, and utilitarian modernization gave evidence that officials and financial decision-makers in both towns held similar visions of civic pride. Concrete manifestations of municipal ambitions appeared along their streets and avenues during this formative decade. Both expanded their economic bases, El Paso through a health industry and Juárez by greater development of its recreation and entertainment platform.

From 1900-1910 evidence of mutual respect between the municipalities took visible form. In March 1906 thousands of El Pasoans, from city officials to school children, joined Ciudad Juárez in celebrating the laying of the cornerstone for the Benito Juárez monument base. In the same year El Paso expressed its approval of the order and progress achieved in Mexico under the administration of Porfirio Díaz by naming a street in his honor in Sunset Heights, one of the city's most upscale developments. Three years later, shared interests at federal levels brought the executive officers of the contiguous nations to the border cities for a conference. In October 1909, surrounded by extravagant pomp and circumstance, Mexico's President Porfirio Díaz and United States President William Howard Taft demonstrated warmth and cordiality between the two nations, typifying nationally and locally shared goals and aspirations for a peaceful and productive partnership.

Little more than a year later, under the pressures of the Mexican Revolution municipal cohesion in the U.S.-Mexico borderlands began to break down. Beginning with the Battle of

Juárez, 8-10 May 1911, Mexico's internecine struggles tore at the trans-river infrastructure. Heated conflicts between Mexico's federal and rebel forces disrupted trans-border municipal services. In the beginning, property in Juárez owned by United States citizens was treated as untouchable, but by the second year of the struggle that consideration evaporated. El Paso businessmen's losses joined the devastation suffered by the Juárez commercial community, generating resentments that complicated cooperation between the border towns. Tensions and limitations imposed by the war in Europe restrained structural growth in the Texas town.Wartime dislocations in Mexico and numbers of incoming settlers attracted by the promised benefits of the Elephant Butte Dam and Reservoir project swelled the population of El Paso County and impacted the city. By 1919 stark imbalances characterized interdependency at the Pass.

Documentary evidence for this period is thin, which points up material culturalists' assertions that while the built environment is often taken for granted, it may constitute the best, sometimes the only, record that survives. During the turbulent decade from 1910-1920, multiple factors placed demand for and restrictions on materials which could be directed toward war efforts; in spite of war pressures some building continued. In this chapter, the buildings speak for themselves—their very existence, their styles, their locations, their functions. Architect Henry Trost, who arrived in El Paso in 1908, played a prominent role in shaping the city's physical infrastructure. In step with material culture theory, the buildings convey sometimes-hidden messages.

Parallels in Culture: Libraries, a Historic Monument, and Schools

Beyond its well-established position as a rail distribution hub supported by an industrial and manufacturing sector, at the turn of the twentieth century El Paso began to imagine a

cultural imperative for itself. The city "must amuse and instruct, affording unrivaled facilities to visitors . . . encourage the best class of opera and drama, endeavor to obtain art galleries and schedule musical performances, provide parks and playgrounds, and provide such splendid school facilities that no resident of all the Great Southwest would think of sending a child away from El Paso for any except special education or college training."[1] The constructed landscape of Ciudad Juárez indicated a similar interest.

Within the first decade of the new century, the border complex enhanced its combined physical image by encouraging public literacy and stimulating a taste for reading in the general public. Two splendid library plants in neo-classical styles went up in prominent locations. Both began as private dreams which culminated in important public monuments. In El Paso Mary I. Stanton had earlier founded a lending library with books available in space allotted in City Hall. In concert with the media call for cultural progress, a group of civic-minded El Paso women appealed to the Carnegie Foundation in 1901. The resulting grant allowed erection of El Paso's first major cultural institution beyond its schools. In March 1904 the El Paso Public Library opened on the site it has occupied ever since, between Missouri and Franklin Streets on Oregon

Fig. 16. El Paso Public Library, 1904. Courtesy of El Paso Public Library, Border Heritage Collection, Aultman Collection, A5046.

St. (see Fig. 16). [2] The imposing neo-classical structure spoke eloquently of El Paso's desire for cultural growth and development, and of the increasing importance attached to education in general put into motion by industrialization and rising standards of living.

The Juárez library originated in a similar manner. In about 1906, two youthful enthusiasts, Jesús M. Frías and Manuel F. Aguilar, founded the city's first public library, but without a formal structure. However, by November 1910, the city's first public library, a building in Moorish-influenced style, stood on one side of the recently established Constitution Plaza, a few blocks south and east of *La Aduana,*bordered on the east by Constitution Avenue and on the north by Vicente Guerrero Street. Designed by architect Julio Corredor de la Torre and financed by the Spanish sector of the community, the structure honored the centennial of Mexico's independence from Spain. It was formally presented to the city on 18 September 1910.[3] The building presented a history-laden view that recalled the corpus of knowledge carried from the Middle East to Spain and thence into European consciousness from the eighth to the fifteenth centuries.[4] The purpose of the structure more than its style accentuated the border city's push to modernity. Windows with round-headed arches flanked a portal both impressive and restrained, a colossal panel decorated with an ogee arch in sharp relief. A crenellated parapet crowning the roofline carried further the idea of the building as a bastion for preserving information and promoting education .

As early as 1886, a movement to honor the late president, Benito Juárez, had arisen in Mexico, aimed at establishing monuments meant to "perpetuate the gratitude of the good sons of Mexico toward the illustrious liberator, el 'Benemérito' de América."[5] Some of Mexico's leaders pushed a move to use statuary as a way to commemorate the nation's heroes and its history overall. Creole nationalism played a part in the ambitious plans to beautify the capital city with a

focus on public monuments intended to educate Mexicans about the national past. The Díaz administration endorsed the trend with the added purpose of attracting foreign investment.[6]

Discussed in Chapter Three, the renaming of the town from El Paso del Norte to Ciudad Juárez in 1888-9 was a part of the ongoing veneration of President Juárez. Having taken a stand at the nation's utmost border, in the little town on the banks of the Río supported Emperor Maximilian and his imperial cohort. From that time El Paso del Norte-Ciudad Juárez claimed by association a certain status attached to the saving of Mexico's national honor and autonomy. *La Convención Radical de la República*, a committee formed especially for promoting and managing the erection of the monument, invited contributions from a wide base across all Mexico as a measure of patriotism. In 1896 the estimated cost was projected to be a half-million dollars; in spite of the downturn in the Juárez economy, the dream of raising the monument persisted.[7] In 1905 the *El Paso Herald* offered to receive contributions for the Juárez monument fund, considering this action an opportunity for El Pasoans "to show their friendship for the sister city across the river." Consistent with El Paso's commercial mind-set, the newspaper pointed out that the monument would draw tourists "from far and wide," thus constituting a business investment for its own inhabitants.[8] By March of 1906, the Juárez City Council selected a site for the monument centered in Constitution Plaza. The developing configuration of the Plaza presented a new dimension in the perceived self-image

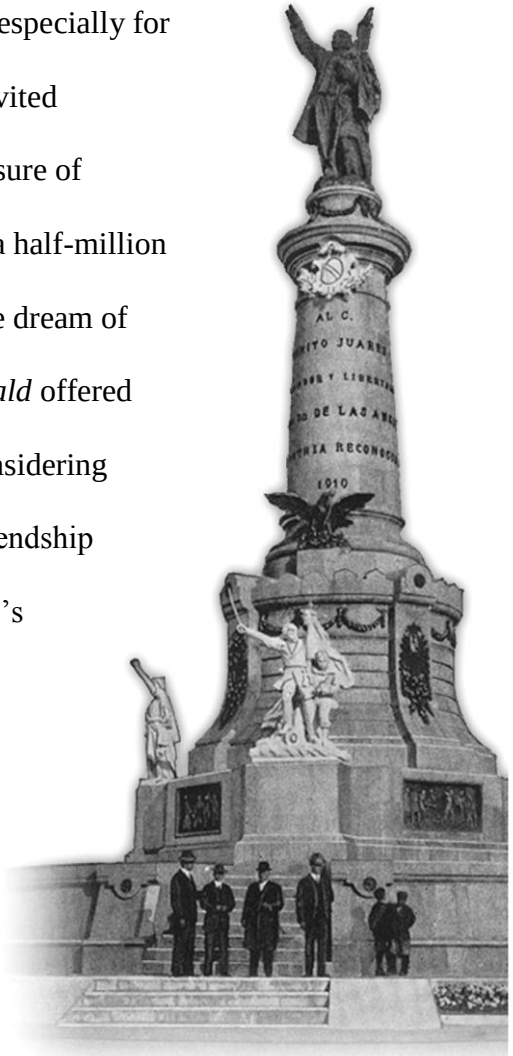

Fig. 17, Benito Juárez Monument, Ciudad Juárez, Mexico. Courtesy of El Paso Public Library, Border Heritage Collection, Aultman Collection, A5256.

of Ciudad Juárez, de-emphasizing the town's centralization around the mission church and the *Plaza de Armas*. This determination showed the epicenter of the Chihuahuan border town expanding outward from the long-revered space surrounding the ancient mission church, a location considered "too far out of the way" for the colossal statue of its patronymic benefactor.[9] The site a few blocks south of *La Aduana* introduced a cultural space that connected with the Porfirian urge toward education and patriotism, distinguishing such activities physically from the main business district's commercial emphasis on *Calle Comercio*. The three-day celebration around the centenary of the birth of Benito Juárez, 19-21 March 1906, encompassed other important celebrations of municipal progress. In addition to laying of the cornerstone for the Juárez monument base, officials dedicated the girls' school, "the finest school house yet built in the State of Chihuahua at a cost of $70,000;" the building would face the monument when it appeared in 1909. [10] This gala also recognized the opening of the Escobar Agricultural College, an important addition to the educational dimension of Ciudad Juárez and a solid expression of the hope for the district's agricultural recovery. Emphasizing cordial trans-river relations a detailed description of the occasion reported that Each school child carried American and Mexican flags, and a flower to place at the site of the Juárez monument cornerstone.[11] The monument incorporated allegorical figures worked in white marble surmounted by the bronze statue of Benito Juárez, further complemented by patriotic high reliefs in bronze (see Fig. 17).[12]

Fig. 18. Jail and Courts, Ciudad Juárez, 1902. Courtesy of El Paso Public Library, Border Heritage Collection, Aultman Collection, A5123.

Other new municipal buildings in Juárez further corroborated the city's modernizing momentum. Inaugurated in 1902, a distinctive combined courthouse and jail retained the traditional one-story contiguous-walled form. However, the sinuous roofline and prominent tower-like projections broke out

of former traditional bounds. The attached cylinders topped with shallow domes recall the protective function of similar forms on medieval fortresses and castles, clearly pointing to the role of courts and jails (see Fig. 18). The new post office facility also housed judicial space; constructed in 1908, it was located near the old town center (see Fig. 19). In another reminder of the city's historic role and the power of place, the post office was established on the site of the building used as headquarters by President Benito Juárez, 1865-66.[13] The building's exterior style echoed that of the Girls' School farther east (see fig. 20).

Fig. 19. Post Office, Ciudad Juárez, 1908. Courtesy of El Paso Public Library, Border Heritage Collection, Aultman Collection, A5546.

Fig. 20. Girls' School, Ciudad Juárez, 1906. Courtesy of El Paso Public Library, Border Heritage Collection, Aultman Collection, A1543.

Owing to increasing populations and substantial, if uneven, economic progress, education took on heightened importance on both sides of the river. By 1906 the scholastic community of Ciudad Juárez included three co-educational public primary schools and the Escobar School of Agriculture, a college degree granting institution.[14] In 1904 Governor Luis Terrazas had authorized an annex for educating boys to be attached to the Catholic Church, and in 1906, the previously mentioned new girls' school stood facing Constitution Plaza.

Its almost startlingly fresh architecture was a dramatic contrast to the town's time-honored blocks of single story flat-roofed contiguous units in adobe brown. The striking near-white walls of the facade dominated by large windows and structural framework outlined in darker brick created a dynamic effect. Ornamental—not supporting—arches added the merest touch of historical essence. Both the bold exterior design and the free-standing form of the school made clear the town's intentions to move into the modern era. Demonstrating a statewide emphasis on education, in 1906 Chihuahua conducted a general census, the first taken for some time, with special attention to the scholastic population.[15] In 1909, truancy laws pointed up the importance attached to schooling Juárez youth. Boys not attending school during the week would not be permitted to shine shoes on Saturdays and Sundays. Fathers of truants would be fined for not keeping their children in school.[16] By 1908 the town established its Municipal School of Music, and in 1909 the Ciudad Juárez budget, approved at the state house in Chihuahua City, designated ten percent of its income for development of public education, although tight controls on state granted funds required executive approval for expenditures of more than fifty pesos.[17] Muddy roads and distances inhibited full scholastic participation; city administrators considered the possibility of building a school in the south part of the city where many children did not attend.[18]

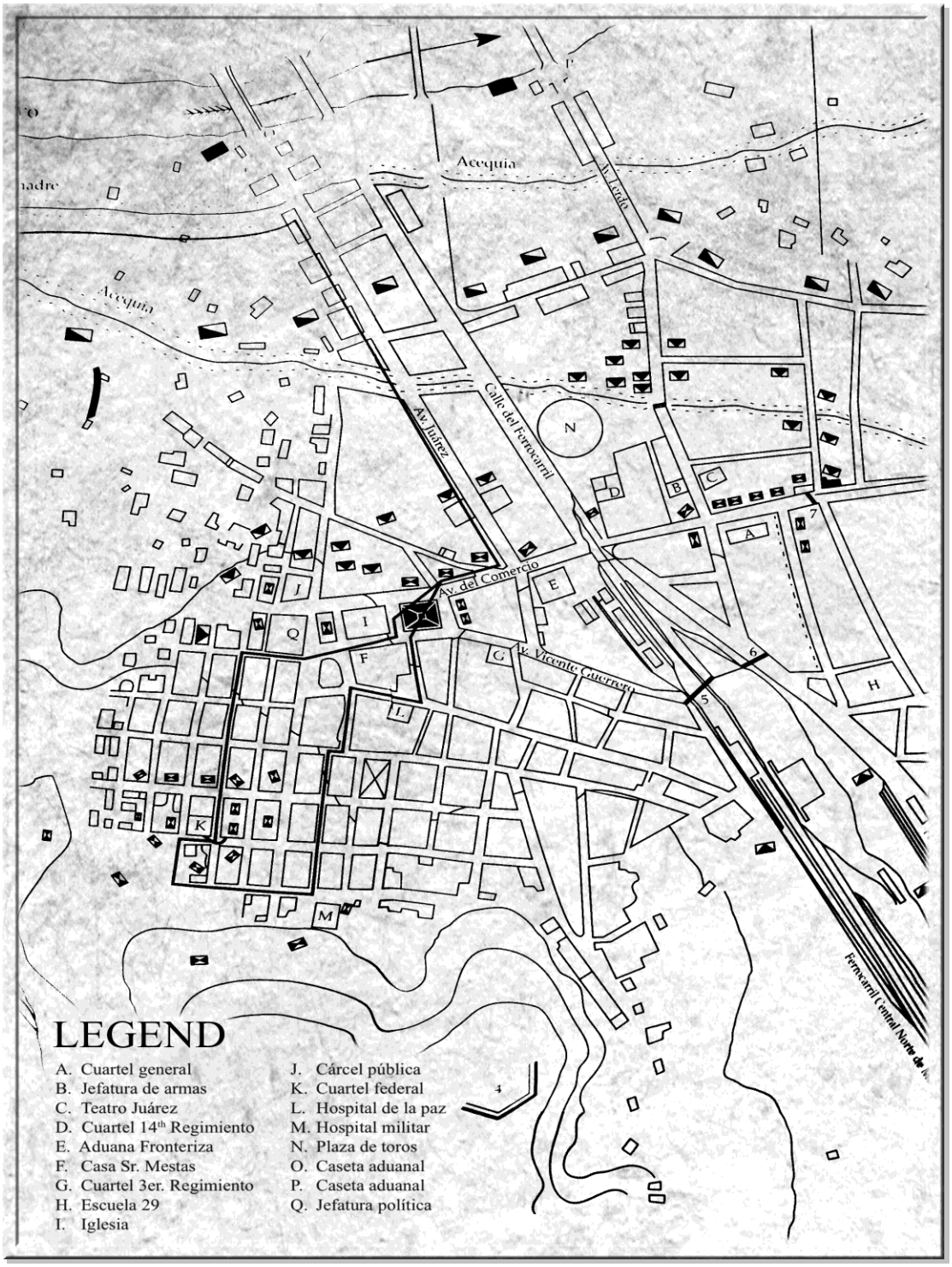

Fig. 21. Ciudad Juárez, 1911. Reprinted, by permission, Berumen, *1911: La batalla de Ciudad Juárez*, frontispiece.

El Paso Schools

On the other side of the river at the turn of the century El Paso school children attended three public grade schools. Burgeoning population growth prompted the city to let large contracts for new educational plants.[19] Within the next five years, five new or enlarged school buildings spread through neighborhoods to the north and east of the concentrated downtown nucleus, locations dictated by the city's rapid expansion and limited by the rugged terrain to the northwest of the city's central district.[20]

El Paso school architecture clearly meant to honor and complement the community's accelerating industrial and commercial progress. The *El Paso Herald* stated the situation in no-nonsense industrial terms: "Schools are the mills for the production of the men and women of tomorrow. . . .The combined art and science of education have been applied practically in the city schools of El Paso. No frills or fads of educational instruction have been allowed to creep into the curriculum of the primary, grammar, or high schools."[21] As fast as real estate developers added new sections to the already constructed landscape, barely keeping up with constant overcrowding of existing schools, the city built new plants. The mass of the new buildings, two and three stories high, projected a solid sense of the growing public awareness of a need for modern education and the facilities to accommodate it.

Fig. 22. Franklin School, El Paso. Courtesy of El Paso Public Library, Border Heritage Collection, Aultman Collection, A0332.

Social changes and conflicts of the late nineteenth century reached into the borderlands, engendering a number of architectural challenges and reactions. The consolidation of industry into

great enterprises led to construction of factories and office buildings larger than ever before, for which architects needed to find new ideas. Schools fit into the pattern of bigger and more efficient structures. Designers' work began calling for greater cohesion and order in the built environment, leading to less picturesque forms than those of the Victorian age such as Franklin School in El Paso (see Fig. 22).[22]

A new El Paso High School greeted the new century, followed soon by construction of a four-room school, Sunset Primary. Within a few months four more rooms were added to Sunset School. An eight-room addition to Mesa School, first constructed about 1890, added considerably to its student capacity (see Figs. 23, 24, 25). [23] Contemporary design supplanted traditional school forms, although some of the differences are subtle. The demand for a new structural rationalism specified maximum floor area for minimal financial outlay. Investors were willing to forego the niceties of traditional architectural decoration, preferring a forthright expression of function without extravagance.[24] This new version of thrift in architectural design appealed to municipal school authorities. With El Paso's ballooning population demanding new and bigger educational plants, economy and efficiency in design became a priority. Four of the five new or updated facilities were located north of El Paso's densely industrialized core concentrated

Fig. 23. El Paso (Morehead) High School. Courtesy of El Paso Public Library, Border Heritage Collection, Aultman Collection A0317.

within the railroad district. The fifth, San Jacinto, joined the three schools serving the population in the older part of town. As soon as they opened, every building was full to overflowing.[25]

From a historical perspective more than a century later, the rugged exterior and forward thrust of El Paso's high school building seems particularly suited to the self-image of a city laid on a foundation of self-reliance, individualism, initiative, and inventiveness. For their first substantial structures, many of the recently established towns in the prairie and intermountain West turned to Richardsonian Romanesque, of which the El Paso High School is typical. As Gelernter points out, one can hardly find a Midwestern or Western town without a school, courthouse, or prominent residence housed in a boldly massed, heavily rusticated structure. The pronounced concordant massing of Richardsonian Romanesque exuded a primitive sort of power that relied on proportion, material, and the pattern of solids and voids on the external facades. The architect captured a sense of sober-minded authority in a building that could stand its ground against the landscape, the rocky mountain-ringed Pass surrounded by a sea of desert.[26] While no records have been found relating citizens' reactions to the pared down styles of public education plants, it seems likely that the essential uniformity of the buildings represented implicit public approval of decisions made by elected school board members.

A comparison of selected new schools with Mesa School, erected about 1890, illustrates El Paso's sensitivity to trends in modernized forms and makes evident the town's forward progress in architectural design for its educational plants. A rather weighty feature that recalled memories of a belfry topped Mesa's simple geometric rectangle planted squarely and almost directly on the earth's surface. The school's heavily quoined corners punctuated the outer limits

of the structure; a shallow pavilion called attention to the first floor entrance which lay only a step or two above ground level. (See Fig. 25.)

The new schools manifested an architectural vocabulary of common features, many in contrast to, or more pronounced than, that of the earlier buildings. The classical tripartite division of base, middle, and top prevailed. The high school building and each of the other three primary schools under consideration stood anchored solidly in terra firma. The ground floor, partly sunken and clad in rusticated stone masonry was characterized by roughly finished edges and faces, and set with deep joints; large windows suggested use of the space as classrooms. The middle and top divisions were of brick, each level graduated to greater refinement in surface texture. Massive staircases led to the main entrance portals on the second level marked by distinguishing features. Elevation of the entrance to the middle story gave the impression that the building rested on a podium, a throwback to classical Roman design integrated into the early

Fig. 24. Mesa Public School, El Paso, 1890. Courtesy of El Paso Independent School District.

Fig. 25. Sunset Public School. Courtesy of El Paso Independent School District.

twentieth century trend, adding dignity to the overall effect. Roof shapes varied and complemented or heightened the character of the ground plans.

Sunset School alone gave an impression of expressing internal functions in external massing, a technique devised by Frank Lloyd Wright.[27] Pointing up this effect, individual hipped roof sections rested on the blocks which make up the whole of Sunset School. Gone was the hint of the old belfry tower; only a few of the windows retained suggestions of arches. (See Fig. 25.)

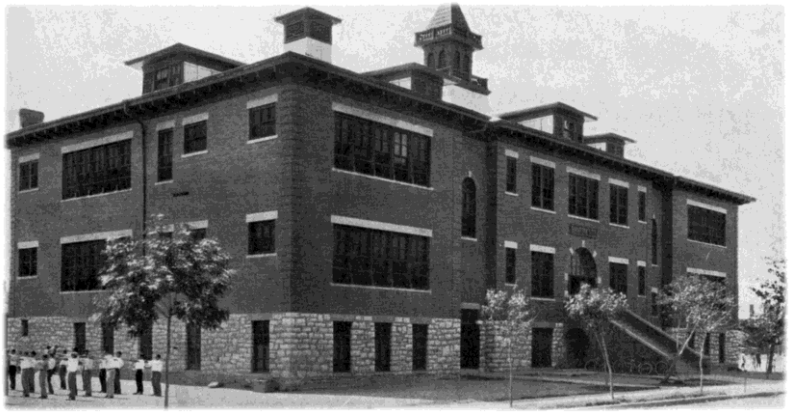

Fig. 26. San Jacinto Public School. Courtesy of El Paso Independent School District.

