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Fear and Loathing in Los Angeles: Industrial Decentralization and the Rise and Fall of L.A.'s Periphery

Alexander Bargmann
Claremont McKenna College

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CLAREMONT McKENNA COLLEGE

**FEAR AND LOATHING IN LOS ANGELES:
CAPITALISM, INDUSTRIAL DECENTRALIZATION,
AND THE RISE AND FALL OF L.A.'S PERIPHERY**

SUBMITTED TO

PROFESSOR LILY GEISMER

AND

DEAN GREGORY HESS

BY

ALEXANDER GNEITING BARGMANN

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Since NASCAR driver Ken Schrader's victory at the track's christening on June 21, 1997, Auto Club Speedway has housed up to 92,000 Californians eager to watch steel hurtle around the track at over 150 miles per hour.¹ Located fifty miles east of downtown Los Angeles in Fontana, the speedway, for most Angelenos, is no more than its Cherry Street exit off of the I-10.² But for Fontana, and those 92,000, the ground that the track occupies has been, and still is, the lifeblood of their local economy. Today, steel swoops by, into, and around the speedway in the form of cars, Japanese, American, and European. Until 1983, the passage of steel about Fontana was far different. Rather than shipped in as the backbone of cars raced around the speedway track at 150 miles per hour, Fontana exported steel that was heated, molded, and shaped into the ships of the United States of America's Navy.

In 1942, the Fontana Daily Herald, referring to Henry Kaiser, founder of Kaiser Permanente, read, "The 'Miracle Man' Comes to Fontana."³ Up until that year, the west coast lacked any large-scale steel plant.⁴ By December, the Kaiser Steel Mill in Fontana had a running furnace.⁵ Five months later, steel began to ship out, headed towards shipyards in Richmond and San Pedro where Kaiser had implemented unprecedented manufacturing systems – churning out his Liberty Ships in mere days.⁶ The federal government's Reconstruction Finance Corporation, a New Deal hangover, provided the initial loan necessary to pay for the plant. Angelenos perceived the plant as a key turning point in ending western colonialism, adding a necessary raw material that would allow

¹ "Looking Back: Key Dates," The Press Enterprise, <http://www.pe.com/sports/projects/2007/10years/#>.

² Using Union Station as a parameter for downtown Los Angeles throughout this thesis.

³ Qtd. in Mike Davis, *City of Quartz: Excavating the Future in Los Angeles* (New York: Vintage Books, 1992), 390.

⁴ Roger W. Lotchin, *Fortress California 1910-1961: From Warfare to Welfare* (New York: Oxford University Press, 1992), 154.

⁵ Davis, *City of Quartz*, 392.

⁶ Davis, *City of Quartz*, 392.

their factories to free themselves of the East.⁷ However, to see Fontana only from the perspective of the Southland's boosters ignores the plant's power as a symbol of urban and industrial transformations in the area.

Fontana, 50 miles away from Los Angeles' center, fell in line with the metropolis' tradition of urban decentralization. Boosters, reacting to fears about urban congestion in the 1920s, combined arguments about industrial decentralization with further commercial and urban growth for the city. During World War II, as more defense industry arrived in the Southland, boosters on the periphery developed new urban hubs far away from downtown. Fontana, alongside Palmdale, "the aerospace capital of the world," best characterize this phenomenon.⁸ The peripheral hubs depended on their respective defense industries, steel in Fontana and aerospace in the Antelope Valley. The defense industries served as Fontana and Palmdale's tickets into the regional economy. When those industries left or downsized, the two cities fell back into the periphery as fragile and distant suburbs in search of new industry to underwrite any future prosperity.

Prior to World War II, Fontana was an agricultural town in San Bernardino County. Just as steel embodied the industrial dreams of California, those rooted in Keynes, the New Deal, and global conflict, agricultural Fontana represented other notions of the California ideal. This first version, a local breed going back one hundred years romanticized some of America's greatest memories. In mixing this tradition with twentieth century industrialization and consumerism, Los Angeles created a blend of capitalism and culture that was proclaimed simultaneously the "First American City" and the downfall of Jeffersonian Democracy. Mike Davis applied a Marxist framework to

⁷ Lotchin, *Fortress California*, 154-155.