San Jacinto Public School projected a powerful muscular essence, almost industrial, an overall lateral effect intensified by a flat roof. However, the designer seems to have been unwilling to break totally free from scholastic tradition. A small peaked-roof tower rather timidly jutted out above the flattened roof amid a jumble of equally flat-roofed dormers and chimney stacks. Two narrow arched windows squeezed into recessed niches on the sides of the center section that contained the entrance. These small competing features distracted only slightly from the building's sense of invincibility (see Fig. 26).

In keeping with the new philosophies, but paradoxically repeating the layout of old Mesa School, Lamar Primary School combined simple but bold rectangular geometry with a broad unbroken hipped roof, relieved only by proportionally diminutive dormers and chimney stacks at the angles of the roof form. The flat surface of the brick facade was relieved by two broad symmetrically-placed ornamental pilasters crowned with parapets, thus retaining vestiges of

Victorian ornamentation and softening the functionalist thrust of the overall structure.

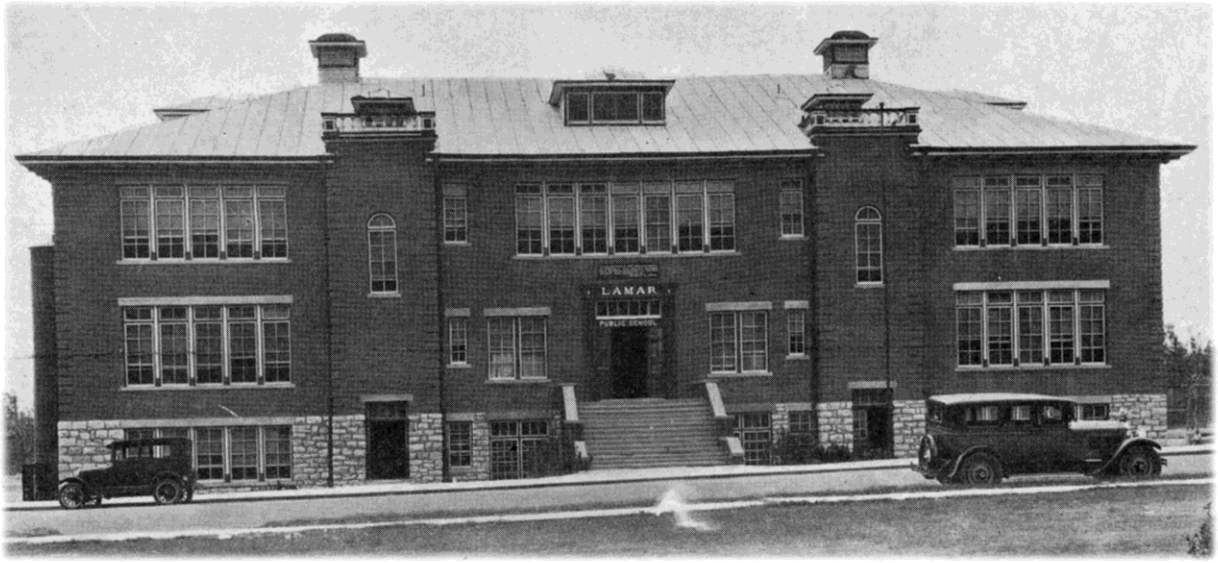

Fig. 27. Lamar Public School. Courtesy of El Paso Independent School District.

The new schools on both sides of the river signaled an advance into broader cultural development in the Pass city complex and added a powerful visual dimension to its overall character and urban mien. During the same period, El Paso's venture into the health industry gave birth to architectural expansion on an even grander scale.

The Health Industry in El Paso: Sanatoriums

Recent scholarship has shown that cultural practices of plotting and dissemination of stories about community prowess, geographic advantages, and municipal accomplishments, otherwise known as boosterism, are not simply ideological fabrications nor passive reflections on previous achievements. Often, these narratives serve as a means for acting on the world.[28] Never simply expressions of civic pride, El Paso's sustained and determined self-promotion quite fully intended to advertise its superior environmental qualities, touted in terms appealing to

tuberculosis sufferers and aimed at attracting a particular type of immigrant. A group of innovative physician/organizers opened Providence Hospital in response, partly, to the inrush of health seekers. Other examples were Dr. Robert B. Homan, Sr., and David C. Baldwin, former New Orleans Postmaster, both consumptives who came to El Paso for the "cure" and remained to build and operate one of the city's larger sanatoriums.[29] Other entrepreneurs in the health industry included partners Dr. Charles L. Hendricks and James W. Laws who also constructed a large hospital for treating tuberculars.

Many, but not all, came with few resources. According to the *El Paso Herald*, "although public agencies spent large sums each year in support of indigent persons, at the same time many self-supporting people, some of them with abundant means, who visit the city in search of health, bring a large [sic] revenue to the city and are undoubtedly an asset to it."[30] The number of large sanatoriums supported by patient patronage shows that TB was no respecter of economic class. Built in 1907, the Homan Sanatorium, with a capacity of seventy-five beds, charged $25.00 to $35.00 per week. Rates set by the El Paso Sanatorium with twenty-five beds were $12.50 to $22.50 per week, not including medical attention. The sixty-room Hendricks Sanatorium, built in 1915, took cases with "reasonable chance of recovery, at $30.00 to $50.00 per week.[31] The non-profit Hotel Dieu, with a capacity of one hundred beds in

Fig. 28. Hotel Dieu, El Paso, 1905. Reprinted, by permission, University of Texas at El Paso Library, Special Collections Department.

1904, charged according to patients' ability to pay.[32]

The confluence of advantageous environmental conditions, the national need to stamp out the "dread white plague," and El Paso's welcoming attitude toward large capital investment pulled the border town into the health industry springing up across southwestern and Rocky Mountain states. Comprehensive rail access contributed a necessary element to the overall scheme. As the nineteenth century turned into the twentieth, the city's invitation brought in a new population sector which called for large scale specialty hospitals and their supporting enterprises--pharmacies, clinics, boarding houses, apartment buildings, and hotels. Foremost among the structures were the substantial sanatoriums that began to enrich El Paso's constructed landscape, expressing in brick and stone the dignifying humanitarian impulse in tandem with the commercial aspect of caring for tuberculosis sufferers.[33] The multi-winged hospitals injected a new architectural aesthetic into El Paso's built landscape from 1900 to 1920. Compared to the belching smokestacks and fiery hearths of smelters and foundries and the streamlined minimalist architecture of its commercial buildings, the edifices housing El Paso's health industry contributed an aura of stately dignity colored with a sense of benevolence to the commercial character manifested by the border railroad hub up to that time (see Figs. 28-31).

Fig. 29, Providence Memorial Hospital, 1902. Courtesy of El Paso Public Library, Border Heritage Collection, Aultman Collection A5290.

Applying Glassie's theory, El Paso's sanatoria present a set of structures for analysis. While efficiency and economies of construction gave a certain functional unity across public education facilities, for-profit enterprises needed to stand out against competitors, although in that era it was probably considered bad taste to view hospitals in such a crass light. To support the economic view, the numbers of patients presenting themselves forced some institutions to employ triage, that is, a process of prioritizing based on the severity of a patient's condition weighed against the likelihood of improvement. The Baldwin Sanatorium, later the Homan Sanatorium, and even later St. Joseph's, accepted only "suitable" cases of tuberculosis, people who were judged susceptible of recovery and had been recommended as such by the patient's physician.[34] As the illustrations show, privately funded sanatoria exhibited a wide range of architectural choices. Their importance lies not as much in style as in their complex role which combined a concern for public and private health and an economic entrepreneurism with a humanitarian cast. There was also the desire to keep in step with the national trends of the day. Since access to sunlight and fresh air was a major component of treatment of consumptives, long wings, one or two rooms deep, gave the structures a massive appearance.

Fig. 30. Homan Sanatorium. Courtesy of El Paso Public Library, Border Heritage Collection, Aultman Collection, A0454.

Fig. 31. Hendricks-Laws Sanatorium. Courtesy of El Paso Medical Museum, Heritage Collection.

El Paso's campaign to originate a health industry

produced unintended consequences. Health seekers answering the town's invitation inevitably spread the disease locally. Of those who could not or chose not to be hospitalized, many took up residence in rooming houses or private homes; others lived in the tent camps constructed specifically for tuberculosis sufferers.[35] Public control measures demanded obligatory notification to authorities of existence of the disease, disinfection of living quarters of infected persons once they left the premises, and dissemination of information concerning the true nature of consumption.[36] Most important of all was the urgent necessity for a hygienic sewage system.[37]

Parallels in Utilitarian Modernization

Understanding of the spread of disease by bacterial organisms drove efforts for more effective public utility systems.[38] As early as 1884, a forward thinking El Paso newspaper editor warned that sewage disposal would become a problem, eventually to "loom up in our local horizon as a hygienic question of transcendent proportions."[39] Twenty years elapsed before a satisfactory solution emerged. At the turn of the century, national sentiment swelled against befouling rivers. The rapid rate of local population growth was compounded by authorities' diffidence, although part of the blame for delay may have resided in reluctance on the part of the citizenry to tax itself for funding this unavoidable, but expensive, certification of progress. [40] As the towns grew into cities, dumping sewage into the river became less and less a viable practice, especially when the stream flow was at a minimum.[41] Modern water supply and waste disposal systems became imperative.

The first decade of the twentieth century brought a period of many important firsts in modernization of city utility services across the border complex. Officials and citizens celebrated installation of subterranean potable water delivery and waste disposal systems, quantum leaps in

household convenience, individual comfort and well-being, but most important of all in overall city hygiene. In Juárez water delivered via underground tubes instead of by *acequias* so susceptible to pollution of many kinds may have constituted the most salutary achievement of the period. In the former "old town," gasoline-powered pumps filled large capacity overhead water tanks, releasing the town, but not the farms, from dependence on the erratic and diminishing Río Grande flow.[42]

City systems, limited at first in scope of service, grew as fast as authorities could marshal adequate funds. To Ciudad Juárez, former governor, banker, and wealthy land-owner Luis Terrazas extended an interest-free loan in the amount of 60,000 pesos for installation of the water system.[43] In 1910, the city issued bonds through the *Compañía Bancaria de Fomento y Bienes Raíces de México* (Bank of Development and Real Estate) for installation of its sanitation works.[44]

On the opposite side of the river, a contract mandating larger mains and reservoirs for the water works of El Paso failed to produce desired results. In a controversial 1908 city election El Paso voters authorized its officials to purchase the current leaky, undependable water supply operation at a price of one million dollars. Also in 1908 many miles of sanitary sewer lines extended across the entire north and east portions of El Paso, with a sewage pumping station in the southeast quarter of the city.

Further upgrading amenities, both towns opened new streets, paving and lighting many, widening and straightening them where necessary, lining them with regulation sidewalks and numbering structures.[45] Street paving required cooperation from the El Paso & Juárez Traction (street railway) Company and the railroad companies. Once again, showing compatibility, the

supervisor of the Traction Company contributed $1,000 to the street improvement program in the city in Mexico through which the company's electric streetcars ran.[46]

El Paso's built environment blossomed from 1908 through 1910, and for several years thereafter broke construction records, by 1910 registering thirty-five miles of street car lines and

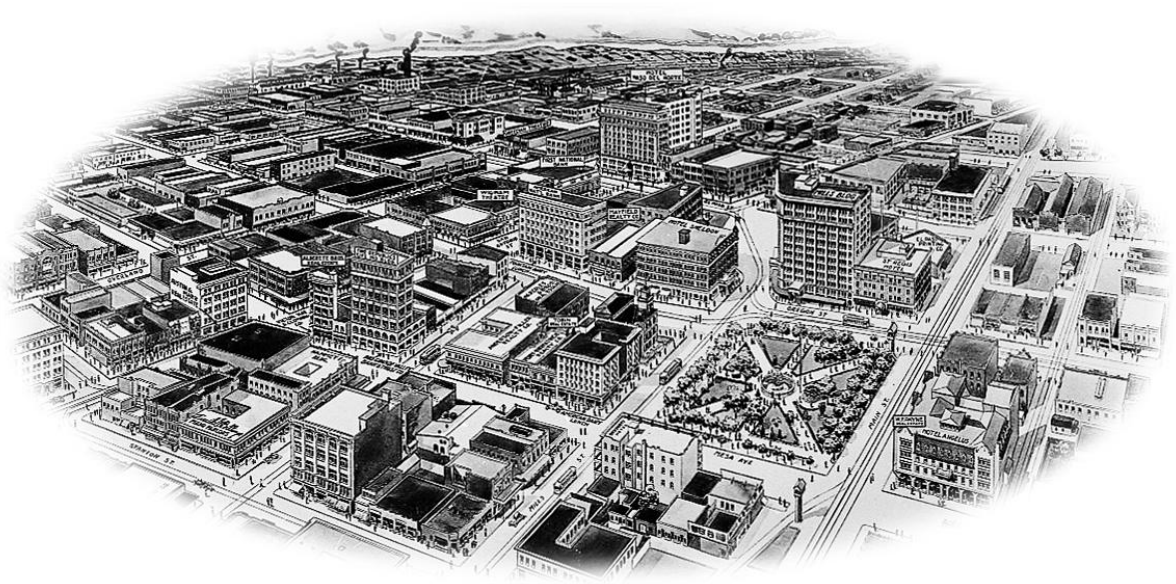

Fig. 32. El Paso Business District, 1912. Reprinted, by permission, El Paso Public Library.

twenty miles of paved streets.[47] The built environment had reached an assessed valuation of $30,000,000.[48] The commercial sector spread outward and upward.

As Figure 32 shows, El Paso's business district fully embraced the functionalist trend in architecture that originated in the Louis Sullivan school of thought emanating from Chicago. Reinforced concrete construction and electric elevators allowed buildings to rise to heights of six, eight, then eleven stories. Restrained surface ornamentation characterized the structures, well-suited to El Paso's aggressive entrepreneurial civic nature and to commercial buildings in general. With office buildings, industrial plants, schools, and hospitals looming large on the face of the urban complex, the twentieth century brought a frontal assault on what was once the

hallmark of the frontier towns, their gaming houses and saloons. Both Texas and Chihuahua began to crack down on gambling.

The Changing Character of the Border Towns: Entertainment Criminalized

In the early twentieth century, the Texas legislature passed a succession of anti-gambling laws; the first in 1901 prohibited the keeping of any and all types of devices used for gaming;[49] another in 1905 made the operating of any gaming establishment liable to penalty;[50] and in 1907 a third reiterated the prohibitions, broadening and stating them much more specifically.[51] Although some El Paso mayors tried to enforce the state injunctions, public resistance rendered the efforts largely impotent. Officials re-imposed laws intermittently between slippages when bars and saloons gradually reintroduced games for their customers.[52] A tenacious effort to withstand eradication allowed bars and saloons to stay in business but eventually without games. Within the overall built environment this segment shrank in relation to other vigorous economic enterprises on the march.

Chihuahua's Governor Luis Terrazas, bitterly opposed to gambling, was bent on eliminating that particular vice from the state. Terrazas and Texas Governor Samuel W. T. Lanham reportedly agreed to cooperate not only in stamping out gambling, but also to regulate the saloons differently. Governor Terrazas was adamant; gambling would not be permitted under any circumstances, even at local festivals.[53]

The governor's insistence on this point posed a fiscal challenge for city officials in Juárez. The varied sources of municipal income consistently rendered limited revenues. The city's share of customs collections, one percent, depended on traffic through the port-of-entry.[54] *Ejido* lands sold at very low prices and the declining agricultural component further depressed

city receipts. Juárez relied heavily for public and private income on the proceeds from the annual December Festival, when games of all kinds offered entertainment to local people and to crowds of guests from north of the border. The check on gaming houses, which paid handsome concession fees, constricted the treasury that was often in dire straits, under frequent pressures to augment city income.[55]

Conflicting evidence complicates the picture of the city's financial status in 1903. A news article reported brisk business in Juárez real estate with property "now being held at one thousand dollars while it could have been purchased a year ago for a much less [*sic*] price."[56] In 1905, sale of public lands, a common strategy for raising municipal funds, surged to seventy lots for home sites. Low prices, at times two cents per square meter, encouraged denunciations with a view to putting public land into private ownership, thus raising its market and tax value over the longer term by the construction of new residences or businesses.[57]

In September 1908 the financial prospects of Ciudad Juárez took a sudden turn for the better. That month the city entered into a contract with J. G. Follansbee for establishing a horse racing track within the town's boundaries. Once the contract was approved by the Racing Commission, the city lost no time in signing a second contract with the El Paso & Juárez Traction Company for construction of a street car line to accommodate track visitors to this new center of tourism and international interest.[58] Colonel Matt Winn, manager of Churchill Downs Track at Louisville, Kentucky, and the Empire Track of New York City, announced that the track in Ciudad Juárez was expected to be the first of a string of racing plants throughout Mexico, including one at Mexico City.[59] The track, described as one of the most up-to-date and complete racing facilities in Mexico with pari-mutuel betting permitted, was formally opened on 1 December 1909 with a few less than seven thousand people attending. In the journalistic jargon

of the day, "all El Paso was there."[60] The state of Chihuahua considered the race track to be merely a means to an end, that of "warding off municipal pauperism until the arrival of the expected waters for irrigation and the subsequent thorough recovery of the once rich lands along the river."[61] Repeated edicts about closing down gambling suggest that enforcement of the laws was lax and uneven.

When news of the impending race-track construction became public, the *El Paso Herald* waxed euphoric about the "mammoth" income the concession for a proposed new race track would bring to the neighbor city. The terms of agreement with Winn's company allotted to the city one percent of the gross amount of all mutual bets, a license of $100 each day, another special license of $25 a day, and $5,000 a year to be paid for the full racing and gambling rights. El Paso rejoiced in the good fortune of its sister city, and anticipated the pleasures of pari-mutuel gambling forbidden in Texas.

The Texas town, captivated by horse racing barely a mile away across the bridges, was subjected to aggressive print media promotion. Both the *Times* and the *Herald* published splashy notices of special events like "Souvenir Day" at the track. The souvenir was a bound booklet promoting all the colorful aspects of the enterprise including special "Ladies' Days" when women were admitted free. Racing cards and daily charts, jockeys' biographies, previous day's results, and other related information took up significant space in El Paso's sports news sections.[62] Beginning in February 1911 races would run seven days a week until the season ended on April 1.[63] Not even the revolutionary battles fought in Ciudad Juárez suspended the races for more than a few days at a time.[64] In December 1911 twelve thousand patrons made opening of the races on Thanksgiving a "gala" occasion, both a sporting and social event. Hotels and boarding houses in El Paso were filled and many whole residences had been leased for the

season.[65] The Juárez enterprise began to pay handsomely for the entire border complex. Commodification of its former entertainment business on a much grander scale than ever before promised to alleviate the shortages sustained by the city treasury, welcome relief for the border town's persistent budgetary headaches.

Elephant Butte Dam and Reservoir

After the turn of the nineteenth century, while schools and libraries promoted cultural progress across the fused municipalities, the traditional economic base in Chihuahua's Bravo District hung in limbo. Increasing upstream competition for Río Grande waters over the previous two decades had shrunk the viability of irrigated agriculture. Formal complaints asserted that the near total lack of water in the Río Grande was making farming in the Juárez area exceedingly difficult. By 1889, due to reduced snowfall in the Colorado mountains, water shortages had become critical not only in the El Paso/Juárez region, but farther upstream in New Mexico as well.[66] More and more homesteads lay abandoned. As early as 1895, one hundred seventy farmers and growers from the Juárez/Distrito Bravo area petitioned the Mexican government for support of an international dam recently proposed by Anson Mills, long an investor in El Paso's development.[67] The Federal Court in Ciudad Juárez investigated damages and losses claimed by the inhabitants of Bravo District from the lack of water in the Río Grande, and sent a report to the Secretary of Foreign Affairs in Mexico City[68] More than twenty years would pass before the shortage in irrigation waters was rectified.

Meanwhile, the massive Elephant Butte reclamation project, in the planning stages by the U.S. Government, was intended to harness the waters of the Río Grande, controlling flooding and irrigating thousands of acres of fertile, but arid, land. Federal engineers located the dam and

reservoir at Engle, New Mexico, one hundred twenty-five miles upstream from El Paso. The *El Paso Times* could imagine "no matter of greater moment to the people of El Paso and the great Río Grande Valley." When filled, the reservoir would extend forty miles in length, one to five miles in width, and irrigate 200,000 acres of farmland.[69]

Anticipated effects renewed agriculture-based interest and investment in Distrito Bravo. In 1908, the municipality sold off plots of land at affordable prices for agricultural purposes.[70] City authorities continued to maintain the fragile diversion dam and centuries–old *acequia* system, measures expected to augment the flow of water destined to invigorate the agricultural lands of the municipality. Leveling and sometimes widening the canal beds, replacing outworn headgates and other components, as well as continuing upkeep of the diversion dam in the river–all witnessed to the, perhaps grim or gritty, determination of Ciudad Juárez to recover its ancient *genius loci*, all the while moving into modernization along with its partner city.[71] In 1910, faith in the future of irrigated farming prompted the planning and opening of some new canals in the Juárez Valley.[72]

Recognition of the importance of agricultural development to the Republic of Mexico took a variety of forms. Regular publications emphasized the necessity of increased production of food and fiber.[73] In Ciudad Juárez two firms, Ketelsen & Degatau and Zork & Moye, had long been selling mechanical farm implements and supplies. When Mexico reduced tariffs on imported machinery, both machinery and modernizing methods migrated further into the region across the Río Grande. [74] Looking ahead in anticipation of a "brilliant future" for agriculture in the district, in 1908 the Chihuahua State Department of Development, in accord with President Díaz, distributed a circular urging good maintenance of farm-to-market roads.[75] In February 1910 Díaz promulgated a lengthy decree which declared many forms of government support for

the nation's agrarian base, including creation of a National Agricultural Bureau. The document also strongly encouraged private initiation of agricultural conventions, establishment of expositions and museums, attendance at international conferences, and publications promoting the field.[76]

Beginning construction on the "greatest irrigation project in the world" in 1908 was cause for great rejoicing in the El Paso press, although completion would not be effected for another eight years; extension into arable lands on both sides of the international boundary line would require even more time and effort. Legislative action concerning the Elephant Butte dam-and-reservoir project stretched from 1902 to 1907 before any material construction took place.[77] The treaty between the United States and Mexico signed in 1906 guaranteed a total of 60,000 acre feet of water per year at "a point where the head works of the *acequia madre* . . . now exist above the city of Juárez, Mexico." Article II of the treaty reiterated the specific destination and equality of the volume: "The delivery of the said amount of water shall be assured by the United States and shall be distributed through the year in the same proportions as the water supply proposed to be furnished from the said irrigation system to lands in the United States in the vicinity of El Paso, Texas, . . ." Article III of the treaty stipulated that the "said delivery shall be made without cost to Mexico, and the United States agrees to pay the whole cost of storing the said quantity of water to be delivered to Mexico, of conveying the same to the international line, of measuring the said water, and of delivering it in the river bed above the head of the Mexican Canal." The writers inserted a caveat: the quantity of water received would depend entirely on meteorological cycles. During periods of drought, the shortage of water would be pro-rated between the two countries.[78]

Construction of the international dam and reservoir prompted one immediate change in the built environment of Juárez. In 1906 Rómulo and Numo Escobar, sons of Mexico's consul in El Paso, opened the previously mentioned School of Agriculture on the outskirts of Ciudad Juárez. Across the nation the Escobar School was the only such institution except the National School of Agriculture in Mexico City.[79] Using the buildings and land of an established farm operation known as "La Playa," about three kilometers south of Juárez proper in Partido Romero the school provided hands-on experience for its students as well as academic certification equivalent to a bachelor's degree in the United States (see Fig. 42, Map, Plano 6, in Ch. 5).[80] Study in the arid environment of the Chihuahuan desert equipped graduates, referred to as prospective "scientific farmers," to deal with changes in agrarian development, including the expected irrigation-based recovery for the Pass region.[81] Known as the College of Agriculture and Experiment Station, the institution utilized sixteen hectares (approximately thirty five acres) of level, fertile irrigated land, and by 1913 expanded to seventy acres. Projects included testing wheat varieties and other crops for best properties and yields under local conditions. The school regularly published informative bulletins, and in a few years, was distributing young fruit trees to farmers and ranchers for enhancing and broadening the production of their operations.[82] As part of the education of young agricultural engineers, the Escobar School started up a broom factory and a dairy cooperative. [83] During later years the city grew eastward around the school and beyond.