⁸ <http://www.cityofpalmdale.org/visitors/>

study the class warfare and political economy of Los Angeles. He wrote, “Fontana was the modernized Jeffersonian idyll: an arcadian community of small chicken rancher and citrus growers living self-sufficiently in their electrified bungalows.”⁹ Davis argues that American capitalism, by means of the New Deal and Henry Kaiser, maligned these humble beginnings and eventually led to Fontana the “junkyard.”¹⁰ While Davis’ framework provided a deep understanding of Los Angeles and how its culture was influenced by capitalism, his criticisms of the system are misguided. American capitalism did not destroy Fontana. Without capitalism, Fontana would have never existed – its original boosters, A. B. Miller, was an agricultural entrepreneur that envisioned a profitable community of farms where Fontana now lies. Rather, when community leaders, in places around the country, but especially in Palmdale and Fontana, implement their desires for local prosperity under the pretenses of misguided optimism, they overlook the implications.

Fontana, located outside of the topographical boundaries of Los Angeles city and county, was, from 1942 until its industrial demise, a peripheral cornerstone of the regional manufacturing grid – decentralized and planned by local boosters. Along with plants, airports, and runways pushing the Northern outer boundaries of Los Angeles into the Mojave and Antelope Valley, Fontana’s industrial presence represented the stretching of capitalism across the Southland’s campus. These trends were continuing and evolving fears of urban centralization and crowding that developed among Los Angeles planners, politicians, and businessmen during the 1920s. Loathing what they saw as the urban squalor overtaking Eastern cities founded in pre-industrial eras, these figures looked

⁹ Davis, *City of Quartz*, 376.

¹⁰ Davis, *City of Quartz*, 373.

outward – dispersing and segmenting industry and population. With these anxieties internalized, the city experienced depression and then a war, in which the airplane was paramount, which brought magnificent spoils in the form of defense contracts and demand for manufacturing. As the city continued its outward growth, it grew into a regional economic metropolis ever progressing forward and outwards. In 1949, Carey McWilliams, a historian of the city and progressive booster, wrote, “The ‘spread-out’ character of Los Angeles has lent itself to a new type of industrial development, fitting in with modern industrial methods.”¹¹ Fontana, Edwards Air Force Base, and Palmdale embody this new type of industrial development.

Roger W. Lotchin, an urban historian who wrote *Fortress California 1910-1961: From Warfare to Welfare*, established the argument about boosterism that Fontana and Palmdale represent on periphery. Rooted local boosters worked to advance their city, co-opting the federal and defense spending during World War I, the New Deal, World War II, and postwar prosperity to continue Southern California’s history of booms. The “fragmented metropolis,” as Robert Fogelson calls it, is the result of the booster movement’s work. Among other things, fears of industrial congestion, traffic, and centralized population, spurred the boosters to segment the city and develop outward and decentralized. The city’s early leaders sold decentralization in Los Angeles as its own commodity. The economic decentralization, along with the city’s allegiance to the automobile, established the “spatial fragmentation” of the city. Palmdale and Fontana represent the next step of these arguments, a step the boosters made in partnership with the military and defense related industries.

¹¹ Carey McWilliams, *California: The Great Exceptions*, (Conneticut: Greenwood Press, 1949), 238.

The empirical arguments made by Fogelson, Lotchin, Davis, and others, fall in line with the Los Angeles School of urban thought. Edward Soja, Michael Dear, Allen Scott, and Davis, are significant scholars associated with the school. The school argues for a postmodern or post-fordist understanding of the city.¹² This framework is contrary to the traditional Chicago School vision of a modern city built around a centralized industrial core – as in New York or Chicago. Rather, with Los Angeles as the paradigmatic example of the “postmetropolis,” the L.A. School suggests the current generation of cities should be understood as regional sprawl both spatially and economically – composed of urban peripheral hubs. Soja calls these “technopoles.”¹³ Both Fontana and Palmdale, in different and similar ways, characterize the empirical basis for such an approach. This thesis does not argue that the stories of Palmdale and Fontana suggest the “postmodern” framework is the only way to understand the city. However, the L.A. School’s framework and Davis’ Marxist approach help to illuminate the various implications of the booster led economic transformation of regional Los Angeles.

Rapid World War II production brought the onset of corporate industry and government contracts. However, World War II, alone, did not establish these industrial trends in Los Angeles. While Fontana’s steel mill was built in the climate of wartime

¹² The school is not strictly “postmodern,” but it uses the word to signify a break from the traditional “modern” city. Scholars use Post-fordist, as well as postmodern, to differentiate from past cities centered around a manufacturing core and the current trend in cities that emphasize both peripheral industry or the lack of a local manufacturing base with only a service economy present in its absence. Michael Dear’s “Urban Politics and the Los Angeles School of Urbanism” lays out the school’s theoretical approach and arguments. Michael Dear, “Urban Politics and the Los Angeles School of Urbanism,” *Urban Affairs Review*, November 2008, vol. 44 no. 2.

¹³ Edward W. Soja, *Postmetropolis: Critical Studies of Cities and Regions* (Wiley-Blackwell, 2000), 77.

demand, California, for thirty years, “had been trying to get a steel industry.”¹⁴ As the war came to a close, the city’s politicians and businessmen, products of the tradition of boosterism and very aware that all could come screeching to a halt without conflict, prepared to develop an urban landscape where their growth could continue.

Kaiser’s factory, Edwards Air Force Base, and Palmdale’s aviation park signaled a culmination, but it also laid a new foundation. Decades of industrialization within Los Angeles, stretching back to the 1920s, existed, but it was only with World War II that these dreams were realized into a regional powerhouse. The steel mill, along Fontana’s Cherry Street, represented the dynamic shift the Los Angeles economy was about to undergo, a transformation that established a regional, urban, industrial economy.

While present long before the 1920s, boosters working during that period amidst a frenzy of economic and population growth. They were determined to decentralize, fragment, and disperse the growth.¹⁵ As the city grew, its population and borders pushed outward. The Southern California boosters refused to have their constituents live in a crowded urban environment like that of Chicago or New York. Fontana and Palmdale, while far away from any sort of traditional downtown, were, and still are in Palmdale’s case, inherently a part of Los Angeles because of this idea of decentralization. As the metropolis grew during World War II new arguments for industrial decentralization were made on top of those first constructed during the 1920s. Palmdale and Fontana picked up the torch; both were simultaneously the next great step for Los Angeles urbanization and the physical iteration of an “ecology of evil.”¹⁶ Los Angeles’ “ecology of evil” defines

¹⁴ McWilliams, *California: The Great Exception*, 240.

¹⁵ Robert Fogelson, *The Fragmented Metropolis: Los Angeles from 1850-1930* (Berkeley: University of California Press, 1992).

¹⁶ Mike Davis, *City of Quartz: Excavating the Future in Los Angeles* (Ann Arbor: Vintage Books, 1992), 4.

the great city as a sprawling capitalist urban form swallowing up the landscape. This ecology is dependent on unsustainable militarized industry embattled by the end of the Cold War and the decline of an American industrial economy.¹⁷

In Antelope Valley, the desert people of Palmdale and Muroc, became part of the metropolis not through the redrawing of borders, an anachronism in Los Angeles, but by the industrial development of Air Force Plant 42, the Palmdale Airport, and Edwards Air Force base – all cutting edge components of the region’s military economy. Combined with Fontana, the continuing trend of dispersion, and the marriages of arms and economics like Cal Tech’s rise to prominence, these places contain stories that characterize the nation’s preeminent regional metropolitan economy and construct a narrative to underwrite the implications facing the metropolis today. Los Angeles is far more than the urban embodiment of a military industrial complex. Los Angeles is a unique representation of the economic and industrial experiences America underwent during the post-war years. Civic leaders in Fontana, Palmdale, and Los Angeles, unable to predict the future, established their communities in a context of decentralization and economic prosperity dependent on defense spending. When American capitalism evolved, the transformation forced Fontana and Palmdale to re-adapt. Their current leaders and boosters continue to search for progress and prosperity, but they can now do so with the knowledge of the system’s paradoxes and nuances and the mistakes of the preceding generations of boosters.

Deleted Image

¹⁷ Mike Davis, *City of Quartz*, (New York: Vintage Books, 1992), 4.

From Tom Zimmerman, *Paradise Promoted: The Booster Campaign that Created Los Angeles*. (Santa Monica: Angel City Press. 2008).