Financial support from the state of Chihuahua and grants from the federal government allowed the Escobars to offer scholarships to qualified applicants.[84] Enrollment steadily increased from fewer than one hundred in 1906 to one hundred fifty in 1910, prompting construction of new buildings.[85] With this institution the suburban built environment of Ciudad

Juárez, which had traditionally embraced a strong agricultural component, reached out farther and farther. The school, undergirding economic change and updating development, was an important feature of the town's larger landscape.

The border populace in its entirety and without reservation supported installation of the massive planned reclamation project.[86] The magnitude of the Elephant Butte Dam and Reservoir undertaking created a ten-year period of sometimes anxious expectation.[87] When President Taft made his historic visit to El Paso in October 1909 (see below), local businessmen presented their plea regarding the Elephant Butte project. The president promised to give the matter his personal attention and by April 1910 support by officials in Washington became evident. In the ensuing months after the first contracts for construction were let, Secretary of the Interior R. A. Ballinger indicated that completion of the dam was a high priority.[88]

The gigantic project raised expectations to levels which would bring disappointment when reality set in. The drastic reduction of water over the previous two decades of drought had desiccated the Distrito Bravo region. In 1916, when the project was complete and water became available, the limited extent of the existing irrigation system in the Juárez Valley became evident. A delegation of engineers from Mexico City found a need for new headgates and lateral canals to fulfill the potential of the projected twenty thousand acres of arable land. Authorization of government funds for expansion of the ancient system promised to remedy the shortage.[89] However, the immediate dangers of the battles and war seem to have eclipsed realization of any significant development of the Juárez Valley irrigation system until well into the 1920s. Multiple demands on state and federal funding left the border region without a fully-operational *acequia* system, even after the two or three years required for collection of water in amounts that could be released from the reservoir.

A Pageant Extraordinaire: Presidents Taft and Díaz

An "epoch-making event in the world drama" brought Mexico's President Porfirio Díaz and U.S. President William Howard Taft to an unprecedented trans-border meeting in El Paso and Juárez. Both towns seized the occasion to showcase to the two presidents and the watching press their considerable material modernization and the complementary agendas of the municipal elites. On 16 October 1909 an extravaganza of pageantry surrounded the two republics' chief executives, celebrating "cordial relations that were never warmer." Lavish encomiums declared Díaz the hero of more than a quarter century of peaceful growth, development, and prosperity in Mexico, a statesman whose policies were "distinctive for cordiality toward America and Americans, especially U.S. businessmen." Honoring the two highest officials of the sister nations, bands played, artillery fired salutes, parades filled flag- and bunting-draped streets lined with cheering crowds, steam and electric whistles blew, and every bell rang. The occasion culminated in an elaborate banquet at the Juárez customshouse attended by a glittering array of dignitaries from both nations. The meeting concluded with a hope that the precedent thus established of such "grandeur and magnitude may be cherished as assurance of our continued friendship and commerce."[90] The bright hopes of the moment faded when, only one year later, regional rebellions against Porfirio Díaz unseated the Mexican president, and dampened bi-national relations between Mexico and the United States.

The Mexican Revolution: Local Tensions; Eroded Civic Cooperation

Pressures of war in Mexico broke the momentum of forward motion in Juárez; the strategic border town struggled to maintain its municipal equilibrium as military control shifted between federal and revolutionary factions. The risks attendant upon cross-border interaction

aggravated anxieties on both sides of the river. Sustained tensions led to a breakdown of trans-border municipal cooperation. Moreover, international protocols set limits beyond which neither revolutionary leaders nor local players ventured, but which added to strains within the trans-national complex. With asymmetries between the two cities sharpening, interdependency took on new forms. Revolutionary disturbances in Mexico cost El Paso heavily by cutting off the bulk of imported Mexican ores and other raw products; the deficit was offset somewhat by commercial traffic in arms provisions and other war materiel. An influx of new population and new capital boosted El Paso's retail trade and the building industry which surpassed all previous records for progress and prosperity.[91]

Widespread dissatisfaction with social conditions in Mexico fomented outbreaks of rebellion, some of which originated in the Northern provinces. Francisco Madero, an idealistic property and business owner of Coahuila, mounted a challenge to President Porfirio Díaz which put revolutionary forces on the march. Almost a decade of intermittent and extremely intense struggles for control of Ciudad Juárez converted the core of the forward-looking border town to little more than rubble. Many of the structures destroyed in the battles had been built during the previous decade's surge into modernization. Parts of the outlying suburbs suffered the depredations of military occupation as well. Direct access to the El Paso railroad hub and the wide-flung U.S. rail network made control of Ciudad Juárez vital for procuring arms, ammunition, and other war materiel and for rapid mobilization of troops. The town's strategic location thus invited the ensuing deluge of destruction.

In early February 1911, as Madero's insurrection gathered momentum throughout the country, the citizens of Ciudad Juárez began to prepare for the imminent battle, a warning having been issued in advance. In the months before the first battle took place, *Hospital Libertad*

(Liberty Hospital) prepared for incoming wounded, as did the Red Cross which erected a temporary field installation.[92] In March Juárez closed its saloons and gaming houses, warning its patrons from El Paso to stay away.[93] More of the bulk of the combined municipalities' demographic concentration, already unbalanced, shifted from the south to the north side of the river. Over the decade of war, sustained tensions led to a gradual breakdown of bi-national municipal cooperation,

While El Paso continued to build and expand, the constructed environment of Ciudad Juárez regressed under a series of destructive attacks. In January 1912 a particularly destructive struggle wrought devastating havoc on the business center, and in 1913 although Villa's partisans assumed control without a major battle, they subsequently ravaged the District, co-opting its resources at will. In 1915 Carrancistas wrested command from Villa, but raiding by the undaunted Centaur of the North continued to pose a threat to Ciudad Juárez until his final capitulation in 1920.

Early in the Revolution the border town became a staging theater for extending rebellion throughout upper Chihuahua, and a number of times a point of departure for military attacks on the state capital or other smaller points under contention. Paradoxically, geographic location provided proximity to safety, usually temporary, sometimes permanent, just across the bridges, behind the international border. Combatants organized, plotted campaigns, arranged for provisions, and sometimes relaxed in El Paso. Non-combatants took refuge in El Paso when threatened by an impending battle, the approach of large numbers of troops, or simply the near constant turmoil of life in Ciudad Juárez for the better part of ten years.

Six months into Francisco Madero's rebellion against Porfirio Díaz, from 8-10 May 1911, Ciudad Juárez staggered under the brunt of a three-day pitched battle for control of its

prime position. Exchanges of mortar fire and heavy artillery between Díaz's federal forces and Madero's revolutionaries inflicted extensive damage on the city's municipal infrastructure. Beginning at the Stanton Street Bridge on the north extremity of *Avenida Lerdo*, insurgents advanced southward toward the intersection with *Calle Comercio* by blasting through a series of contiguous adobe walls using dynamite bombs. This tactic furnished cover from enemy fire as the rebels moved through a long territorial–style block of buildings to an area of concentrated federal defense. The fighting was especially destructive around the two sets of barracks and the bull ring, where the defenders had established a major artillery battery. The Juárez Theater in the vicinity, constructed after 1906, suffered considerable damage.[94]

A few blocks away, at a second battle site on Constitution Avenue, the city hall recently under construction and the newly-erected library--the town's first--were shelled and burned out, although the girls' school in that vicinity was spared.[95] Farther to the west heavy fighting close to the ancient mission church damaged or demolished nearby public buildings–the combined courthouse and jail, inaugurated in 1902, the old federal barracks, and a hospital. The historically important post office, also the site of a court, succumbed entirely to flames and was left a mass of ruins.[96] The water tank in the patio of the federal barracks was blown up and the electrical wires that carried power to the streetcar system were severed.[97] The interior of the ancient mission church escaped the effects of the attack, but shells and bullets pocked and gouged the exterior walls, parapets, doors, and other features. The clock in the customshouse tower was shot away.[98] Along *Calle Comercio*, with the main battle sites at sufficient distance, only one window was broken in any of the business establishments; police discipline prevented looting of stores.[99] The American consulate building remained intact and ownership by United States citizens protected the racetrack; the stable of three hundred horses was left unharmed.[100]

Once Francisco Madero took command of the federal government, he created a commission for managing indemnity and reparations for properties damaged or destroyed during the battles of 1910 and 1911. The agency, titled *La Comisión Consultiva*, was scheduled to begin functioning 31 May 1911.[101] Applicants for compensation were required to present supporting evidence for their claims, in some cases tax records.[102] Unfortunately the uncertainty of central control and the short tenure of Madero's presidency allowed few if any payments to be made, according to available evidence.

On 31 January 1912 the city's built environment experienced another debilitating assault on its physical infrastructure when five hundred rebel troops rose against their officers in a general mutiny. Some broke into the jail, released prisoners, and taking all of the documents from the office of the judge of letters–the court housed in the building with the jail–burned them in front of the building.[103] The ensuing frenzy of looting inflicted extremely heavy losses on many of the principal stores of Juárez. Reports in El Paso's print media, perhaps not surprisingly, focused on the melee's effects on its own citizens. Putatively, the mob, caring nothing for international protocols, targeted businesses conducted by residents of El Paso, shattering show cases, carrying off everything but the heavy safes and the flooring. Almost every store on the south side of *Calle Comercio* had display windows smashed and goods taken. The business establishment of Ketelsen & Degatau, long time benefactors to the municipality, was plundered and set aflame. A few merchants or saloon owners bought off the mutineers. The newspaper was quick to report that the keno halls were reportedly not damaged, nor were the horses at the race track stolen or even bothered, but that the races were temporarily suspended.[104] This press notice seems to imply that El Pasoans continued their customary patronage of entertainment facilities

between assaults on Juárez , an important source of municipal income regardless of who controlled the city at any given time.

A month after the mutinous night of 31 January 1912, a revolt broke out in Chihuahua under Emilio Vásquez Gómez. Vasquistas captured Ciudad Juárez, seizing the customshouse, the currently functioning post office, the remaining municipal buildings, the jail, the barracks and other public places, meeting little, if any resistance.[105] Saloons were closed and gambling banned to help preserve peace, although horse racing resumed almost immediately. At once the new command posted guards to preserve order; troops controlled access to communications by taking charge of the two railroad stations and the international bridges that reached into El Paso.[106]

The complexity posed by Ciudad Juárez's border position carried a threat beyond mutiny and rebellion. Although the strategic importance of the city warranted an attempt to regain its control, Madero rightly feared intervention by the United States at the slightest provocation, and undoubtedly was aware of the troop concentration from Fort Bliss positioned tightly along the international border on the El Paso side. The revolution's commander resorted to an extreme measure. Openly recognizing the "delicate situation," Madero telegraphed the Mexican consul in El Paso, ordering him to "take any action he deemed advisable to prevent the possibility of shots being fired by the combatants across the international boundary." The orders gave the official the right "to sacrifice the possession of Juárez if necessary to carry out these instructions."[107] The crisis passed without an international incident.

Two violent struggles in less than a year left much of the Juárez central district wrecked with many of its government functions stalled and its mercantile segment crippled. Within a week of the mutinous night, Mayor Dr. Benjamin Castillo had elicited a promise from the state government for reconstruction assistance that included reorganization of individual precincts'

responsibility for pumps that serviced the drainage system and repairs of some of the structures associated with Liberty Hospital. The negotiations involved budget reform and creation of commissions to take charge of the waste disposal system.[108]

From the perspective of a century later, the amount of state aid promised seems paltry in relation to the extent of the damage, perhaps an indication of war-related losses incurred at the state level. Reconstruction would be a slow, painful process, frequently interrupted. In 1912, repair of the broken environment progressed in small increments, beginning with ten new street lights, and repairs to the market building and the public jail.[109] Private investors would not be compensated for damages inflicted by other than battles involving federal forces. Confusions of command in Juárez further complicated or negated responsibilities. Furthermore, nationalism at the border created a tricky balancing act, "the nationalist urge in the United States sometimes reaching hysterical proportions. The popular presses screamed for retributions against perceived slights by other countries, while countries took it as a matter of intense pride to best rivals in whatever competitions they could imagine."[110] A major effect of the revolutionary activity in Mexico was militarization of the border, achieved by varied measures.

During 1916 with increasing numbers of war refugees wanting to cross the border into the U.S., "reports of epidemics ravaging Mexico and a heightened concern with disease and contamination prompted the United States Public Health Service and the Bureau of Immigration to impose an 'iron-clad quarantine' against every body entering the United States from Mexico."[111] Inspections and entrance requirements became much more rigorous. Also in 1916 the attack by Francisco Villa's troops on Columbus, New Mexico, ratcheted up boundary anxieties significantly, prompting the effort of General John (Black Jack) Pershing and his forces to punish the infraction by taking military forces onto Mexico's soil. In 1916 the post at Fort Bliss

was stripped of most of its garrison to furnish troops for the Pershing expedition into Mexico. Other regular troops moved in and out, amounting at times to over 60,000, some stationed at points extending outward from El Paso, others—many of them National Guardsmen—enroute to other border points. [112]

From 1912 through 1919, between attacks and battles varying numbers of military forces moved in and out of Juárez, wearing on citizens' nerves and resulting in the depreciation unavoidable when large numbers of soldiers occupy limited space. From El Paso's point of view, in a very tense Ciudad Juárez municipal order was breaking down. Security wavered, crime rose, travel had never been so "unsafe" and daylight holdups became common.[113] In spite of the weakening relationship, when the Juárez branch of the *Banco Nacional* ceased to function, depositors were directed to withdraw their deposits from a cooperating agency in El Paso.[114]

In the spring of 1912, troops moved into and out of Juárez which was under rebel control. Rumors of federals being in the vicinity called for reinforcements, while fighting further to the south in the state kept tensions high.[115] The uneasiness which gripped the town prompted merchants to make preparations to close their stores at a moment's notice and make their way to El Paso. When a Juárez wholesale liquor and grocery warehouse burned, the El Paso fire department declined to answer a call for help; "local officials thought on account of the conditions prevailing in the city, better not to send any apparatus to the neighbor town."[116] Contradictions inherent in the affairs of an urban complex which spanned an international border became more apparent and troubling within a context of armed conflict. While nationalistic pride decreed observation of political protocols, familial links combined with humanitarian concern demanded that El Pasoans become involved in some support and protections of their neighbors.

Ciudad Juárez, itself severely wounded, became a regional center for treatment of casualties who could be brought in from battle sites in the surrounding region. Reports of the approach of federals and the continued uncertainty of events in the southern part of the state incited another non-combatant exodus from Juárez.[117] In spite of political and military tensions, El Paso did not shut out the refugees who qualified under immigration regulations. As the summer of 1912 wore on, rumors of both federals and rebels in the vicinity and fear that insurrectionists planned to dynamite railway trains carrying troops caused dire misgivings. Juárez streets were almost deserted, many of their usual occupants having crossed to El Paso.[118] But before the end of August Madero's forces, having recovered control, attempted to restore order and normal transactions. Order and normality, however, meant a town under military guard with artillery stationed at the bull ring and 1,300 infantry regulars in the barracks; the town was otherwise fortified with cannon, mortars, and smaller caliber arms.[119]

By 24 January 1913 the re-opening of rail traffic from the state capital occasioned the arrival at Juárez of three hundred federal troops. The following month saw the assassination of President Francisco Madero and his vice-president, with assumption of power by Victoriano Huerta. In spite of recurring turnovers in political and military control and resulting battles, residents of Juárez attempted to repair their built environment. In 1913, reconstruction included insuring municipal buildings against fire and launching construction of a new school in Partido Romero. [120] The *cabildo* made repairs to the public jail and led a campaign of further public and private improvement. Arrival of new equipment permitted restoration of postal service. The lottery and bull fights resumed; the race track introduced a new form of entertainment, auto racing.[121] The Tivoli bar opened, its games authorized.[122] In 1914 work continued toward installing a sewer system along Juárez streets, to be accomplished before projected street paving

was laid. Plans for improvement to the built environment included extensive work on various municipal buildings and also on the customs house, which was showing considerable deterioration.[123]

Order in Ciudad Juárez was again interrupted in November 1913. Earlier that year the constitutionalist coalition, Venustiano Carranza of the state of Coahuila, Francisco Villa of Chihuahua, and Álvaro Obregón of Sonora, had mounted a challenge to the Huerta regime. Their Plan de Guadalupe named Carranza First Chief of the Constitutionalist army, to become interim president upon Huerta's defeat. Villa assumed the position of military governor of Chihuahua.[124] By taking command of Juárez on 16 November in a surprise attack on federal troops in the early morning hours, Villa limited the fighting to a short duration.[125] The General found Ciudad Juárez a town sparsely inhabited, its streets dust-choked or muddy according to the season, with only a few commercial buildings still standing to face what might come next.[126]

Villa's subsequent occupation of Ciudad Juárez was harsh and confiscatory. When Villa was at the height of his reign, he co-opted the Escobar agricultural college and all of its facilities: seventy acres of crops, livestock, and the library. During the intermittent occupations, the college buildings were used for a hospital and for various sorts of military purposes. More than three thousand volumes in the formerly magnificent library were mutilated or destroyed, the school's buildings marred.[127] During his three-year tenure Villa demanded support and sustenance in the amount of 435,000,000 pesos which Chihuahua property owners, including *juarenses*, never recovered. Food shortages impelled Villa to authorize importation of primary necessities without duties.[128] Federal officials estimated the income for Villa's government from cattle exported to the United States as close to $280,000 for one month. Income from the race track at one hundred dollars per day added to the Villa purse, with the addition of sums from the smaller gambling

businesses and their allied enterprises, much of which El Pasoans probably contributed.[129] Historian Friedrich Katz does not deal with this specific information but he describes the generally confiscatory tactics the guerilla chief employed across the state.[130]

When the break came between First Chief Carranza and General Villa, Ciudad Juárez once again felt itself a target of conquest. In April 1915 three hundred Villistas garrisoned the city and constructed an elaborate system of defense.[131] Villa posted guards throughout the city and maintained tight control. During that month battles in the south of Chihuahua did not go well for Villa's forces; the resulting large numbers of troop movements raised local apprehensions. In June Villa suffered a major defeat at Celaya.[132] Rumors of a plot against Villa in Ciudad Juárez and alleged threats of a revolt of the entire city government and garrison in the border city unleashed another general and growing exodus of middle class Mexican families to El Paso.[133] By mid-November the garrison of a thousand troops prepared for an expected assault by the Carrancistas. In anticipation of victory, Carranza's de facto government offered amnesty to Villa officers and men contingent on their desertion from the northern forces.[134]

Although their general escaped, surrender by Villa's troops signaled the transfer of possibly as many as four thousand men to the control of the constitutionalist government. Many being mustered out claimed that they had not been paid and were hungry. Another round of looting ensued in Juárez, with groups of armed soldiers demanding food and drink from proprietors of grocery stores and saloons. Mounted troops patrolled the city, attempting to maintain order.[135] The Carranza government pledged to restore property confiscated under the Villa regime upon presentation of evidence of legal ownership. Carranza eventually deeded the School of Agriculture property back to the Escobars, who planned to reestablish it on a greater scale than that of its former successes.[136]

In January 1916 Carranza's army of the northeast arrived five hundred strong to establish temporary headquarters at Juárez.[137] By June sufficient calm had returned to the beleaguered border town to allow organization of a Chamber of Commerce aimed at working in cooperation with the interior cities of the republic.[138] However, permanent tranquility proved elusive. In the same year the Pershing punitive expedition against Villa brought out posters in Juárez calling all Mexicans to defend with arms and by hand the national integrity in case of international war. The proclamation reported formations of organizations along the border to "combat the American army in case of rupture between the United States and Mexico."[139] Fifty *juarenses* turned out to receive military instructions daily at the principal plaza.[140] So recently the repeated objective of rebel and federal attacks, at least some inhabitants of the frontier town expected to act as a buffer against an anticipated foreign incursion from its powerful neighbor to the north.

Carranza's presidency brought a renewed attack on the vice industry. Reports declared Ciudad Juárez "spotless," with no gambling or keno halls, no bullfights or cock fighting. The only exception was horse racing. Juárez felt the sting of Carranza's iron-clad mandate when a presidential manifesto stopped the bullfights scheduled for a particular Sunday afternoon; the bulls were sold to local butchers.[141] Ciudad Juárez held its first constitutional election under the Carranza government in September 1916, filling the offices of municipal president and city councilmen.[142] Rather than being subject to mayors or *jefes políticos* appointed by the state, local citizens would elect representatives to govern the municipality. Relative stability obtained in the mayor's office for the following three years.

In April 1918 a trainload of regular troops arrived in Juárez for the announced purpose of halting raids and pillage in western Chihuahua.[143] By June 1919 Ciudad Juárez once more fortified itself against an expected attack by Villa and his supporters, reduced by that time to a

"bandit gang," according to the El Paso press. A network of trenches protected by barbed wire entanglements surrounded the city. Adobe blockhouses sheltered machine gun nests and provided emplacements for field artillery. From a position judged practically impregnable on a hill south of town, a large new fort commanded access from the south and east. Land mines triggered electrically from a distance were set to deter attackers.[144]

Ignoring or bypassing the defensive readiness of Juárez, Villa's troops charged down *Calle Comercio* shortly before 3 a.m. on 15 June 1919. Federal troops retired to Fort Hidalgo, abandoning the town proper to the attackers. Scores of citizens fled before the onslaught, pouring over the bridges into El Paso. Mexican customs guards moved federal records of value to the El Paso side and merchants began loading their stocks onto railroad cars, having arranged to have them pulled over the bridge into the U.S. if necessary to escape probable brigandage.[145]

The Villistas, having penetrated the business section, smashed windows and robbed two pharmacies, a jewelry store, and most of the saloons including the Jockey Club Bar. In the short one-to-two day incursion, the rebel forces improvised a hospital, once again occupying the School of Agriculture to provide care for their wounded which numbered seventy seriously injured, forty less so. A large detachment of the raiders remained in the Girls' School building, their duty to cover the inevitable retreat of the attacking forces.[146] Once again the people of Juárez were left to repair the damages inflicted on their town.