Chapter 1

Metropolitan Marriages: Boosterism, Urban Decentralization, and the Roots of the Military Industrial Complex

“With cities, it is as with dreams: everything imaginable can be dreamed, but even the most unexpected dream is a rebus that conceals a desire or, its reverse, a fear. Cities, like dreams, are made of desires and fears, even if the thread of their discourse is secret, their rules are absurd, their perspectives deceitful, and everything conceals something else.”

- Italo Calvino¹⁸

From a narrow viewpoint, federal demand for raw resources and future defense contracts industrialized and directed Fontana and Palmdale down their respective paths as peripheral hubs of the Los Angeles area. However, the forces that drove the politics and business activity behind developing these two places during and after the war were not creations of the wartime economy. To the contrary, they embody traditional continuities established long ago in Los Angeles. Los Angeles, “the great laboratory of experimentation,” developed, as a modern city, at the hands of deliberate and active boosterism. Los Angeles, with its boosters acting as both urban planners and capitalists, did not abandon this tradition. Instead, the idea of continued growth in not just size but also modern industry became an underlying factor in the way the city settled out across the plain, and then into the deserts and valley. Long before World War II, boosters planted the urban tensions present in Palmdale and Fontana today, as desire for growth clashed with such a desires real demerits and ironies.

During the 1920s, boosters developed a unique approach to handling their city’s growth. Fearing the calamities of East Coast cities – congestion and centralization – the

¹⁸ Italo Calvino, translated by Harcourt, Inc. *Invisible Cities*, (United States, 1974), 44.

boosters installed a tradition of urban and industrial dispersion and decentralization. These forces became fundamental to the city's, and then region's growth. Fontana and Palmdale, both far removed from the concerns of 1920s boosters, are still representative of their ideas. They represent the real implications of not just the urban and industrial decentralization developed during the 1920s, but also the way in which it became entangled with defense based industries and federal spending.

World War II represented yet another opportunity, a colossal one, for extending the tradition of growth further through time and adding more elements of industry and modernity to the regional metropolis. Robert Lotchin established this thesis about the city, writing:

In California, where war and urban society are both hyper extended, the connection between these two entities did not originate through World War II or Cold War actions of bureaucrats of the modern nation-state or through defense giants such as Boeing...Lockheed...It grew out of the efforts of World War I and interwar city builders to find an economic niche for their rapidly growing and dynamic but unstable cities and military men hoping to arrest the decline of their services.¹⁹

Twenty years before Pearl Harbor, local boosterism attached itself to ideas and themes of development that defined not just the rampant metropolitan growth of the 1920s but the peripheral urbanization represented by Fontana and Palmdale during the war and postwar periods.

Morris Markey, a British tourist visiting Los Angeles in 1932, asked, "Why did a town spring up here and why has it grown so big?"²⁰ The answer was not wartime demand, still ten years away. Nor was it inherent in the land – unfertile before irrigated

¹⁹ Roger W. Lotchin, introduction, *Fortress California 1910-1961: From Warfare to Welfare* (New York: Oxford University Press, 1992), xv.

²⁰ Robert Fishman, foreword to *The Fragmented Metropolis: Los Angeles from 1850-1930* by Robert Fogelson (Berkeley: University of California Press, 1992).

by men, without an ideal natural port like the Bay Area cities, and without immediately apparent natural resources. As historian Robert Fogelson explained, “the Los Angeles elite very early realized that their real business was growth itself.”²¹ A city without the locational advantages of a New York or Chicago, L.A. emerged, or rather synthesized, in a different form. Los Angeles depended on leaders that realized these deficiencies and manifested the city’s growth themselves.

Boosterism, the practice of local officials, businessmen, and politicians actively preaching a gospel of development and growth to further their city, was a driving force behind Los Angeles’ legacy. While not always a self-identifying group, Henry Chandler, publisher of the *Times*, Carey McWilliams, historian and labor activist, Henry Arnold, Air Force general, Howard Hughes, aviation industrialists, A.W. Ross, real estate mogul, William Mulholland, water and transit developer, Fletcher Bowron, mayor from 1938-1953, and Henry Kaiser, national business mogul, can all be considered Angeleno “boosters.”