Reconstruction and Limited Recovery in Juárez; El Paso Forges Ahead

In the intervals between the repeated assaults on Ciudad Juárez, authorities and citizens attempted to maintain the city's systems and preserve its constructed essence. El Paso observers

noted that the city's Chamber of Commerce had accomplished much in improving its streets and parks and had established bi-lingual business schools for young men and women.

Even though the political climate of Ciudad Juárez had stabilized, with no changes in the sitting mayors during 1917, 1918, and 1919, the economic situation of the Juárez municipality continued to be desperate.[147] Expenses far outran income. As was common in periods of financial distress, proponents of re-establishment of the Free Zone vociferously raised the issue. The City Council formed a commission to study the possibility.[148] In addition, perhaps in light of a reviving wine industry, the city imposed a special tax on the sale of liquor. [149]

After water from the Elephant Butte project became available, the agrarian sector of the Juárez business community closely watched El Paso's success in commercialization of agriculture, especially cotton production, studying problems of depressed markets and farm-to-market costs, once crops were harvested. Some of the business-minded community made efforts to re-establish bonded warehouses in Juárez, which would allow the holding of commodities for calculated price rises.[150] One problem transcended all others for farmers and growers. Even though irrigation waters had begun to flow from Elephant Butte Reservoir, a report to the Juárez city council focused on the shortage of sufficient water to irrigate the available land; the study showed that, in the opinion of the commission, at least twice the amount designated in the Treaty of 1906 would be required to serve the Juárez Valley. Moreover, the main head-gate, stipulated as the point of diversion, proved much too small to handle the amount of water allotted by the agreement. Agricultural lands below the main *acequia* system did not receive the share to which they were entitled. The aggrieved and deprived farmers wanted the first treaty annulled, and a new agreement negotiated. Unfortunately, that new agreement was delayed for another twenty-five years.[151]

In the face of the several attacks on the city's physical plant, public education continued to hold a high priority in Ciudad Juárez. In 1917 one adult education school and nine grammar schools were functioning under modern state-approved forms.[152] In 1918 the border city enrolled four thousand pupils, and in 1920 the Juárez mayor laid the cornerstone for a big new modern school, an event celebrated by a city-wide turnout.[153]

On the opposite side of the river, El Paso also continued to expand its educational sphere. By 1912 twelve public schools were open and by 1920 the number had jumped to seventeen, which included a day school for deaf children. The school census of 1919 counted 15,238 children of school age; public enrollment numbered 12,382. The difference of almost three thousand points up the many private schools and academies functioning in El Paso at that time.[154] El Paso City Directories show that during the war years many refugees opened private day schools in El Paso, presumably with the dual goal of finding a means of livelihood and to continue the education and preserve the culture of children who were living outside their native environment.

The decade's crowning achievement in El Paso public school building, a new El Paso High School designed by local architect Henry C. Trost, arose in 1916 on the rocky heights above Montana Avenue. Although the elevated site enhanced its civic and cultural importance, the building itself was an imposing structure, almost intimidating in its

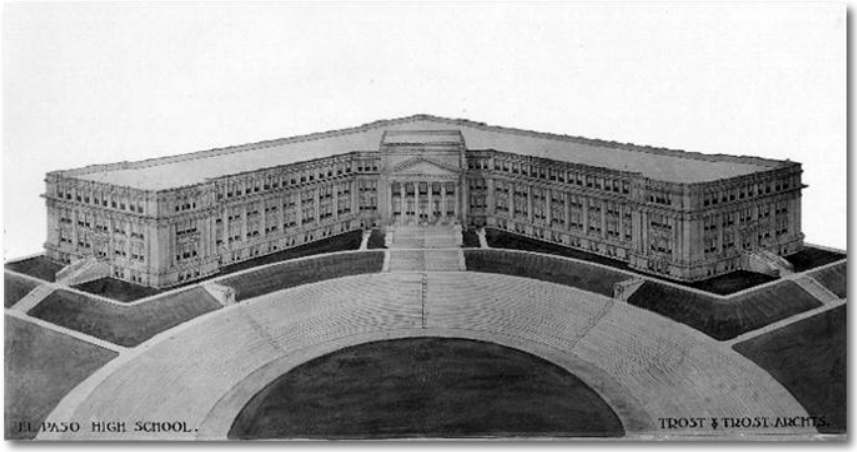

Fig. 33, El Paso High School, 1916. Courtesy of El Paso Public Library, Border Heritage Collection, Aultman collection, A5272.

Classical Revival austerity. The architecture created an effect of ceremonious gravity intended to prompt serious thought and diligent study. The Neo-classical face of the building promulgated an unmistakable statement of respect for the aim of classicism which was to construct an ideal vision and version of human experience that should inspire and instruct by its nobility, authority, rationality, and truth. Moreover, classicism emphasized clarity and unity. A product of the mind, its purpose was to construct an ideal world of balance and restraint, symmetry and proportion, harmony and decorum (see Fig. 34). [155] The Board of Education and the El Paso public had more than met the challenge thrown down by the *Herald* editor in 1901, who had lectured the community about the values and obligations of securing a stronger cultural ambience for the west Texas town.

Before arriving in west Texas, Henry C. Trost, who would become the prolific "architect of the southwest," had trained for eight years in Chicago under the influence, if not the tutelage, of Louis Sullivan. Trost designed a great many of El Paso's buildings, making himself the town's leading architect. However, the city of El Paso never developed a signature architecture as such; no single style dominated Trost's work. In fact, "he may have sought variety as an end in itself," thus contributing to the heterogeneity replete in borderlands urban architecture,.and bearing witness to Trost's extraordinary talent and adaptive skills as well as to the broad range of architectural styles preferred by his clients across the U.S. southwest.[156]

Higher education in El Paso took a leap forward when the city's bid for the Texas School of Mines succeeded. A pro-active Chamber of Commerce purchased an appropriate site near Fort Bliss in support of the legislative push by the region's senator, Claude B. Hudspeth.[157] The school opened in 1914 but in October 1916 fire completely destroyed the main building.

Fig. 34. Texas School of Mines, 1916. Courtesy of El Paso Public Library, Border Heritage Collection, Aultman Collection, A5961.

For reconstruction El Paso officials chose a site closer to El Paso proper where fire protection was available. In 1917 "Old Main" rose, and still stands, on the rugged hills northwest of the downtown center. [158] The choice of Bhutanese temple architecture for the Texas School of Mines added yet another strand of international culture to the combined El Paso-Ciudad Juárez cityscape (see Fig. 35).

At the suggestion of the wife of one of the school's department deans, Trost patterned the architecture of the Texas School of Mines after Bhutanese *dzongs*, great fortress complexes which traditionally combined military, administrative, and religious functions. Set in the rugged arid lower Himalayan landscape with sparse vegetation, the *dzongs* were-and are-placed in commanding positions such as an entrance to a valley or the summit of a hill. The similarities of

Bhutan's landscape to that of the city at The Pass made Bhutanese temple-fortress architecture peculiarly suitable. Moreover, the low hipped roofs, the ornamental frieze of brick and tile below the roof line, broken by the windows of the top story, and the battered outside walls, increasing in thickness toward the bottom by seven inches per ten feet present a solidly massive impression calculated to carry messages of an invulnerable autonomy that promotes freedom of thought and encourages learning and protects wisdom.[159]

The Mexican Revolution was only one of the powerful thrusts pushing expansion of El Paso's built environment from 1910 to 1920. In 1916 a special U.S. census showed a total population of 61,902 residents in the corporate limits of the city, a 57.6 % increase in the five years. The survey counted 7,047 refugees, many of whom were living temporarily in El Paso awaiting settlement of conditions in Mexico; 1,763 soldiers added to the total.[160] Moreover, numbers of people were moving into surrounding El Paso County to take advantage of land expected to open up to the benefits of irrigated farming. Growth in the agricultural industry demanded new and broader support businesses in machinery, seeds, cotton gins, and a host of other associated enterprises. One final example illustrates the city's rapid development during this period. The advent of the automobile enhanced El Paso's base of recreational and business tourism. Combined with the flow of health tourists that patronized El Paso's well-established community of hospital services and the corresponding vertically integrated firms, the influx of visitors demanded ever-larger accommodations. From 1910 to 1920 the number of hotels offering lodgings to a broad spectrum of travelers more than doubled, from thirty-two in 1910 to seventy-two in 1920.[161]

Summary

From 1900 to 1920 the bonds of interdependency between Ciudad Juárez and El Paso expanded and contracted in response to forces operating in their respective national theaters. While Mexico and the United States each followed its own set of goals, it was left to the border towns to negotiate and maneuver around and through the rocks and shoals of local adaptation to national purposes. During the first decade of the twentieth century, collective unity of purpose carried the coterminous communities into the broader march of urbanization unrolling across the North American continent. North of the international border immigration flowed westward to populate and exploit underdeveloped urban and rural areas of the trans-Mississippi and Rocky Mountain west. Continuing railroad expansion allowed convenient travel across the broad expanses. Among national trends in modernization, enlightened "scientific" understandings of contagious disease, in particular tuberculosis, carried large numbers of health seekers into the arid sunny southwestern region of the United States. With them came capital in the forms of economic investment and cultural ideals.

In Mexico improvements initiated by the policies of President Porfirio Díaz over his thirty-year tenure were slow to reach the northern border towns. Juárez citizens were forced to rely on economic practices sometimes in opposition to state and federal anti-gambling mandates. In the main, economic exigencies subverted moralistic progressivism. Entertainment and leisure enterprises funded an increasingly larger percent of the municipal budget. In spite of economic strictures, the Juárez built environment began to assume an updated appearance in educational and civic architecture.

The two towns acted in concert as an awakening of cultural interests planted iconic monuments throughout the combined border cityscape. Juárez emphasized its historic legacy

although conventional ecological orthodoxy, adobe construction, gave place to structures of brick and stone. El Paso joined the push to modernizing techniques by building skyscrapers of steel-reinforced concrete. Erection of large and impressive hospitals added a new architectural aesthetic to El Paso's appearance. Decision-makers shared common goals for installation of hygienic water and sewage treatment systems. In October 1909 accords reached their peak when the border complex hosted a historic meeting of the two republics' chief executives, Porfirio Díaz and William Howard Taft, an event celebrated in an elaborate fashion.

Cooperation and amiable interdependency previously embraced by the partner towns gradually eroded after the eruption of the Mexican Revolution in 1910. The years of conflict marked a sharp turn in trans-river municipal relations. From 1911-1920 intermittent military assaults and subsequent troop occupations took a tremendous toll on the built environment of Ciudad Juárez. In addition, successive turnovers in national command shook stability at the border and drove much of the population to safety in El Paso, some permanently. Interdependency devolved from a partnership, although unequal, into a state of nationalistic suspicion and fear of U.S. intervention into Mexico's internecine struggles. Nevertheless, ties that continued to link the communities included the street railway circuit, the railroad lines, fluid population, and social kinships.

During this period El Paso's constructed cityscape strained to accommodate an increase in population of approximately five hundred percent. The Texas town's economy expanded, to some extent through demands for logistical support by the various political and military factions that were sustaining the Revolution. By 1920 relative calm returned to the United States-Mexico borderlands. An indomitable spirit in Juárez resurged to initiate material reconstruction of its physical infrastructure. The asymmetrical interdependency would require time to heal.

[1] *El Paso Herald*, 29 June 1901.

[2] *El Paso Public Library Progress Report, 1894-1921*,(El Paso, Texas: Ellis Bros. Printing Company, 1922), 17-18; J.P. Andrews, "El Paso Public Library," *The Pass Magazine* 1, no. 1 (November, 1913): 3-7.

[3] Archivo Histórico Municipal de Ciudad Juárez, 1910, Legajos (Dossiers) 246, 254 y 266, in *La batalla de Ciudad Juárez,II. Las imágenes,* ed. Miguel Ángel Berumen Campos y Jesus Muñoz (Cuadro x Cuadro imagen y palabra, 2003), 86.

[4] Armando B. Chávez M., *Sesenta años de gobierno municipal:Jefes politicos del Distrito Bravo y presidents del municipio de Ciudad Juárez, 1897-1960: Actuación política u datos biográficos,*(México: Gráfico Cervantino, 1959), 14; *El Paso Herald,* 17 November 1910.

[5] Ciudad Juárez (México), Municipal Archives, *Documentos históricos/Archivo municipal de Ciudad Juárez* (Ciudad Juárez, México: 1750–1939), Part 2, Roll 59, Book 4, Frame 64.

[6] Barbara A. Tanenbaum, "Streetwise History: The Paseo de la Reforma and the Porfirian State, 1876-1910," in *Rituals of Rule, Rituals of Resistance*, eds. William H. Beezley, Cheryl English Martin, and William French (Wilmington, Del.: Scholarly Resource Books, 1994), 130-132, 135, 143.

[7] *El Paso Herald,* 17 January 1896.

[8] Ibid, 20 June 1905.

[9] *El Paso Times,* 9 March 1906; *El Paso Herald,* 16 March 1906.

[10] Ibid.

[11] Ibid., 22 March 1906. El Paso's scholastic census for 1906 counted 4,990 pupils in public schools.

[12] Armando B. Chávez M., *Historia de Ciudad Juárez, Chihuahua, México* (México, D.F.: Editorial Pax México, Librería Carlos Cesarman, S.A.), 348.

[13] *El Paso Herald,* 22 August 1908.

[14] Chávez, *Sesenta años de gobierno municipal*, 16; México, *Periódico oficial de Chihuahua* No. 73, p. 11, 10 September 1908.

[15] *El Paso Herald,* 17 March 1904, 17 February 1906; *El Paso Times,* 24 February 1906.

[16] Ibid., 5 August 1909.

[17] Chávez, *Sesenta años de gobierno municipal*, 28, 32.

[18] México, *Per.ofic.* No. 10, p. 10, 3 February 1910.

[19] *El Paso Herald,* 19 July 1899.

[20] Ibid., 28 March 1906.

[21] Ibid., 27 January 1912.

[22] Mark Gelernter, *A History of American Architecture: Buildings in Their Cultural and Technological Context* (Manchester: Manchester University Press, 2001), 194, 197.

[23] *El Paso Herald,* 28 March 1906.

[24] Gelernter, 211–12.

[25] *El Paso Herald,* 8 September 1906.

[26] Gelernter, *History of American Architecture,* 183–84.

[27] Ibid., 219.

[28] Greg Hise, "Industry and the Landscapes of Social Reform," in *From Chicago to L.A.: Making Sense of Urban History*, ed. Michael J. Dear (Thousand Oaks: Sage Publications, 2002), 102.

[29] Chris P. Fox, "Health for Sale," *Password* XXI, no. 4 (Winter 1976): 150; Werner E. Spier, Edward Egbert, and Cheri Spier, "Medical History of El Paso. Tuberculosis: The Beginnings of El Paso as a Medical Center," *Password* 42, no. 3 (Fall 1997): 110; Anne Kemp White, "Doctors I Have Known," *Password* XVIII, no. 1 (Spring 1972): 25.

[30] Ibid.; *El Paso Herald*, 3 July 1920.

[31] Genealogy Trails History Group, Texas State Institutions, "Tuberculosis Institutions in Texas as of 1916," in *A Tuberculosis Directory Containing a List of Institutions, Associations and Other Agencies Dealing with Tuberculosis in the United States and Canada* (National Association for the Study and Prevention of Tuberculosis, New York, 1916) n.p., ; http://www.genealogytrails.com/tex/state/stateinstitutions.html, accessed 25 April 2010; *El Paso Herald*, 1 August 1914. A comparison of rates may be seen in the *El Paso Times*, 5 November 1916: The Wiley Sanatorium for Convalescents, 2401 Copia, advertised individual tent cottages, porches and private room at $10 to $15 per week.

[32] "Hotel Dieu Performed First Operation," in *Southwest Catholic Register*, VII, no. 20 (14 May 1965): 3.

[33] W. H. Timmons, *El Paso: A Borderlands History* (El Paso, Tex.: Texas Western Press, University of Texas at El Paso, 1990), 193-4.

[34] *El Paso Herald*, 6 July 1907.

[35] Ibid., 14 March 1906, 21 April 1908.

[36] Ibid., 18 April 1908.

[37] Ibid., 26 November 1910.

[38] Ibid., 31 July 1901.

[39] Ibid., 16 November 1884.

[40] Ibid., 10, 25 July 1901.

[41] Mexico, *Per. ofic.* No. 47, p. 8, 12 June 1910.

[42] Chávez, *Sesenta años de gobierno municipal*, 19, 36; México, *Per. ofic*. No. 75, p. 11, 17 September 1908; *El Paso Herald*, 12 January 1904, 22 August 1908; *El Paso Times*, 23 March 1906.

[43] Chávez, *Sesenta años de gobierno municipal*, 19.

[44] Ibid., 45.

[45] Ibid., 44; México, *Per. ofic*. No. 75, p. 11, 17 September 1908; No. 19, p. 16-17, 7 March 1909; No. 47, p. 7, 12 June 1910; *El Paso Herald*, 30 April 1903, 17 January 1905, 5 April, 6 May 1906.

[46] México, *Per.ofic.*, No. 47, p. 7, 12 June 1910; Chávez, *Sesenta años de gobierno municipal*, 46.

[47] *El Paso Herald*, 29 April 1908, 12 January, 26 August 1910, 3 March 1912, 12 August 1912, 25 January 1913.

[48] Ibid., 26 August 1910.

[49] Texas. The Laws of Texas, 1897-1902 [Volume 11], Book, 1902; digital images, (http://texashistory.unt.edu/ark:/67531/metapth6576 : accessed September 10, 2010), University of North Texas Libraries, The Portal to Texas History, http://texashistory.unt.edu; crediting UNT Libraries, Denton, Texas.

[50] Texas. The Laws of Texas, 1903-1905 [Volume 12], Book, 1906; digital images, (http://texashistory.unt.edu/ark:/67531/metapth6695 : accessed September 10, 2010), University of North Texas Libraries, The Portal to Texas History, http://texashistory.unt.edu; crediting UNT Libraries, Denton, Texas.

[51] Texas, *Penal Code of the State of Texas*, 39th Legislature, 1925.

[52] Jack C. Vowell, Jr., "Politics in El Paso, 1850–1920," (M.A. thesis, Texas Western College, 1952), 131–33.

[53] *El Paso Herald*, 5 September 1903.

[54] Chávez, *Sesenta años de gobierno municipal*, 45.

[55] Ibid., 20, 32. According to Francisco R. Almada, *Diccionario de historia, geografía y biografía chihuahuenses* (*Chihuahua: Librero Juárez*, 1968), 225, Luis Terrazas served a number of terms as governor intermittently from 1858 to 1905, but in 1903 only a short tenure in the governor's seat, 27 May-18 August; this may have relaxed the urgency of his anti-gambling decree. He was succeeded by his son-in-law, Enrique C. Creel, who attempted to implant material improvements in the border town and may have better understood the difficulties the municipality faced.

[56] *El Paso Herald*, 1 May 1903.

[57] Chávez, *Sesenta años de gobierno municipal* , 18; *Mexico, Per. ofic.*, No. 76, p. 8, 20 September 1908. At two cents per square meter, sale of a hectare of land (2.417 acres) would yield two hundred dollars to the public treasury. It appears that individuals purchased extremely small plots, thus increasing density of population within Juárez city limits along with raising its tax base.

[58] México, *Per. ofic.*, No. 7, p. 9, 6 September 1908; No. 81, p. 3, 10 October 1909.

[59] *El Paso Herald*, 11 January 1912.

[60] *El Paso Times*, 2 December 1909.

[61] Chávez, *Sesenta años de gobierno municipal*, 34, 37; *El Paso Herald*, 10 November 1909.

[62] *El Paso Herald*, 18 February 1910, 9 March 1912.

[63] *El Paso Times*, 14 February 1911.

[64] *El Paso Herald*, 28 February 1912.

[65] *El Paso Times*, 1 December 1911.

[66] Douglas Robert Littlefield, "Interstate Water Conflicts, Compromises, and Compacts: The Rio Grande, 1880-1938," (Ph.D. diss., University of California, Los Angeles, 1987), 43, 44, 50, 55.

[67] Department of State. U.S. Consul to Ciudad Juárez , Chihuahua, Mexico Charles E. Wesche to the Assistant Secretary of State Edwin P. Uhl (12 September 1895) RG 59 MF1623 M184 R5); Anson Mills and ed. C. H. Claudy, *My Story* (Washington, D.C.: The author, 1918), 259, 264–74; *El Paso Herald*, 2 January 1890.

[68] Department of State. U.S. Consul to Ciudad Juárez, Chihuahua, Mexico, Louis M. Buford to Assistant Secretary of State W. W. Rockhill (9 April 1896) RG 59.

[69] *El Paso Herald*, 26 February 1908; *El Paso Times*, 13 February 1911, 13 December 1914.

[70] México, *Per. ofic.*, No. 76, p. 8, 20 September 1908.

[71] México, *Per. ofic.* No. 86, p. 7, 5 October 1908; No. 90, p. 7, 26 October 1908; No. 88, p. 5, 1 November 1908; No. 93, p. 10, 19 November 1908.

[72] Chávez, *Sesenta años de gobierno municipal*, 32.

[73] *El Defensor*, 2 December 1894, 13 January 1895, 3 March 1895; *La Gaceta Municipal*, 26 July 1896; *El Clarin del Norte*, 17 November 1906, 24 November 1906.

[74] *El Paso Times*, 6 August 1906.

[75] México, *Per. ofic.* No. 70, p. 11, 25 August 1908.

[76] México, *Per. ofic.* No. 10, pp.2–9, 3 February 1910.

[77] *Reclamation Act of 1902, Statutes at Large 32, 388 (1902);* Congress, House, *Provisions of Reclamation Act Extended to Texas*, 34th Cong., 1st sess., H.R. 1790 (1905); *An Act Relating to the Construction of a Dam and Reservoir on the Rio Grande, in New Mexico, for the Impounding of the Flood Waters of Said River for Purposes of Irrigation, Statutes at Large* 33, Pt. 1, 814 (1905); *Convention between the United States and Mexico Providing for the Equitable Distribution of the Waters of the Rio Grande for Irrigation Purposes, Statutes at Large* 34, Pt. 3, 2953-2956 (1907); *CONVENTION WITH MEXICO, Statutes at Large* 34, Pt. 1, 1357 (1907).

[78] Mexico, *Treaties Applicable to the International Boundary and Water Commission: United States and Mexico: U.S. Section* ([United States: s.n.], 0196), 17–18.

[79] *El Paso Herald*, 24 March 1906.

[80] *El Paso Times*, 24 March 1906; *El Paso Herald*, 14, 24 March, 6 November 1906.

[81] Ibid.,, 14 March 1906.

[82] Ibid., 6 November 1906.

[84] México, *Per. ofic*. No. 72, pp. 8–9, 6 September 1908; No. 19, p. 16, 7 March 1909.