In addition to notions of dispersion, boosters also institutionalized the emphasis of military industry – the second theme prevalent in Fontana and Palmdales’ stories. California, especially Los Angeles, matched its tradition of boosterism to the relationship between war and urbanization.²² In California, argues Robert Lotchin in *Fortress California*, the relationship between war and urban society sprouted from “the efforts of

²¹ Robert Fishman, foreword to *The Fragmented Metropolis: Los Angeles from 1850-1930* by Robert Fogelson (Berkeley: University of California Press, 1992).

²² Roger W. Lotchin, preface to *Fortress California 1910-1961: From Warfare to Welfare* (New York: Oxford University Press, 1992).

World War I and interwar city-builders to find an economic niche for their rapidly growing but unstable cities.”²³

While various industries flourished during the 1920s, several aviation companies made permanent homes in Los Angeles during the decade, long before their bombers and fighters were key to military strategy in World War II. In 1941, *Harpers* called the city “the cradle of American air power, the Pittsburgh of the U.S. aircraft industry.”²⁴ The war did not bring aviation industry into Los Angeles. In 1946, Los Angeles averaged about 4,400 people per square mile. New York had a density six times as much, Chicago four.²⁵ Instead, it played on an existing presence, evolving an already beginning process that eventually married aerospace industry to national defense spending.

Fear of urban centralization and congestion urged boosters and businesses to incorporate the space around them in defining the city on their terms. Together, this partnership, in most part through the Chamber of Commerce, segmented and fragmented population, transportation, and industry to build a new urban environment. In 1924, the entire Los Angeles basin had been subdivided not by organic communities but along legal lines; much of the segments were still unpopulated and entirely vacant.²⁶

Robert Fogelson, in his biography of the city’s beginnings, uses “fragmentation” to identify the themes prevalent during the period. The city would split into political, social, cultural, but most importantly industrial and spatial segments. Devout Angelenos that, in the Western metropolis, transliterated manifest destiny from a geographical creed

²³ Lotchin, intro to *Fortress California*, xv.

²⁴ “City of the Angels,” *Fortune*, March, 1941, pg. 90-95.

²⁵ Mel Scott, *Metropolitan Los Angeles: One Community* (Los Angeles: The Haynes Foundation, 1949) 50.

²⁶ Roth, “Mulholland Highway and the Engineering Culture of Los Angeles in the 1920s,” ed. By Tom Sitton and William Deverell for *Metropolis in the Making* (Los Angeles, Berkeley, and London: University of California Press, 1999), 54.

to urban economic growth welcomed population and industrial expansion. Upon its arrival, these boosters worked to establish what they believed to be the ideal built environment and market to best capitalize on consumer and government demand. The stories of Los Angeles's embattled military industrial complex, twisted suburban and urban identities, and distressed housing markets all trace back to the implications of an entrenched and deified essence of the civic booster.

“Every city has a direct economic ancestry, a literal economic parentage, in a still older city or cities. New cities do not arise by spontaneous generation. The spark of city economic life is passed on from older cities to the younger.”
-Jane Jacobs²⁷

During the 1920's, industry in L.A. was growing faster than it was in any other place in the country. Population doubled to more than 1.2 million in 1930 from 570,000 in 1920. The County of Los Angeles would grow from 1,238,000 to 2,200,000 in that same period.²⁸ Los Angeles Harbor beckoned 2,886 ships to dock behind its sea wall in the fiscal year 1920. During fiscal year 1930, 8,633 boats made their way into Los Angeles Harbor.²⁹ Total land area of the city grew by about eighty square miles through means of forty-five separate property annexations throughout the decade.³⁰ Los Angeles took on significant characteristics of its modern form during the 1920s as more than population changed – especially the presence of the car circulating amidst the urban sprawl.³¹ Downtown traffic created significant transit congestion.

²⁷ Jane Jacobs, *The Economy of Cities* (London: Vintage, 1970), 176.

²⁸ Martin Wachs, “Autos, Transit and the Sprawl of Los Angeles: The 1920s,” Institute of Transportation Studies University of California, Irvine. 8.

²⁹ Wachs, “Autos, Transit and the Sprawl of Los Angeles: The 1920s,” 10.

³⁰ Greg Hise, “Industry and Imaginative Geographies” ed. By Tom Sitton and William Deverell for *Metropolis in the Making* (Los Angeles, Berkely, and London: University of California Press, 1999) 18.

³¹ Jules Tygiel, “Metropolis in the Making” ed. by Tom Sitton and William Deverell for *Metropolis in the Making* (Los Angeles, Berkely, and London: University of California Press, 1999), 2.

Industrial boom was prominent in most industries, from Hollywood to oil and rubber.³² Impossible to separate from the population growth and physical expansion of the city, this economic growth prodded businessmen and boosters to concern themselves with the city's planning. "Miracles occurred on both supply and demand sides of the industrial equation," writes Mike Davis.³³ In a move to confront this confluence of growth in Los Angeles, planned development would be heralded as the cure, cementing the urban landscape and themes of Los Angeles.

The Los Angeles elite, even before the arrival of widespread national economic expansion, began to desire economic boom and planned accordingly. Fogelson writes, that as early as 1915:

The leaders of the Chamber [of Commerce] wooed industrialists with as much

Map showing population growth throughout the Los Angeles Basin, orange is 1920-1928. From page 9 of Frank L. Meline Corporation's *Los Angeles: Metropolis of the West*.

fervor as they had once coaxed immigrants. They described expanding markets, available resources, and cheaper transportation with as much enthusiasm as they had once depicted an easier life, softer climate, and more picturesque landscape.³⁴

The 1920s, and the lead up into them, coincided with a revising of financial goals for the city. City boosters moved the emphasis from agriculture to industry with urgency as they became aware of the exploding growth.³⁵ A *Los Angeles Times* article, entitled "Balanced Progress," from 1923, was fully aware of the remarkable goings on in the city.

³² Jules Tygiel, "Metropolis in the Making" 3. Population growth did not come to a complete slow down after the 1920s and picked up dramatically again in the 1940s. Population grew by 590,000 in the 1930s and 12. Million in the 1940s. "Motor-borne Los Angeles Gives Industry that Open-Air Touch," *Businessweek*, May, 1957, 174.

³³ Mike Davis, "Sunshine and the Open Shop" ed. by Tom Siton and William Deverell for *Metropolis in the Making*, (Los Angeles, Berkely and London: University of California Press, 1999), 96.

³⁴ Fogelson, *The Fragmented Metropolis*, 127.

³⁵ Fogelson, *The Fragmented Metropolis*, 120-130.

It started, “Los Angeles stands at the dawn of a golden tomorrow.”³⁶ The article, while optimistic, urges the Angelenos to recognize the problems associated with the gift of growth – recommending expansion in both maritime industry, water supply, and the “white coal” industry.³⁷ This angelic phrase, possibly playing off racial themes, referenced electricity and other methods of power, as the editorial recognizes that coal could not sustain Los Angeles alone as it sprawls out over the basin.

Los Angeles was the cutting edge of such urban revolutions, involving “not so much an increase in the size of cities as an expansive recomposition of the urban population.”³⁸ L.A. was an ideal stage for this recomposition – a luxury that New York, Chicago, and London never had. There was not just a need, now in the modern era, for reorganizing people but also infrastructure and industry.³⁹

Boosters, for years, had advertised Los Angeles across the country – ongoing migrations existed long before the 1920s. Once again, during a decade of unprecedented economic growth, the boosters once again prodded Americans and Anglo immigrants to migrate to their new American city that, while not a city on a hill, had even loftier ambitions. They did as much as possible with their influence to plan and sell the boom to all those who were interested. Akin to the transportation development, officials crafted plans to decentralize and fragment the offspring of the economic growth, the Chamber of Commerce made plans for economic growth before it came. This growth came in a certain way, with emphasis on the booming industrial sector of the city. In 1930, Los Angeles had 724,000 employees in the industrial sector; this was almost an

³⁶ “Balanced Progress,” *Los Angeles Times*, November 8, 1923, II4. <http://www.proquest.com/>

³⁷ “Balanced Progress,” *Los Angeles Times*, November 8, 1923, II4. <http://www.proquest.com/>

³⁸ Edward W. Soja, *Postmetropolis: Critical Studies of Cities and Regions* (Wilsey-Blackwell, 2000), 77.