[85] Ibid., No. 76, p. 6, 20 September 1910; *El Paso Herald*, 2 November 1910.

[86] Ibid., 26 February 1908.

[87] Ibid.; *El Paso Times*, 26 August 1911.

[88] W. H. Timmons, *El Paso: A Borderlands History* (El Paso, Texas: Texas Western Press, 2004), 199-200.

[89] *El Paso Herald*, 6 April 1916.

[90] Ibid., 16 October 1909; *El Paso Times*, 16 October 1909.

[91] Romo, David Dorado, *Ringside Seat to a Revolution: An Underground Cultural History of El Paso and Juárez: 1893-1923* (El Paso, Texas: Cinco Puntos Press, 2005), 109; *El Paso Times*, 25 January 1913.

[92] Ibid., 8 February 1911.

[93] Ibid., 2 February 1911.

[94] Romo, *Ringside Seat*, 108; McNeely, John H., "Fall of Juárez in 1911 Sealed Fate of Díaz," in the *El Paso Times*, 17 May 1952. Daily reports in El Paso newspapers tended to be fragmentary and narrowly focused on daily struggles; other examinations have not been found beyond a line or two in general histories.

[95] Ibid.

[96] Ibid.

[97] C. L. Sonnichsen, *Pass of the North: Four Centuries on the Rio Grande* (El Paso, Texas: Texas Western Press, The University of Texas at El Paso, 1968), 398.

[98] *El Paso Herald*, 12 May 1911.

[99] Ibid.

[100] *El Paso Times*, 23 November 1909, 2 February 1911.

[101] Ciudad Juárez, *Documentos históricos*, Part 1, Roll 37, n.d.

[102] Ibid.,. J. Siqueiros, "Inventory of damages to contents of Ciudad Juárez municipal palace, 31 August 1912; Ketelsen & Degetau, letter to Governor Abraham Gonzalez, claim for damages, 19 October 1912; Governor Abraham Gonzalez, telegram to Municipal Committee at Ciudad Juárez regarding Ketelsen/Degetau claim, 21 November 1912; Claim (detailed) by Ketelsen & Degetau, December 1912; Tax Collector, "City tax records" for Ketelsen & Degetau, 3 December 1912.

[103] Chávez, *Sesenta años de gobierno municipal*, 71–72; *El Paso Herald*, 1 February 1912.

[104] For the next two days, 1 and 2 February, 1912, the *El Paso Herald* and the *El Paso Times* published extra editions with further extensive reports of the damage and disturbance to the built environment as well as the military ramifications. Under the headline, "JUAREZ WAS SHATTERED," the *Times* enumerated estimates of losses by mercantile establishments.

[105] *El Paso Herald*, 28 February 1912.

[106] Ibid. 27 February 1912.

[107] Ibid.; 1 February 1912, byline Mexico City.

[108] Chávez, *Sesenta años de gobierno municipal, 70-71*.

[109] Ibid.

[110] Gelernter, *History of American Architecture*, 195.

[111] Alexandra Minna Stern, "Buildings, Boundaries, and Blood: Medicalization and Nation-Building on the U.S.-Mexico Border, 1910-1930," *Hispanic American Historical Review* 79, no. 1 (1999): 41-42.

[112] M.H. Thomlinson, *The Garrison of Fort Bliss, 1849-1916* (El Paso, Tex.: Hertzog & Resler, Printers, 1945), 34; Richard K. McMaster, comp., *Musket, Saber, and Missile: A History of Fort Bliss* (El Paso, Tex., s.n., 1963 revised), 41.

[113] Mario García, *Desert Immigrants* (New Haven: Yale University Press, 1981), 172-196.

[114] *El Paso Herald*, 1 March 1912.

[115] Ibid., 22 April, 9 May 1912.

[116] Ibid., 30 May 1912.

[117] Ibid., 11, 27 June 1912.

[118] Ibid., 20 August 1912.

[119] Ibid., 21 August 1912.

[120] México, *Per. ofic.*, No. 19, p. 2, 11 May 1913.

[121] Ibid., p. 1, 11 May 1913.

[122] Chávez, *Sesenta años de gobierno municipal* , 86–7.

[123] *El Paso Herald*, 7 December 1914.

[124] México, *Per. ofic*., No. 1, p. 1, 15 December 1913.

[125] *El Paso Herald*, 16 November 1913.

[126] Chávez, *Sesenta años de gobierno municipal*, 96.

[127] *El Paso Herald*, 11 October 1916.

[128] Chávez, *Sesenta años de gobierno municipal*, 97–98.

[129] *El Paso Herald,* 4-5 December 1915.

[130] Friedrich Katz, *The Life and Times of Pancho Villa* (Stanford, Calif.: Stanford University Press, 1998), 584-587, 706.

[131] *El Paso Herald,* 29 April 1915.

[132] Ibid., 12 June 1915.

[133] Ibid., 16-17, 20 October 1915.

[134] Ibid., 11 November 1915.

[135] Ibid., 20, 21 December 1915.

[136] Ibid., 11 October 1916.

[137] Ibid., 6 January 1916.

[138] Ibid., 16 June 1916.

[139] Ibid., 21 June 1916.

[140] Ibid., 17, 21 June 1916.

[141]*El Paso Herald,* 7 March, 11 October 1916.

[142] Chávez, *Sesenta años de gobierno municipal*, 70; *El Paso Herald,* 26 July 1916.

[143] *El Paso Herald,* 5 April 1918.

[144] Ibid., 2 June 1919.

[145] Ibid., 15 June 1919.

[146] Xavier Enciso Durán, trans. Wencis O. Tovar, "El ataque a Ciudad Juárez y los acontecimientos de 14–18 June, 1913" (El Paso, Texas, 1919), 14, 21; *El Paso Herald,* 15-16 June 1919.

[147] Chávez, *Sesenta años de gobierno municipal*, 142.

[148] Ibid., 147.

[149] Ibid., 134, 147, 149.

[150] *El Paso Herald,* 14-15 February 1920.

[151] Chávez,, 148, 149.

[152] Ibid., 134.

[153] *El Paso Herald*, 7 September 1918, 19 July 1920.

[154] *El Paso City Directory, 1920*, (El Paso, Texas: Hudspeth Directory Co., 1920).

[155] John Wilton-Ely, "Neo-classicism," in *Dictionary of Art*, vol. 22, ed. Jane Turner (New York: Grove's Dictionaries, 1996), 734.

[156] Lloyd C.Engelbrecht, and June-Marie F. Engelbrecht, *Henry C. Trost, Architect of the Southwest* (El Paso Public Library Association, 1981), 60.

[157] *El Paso Herald*, 9 January 1911, 13 March, 17 April, 12 September 1913.

[158] Ibid., 5 June 1914, 30 October, 2 November 1916.

[159] *Bhutan: Himalayan Kingdom* (The Royal Government of the Kingdom of Bhutan, 1979), 21.

[160] *El Paso Herald*, 3 February 1916.

[161] *El Paso Directory for 1910* (Dallas, Texas: John F. Worley Directory Company, 1910), 271-272; *El Paso City Directory, 1920* (El Paso, Texas: Hudspeth Directory Co., 1920), 576-578.

CHAPTER FIVE

THE 1920S: URBAN ARCHITECTURE AS SOCIAL AGENTS

Introduction

Material culturists hypothesize that objects, "things" humanly conceived and constructed, incorporate physical presence, embodying social structures and reflecting the social world. Although much building was underway during the recovery from the wars of the previous decade, churches, schools, bridges, and airports were the stuff which underscored the El Paso-Juárez interdependency in the 1920s. These sets of structures in particular acted as social agents, by providing a means of interaction rather like language, but additional to it. Culture, at times in flux, helped to shape the things *paseños* and *juarenses* constructed and used; thereafter, the structures played a strong role in fashioning the bi-national society.[1] As explained in the Introduction, specific sets of objects in the borderlands urban context shared the work–social, political, and economic–that created the *sui generis* ambience permeating the El Paso-Ciudad Juárez amalgam from 1920 to 1929.[2] Local newspapers consistently measured economic growth and socio-cultural development in El Paso and Juárez by the constructed cityscape, which empowered and sheltered worship, education, and transportation activity.

From 1920 into 1924 the bi-national complex at the Pass continued to feel the effects of World War I and the Mexican Revolution. Rapid demographic growth strained the built environment and municipal services. Economic depression brought on by the broad post-World War I downturn affected the wider trans-border regional economy, particularly evident in the depressed prices of mineral ores and cattle. The expected salutary results of the opening of Elephant Butte Dam and Reservoir had not yet impacted agriculture on a large scale. Rampant

unemployment in these industries created hunger and general privation in Mexico more evident had prevailed during the late Porfiriato.[3] During this period legal, social, and cultural changes intersected to harden the boundary between Mexico and the United States. Nineteenth-century science applied to immigration control practices solidified a boundary line that had previously been much less distinct. Studies by Ann Gabbert and Alexandra Stern show how new "medicalization" processes helped to racialize Mexicans as outsiders and demarcate Mexico as a distant geographical entity.[4]

In the political realm Ciudad Juárez struggled to manage somewhat liberalized forms of democracy under Mexico's Constitution of 1917 which reduced the powers of the *jefes políticos* and increased the responsibilities of city council members, although they remained under the watchful eye of the state. At the same time a population densification process at the city's core heightened demands for public services from a city treasury endowed with meager resources. Lively suburban expansion further increased pressures on the municipal infrastructure. Since the state of Chihuahua was itself recovering from the Revolution's residual effects, assistance to Juárez appeared in small amounts and on an irregular basis, leaving the border town to rely on the most expedient measure at hand, the vice industry. The era of Prohibition in the United States connected consumer demand in El Paso with the cantinas and casinos across the international border, but access to liquor and open gambling in Juárez generated a moral and social backlash within El Paso's citizenry. Mexico's state and federal attempts to quash the entertainment and recreation industry generally succeeded only temporarily. In spite of social and political perplexities, the Juárez built environment depicted a town regaining economic vitality. A narrow focus on the political and economic difficulties leads the historian to a one-sided view. The

record read from the built environment of Juárez broadens the outlook and presents an adjusted, and perhaps more accurate, historical account.

A specific instance of refractory interdependence at the Pass, prolonged contentions regarding closings of the international bridges, substantiates the observations of Michiel Baud and Willem Van Schendel that borderlands are broad scenes of intense interactions in which people from both sides work out everyday accommodations based on face-to-face relationships. This much-treated postulate is now a commonplace, but a protracted period of obstinate confrontation between the border towns illuminates the salience of this point in border historiography. Baud and Van Schendel further declare that borders become markers of the actual power that states wield over their own societies, and that "recent research has shown that these ambitions often fail because of the opposition of a stubborn society. The confrontation between 'state' and 'people' is especially clear in marginal areas such as borderlands."[5] The events of September 1922 regarding international bridge closings and ongoing moralistic agitations at the Pass over El Pasoans' easy access to liquor and gambling in Ciudad Juárez fit squarely within the parameters Baud and Van Schendel outline. The governments of Mexico and the United States acted on the situation, one with little success, the other cautiously.

El Paso's material development in the post-war years provides insights into its municipal direction and spiritual temper. Ecclesiastical architecture carried the values, ideas, and emotions evident in the town's efforts to further establish social respectability and cultural maturity. Another important segment of the built environment, the bridges across the Río Grande, became a tool in the hands of citizens who wished to protect El Paso society, particularly its youth, from ready availability of alcoholic beverages and gambling. Determined citizens perceived closing of the bridges to be a control mechanism for damping down El Paso's patronage of the amusements

and recreation offered by Ciudad Juárez. Many in the business community opposed this kind of social engineering and the debates grew heated. The controversy took on an international complexion when citizens of Ciudad Juárez posted vigorous objections to this attempt to control what was, in their view, a vital element of their city's crippled economy. The quarrel's resolution revolved primarily around the bridges, the conceptual and material apparatus that tied the towns together into one textual weave. By the end of the decade new technologies in communication and transportation had changed the face of the cosmopolitan bi-national urban totality that straddled the international boundary.

Churches at the Pass: Carriers of Values and Meanings

Local citizens and news services commonly judged growth by expansion of the city's built environment. The year 1919 saw a revival of building activities in El Paso that "astonished even the most optimistic." A newspaper article recounted the effect of the war on building activity, restrictions on materials being the most problematic.[6] As recovery progressed, in 1919 El Paso ranked sixth among Texas cities in building permits for the month of April; the amount of construction authorized during October was 1,841% more than for the same month in 1918.[7] A significant part of this growth encompassed ecclesiastical architecture across the city.

In 1911 an El Paso writer declared that "a city is judged by its public and semi-public buildings. El Paso is noted for its public buildings and is known as the city of churches, many housed in imposing edifices which constitute a decoration to the city's architectural design."[8] In 1918 El Paso counted fifty-four religious meetinghouses, an important sector of the constructed cityscape. Selected examples reflected the multi-cultural influences that shaped the eclectic character of the city's constructed landscape, along with the spiritual disposition of the period

expressed in stone, brick, tile, and wood. Houses of worship kept pace with other segments of municipal growth by increasing their size and strengthening their visual impact with more emphatic architectural statements. Replacing the first wave of comparatively diminutive churches built in the center of El Paso before the turn of the century, church and synagogue congregations moved with the flow of a growing population into residential additions upward and outward onto the foothills of the mountainous spine that constituted the east side of the Pass. Industrial and commercial enterprises increasingly occupied the space between the band of railroad tracks and the river.

In 1906 St. Clement's Episcopal Church vestry constructed a new church building near the head of a long narrow north-south plateau which was rapidly becoming the most fashionable of the town's housing developments. Building on the corner of Montana and Campbell Streets, designers chose to project the impression of timelessness that is characterized by ashlar walls and solid Roman revival design mingled with Gothic pointed arches. St. Clement's architects chose to build on the traditional basilica plan, i.e., with a rectangular nave terminating in an apse opposite the main entrance. Weighty walls and heavy square towers flanking a

Fig. 35. St. Clement's Episcopal Church, 1906. Reprinted, by permission, from St. Clement's Episcopal Church archives, C. Pine, Administrative Assistant.

recessed portal emphasized by graduated moldings present an impression of a nearly impregnable structure. Stonework in a contrasting lighter color calls attention to the building's structural lines and decorative features, lightening the overall impression which otherwise might have appeared oppressively massive. Lancet windows piercing the upper tower walls provide a pleasing foil to the large round window above the main entrance (see Fig. 35).[9]

Before 1893 many Catholics living in the El Paso area crossed the river to hear mass in the mission church of Ciudad Juárez while others traveled to the mission churches in El Paso's lower valley. Population growth warranted construction of a proper place of worship for its Catholics, and in 1892, the first Sacred Heart Church appeared at 602 South Oregon Street. Its recorded aim was "to join Catholics of all ethnic backgrounds" in a venue large enough to accommodate growth at a convenient site in the rapidly expanding town.[10] Later, on the same site, a new larger Sacred Heart Church appeared, an imposing architectural example of neo-classical principles–based on Vitruvius's classic scheme incorporating commodity, strength, and delight. Previously accommodating 800, in 1923 the building was remodeled to seat 1600 congregants (see Fig. 36).[11] Sacred Heart Church succored El Paso Catholics

Fig. 36. Sacred Heart Church, 1923. Courtesy of El Paso Pubic Library.

for twenty-five years before intensifying business and industrial expansion pushed residential districts upward onto the slopes of the mountains that shouldered the "pass" on the Texas side of the Rio Grande. This trend gave rise to a second equally stately Catholic sanctuary at the corner of Mesa Street and Arizona Street. In 1916, for St. Patrick's Cathedral, which had been recently elevated to Episcopal See of the newly created Diocese of El Paso, planners chose a superb site on the slope overlooking the Río Grande valley and beyond, to the mountains behind Ciudad Juárez.[12] The structure, in style a blending of modified Byzantine and Romanesque architecture, enhanced El Paso's identity as a city informed by classical culture. The sanctuary, decorated in golden oak woodwork, seated seven hundred on an inclined floor with no interior columns.[13]

With these models of dignity and eloquence in place, El Paso's religious community expanded and elaborated its impact. Moreover, the building of St. Patrick's Church heralded the growth of a critical mass of non-Mexican Catholics. The work of R. Patrick Cross shows that the cathedral parish was comprised mainly of persons with Anglo surnames while Sacred Heart's congregation was 98% Hispanic.[14] Although Cross's statistics focus on the years 1926-29, it seems that the new church enabled an informal simulation of racialized

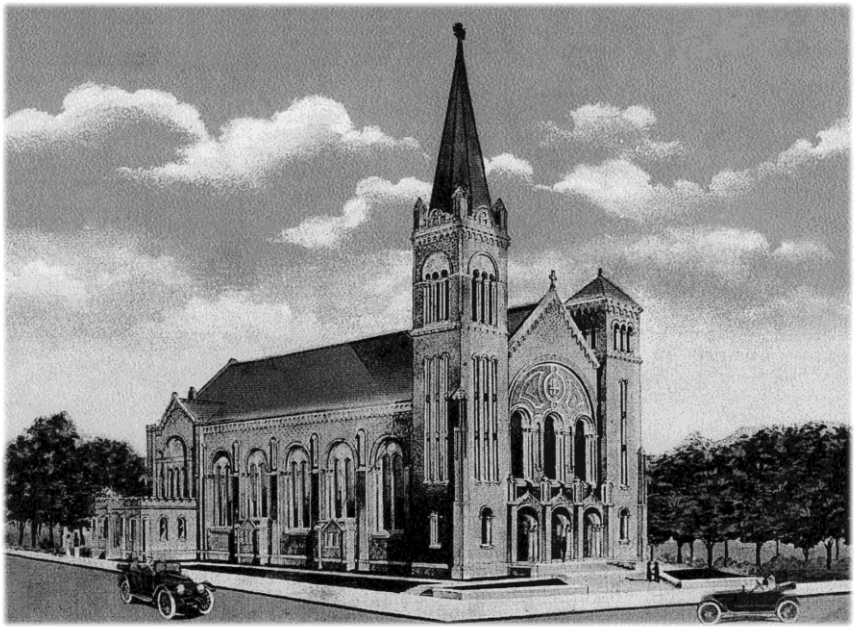

Fig. 37. Architect's plan for St. Patrick's Cathedral, 1916. Reprinted, by permission, J. Thomson, Historian, St. Patrick's Cathedral.

distinctions seen in immigration practices at the border, thus becoming a social agent in its own right (see Fig. 37).

Zion Evangelical Lutheran Church dedicated its new red brick building at Birch & Pershing in March 1923. Worshippers entered through a square corner tower that housed the church bell above. Eight arched windows pierced the walls of the sanctuary, which seated two hundred and twenty persons. Zion Evangelical fit the pattern of having outgrown its first meetinghouse, which seated only about sixty (see Fig. 38).[15]

Fig. 38. Zion Evangelical Lutheran Church. Photograph by author.

Also in 1923, Manhattan Presbyterian church built its new home on Piedras Street in the rapidly developing Five Points district, judging it a strategic center for advancement of its outreach. Shallow arches above the upper windows softened the simple geometry of the building which depended on locally-quarried limestone for its character . The sanctuary seated between 450 and 500 people (see Fig. 39).[16]

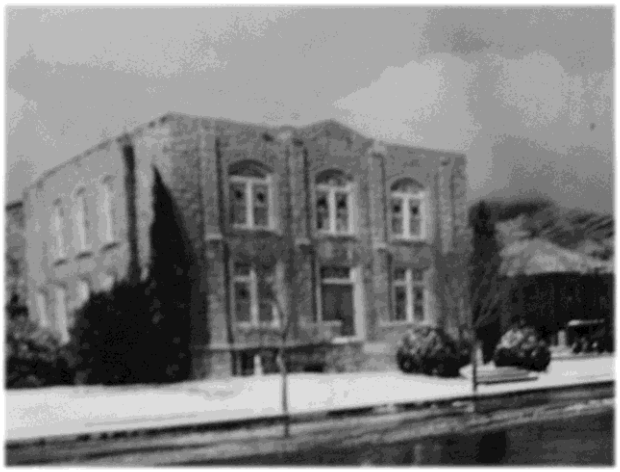

Fig. 39. Manhattan Presbyterian Church,1923. Courtesy of El Paso Public Library.

In 1926, the growing congregation of B'nai Zion synagogue almost quadrupled the seating space of its sanctuary, from 400 in previous accommodations to 1500 in the new building on Mesa Avenue.[17] In contrast with most of these examples, the simple rectangular basilica plan relied on exterior symbols and ornamental

features for asserting its place in the community of churches. Menorahs, seven-branched candelabra in bas relief just below the roofline at the building's front corners, drew attention to the ornate rose window centered above the entrance. A decorative tympanum surmounted the recessed portal (see Fig. 40).

In Ciudad Juárez church building took an entirely different turn. The strong anti-clerical theme of Mexico's 1917 Constitution, Articles 5-130, dispossessed the Catholic Church of the right to build churches. In effect the government nationalized ecclesiastical architecture, reserving to itself the power to determine the need for new churches, which, if built, automatically became national property.[18] New tolerance for Protestant church constructions altered the cityscape in Juárez. Added to the dominant mission church of *Nuestra Señora de Guadalupe* which had so long stood in Ciudad Juárez infused with history and socio-religious values and meanings, an innovation on the historic landscape appeared in late 1922. Dedication arrangements scheduled for January 1923 introduced two Protestant mission churches to the city's ecclesiastical context. Just completed were two brick buildings, one erected by a Baptist mission outreach at a cost of $12,000, and the second by the Methodists at a cost of $15,000.[19] The Juárez municipal focus during this period promoted construction of another type of socio-cultural institution in Juárez; efforts centered strongly on the building of schools, as the evidence will show.

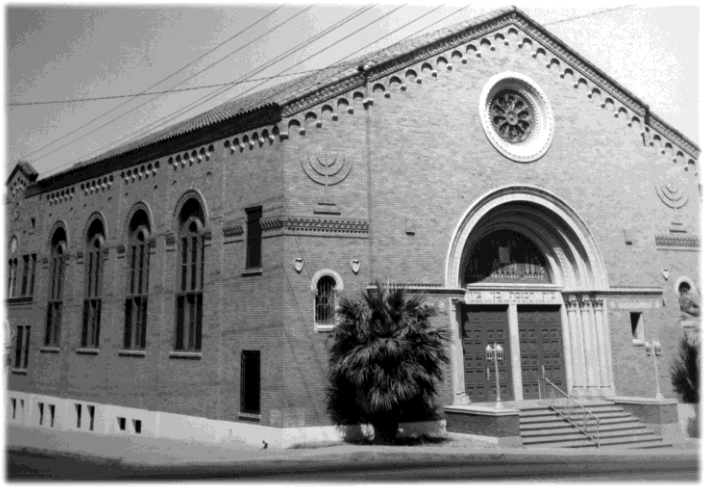

Fig. 40. B'nai Zion Temple,1926. Reprinted, by permission, Congregation of B'nai Zion Temple.