³⁹ Soja, *Postmetropolis*, 77.

increase of three times from the number of industrial employees in 1920.⁴⁰

With what was perceived as near unlimited space for growth, urban decentralization by means of transit, industrial, and residential policy became creed. Disperse, rather than gather. Motion over stasis. This maxim was the code of development in the 1920's as the city moved away from its Spanish Mexican past. Economic boom in the 1920's spurred the shaping of a metropolis that was dynamic and forward thinking – anything that could be, would be planned and developed. Boulevards were methodically extended in order to alleviate traffic. Whereas Boston evolved from cattle paths perpetually going in some unknown direction, Los Angeles was a different case, one that was intimately entwined with the roots of dynamism in America.

The 1920s witnessed the establishment of the City Planning Commission in 1920 and the Regional Planning Commission in 1923, heralded by city planners and consultants like the Frank Meline Company, as the first of its kind.⁴¹ In 1924, the commission finished the Major Street Traffic Plan, to be approved by voters a season later.⁴² This established a concrete plan and goal of boulevarding the city, providing arteries and veins for Angelenos so circulate among their city's segments. More importantly, though, was the city planner's concerns with zoning, a practice that occupied 85% of the Regional Planning Commission's time – a testament to the underlying desires to segment, rather than construct.⁴³

In the days leading up to the vote on the Major Street Traffic Plan's bond

⁴⁰ Scott, *Metropolitan Los Angeles*, 54.

⁴¹ Frank Meline Inc., *Los Angeles: The Metropolis of the West* (Los Angeles: Frank L. Meline, Inc., 1929), 4.

⁴² Matthew W. Roth, "Mulholland Highway and the Engineering Culture of Los Angeles in the 1920s" ed. By Tom Sitton and William Deverell for *Metropolis in the Making* (Los Angeles, Berkeley, and London: University of California Press, 1999), 51.

⁴³ Lotchin, *Fortress California*, 184.

initiative, Henry Chandler's, who sat on a private commission that advised the City's board, *Los Angeles Times* paper published a flurry of pieces campaigning for the plan.⁴⁴ In October 1924, less than a month before the vote, the *Times* wrote, "There is neither speed, comfort, nor safety in the congestion that prevails at present and many motorists are unable to use their cars to advantage."⁴⁵ Later in October, the paper argued that the plan "corrects evils" and orchestrates future development of all the city's streets.⁴⁶

In addition, and while not quite the on the tangible scale that projects the Major Street Traffic Plan, the city and its capitalists also organized various public works projects that now serve as metaphors of Los Angeles' narrative.⁴⁷ Mullholland Highway, cascading from Hollywood to the Pacific Ocean, was a project that had less to do with real dispersion of population and industry. However the Highway, a "massive reordering of the natural environment," was a more romantic result of 1920s growth and planning.⁴⁸ The Highway showed the influence of real estate and the boosters' desire to mold a concept of motion through an environment into the city's lore.

Reyner Banham, an architectural critic that argued there was an explicit connection between the built environment, the architecture of Los Angeles and the automobiles, treated Mulholland as a civic accomplishment indicative of Los Angeles' shared conscience - a public space and attraction that was unlike any other found in America cities. The Highway was landmark of motion, even if it was to nowhere but a

⁴⁴ Roth, "Mulholland Highway," 51-52.

⁴⁵ "Major Highway Plan to Make Use of Blind Streets," *Los Angeles Times*, October 12, 1924. <http://www.proquest.com/>

⁴⁶ "Traffic Solution Offered," *Los Angeles Times*, October 26, 1924. <http://www.proquest.com/>

⁴⁷ Roth, "Mulholland Highway and the Engineering Culture of Los Angeles in the 1920s," 49.

⁴⁸ Hise, "Industry and Imagined Geographies," 15. Roth, "Mulholland Highway and the Engineering Culture of Los Angeles in the 1920s," 46.

cliff overlooking the final boundaries of Manifest Destiny.⁴⁹ Urban decentralization and industrialization, for Los Angeles, was as much about dispersion as it was about the city's ability to command and torque its surrounding environment. Mel Scott wrote, in his late 1940's survey of development in his city, "If the Los Angeles area represents anything, it represents intensive application of science and engineering to the creation of an environment in which man can enjoy living."⁵⁰

Often, historians and thinkers attribute Los Angeles' distinct culture and decentralization to the influence of the automobile. Reyner Banham wrote, "So, like the earlier generations of English intellectuals who taught themselves Italian in order to read Dante in the original, I learned to drive in order to read Los Angeles in the original."⁵¹ Banham, in practice, is correct. He could walk Los Angeles to study it. Certainly, other than Detroit, no other city has such a legacy of the automobile. However, the highways are not the language of Los Angeles, rather they are symbols and expressions of deeply rooted desires of industrial growth and insecurities that Los Angeles would go on to mirror the static shortcomings of other American cities.