It seems plausible that interweaving complexities of the early twentieth century in the borderlands generated the push to erect larger ecclesiastical buildings. Reactions to the known horrors of a world war and a national revolution in Mexico may have encouraged people to seek refuge in spiritual activities, which included erecting sanctuaries in concrete architectural form. The long battle to legislate national prohibition and the resulting consciousness-raising effect of the 18th Amendment to the United States Constitution may have helped to instigate the architectural drive of the following years.[20] Prohibition legislation passed in 1919 embodied the strong moralistic flavor and passion for righteousness inherent in progressivist philosophies. The campaign for "morality in politics" and the plea for new standards of honesty and justice in public and private life pointed up this attitude.[21] Social factors and the pragmatics of rapid demographic growth created a demand for larger worship facilities; the brief economic downturn apparently presented no deterrent to congregations determined to expand. Physical expansion in the religious community was the most visible effect of newly awakened moral sensitivities. But, in 1923 a clash between cultural mores and economic urgency created more than one rift within and between the partnered communities.

Growth in Ciudad Juárez: Demographic, Political, and Material

During the decade following the Mexican Revolution, numbers of people continued to flow northward from the country's interior, more than doubling the population of Ciudad Juárez, which grew from 19,457 in 1920 to 39,669 in 1930.[22] Although the primary intent of most of the refugees was to emigrate into the United States, some were detained by procedural delays and others were turned back by immigration restrictions; thus many remained in the northern Chihuahua border town. The rapid population growth drove expansion of the town's physical

base.[23] The city government continued to make land available for purchase, but found it necessary to administer unprecedented restrictions. For example, petitions for denunciations by those who already owned large amounts of land were investigated, and requests from those who lacked property were given precedence. Land speculation was discouraged; authorities reserved some land for future public use. With demand increasing, some owners subdivided and sold plots at very low prices, a process that further increased population density. Space in some *partidos* that had lost occupants became repopulated. The town stretched toward the west and south, absorbing some land previously dedicated to agriculture; most desirable of all was that to the east served by the irrigation canals.[24] Population pressures created a great many problems for city authorities during a time of political change in Ciudad Juárez.

According to Armando B. Chavez's history of Ciudad Juárez, after thirty years of Porfirio Díaz's authoritarian administration and ten years of revolutionary turbulence, some expanded freedoms in governance at the municipal level required applications of trial-and-error in policies and practices. Close supervision by state authorities circumscribed municipal actions. State constitutions generally granted state legislatures the power to create and abolish municipalities and to designate their size, limiting democratic self-government in varying degrees; this was the case in Chihuahua. In addition, the governor was authorized to assign and remove the chief of police in each municipality, supervise municipal finances, and to encourage the *ayuntamiento*s to meet their administrative responsibilities when in his opinion they were not doing so. [25] The Juárez *ayuntamiento* struggled to maintain a balance within the legislative mandates that established regulations for orderly government. In the early days of the constitutional republic the heady freedom to elect city council members from its own populace brought a cadre of inexperienced *regidores* in Juárez face to face with an agenda heavily

burdened by economic difficulties.[26] Disagreements between the Juárez municipal president, the police chief (who answered only to the governor), and city councilmen resulted in heated sessions and frequent resignations. Participation in governance was a privilege taken very seriously; failure to attend council meetings could result in detention and incarceration on occasion. One interim governor gave his approval when the mayor placed an alderman in detention for absence at council sessions on the grounds that such an attitude constituted a subversive maneuver against authority.[27] At another point the incumbent governor of Chihuahua recommended resignation of the entire Juárez City Council and its replacement by a new slate of officials that would be totally neutral to all politics, a "solution" that would seem unlikely to have succeeded considering the numbers of factions and the persistent state of political agitation in the town. The state executive opined that he might see himself obligated to consign the entire council before judicial authorities. Refusing the governor's mandate, the *cabildo* sent a telegram to President Álvaro Obregón, asking that a mediator be appointed to effect local conciliation. The following day the governor received notice that the situation was resolved: the *jefe político* had resigned his office, calling his *suplente* (deputy) into service.[28] Chávez has described the years 1921 and 1922 as tumultuous, anguished, agitated, and "in a state of political imbalance to the extent that benefits to the city were delayed."[29]

Full economic independence did not accompany political reform. By law, the municipality would freely administer its funds and collect all taxes. However, the Constitution granted power to the state governor to assign inspectors to receive taxes due the state and to supervise fiscal accountability in the municipalities; funds sent to Chihuahua City would be rebated in amounts necessary to meet needs and in *amounts designated by the state* (italics

added). This brief directive would immensely complicate the fiscal management with which the Juárez City Council was charged.

Economic Distress in Ciudad Juárez; Measures for Recovery

The rapidly increasing population exerted enormous pressure on a municipal budget perpetually strained to supply residents with the most basic services. From 1920 to 1923 records show a state of near-insolvency, leaving those responsible unable to repair existing water and sewer systems, much less to build new ones.[30] With both the federal and state treasuries in a debilitated condition following the Revolution, financial assistance to municipalities was not readily available. During his tenure as interim president from May to December 1920, Adolfo de la Huerta suspended the government program aimed at granting restitution to owners of property damaged or destroyed by the war, further reducing resources on tap for reconstruction of the built environment.[31] Chihuahua's state legislators' right of approval over the Juárez annual budget and strict oversight of expenditures created a climate of tension between local and state officials until the beginning of 1923.[32]

In February 1921, the governor granted to Juárez a sum of 400,000 pesos for a variety of city improvements. While the money was welcomed, it seems to have generated a conviction that the border town was entitled to a greater portion of the taxes collected from its entertainment and diversion industry. The *ayuntamiento* calculated the amount the city should be receiving in rebates through state channels as a just portion of revenue from cantina and casino incomes; the estimate was far more than the state delivered to Juárez coffers. A communication to the state office charged forthrightly that fifty percent of the total collected from owner-operators of gaming establishments was due to the municipality. Furthermore, the amount owed the city

should be retroactive, calculated from the date of the concession granted. The request suggested that if state compliance to the petition was not forthcoming, the Juárez gaming establishments might be moved outside of the jurisdiction of city law enforcement. The governing body also sent a telegram to President Obregón, stating that the Juárez municipal administration was determined to validate its rights, preferring to dissolve itself rather than to suffer violation of the "sacred principle of municipal liberty."[33]

Although the council was reminded that such dissolution would breach the right of the state to create or abolish municipalities and was punishable by law, the members did not retreat from the position they considered just and equitable. They pointed out that compensation was due on the grounds that the revenue generated in "immoral vice" could be justified only by its use for immediate realization of material progress. In an effort to calm the agitation, the state offered to the Juárez Committee of Public Works 100,000 pesos to be spent on municipal services, sewer and water systems, completion of a school, and construction of a highway to one of its outlying villages. The *cabildo* "respectfully and energetically" declined the offer, a much smaller amount than they considered their due. Thereupon the municipal president took a leave of absence to attempt a truce with the governor.[34]

Small measures counted in efforts to meet civic obligations. In 1921 the state government was reportedly studying a proposal to require property owners to stand the cost of paving streets their property faced, a policy in practice in El Paso since at least 1915.[35] In 1923 the City Council resorted to cutting salaries of municipal employees; city council members ceded a portion of their monthly expense accounts and doctors serving the hospital contributed their services without charge.[36] Seemingly large grants and tax rebates arriving from the state were soon disbursed. Construction of new buildings and repair of those already existing held the

highest priority, although some allowance was made for a portion to be spent on the sewer system, street paving, and other pressing needs.[37]

The long-standing slump afflicting the Ciudad Juárez municipal treasury provoked a three-year campaign for reinstatement of the old *Zona Libre* (1885-1905), upgraded and limited in territorial scope. Proponents of "Free Perimeter" status asked for tariff-reduced or free ports where goods could pass freely across the international boundary line without being subjected to the onerous duties that drove local consumers to the American side of the border to purchase necessities. Free Perimeters advocates were decidedly not in favor of extending the Zone along the border between the free ports.[38] However, the arguments repeated the old justifications for reduced tariff rates: defenders of the plan expected free exchange to encourage manufacturing of items from raw materials which would contribute to the growth of national industries as well as expansion of commerce in the border region. Bonded warehouses would accommodate the products and encourage brokering activities. These enterprises would constitute a new form of wealth by bringing merchandising back to the Mexican side, augmenting national income and providing job opportunities for border citizens, particularly the youth. In hopes of bringing the power brokers at the nation's center around to their point of view, Free Perimeter champions consistently framed their apologetics as measures to enhance greater Mexico's economy. But they also argued passionately on behalf of the morality of the working classes, the people who suffered most from Mexico's high import duties. The Free Perimeters would remove the motive for "living a lie" while border guards turned a blind eye to the daily tragedy of those being forced to buy food or shoes for their children on foreign soil, i.e., in El Paso. Cross-border buying of the most urgent necessities was not reserved for an

occasional advantageous purchase; it constituted forced commerce in "vice," that of violating their nation's laws to provide bread for their children.[39]

In 1923 Ulises Irigoyen, Juárez businessman and President of the Chamber of Commerce, headed up a letter writing effort aimed at correcting what he viewed as faulty information combined with an erroneous point of view published in prominent newspapers. On 31 October 1923 *Excelsior* had ignited the controversy with an editorial that incensed Mexico's borderlanders. Both *Excelsior* and *El Universal* derided the idea of setting up once again what they considered an open corridor for smugglers, sure to encourage movement of contraband, thus incurring a loss of customs receipts and ruining legitimate merchants at the border and in interior Mexico. The newswriters recalled that during the years that the *Zona Libre* was in force, 1885-1905, few merchants took advantage of the reduced tariffs, nor did the Zone promote development of commerce, industry, and agriculture. Furthermore, they feared the "de-Mexicanization of the border population."[40] Irigoyen retorted that serious drawbacks faced by the border population included the bitter truth that border cities had not only already become de-Mexicanized, but that they were uniquely zones of tolerance attached to the American cities. In a sharply worded satirical article titled "Treason and Ignorance," Irigoyen declared that "Mr. Volstead did us a favor," referring to the prohibition act that sent U.S. citizens across the border in search of free access to alcoholic beverages, thus contributing to Juárez income. Irigoyen claimed that Free Perimeters were justified on moral grounds, not only of suppressing illegal vice, but of the higher morality of granting people a right to live without the daily necessity of becoming *contrabandistas*. Moreover, Irigoyen insisted that smuggling would never disappear while high and disproportionate tariffs and interstate taxes existed.[41]

Beginning in 1924, politics in Ciudad Juárez operated relatively peacefully almost to the end of the decade, but in March 1929 rebels took up arms pledging a desire to renew the Mexican Revolution. Erupting in Sonora, the uprising against the incumbent central administration spread to Chihuahua and was supported by its current governor Marcelo Caraveo and by Juárez municipal president Augustín Gallo. The commander of the city's garrison remained loyal to the existing administration but was forced to flee to El Paso. By 13 April the advance of an infantry brigade from Chihuahua ousted the rebels from Juárez. A loyalist military presence regained control of the state and of the border town; for the remainder of the year state appointees governed Juárez. In January 1930 an elected municipal president assumed his seat but from August to November a Committee of Civil Administration took charge. Juárez municipal governance ended the decade in a state of political uncertainty.[42]

Importance of Schools: Linking the Conceptual and the Material

A long period of gestation produced federally managed secular public education in Mexico. An 1867 law prohibited for the first time teaching of religion in public schools.[43] From that time, the federal government gradually took on more of the responsibility for education of the masses, little by little reducing the role traditionally assumed by the Catholic Church. After 1889, a series of congresses sought to nationalize curriculum, ensure its adoption by private Catholic schools, and secure uniform teacher training through a system of normal schools.[44] Porfirians (1877-1911) and revolutionaries alike perceived the need for education on a broad national scale. Influential ideologues and political figures in both camps viewed illiteracy of the masses as the most stultifying curb on Mexico's cultural progress, while education was the energizing motor for reshaping the nation. Both conservatives and liberals believed that "the

school was the crucible of nationalism and moral development, in which "the base matter of plebeian culture would be transformed into the pure gold of virtuous citizenship."[45]

Twentieth-century liberals espoused an anticlerical and even antireligious project. Mexico's Constitution of 1917, written under Venustiano Carranza's supervision, codified anti-clericalism. Article 3 proscribed the teaching of religion in private and public primary schools; it also prohibited religious orders from founding or running primary schools.[46] Carranza's administration encumbered local governments with educational responsibility even though few were adequately equipped or funded to run these schools, as they had no new revenue base to fund the extra expenditure.[47] Patience Schell's work concentrates on education in the Federal District; however, documentary records show that many of her observations apply to border town cultural politics. The Ciudad Juárez *ayuntamiento* took on the task of school construction and operations in the early 1920s under the financial strictures already described. Schell finds that between 1917 and 1924 states, municipalities, and private groups all participated in the movement to provide education to Mexico's children and adults. Local education was an important aspect of revolutionary demands for municipal rule. In Chihuahua, a multi-tiered support system developed to fund and promote public instruction, high on the post-revolution agenda of the Juárez city government.[48]

In 1920 a decree by President Obregón empowered José Vasconcelos, one of Mexico's most illustrious men of letters, to create a national education system under the *Secretaría de Educación Pública* (SEP).[49] The ministry issued assurances that federal education would not replace state or local provision of education, but rather would complement that provision and offer education in regions that were too poor to support schools. Throughout the country the SEP founded schools that were either solely SEP-administered or managed in partnership with the

states, providing loans for state education that covered the cost of schooling or materials and building repairs.[50] In the view of Mary Kay Vaughan, the appointment of Vasconcelos marked the beginning of one of the most consistent state commitments to the creation of national culture and the expansion of public education in the twentieth century. In the 1920s, the financial incapacity of state and local governments impelled the Public Education Ministry to take on an increasingly larger role in public education.[51]

In July 1920 Chihuahua Governor Abel S. Rodríguez published a manifesto affirming that one of the primary duties of the government is to honor the claim of the rights of the people to public services, "primary school being the base of all popular education, one of the most solid fundamentals of prosperity, of civic responsibility and of the peace so much desired."[52] As part of Mexico's determination to join the community of modernizing nations, over a thousand rural schools were built across the nation between 1920 and 1924, more than had been constructed during the previous fifty years.[53] While Ciudad Juárez could not be counted as "rural," the message was not lost on the border town. A substantial number of public and private schools appeared in Ciudad Juárez in the first half of the 1920s.

With the municipal treasury continually near depletion, private donations sometimes augmented the amount the municipal budget could allocate for school construction and operation. In June 1920 the former operator of the Tivoli gambling hall contributed $10,000 toward erection of a new school.[54] In February 1921 one school was under construction in Juárez and a second was in the planning stage. The first, La Chavena, built at a cost of 55,000 pesos, was expected to be ready for occupancy by 1 April. For the second, City Council designated 15,000 pesos to initiate construction of Bella Vista Public School. Private contributions for the Bella Vista project totaled 5,351 pesos and in September during the national Independence

Celebration the new school was dedicated.[55] An added measure of support surfaced when a patron "adopted" Bella Vista, offering to assume payment of teachers' and janitors' salaries, the cost of books, tablets, paper, and 10,000 sanitary drinking cups. Perhaps it was this kind of patriotic participation in progress that allowed the city to budget in 1923 for another school in the expanding Bella Vista *partido* (see map, Fig. 41).[56]

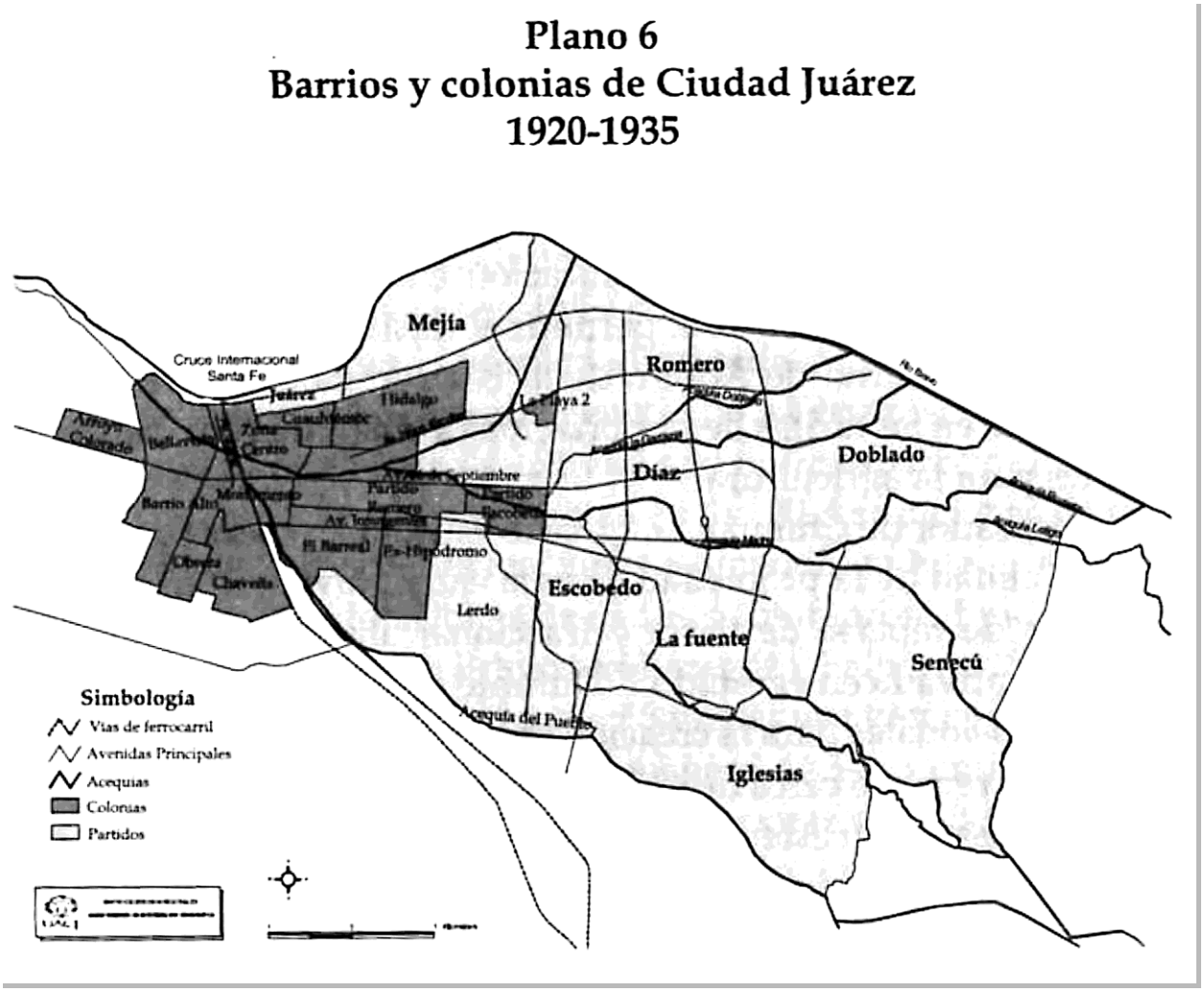

Fig. 41. Ciudad Juárez *partidos*, 1920-1935. Reprinted, by permission, Santiago, *Propiedad de la Tierra en Ciudad Juárez, 1888-1935*, 115.

Numbers of schools continued to grow. In August 1923 residents of the Colorado *colonia* sought permission to construct a school, asking help as the municipal budget should permit (see map, Fig. 41).[57] A business and language school existed in 1920 and in 1923 Vasconselos

granted a monthly stipend of three thousand pesos for the city's "trade school," presumably the same institution.[58] In January 1924 a prominent merchant and citizen of Juárez donated a large tract of land near the race track to be used for a new school building and large playground. At the same time, the state donated four thousand pesos per month for equipment and improvements to Juárez's education facilities. In April 1924 a new school, financed by the federal government, opened in the Mejía district, with several to be opened in the same district in the near future (see Fig.41).[59] The city also constructed a correctional school for unfortunate youth who "swarmed the streets," engaging in petty crimes.[60]

The Juárez Built Environment: Beyond Politics

Ayuntamiento records and later secondary sources focus on the inadequate state of Ciudad Juárez's city treasury and concurrent political tensions; the material environment tells of a broader dimension. Advertisements in the 1921 El Paso City Directory by a number of firms based in Juárez, a survey compiled by the Juárez Chamber of Commerce, and a comprehensive newspaper article together present an image of the recovering built environment. The active self-marketing of the companies listed below, most owned and operated by *juarenses,* suggests a commercial base surviving or reviving from the effects of war and depression.[61]

Universal Automobile Company—Ford
Juárez Banking and Investment Company
Agencia Aduanal, Angeles & Velarde (custom house brokers, importers, exporters)
Aguilar and Company, "Botica de Guadalupe"
Thacker & Baca, wholesale dry goods
Escudero & Martinez (customs brokers & commission merchants)
Joseph B. Smith, Importer & Exporter, Wholesale Only
Ornelas, Cuellar and Company (merchants & commission agents)

Manuel Trueba (exporter, importer, wholesale groceries)

Manuel M. Perez (customs broker & commission merchant)

Juárez Lumber Company

García, Carreno & Company, Mortgage & Real Estate

Most of these firms would have required offices and storage facilities for wholesale goods and groceries, imports and exports, perhaps bonded warehouses or other large depositories, necessary, even important, structures in a city landscape but generally not included nor described in historical records.

In addition to these Juárez business firms, a compilation of forty-one building projects extant in the city, their costs and locations, shows a remarkable amount of construction and reconstruction underway or completed in 1924.[62] Records of the architectural skeleton of the town enlarge the overall understanding of the built environment during this period of political and economic stress. Construction or restoration of business buildings included three whiskey distilleries, a cotton seed oil extraction company, and repair of the race track. The remaining thirty-eight appear to be private properties, most of them dwellings, their sites often indicated by *manzana*, or block, and street number. Many were located on the main streets of Juárez, supporting a tendency to densification identified by Arreola and Curtis, and Santiago; others spread across *partidos, colonias,* and *adiciones.*[63]

An *El Paso Herald* reporter's review of construction activity in Juárez printed in 1922 reveals vibrancy far beyond the constraints on the city's political structure. The article asserts that "Juárez never stopped its building operations." Described as a "building boom," solid commercial development was eradicating the decade of war damage the city had suffered. Construction of a new brewery commanded the largest expenditure; when it opened on 15 January 1922, El Pasoans flocked to the celebratory ceremonies. One "attractive new structure"

housed the Oasis cafe, which advertised liberally in El Paso newspapers. A mortgage company and a new hotel, the Río Bravo, contributed to the new and pleasing appearance of the heart of the city at the intersection of Juárez Street and 16 September Avenue. The hotel offered sixty guest rooms, and, according to the report, was rapidly becoming headquarters for prominent officials and distinguished visitors. The Alcazar Theater, the Hotel del Sur, and the showroom for the Universal Car Company faced Juárez Street. Some second floor space was divided and equipped as modern offices. The federal government had initiated renovation of the "once-magnificent interior" of the customshouse built in 1889 while numberless small adobe and lumber structures housed the growing citizenry. Plans for a new 300,000 peso post office were on the table, and a women's charitable group was raising funds for construction of an asylum.

Many citizens of Ciudad Juárez were investing in the future of their town and of the bi-national metroplex in which they functioned. The afore-mentioned new mission churches added to the built ensemble. The news article, written in a complimentary, even celebratory, tone, suggests an unusually warm attitude towards Ciudad Juárez. The report ended by quoting Mayor Antonio Corona: "El Paso and Juárez need the cooperation of one another and it is my greatest desire to see mutual understanding between these two neighboring cities."[64] The flow of reciprocal warmth took a plunge when, in September 1922, El Paso took umbrage at the open gambling offered in its neighbor's casinos and cabarets.

Hardening the Boundary Line: Fractious Dichotomies

Alexandra Stern argues that anxieties founded in nineteenth–century eugenics, the science of genetic improvement of the human species, exacerbated fears of disease being imported across international border lines. These factors contributed to a stiffening of regulations which instituted unprecedented practices in the immigration processing plants at El Paso and other ports of entry. Under the 1917 Immigration Act, a large group of selected applicants for entry into the United States was subjected to an expanded "medicalization" procedure of bathing and delousing, their clothing laundered, some individuals vaccinated for smallpox, and all baggage disinfected.[65] A final examination determined whether the prospective immigrant should be excluded due to physical or mental defects. Stern's work shows that medicalization created a system of eugenic gate-keeping on the border that aimed to ensure the putative purity of the 'American' family-nation while "generating long-lasting stereotypes of Mexicans as filthy, lousy, and prone to irresponsible breeding."[66] Stern further points out the contrast between a border with few restrictions or lax enforcement of existing laws, and a stiffer, more divisive boundary line that developed from 1915 to 1930. More stringent inspections and controls helped to solidify a border line that had previously been much more nebulous and, in doing so, helped to racialize Mexicans as outsiders and demarcate Mexico as a distant geographical entity despite its proximity to the U.S. The new restrictions not only intensified racial tensions in the borderlands; they also catalyzed anti-Mexican sentiment on a national level and fueled nativist efforts to ban all immigration from the Southern Hemisphere.[67] Ann Gabbert observes that medical inspection of immigrants at the Texas-Mexico border was as much a result of an increased awareness of the "Mexican menace" as of a genuine public health crisis. The U.S.-Mexican quarantine established a racialized boundary at the extreme edges of normal sanitary measures, and boundaries between population groups were redrawn along the international border.[68]

The 1917 Immigration Act created boards of special inquiry to investigate individuals' circumstances. Women and children unaccompanied by an adult male were sometimes detained on the grounds that they were likely to become public charges. Enforcement of old immigration laws had lagged because of the need in the U.S. southwest and west coast regions for industrial laborers and seasonal agricultural help. The new literacy requirement and the eight-dollar head tax made entry prohibitive for many. In spite of the increasingly exclusionist legal, cultural, and social barriers in place at the international check point, tens of thousands crossed from Mexico into the United States over the Ciudad Juárez-El Paso bridges every year during the 1920s.[69]

Congressional legislation, bureaucratic practitioners of the science of the day, and immigration officers played prominent roles in the hardening of the international border against penetration by "aliens." Local attitudes and behaviors had at least an equal bearing on perceptions and pragmatics of boundary "protection" and supposed territorial infringements. In late 1921 among the continuing influx of economic-minded entrepreneurs, health and entertainment tourists, and Mexican laborers, the Ku Klux Klan, self-described as the "Invisible Empire," briefly established itself as a major force in El Paso society and politics. Shawn Lay's research posits that the Klan's overtly racial politics resonated with other Anglo newcomers who had never had the opportunity to be socialized into the tradition of cultural tolerance common at The Pass. In large part because of El Paso's experiences during the Mexican Revolution and World War I, a sizeable Anglo bloc had developed by the early 1920s that distrusted the city's large and expanding Mexican majority. When the Klan arrived in 1921 with its solemn vow to "strive for eternal maintenance of white supremacy," the secret order found a ready audience. Moreover, because the Mexican majority was almost exclusively Roman Catholic and the bulk

of Anglo newcomers were southern evangelical Protestants, the Klan had a splendid opportunity to pose as the local champion of "imperiled Protestant civilization."[70]

Loosening of traditional mores in the "flapper" age of the twenties heightened local concerns about social morality in El Paso. To those already unsettled by the rapid pace of social change and disturbing new moral codes, the Juárez vice industry represented a major threat, a perception that reinforced racial prejudice against Hispanics at large. Some El Pasoans resented community leaders' perceived negligence in supporting the war on 18th Amendment violators. The desire for moral and social reforms clashed with the knowledge that convention planners and tourists chose El Paso as a destination site expressly for its convenient access to entertainment and diversions in Juárez that were forbidden in the United States.[71] The Klan's adaptable program of Americanism, Protestant fraternalism, better law enforcement, and a return to traditional morality proved very attractive.[72] A circular sent out in November 1921 urged local ministers to inaugurate a new moral cleanup campaign, promising the full support of the "worthy citizens" who composed the Klan's membership. The cordial reception given the KKK by Protestant moral reformers contrasted sharply with the stance of El Paso's business and political establishments which issued frequent vociferous denunciations of southern style racism and religious bigotry.[73] Some individuals of an alleged El Paso Klan membership of over three thousand in 1921 worked themselves into influential civic positions, including a majority on the El Paso school board. Klan activists organized a new El Paso Good Government League whose proclaimed purpose was to exacerbate racial divisions.[74]

Throughout 1922 the Ku Klux Klan's social and political agenda became increasingly bold, although Lay argues that local economic stratification of the El Paso chapter members, mostly middle class, ensured that the membership remained a law-abiding group that eschewed

the violent vigilantism sometimes employed by the Klan in other venues. This restraint did not hinder pursuit of the organization's goals for "good government" which it equated with a less liberal social environment. In March 1922 scores of El Pasoans received mimeographed messages, affixed with the official seal of Frontier Klan no. 100, El Paso's chapter, warning against recreational trips to Ciudad Juárez, with a darkly implied threat about "dynamite's potential to explode."[75]

The Volstead Act, declaring illegal the manufacture, production, use, and sale of alcoholic beverages, dramatically altered the social relationship between the border towns and stirred up difficulties in Ciudad Juárez vis-à-vis Mexico's state and federal authorities.[76] However, in a curious associative transference, instead of objections against access to liquor, open gambling became the flashpoint which ignited a storm of opposition by El Pasoans. In the years between 1905 and 1907, Texas legislators had outlawed gambling, thereby suppressing public gaming in El Paso and generally removing casinos from its city streets, although El Pasoans could easily indulge the urge to wager in the "sister city," especially during the periodic fiesta times. But new, more abstemious administrations in Mexico City wrought changes in the vice industry at the border. In August 1920 interim President de la Huerta issued a peremptory order for immediate closing of gambling in Juárez and other border towns. While temporary compliance may have closed some casino doors, the government found it necessary to reissue orders to shut down gaming establishments.[77] One year after de la Huerta's decree, another ruling came down from President Obregón. Even though the gambling concession at Ciudad Juárez reportedly paid the state and federal government 50,250 pesos per month, the Obregón mandate shuttered at midnight the best-known cabaret in Juárez, the Tivoli.[78] The executive push for closing the gaming industry stemmed from the national political ideology, the stated goal of

which was "redeeming the Mexican people from the poverty, vice, ignorance, immorality, and corruption that many revolutionaries believed had plagued the country under the long dictatorship of Porfirio Díaz."[79]

The putatively immoral effects of the gaming industry continued to be for many a troubling social undercurrent, but 1922 proved to be a pivotal year for determining who could or should control the very existence of gaming establishments in Ciudad Juárez. That year the post-World War I depression reached west Texas; the El Paso Chamber of Commerce later admitted that 1922 had struck El Paso's economy one of the hardest blows in its history.[80] Perhaps financial stress made the town ripe for a campaign against the outflow of its dollars to Juárez gambling establishments, an issue argued strongly by a faction of the town's businessmen. Little doubt existed about the numbers of El Pasoans patronizing its neighbor's cantinas and casinos. Horace B. Stevens, long a prominent businessman and real estate broker, made an informal investigation which he claimed showed that five hundred cars went to Juárez after 5 o'clock on weeknights and nine hundred on Saturday evenings. In addition to the auto traffic, an average of thirty street cars crossed the bridge, each car averaging fifty persons.[81] Stevens' figures, estimating an average of three persons to each auto, counted a total of 4,200 people traveling to Juárez from El Paso on a Saturday night. Further corroborating the heavy trans-river traffic, in August 1922 the El Paso Electric Company published the numbers of passengers who traveled during June on its electric street cars, a total of 1,266,138, a count which included 1/2 fare and non-revenue passengers.[82] Many of these passengers traveled across the international boundary line for a variety of reasons. Some, as Irigoyen pointed out, passed from south to north for purchasing basic necessities and comforts; others, as El Paso observers were keenly aware, went from north to south, spending their dollars on recreation

and entertainment illegal in their own city. An unknown number of persons lived on one side of the border and worked on the other. The effort at halting El Paso's financial losses, however, would be couched largely in moralistic terms.

Adding to the social mood, in September 1922 traveling evangelist Bob Jones stirred up the moral indignation of quite a few El Pasoans by circulating petitions at his series of meetings demanding closing of Juárez saloons; some 10,000 signatures attested to the public demand for political control of individual behaviors considered in some quarters to be debilitating, especially to El Paso's youth. When the subject came under discussion at a subsequent Chamber of Commerce meeting, an opposing response insisted that legislating morality was impossible. Nevertheless, a strong groundswell surfaced, demanding action to prevent people of all ages from frequenting Juárez gambling parlors, cantinas, and cabarets. The objectors wanted the vice "dens" closed down.[83]

Compliance in Juárez with Obregón's earlier mandate for casino closings had proved at best sporadic under local enforcement. Rather than close the saloons, in April 1921 the Juárez Chamber of Commerce had named a committee to consider management of the hours the town's cantinas and bars could operate, and to regulate quality of liquor sold.[84] For the annual December Feast of Guadalupe some provisional gambling permits were issued with slot machines restored and much gaming paraphernalia in place. Proceeds of the festival operations were earmarked for completion of a school building under construction and for other city improvements.[85] Perhaps reiteration of this very creditable purpose sanitized to some extent the social stigma attached to open gambling. At any rate, in January 1922 gambling resumed in the old Tivoli, renamed the Latin-American Club.

From 22-25 of September 1922 debates raged in El Paso's Chamber of Commerce halls with a variety of public factions exchanging excited, sometimes hot-tempered, points of view. Although the mayor and the Chamber of Commerce of Juárez declared in favor of eliminating gambling and adopting a more rigid control of saloons, some El Pasoans devised a heavy-handed approach to ensure closures. If Juárez saloons were not completely shut down, would-be reformers insisted that the international bridges must be closed. Determined to wield the constructed environment as an instrument of social control, they intended to convert the bridges into moral guardians of El Paso's youngsters, barriers against harmful influences. Moreover, proponents of this course proposed to operate the bridges as levers for forcing Juárez to change its economic practices. If this effort became successful, the bridges would act as agents for extending the values and mores of some El Pasoans across the border to Juárez.

When a vote taken in the El Paso Chamber resulted in 75 to 9 for earlier closing, the debate soon evolved to a question of not whether the bridges should be closed but of how much earlier than the customary 12:30 a.m. Some argued for nine o'clock, others for eight, some as early as six p.m. Cooler heads began to confer, trying to formulate plans for bridge closings satisfactory to both cities. Word of the controversy reached President Obregón in the form of a letter sent by Adolph Schwartz, president of the El Paso Chamber of Commerce, informing Mexico's chief executive that open gambling had resumed in Juárez. The President's reply assured Schwartz that Chihuahua Governor Enríquez would allow no more gaming.[86]

This week-long incident emphasized the well-developed long-term economic interdependency that existed across the international border. The disagreement became a sort of tit-for-tat confrontation. The Juárez Chamber's Foreign Relations Committee pointed out that early bridge closings would force hundreds of people living at the time in El Paso to move across

the border. Others asserted that much of the money spent in Juárez casinos, cabarets, and gambling parlors returned to El Paso banks. A communication from the Juárez Chamber of Commerce suggested that strict enforcement of the Mexican customs regulations covering the importation of merchandise from El Paso would unquestionably stop all retail purchasing by the citizens of Juárez in El Paso's stores, reducing private profits and public tax revenue. Irigoyen's campaign for Free Perimeters, known in El Paso, was considered a retaliatory threat to bridge closings. H.B. Stevens, who had conducted the bridge crossing count, remembered the old Free Zone; he dismissed the idea as an empty threat with the remark that "they tried it once and the Mexican people stopped it themselves."[87]

International politics and legal restrictions seem to have cooled the momentary mood of "nervous hysteria." In the opinion of Judge Waters Davis, the closing of the bridge at a specified time posed a serious and difficult problem because of the international questions involved. If Mexico as a nation should object to its closing, the judge held no doubt that the U.S. Secretary of State would refuse to give consent to the proposed action. H.R. Gamble, assistant United States attorney general, opposed bridge closing earlier than the customary 12:30 a.m. hour on the grounds that it contradicted "the great effort to establish cordial and congenial relations with Mexico."[88] According to assistant supervising inspector of immigration for the Mexican border George J. Harris, "no law exists insofar as the immigration service is concerned which will permit its officers to prevent the entry of American citizens at any time, day and night."[89] The immediate urgency of the issue apparently abated when these authoritative statements came to the attention of protagonists on both sides of the question.

In October a palace for electrical keno at a cost of 59,000 pesos was scheduled to open in spite of opposition from Governor Enríquez and President Obregón. It seems that Juárez

authorities were becoming less and less willing to submit to mandates that they perceived against their best interests, but a rapid response to the town's non-compliance came from the higher levels. The governor's office ordered seventy-five of Juárez's saloons locked up. Other planned reforms included moving "Devil's Row" from the center of the city, and deporting "undesirable Americans" to the United States. Through 1922 and until 1924 the bridge remained open nightly until 12:30 a.m. In 1923 the Juárez *cabildo* continued to grant some concessions for cantina operations, albeit under new regulations.[90]

Although the previous phase of agitation for earlier bridge closing had abated, it had not ended. Through 1923 and up to January 1924, dissatisfied El Pasoans complained to both Washington, D.C., and to Mexico City, continuing to demand a cleanup of gambling conditions in Juárez. The *El Paso Herald,* claiming a direct Washington source, reported that the State and Treasury Departments, as well as branches of labor, immigration, and public health "favor early closing of the bridges to Juárez."[91] Nine o'clock closings of the southern California ports to Mexico encouraged El Pasoans to believe that the same thing could happen locally.[92] On 22 March 1924 word came from Washington that the Treasury Department had ordered the international bridge at El Paso closed at 9 p.m. daily, action taken in response to "representations from many residents of El Paso, led by ministers and church and club organizations, who feel that the night life at Juárez is a menace to the morals of the city on the American side."[93] At first it appeared that the moralists had won the battle. On 2 April 1924 the *Herald* reported that Juárez gambling den promoters paid off all employees and announced that gambling was closed permanently. But former Chihuahua governor Reynaldo Talavera countered that "if the Americans are going to keep the bridge closed at 9 every night, we may as well have gambling. The state treasury is practically depleted, and with the erection of many new schools, and other

numerous expenses caused by the war, we need funds." In September 1924 with El Paso's first International Agricultural and Trade Exposition in full swing (see below), immigration officials made no attempt to enforce the closing law and "come-on men" stationed outside saloons on the main street of Juárez were cheerfully inviting the public to "come inside and take a chance."[94]

The controversy refused to die. In January 1928 El Paso's Commercial Club passed a resolution for an all night open bridge and sent it to Secretary of the Treasury Andrew Mellon. The group argued that the full measure of prosperity in store for both Juárez and El Paso would never be realized until the bridge remained open twenty-four hours a day. Juárez bankers and businessmen agreed, according to the news article.[95] In March 1928, Assistant Secretary of the Treasury Seymour Lowman denied the request; the bridge closing time continued to be 9 p.m. But in June 1929, since all other ports along the border were open until midnight, the privilege was extended to El Paso, the change to go into effect immediately.[96] By this time, El Pasoans seem to have come to terms with Juárez gambling as long as municipal regulations were enforced. Pushing the issue farther, in February 1930, El Paso and Juárez Chambers of Commerce jointly made requests to both countries' governments for all-night open bridges during the Juárez Mardi Gras celebration planned for 2, 3, and 4 March. The Mexican government granted permission; the United States Treasury Department did not.[97]

As they had in the arrangement of the urban form of El Paso del Norte during the colonial period, once again local economic imperatives overwhelmed directives from central authority based on cultural preferences. Many influences on both sides of the border made extirpation of cantinas, casinos, and cabarets from the border town impossible. Perhaps the effort to eradicate the vice industry at the border was not entirely whole-hearted, since opportunities for entertainment, diversion, and pleasure brought tourists across the border and constituted an

entrance into viewing the natural beauty, cultural charm, and larger economic potentialities of the neighbor country. In spite of the sometimes bitter, long-lasting inter-urban controversy, the partnership between Ciudad Juárez and El Paso recovered a measure of amicability.

Evidence feeding into the many sided dilemma leads not to one conclusion, but to a variety of deductions. The active part taken by the El Paso Ministerial Alliance supports the premise of a spiritual upsurge that underwrote new church construction in the 1920s. The legislative aspects of the recent political battle for a wet or dry Texas may have influenced the effort by a segment of El Pasoans to control access to liquor and gambling in what amounted to its suburbs, since prohibition had strengthened the bi-municipal relationship.[98] Before the National Prohibition Act went into effect, a proposal of the progressivist camp would have allowed people of every community the right to exclude the liquor traffic when the people of that community so desired. The proposed statute applied to townships, counties, and municipalities. Even though voters in some cases approved the plan, courts tended to disallow it.[99] The citizens of the Texas town may have been conditioned to the idea of local hegemony through knowledge of the previously proposed statute regarding this particular issue; in 1922, they seemed intent on moralizing private life through public action.[100] Perhaps this behavior also stemmed from El Paso's ongoing ambition to join the ranks of collective urban responsibility sweeping across the United States, as it had desired to enter the technological rush of industrialization and modernization. This is not to discount the element of spiritual and moralistic zeal that animated the period, but to explore the multiplicity of currents flowing across the Texas-Chihuahua borderlands. The cross-border dialectic eventually produced a synthesis, a regulated gambling environment and an agreed upon bridge closing hour.

El Paso's Recovering Economy and Civic Identity

In September 1924 the manager of the El Paso branch of the Federal Reserve Bank of Dallas penned a gloomy review of economic conditions in the region. In his opinion, few sections of the United States had experienced for so long a period the dire aftermath of World War I. Seeing the region's production as nothing but raw materials, agricultural products, livestock, and raw metals, the bank official noted that "our major product, cattle, has been below the cost of production and production itself has been hampered and almost stifled by severe and continuous drought until we have been almost overcome."[101] The bank official seemed unaware that El Paso's business community had begun to make concerted efforts to reinforce the local economy and to re-establish a definitive commercial identity. In 1923 as part of a widening regional outlook, the city organized a week-long gala to be held in May to celebrate the fifty years of its existence since incorporation in 1873.

Returning law and order in northern Mexico encouraged a broader, more inclusive vision of regional commercial potential, and this notion became a strong theme in El Paso's anniversary observance. Invitations went out to officials and prospective celebrants across a wide geographical range. Along with parades, speeches, and band concerts, the event included a Mexican industrial exhibit displaying products from Monterrey, Guadalajara, and Mexico City. A special train brought the governor of Jalisco and his entourage, which included that area's "duchess," one of twenty four young women representing their respective locales, the remainder in Texas and New Mexico.[102] Perhaps it was partly the success of this event that led to a second exposition staged in September 1924 with even stronger emphasis laid on El Paso's large trade territory and manufacturing potential.

The El Paso Electric Company strongly supported the 1924 event, advertising the "International Fair and Exposition" as the "first serious attempt to bring together the people and

the industries of the Southwest in an Exposition that will instruct, recreate, and entertain."[103] Writers for the electric company's publication pointed out the extensive range of natural resources in Mexico's adjacent northern tier of states—copper, iron, manganese, platinum, tungsten, and sulphur, as well as oil and extensive timber stands. Equally important, in New Mexico substantial lumber stores as well as the "largest coal fields of any state west of Illinois" further encouraged economic visions for the region. Investors and miners who purchased equipment and supplies in El Paso were beginning to exploit these riches. Looking ahead to development of this most fundamental of resources, from May to December 1920 the *Agencia de Minería de la Secretaría de Industria y Comercio* based in Ciudad Juárez granted more than three dozen permits to individuals and corporations for mining exploration in Chihuahua. The applications show that prospectors sought a wide variety of metal ores from the Chihuahua terrain.[104] One writer claimed that copper mines in the El Paso territory, which included northern Chihuahua, at the time were producing one-half of the American supply and one-third of the world's supply in normal times.[105]

Implied in the fashioning of the exposition was opportunity which beckoned to entrepreneurs at all levels of potential industrial development.[106] Exposition organizers' intentions to make the resources of the territory more familiar to the U.S. public and to present El Paso truly as the trade center and market for the southwest found a ready response in the trans-border commercial community. Some two hundred merchants, among them about fifteen large concerns from Mexico, signed up for exhibit space in the 200,000 square feet of electrically lighted floor space made available by the fair's designers at grounds on Magoffin Street east of downtown El Paso.[107] When the International Fair and Exposition opened on 18 September, newspaper headlines emphasized Mexico's participation with descriptions of its industrial,

agricultural, and mining products and progress. The governors of Texas, New Mexico, Chihuahua, Sonora, and Nuevo Leon honored the event by attending and on 24 September, twenty thousand persons participated in the Mexico Day celebration.[108] On West Texas Day twenty-seven towns were represented, with special trains carrying many visitors to the exposition. The occasion concluded with a statement from the West Texas Chamber of Commerce which emphasized the success of the exposition in bringing forcibly to public attention the vast resources of the Southwest and of Old Mexico.[109]

While El Paso's efforts at economic self-promotion did not result in giant leaps forward, its mainstays, agriculture, wholesaling, and mining-and-smelting steadily gained ground. In 1925, El Paso's city fathers adopted a formal City Plan which recognized its basic character as the "natural concentrating and distributing point for all passenger travel in the Southwest, as well as for all trade and industrial traffic."[110] That year El Paso counted one hundred fifty wholesale houses and two hundred eleven industrial plants and shops. Agricultural production and stock-raising in the surrounding areas had forged ahead after the completion of the Rio Grande reclamation project in 1916, including the Elephant Butte Dam and Reservoir which allowed irrigation and cultivation of one hundred thirty thousand acres of the fertile valley land on the Texas side of the border.[111] By 1929 that number had increased to two hundred thousand acres with several thousand acres remaining to be developed.[112] Throughout the decade mining and smelting maintained an important position, with El Paso's facilities processing five hundred thousand tons of ore per year. By 1928 El Paso saw an increase in the number of its manufacturing plants to two hundred twenty seven.[113]

The effects of two major conflicts, World War I and the Mexican Revolution, compelled profound changes in the regional economy. From a pre-war business income based on tourism

and the health industry, during the decade of the 1920s El Paso developed a much wider perspective and perception of its economic role and position beyond the borderlands, reaching outward into the international flow of supply and demand.

Moving Ahead: New Bridges and Airports

The middle of the decade was a time for realizing earlier ambitions and looking ahead to utilizing the latest technologies in communication and transportation. As early as 1910 some had dreamed of a steel-reinforced concrete bridge to replace the well-worn, much-repaired bridges that linked El Paso and Juárez; in 1924 the notion came to fruition.[114] The concession from the Mexican government for the street railway to operate in Ciudad Juárez carried a provision obligating the El Paso and Juárez Traction Company to replace the wooden structure of the Stanton Street bridge that fed into Lerdo Avenue in Ciudad Juárez with a metal or steel re-enforced concrete structure not later than 2 November 1924.[115] With the bi-national community in full support of the project, officials of the bridge building company, the Mexican and American Sections of the International Boundary Commission, Mexico's Department of Communications and Public Works, the United States Secretary of War, and the U.S. Chief of Engineers conferred and collaborated with few delaying impediments. In January 1924, the United States Senate passed "An Act granting the consent of Congress to the construction of a bridge across the Rio Grande" and in March awarded the contract to build to the R.E. McKee Company.[116]

Massive steel-reinforced concrete piles, driven into the river's bed-rock, supported the spans, the whole electrically lighted; the cost of the bridge was $180,000.[117] In 1929 the Electric Company constructed a new Santa Fe Street bridge in the same materials and roughly the same dimensions as the Stanton Street Bridge, with a few added features aimed at permitting more efficient handling of heavy traffic.[118] Up until 1925 the bridges were one-way traffic only, except for pedestrians. A new twentieth century emphasis on scientifically planned efficiency and speed

Fig. 42. International Bridge, 1924. Courtesy of El Paso County Historical Society.

led designers to create lanes for specific types of traffic, including pedestrian, bearing out Dant's theory that humans are subsequently shaped by the works they produce. On the Santa Fe Street Bridge, iron railings separated pedestrians and vehicles, allowing "traffic to flow in a steady, uninterrupted stream," but also directing people and autos in very specific ways. As long as the streetcars were powered with electricity, they continued to follow the one-way pattern south on

Stanton Street, thence through Juárez, returning north over the Santa Fe bridge. The new bridge design also provided customs facilities with an eye to speeding up and easing the work of inspections. When the bridge opened about 1 August 1929, one observer judged it to be thoroughly modern in every respect . . . one of the handsomest in the Southwest."[119]

The decade of the 1920s closed with a triumph in transportation and communication for the border metroplex. In 1925, while making a comprehensive and definitive effort at city planning and attempting to envision oncoming contingencies, the El Paso City Plan Commission noted the need for a "flying field."[120] Enthusiastically entering into the latest technology in transportation and communication, both El Paso and Ciudad Juárez opened airports. In September 1928 El Paso allotted a two hundred and sixty acre area on the east side of Franklin Mountain, action recommended in the 1925 City Plan as a move toward a future in league with the burgeoning air industry. The west Texas town's location and history in distribution made it a natural connecting point for air travel across the U.S. The north-south high altitude ridge of Rocky Mountains posed an obstacle for airplanes of the day as it had for the railroads in the nineteenth century. The easier and safer method was to plot a course where another kind of "pass" allowed flight at lower elevations.

Two months after the new facility's inauguration, Scenic Airways of Chicago became its first corporate tenant. The lease with the city permitted the company to build a hangar, maintenance shop, and business office. The Scenic Company offered servicing for transient planes, air taxi and charter flights and a flying school. The company agreed to give free flying lessons to one city employee per year. By February 1929 Texas & Pacific Railroad and Standard Airlines inaugurated the first regularly scheduled passenger airline service integrated with rail transportation. Travelers arriving by train in El Paso transferred to a plane bound for points in

Arizona or California. The same convenience was available to eastbound travelers. Government airmail contracts meant survival for the early airlines, enhancing the ability to attract tenants and increasing traffic to local airports. In November 1929 the *Corporación Aeronáutica de Transportes* was regularly carrying airmail and passengers between El Paso and Mexico City.[121] At the beginning of the 1930s, the Department of Commerce announced the creation of a Southern Transcontinental Air Mail Route from Atlanta, Georgia, to the Pacific Coast, passing through El Paso. That the public well understood the significance of this action was evident when 15,000 citizens turned out to welcome the first planes to fly the new course. In 1930 commercial air traffic through El Paso moved to an airport farther east, away from the danger of the mountain range that affected its original site.[122] Aviation transported both towns into a new arena of modernity. The opening of Carranza Field, Juárez' new municipal airport, on 11 August 1929 drew a crowd of 10,000 enthusiastic celebrants to witness the formal dedication. The comparatively smaller size of the Juárez airport did not diminish its larger determination to keep step with modernizing technologies.[123]

The effects of the stock market crash of 29 October 1929 did not incite panic in El Paso in 1930. At the end of the year El Paso's banks reported no loss in deposits and resources, while the Chamber of Commerce and the *El Paso Times* stoutly asserted the institutions' stability.[124] In April the federal government announced the planned construction at El Paso of a prison with a capacity of five hundred inmates to cost $800,000, calculated to be a substantial asset to the city in initial expenditure and in later contracts with local suppliers.[125] Building permits issued in November 1929, many for homes, represented the "largest single month's business in history," according to a city official and in February and March 1930 reports of high volumes continued. El Paso school board officials opened a large new secondary school, Austin High School, in

September 1930 in the northeast section of the city. Approval from Austin of city-issued bonds cleared the way for school financing and other improvements.[126] In May new commercial construction housed the Clifton-Fitzgerald-Neece Packard auto sales and service agency.[127] However, by November 1930 city officials instigated improvements to El Paso's built environment for the stated purpose of supplying work for local laborers. The City Council voted to speed repairs and upgrades of municipal systems. The constructed cityscape not only reflected the state of municipal affairs; it also became an empowering agent for sustaining the town's economic position.

Summary

Rapidly growing populations, recovery from the effects of wars, social legislation and unfamiliar political responsibilities came together in the Pass cities during the 1920s, altering the built environment and its use. Objects from churches to schools to bridges carried and projected philosophies, ideals, and cultural preferences. The way people—individuals and groups—build, the locations and materials they choose, and the timing of construction informs group identities and their roles in the community. In the borderlands a variety of architectural styles is to be expected. Eclecticism reigns; complexity obviates narrow interpretation. Sets of objects in the borderlands urban context shared the social, political, and economic work that created the border-specific arena for El Paso-Ciudad Juárez interdependency. Glassie's "sets" is a useful tool for drawing out the meanings of ecclesiastical architecture, which in El Paso in the 1920s existed as part of a highly complex congeries of circumstances.

The repeated use of locally quarried blue limestone and fired brick grounded the city's religious meetinghouses solidly into the local *terra firma*, literally and figuratively, and created a

certain visual unity across the scope of the denominations who built from 1893 to 1927. A centuries-old tradition of churches built in stone no doubt played into the choice of materials; values of dignity, permanence, and spiritual power have long infused these most durable and stable materials. Stylistic similarities suggested a socio-cultural unity in El Paso's internal struggle against "vice and immorality." The timing of constructions, from 1920 to 1927, coincided with enforcement of legislative action, the Volstead Act, by the United States Congress which seems to imply an additional intentional statement.

During the early 1920s differing laws, cultural traditions and preferences generated discord at the Pass. The heated controversy prompted an attempt by some El Paso reformers to employ a solid feature of the built environment, the bridges, as a means of social control of its own youth and of the Juárez entertainment and recreation suppliers. Advocates of bridge closings at an early hour supposed the measure would somehow police morality; opponents argued the futility of such an action. Moreover, the restriction, when employed temporarily, imposed adverse consequences on the economic life of its neighbor city. Whereas previously the international bridges had performed both as conduits for and brakes on accelerating immigration into the United States from Mexico, heightened socio-cultural concerns reversed the bridges' role. Reformers intended to halt, or at least impede, border crossings from the U.S. into Mexico, although on a smaller scale. The steel-and-concrete linkages had long been and continued to be agents for social engineering. More and more the bridges mediated as agents of medicalizing immigration procedures between U.S. border regulations and northbound Mexicans and residents of Juárez who crossed regularly. Intimately identified as sites of exclusion, or selective inclusion, the bridges enforced increasingly troubling racial differentiations. This "hardening" of the border added another dimension to the role of the bridges. Emerging from a past heavily dependent on

the Roman Catholic Church for educating Mexico's children, officials and citizens of Juárez faced unfamiliar responsibilities for secularized public education of its population. The post-revolutionary community created a built environment for nurturing the younger generation in values outside the traditional conservative curriculum. Ever cradles for communicating values and cultural creeds, more and more schools arose in Juárez to meet unprecedented demographic and ideological demands. Juárez city fathers strained to construct a municipal plant that could fulfill societal expectations. In addition to legislative mandates, sheer numbers compelled construction of new schools. A variegated battery of funding sources complicated the task.

Churches, bridges, and schools thus contributed to civic and social changes, for better or worse, depending on the point of view. Airports carried no such baggage. The Pass cities welcomed these harbingers of the latest modes in moving people and goods with robust enthusiasm. Aviation introduced a dimension of modernization that pointed toward a future unbound by rails or roads. The features of the built environment in this chapter bear out the philosophy that humans construct the material environment; thereafter, those created items shape their users.

Fig. 43. El Paso and Ciudad Juárez, 1929. Reprinted, by permission, M. Tarabulski, Library Technician, International Boundary and Water Commission.

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[49] Meyer, *Course of Mexican History,* 547.

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[58] Chávez, *Sesenta años de gobierno municipal*, 201.

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[127] *El Paso Times*, 17 May 1930.

CONCLUSION

The Significance of Material Culture

In concert with material culture theorists, evidence has shown that the built environment on the border between Mexico and the United States is a useful tool for analyzing the vacillating nature of the relationships manifested over half a century at The Pass. During the seventeenth and eighteenth centuries, construction of the physical environment of El Paso del Norte forged unprecedented agricultural-hydrological sodalities within the members of a tiny colony along the south (right) bank of the Rio Bravo del Norte on New Spain's northern frontier. Reliance on the acequia system knit together a community that thrived on the yield of the deeply fertile soil deposited by the Rio Grande over millennia. Within the same precinct, peoples from two very different societies melded to build a second long-lasting symbol of their newly-shared cultural convictions, a sacred site which thenceforth molded generations of practitioners partially by its very existence and its physical form. An expanded irrigation system and *La misión de Nuestra Señora de Guadalupe del Paso del Norte de los Mansos* introduced to some local residents new methods of sustenance and established a society that endured for more than two centuries, perpetuating its *genius loci* and eventually spawning another community on the opposite bank of the Great River.

The war between the U.S. and Mexico, 1846-1848, marked a geo-political turning point for the region. The concluding treaty converted the Río Grande to an international boundary between the two young republics. A second major change occurred in 1881 when railroads arrived at The Pass, opening the area to industrialization and modernization, and carrying many of the physical components for transformation of the built environment. Subsequently, structures

of iron, steel, wood, adobe, brick, marble and bronze acted as mediators between and among all levels of society. During the 1880s humanly constructed bridges of timbers, ties, and rails blurred the international boundary established in 1848, i.e., the Great River. These spans initially required and enabled coexistence, cooperation, and collaboration between the two El Pasos, whose people quite deliberately constructed them in order to create those states of interdependency. From their earliest conception the bridges shaped some of the behaviors of political authorities and businessmen, consumers and parishioners, to name only a few of the sectors affected. The mutual effort in construction of the common physical infrastructure taught the human actors multiple lessons in management of municipal government and how to deal with upper echelons of political and industrial authority. Exhibiting and extending ambiguity, the bridges acted also as barriers: enforcers of tariff collection laws, as well as expressions of exclusion drawn by immigration legislation or inflamed social determinations.

Government houses in durable brick and stone extended patriotic zeal, political power, economic strictures, and cultural associations to the very edges of the international border. On both sides of the river, their architectural character, their funding, and their construction spoke of early dependency on federal authorizations and funding. By the turn of the century however, El Paso, Texas, managed to create a city hall which bespoke the town's political and economic maturity. The elegant neo-classical structure was conceived, designed, financed, and constructed by local government and business figures. On both sides of the river, heavy and light industrial establishments—railroads, smelters, ironworks, warehouses, a broom factory—stated the region's development in a distinctively muscular language. At the same time, cultural institutions in the two growing cities—libraries, schools, hospitals, commemorative statuary, churches—proclaimed the shared municipal commitment to social progress.

Clearly "things," humanly conceived and manufactured, incorporated physical presence, and transmitted socio-cultural meanings between and within the partner towns. The constructed architectural object is understood as "text" that signified intent and shared the social, political, and economic work of establishing and maintaining a fast-growing trans-border bi-national community.

Border Interdependency, 1880-1930

The nuances in the interdependency that permeated the character of the El Paso-Ciudad Juárez community emerge from an overview of major trends and changes in relations between the two cities. At The Pass early in the 1880s cooperation and collaboration created the undeniable coexistence which prevailed even during later periods of intense competition and bitter opposition. Economic and political forces from beyond the borderlands complicated the day-to-day operations of building and managing civic affairs and civil government in the two towns. For the half century under this study, controversies illuminated the shatterproof reality of the underlying bonds that welded the two communities into a many-faceted partnership.

Arrival of the railroads at The Pass in 1881 generated growth and change in both communities, reaching far beyond expectations—but perhaps not exceeding the dreams—of local residents and the influx of newcomers. Increases in population, commercial entrepreneurism, and municipal development demanded that ongoing, sometimes uncomfortable, sometimes profitable, adjustments be made by individuals and institutions. Socio-cultural ties and a common historical legacy could not always sustain a cooperative spirit against the onrush of modernizing and industrializing technologies which focused a spotlight on inequalities of economic opportunities. Beginning in the mid-1880s a spirit of rivalry arose between the two El

Pasos. On the Texas side a collective negative mind-set ran against the grain of the cooperative enterprise of international interests and local investors that had created the first bridges across the Rio Grande. Spanning the international border, these carriers-and-barriers immediately symbolized and reified an inviolable affiliation, at times unpalatable to some.

As soon as large-scale bi-national cross-border transactions became a daily pattern, tariff regulations established by central government agencies in Mexico City and Washington, D.C. set the border business sectors at odds. Efforts by the Mexican government to level the commercial playing ground frightened and infuriated the Texas town's mercantile quadrant, which saw Mexico's tariff rates drop far below the protective rates generally favored by developing nations. Reactionary behavior, in retrospect ill-advised and unwarranted, of the mercantile faction on the U.S. side of the international border, exhibited over two decades heightened the difficulties of maintaining a cooperative climate at the international border. Meanwhile, thriving retail businesses on both sides of the river competed for shoppers' expendable incomes. In spite of an increasingly hostile attitude on the Texas side, a bi-national pool of consumers developed, created by easy access via the trans-border street railway system to the merchants who offered the most affordable prices.

A widespread financial depression during the 1890s affected the local economy, slowing material progress appreciably. El Paso businessmen mistakenly laid most of the blame for the local recession on Mexico's tariff policies. Action by a group of the leading citizens of the Texas border town, the Texas legislature, and the U.S. Congress drove a wedge into the commercial and distributive services upon which both communities relied. Legislation suspended the bonded transport privilege enjoyed by the railroad companies, thus forcing trade goods from Europe and Asia to Mexico onto sea routes. By the turn of the century, the border complex at The Pass had

lost a major portion of the import/export volume it had formerly dominated. Reversal of the suspension of the railroads' bonded privilege did not translate into recovery of the lost freight business. Interdependency took on a bitter flavor; local investors were forced to turn to other forms of economic enterprise.

From 1900 to 1910 parallels in civic ambitions and agendas marked the trans-border relationship. Interest in greater cultural development produced similar alterations in the built environments. The street car companies reported rapidly growing revenue from their newly electrified trolleys, much of it collected from trans-pontine travel. Cooperation and shared celebrations characterized the decade. In March 1906 more than four thousand El Pasoans entrained to Ciudad Juárez, renamed from El Paso del Norte in 1888, to assist in honoring the city's historic patronymic figure, the late President Benito Juárez. Congeniality prevailed, especially depicted by the exuberant joint reception hosted by the twin cities when Presidents Porfirio Díaz and William Howard Taft met at The Pass in October 1909. The occasion projected an unprecedented extension of neighborliness on a national, as well as a local, scale. It was a welcome opportunity for the border towns to showcase their modernized and industrialized achievements.

The built environments of the two towns manifested opposite effects when, in 1910, the outbreak of the Mexican Revolution thrust the border interdependency into throes of unprecedented complexity. The struggle unavoidably affected the Texas town since the strategic Pass location provided immediate and broad-ranging rail access into the greater United States. El Paso found itself the focus of a plethora of demands and purposes. Although El Paso's post office, banks, and some schools, functioned as interim institutions for *juarenses* when services in Juárez were disrupted, rapid changes in political control, the numbers of military units stationed

there or staging actions into adjacent areas, and the thousands of refugees hoping to flee across the border converged to erode the built environment of the Chihuahuan town. The battles of 8-10 May 1911 and the mutiny in late January 1912 inflicted severe damages upon the commercial center of the city, portions of which were owned by El Pasoans. Later military actions continued to wear down the physical ambience of Mexico's border town even though city officials and citizens made valiant efforts to rebuild between the intermittent struggles for its control by various factions.

In contrast with the debilitating situation, El Paso continued to build schools, hospitals, and hotels. Even though working under the strictures imposed by federal authorities regarding use of construction materials needed to prosecute World War I, El Paso's builders attempted to meet demands initiated by the multitude of currents. After 1916, when Venustiano Carranza assumed the presidency of Mexico and imposed a measure of calm across the nation, municipal relationships began to mend at The Pass. However, effects of two wars created a serious economic downturn that lasted until 1922.

On the heels of World War I, socio-cultural currents sweeping across the United States brought on what appears to have been an awakening of heightened moralistic consciousness, exemplified perhaps in a measure by passage of the Volstead Act in 1919, which prohibited manufacture, production, sale, use or distribution of alcoholic beverages. Since Mexico had no such law on its books, restrictions on access to liquor did not pose a problem for El Pasoans. However, in an associative cross-over, local critical emphasis fell on the excesses of gambling available in the cantinas and casinos in Ciudad Juárez. The Pass municipalities clashed sharply as some local factions registered opinions and proposed a drastic policy—closing of the international bridges. This use of the physical connection between the two cities was an attempt

to control and regulate games of chance or, alternatively, to prohibit gambling altogether within the partnered community. Interdependency prompted an attempt to use the dominant connecting feature for socio-cultural purposes of a specific group. Within weeks the intensity of the conflict died down, although the basic controversy dragged on for several years before federal policies established bridge closing rules that extended uniformly across the east-west length of the international boundary.

Midway through the 1920s the two towns repaired their interdependency somewhat by pooling efforts to draw the resources of the broader surrounding region into their combined economic sphere. Rich mining, timber, and agricultural assets beckoned investors and entrepreneurs, promising returns that might shore up the dual municipalities' sagging financial situation. The towns staged a successful Industrial Exposition designed to draw attention to the possibilities attached to their location. A little later in the decade new steel reinforced concrete bridges replaced the old, wooden, much-repaired models, symbolizing the permanency of interdependency at The Pass. Facilities for air travel represented the ease with which international boundaries may be contravened. Municipal partnership, sometimes smooth, sometimes jagged, was and would always be an undeniable way of life.

Themes for Further Research into Material Culture in the U.S.-Mexico Borderlands

Further research into the physical environment of the partner cities at The Pass promises significant results. The city street grids of El Paso and Ciudad Juárez display municipal auto-biographies generally overlooked. They are filled with the names of historical figures and events officials and citizens considered important to commemorate. Some El Paso streets recall the service and roles of a number of early municipal participants discussed in this dissertation:

[Joseph] Magoffin, [James] Hague, [Anson] Mills, [Simeon] Newman, George Dieter, [William] Blacker, [William] Schuster, [C. N.] Morehead, [Ynocente] Ochoa, Porfirio Díaz, and others. Streets emanating from the original center of El Paso, Texas, indicate the direction of stagecoach routes outward to near and distant destinations: El Paso [del Norte], Chihuahua, Oregon, St. Louis (later Mills, then Main), Missouri, San Francisco, and Utah (later Mesa). See these designations on Mills' map in Chapter 1.

Renaming of avenues and streets in Ciudad Juárez shows historical and political progression, especially that of Calle Principal, later Calle Comercio, later yet Calle 16 de Septiembre (Mexico's Independence Day). Avenida Lerdo (sometimes known as Railroad) celebrates brothers Miguel and Sebastián Lerdo de Tejada y Corral, leaders of Mexico's Liberal Party over decades of its march through the nineteenth century. Other throughways honor important individuals such as Mexico's beloved deliverer from the French Intervention, [Benito] Juárez, and Vicente Guerrero, a leading general in Mexico's war for independence from Spain. Doniphan Drive, a military parallel on the Texas side, calls to mind the role of General Alexander William Doniphan in the U.S.-Mexico War of 1846-1848. What better foundation exists for constructing a material culture history at The Pass than that provided by its network of streets and avenues?

This dissertation is merely an introduction to investigation into the dual physical cityscape. A full study of El Paso's sacred architecture built from 1900-2000 would connect to ethnic studies and illuminate the town's multicultural background. A medieval-styled monastery stands a few blocks east of the Magoffin Home Museum. Who built it? Who operated it through the twentieth century? In another part of town a Muslim mosque and a Greek Orthodox church appear quite near to each other and show remarkably similar architectural features. Why? Many

houses of worship dot the city's precincts. It may be an unfounded assumption that all sites of worship adhered closely to traditional cultural preferences while congregants took active parts in the city's modernizing development. On the other hand, synagogues built by Jewish immigrants—who served in educational, political, manufacturing, and mercantile spheres—were readily identifiable. Further research into the built infrastructure may show some surprises in the behaviors of newcomers to the borderlands.

Much information may be gleaned from a study of El Paso's hotels, large and small, many of which were operated by women. This topic might connect women's studies with the built environment in new ways. El Paso's newspapers published much data about the roles and activities of women during the fifty years of this study. Another field, the rapid growth of the military-industrial establishment at The Pass, can be expected to profit from close scrutiny.

Limitations of material culture as a working tool for analyzing the socio-political and economic world of the past in the borderlands exist only in the lack of imagination about how to integrate the theories with the empirical data. Enlightening data offered by the buildings themselves, added to federal, state, and city records, biographies, library and real estate archives, newspapers on microfilm, and other repositories wait to be explored. The built environment of the U.S.-Mexico borderlands offers a rich field for further research and investigation.

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Mrs. Hodges's work experience includes four semesters of teaching in the Outreach Program of Pueblo Community College, Pueblo, Colorado, 1992-1994, and two semesters of World History Survey in an extension program offered by Otero Junior College, La Junta, Colorado, at the Arkansas Valley Correctional Facility, Olney Springs, Colorado, 1993-1994. From August, 2001- May, 2003, she served as an assistant instructor in the UTEP History Department.

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