Fogelson, in his account of the period, certainly places great emphasis on the automobile and the failure of electric railways as "elite and general population had

Map of Los Angeles Basin showing the well established transit network of the region in 1929, echoing the cries for decentralization and dispersion that led to L.A.'s embrace of the automobile. from Frank L. Meline's 1929 report on the city entitled *Los Angeles: Metropolis of the West*.

⁴⁹ Martin Dimendberg, "The Kinetic Icon: Reyner Banham on Los Angeles as Mobile Metropolis," *Urban History*, 33, 1 (2006): 3-4. Accessed from Cambridge Journals, <http://journals.cambridge.org/>. Reyner Banham, *Los Angeles: The Architecture of Four Ecologies* (Berkeley and Los Angeles: University of California Press, 1971), 150.

⁵⁰ Scott, *Metropolitan Los Angeles*, 4

⁵¹ Banham, *Los Angeles: The Architecture of Four Ecologies*, 5

switched their allegiance from mass transit to the automobile.”⁵² This shift, in turn, signaled the decline of a downtown. However, it was not the automobile that drove Los Angeles to a metropolis of peripheral hubs within a regional economy. Rather, the automobiles served as both a catalyst and symptom for and of the fanatic dispersion of growth. This solution also resulted in Los Angeles’ distinct breed of progressivism that was not necessarily tied to partisanship, although the city certainly had its social progressives and vehemently conservative blocs. The city planning committee created during this period helps to identify the sort non-partisan progressivism prevalent in much of the city’s inner circles. Writing in its 1920 report, the commission explained, “Right from the start, we must understand that we are not the conservative branch of the City Government... We are the ones who should ‘Dream dreams and see visions’ – visions of the better city to be.”⁵³ Twenty years down the road, this progressive boosterism was matched with New Deal liberalism and wartime demand – implementing a new, but derived, basis of L.A. growth.

Paradoxically, the importance of this progressivism is at odds with the city’s fundamental private free market values that historians have argued are the twentieth century evolution, or devolution, of America’s foundational principles of the individual and progress. However, Fogelson and Sitton both argue that the city planners were symptomatic of a larger tradition for the city that was driven by adamant private development that understood the need to work within a framework of urban planning if

⁵² Fishman, foreword to *Fragmented Metropolis*, xix.

⁵³ Qtd. in Fogelson, *Fragmented Metropolis*, 247.

their desires were to be achieved.⁵⁴ Choice, not equity, served as the main factor of Los Angeles' urban form. However, in the 1920s at least, all, in a democratic sense, shared the freedom for market choice in development was. Fogelson writes, "In all essentials, the planners shared the populace's suburban ideals, and the populace agreed with the metropolitan aspirations."⁵⁵

Reyner Banham proclaimed origin of L.A.'s "instant architecture in an instant townscape" began to come to their anxious climax during the 1920s.⁵⁶ Unlike cities across the world, that amassed millions of people over centuries and had roads built over previous pathways, Los Angeles saw its population brought in within two decades as structures and roads became the first things to be constructed on their plot.⁵⁷ Upstart growth was a backhanded experience for the boosters; it played on their anxieties and fears of a crowded and polluted city. In 1919, Dana Bartlett, a progressive clergyman and public figure, wrote of his own fear that Los Angeles could develop into one of America's eastern cities. He wrote, "As factories increase in size and number, aliens will be attracted, tenements and house courts will become congested, causing an increase in sickness and crime."⁵⁸ Los Angeles businessmen and politicians loathed the same possibility for their city and more than overlapped in an implicit coalition with more leftist progressives like Bartlett and Carey McWilliams.⁵⁹

Before the opening acts of the Great Depression, Los Angeles had established

⁵⁴ Michael Dear, "In the City, Time Becomes Visible: Intentionality and Urbanism in Los Angeles, 1781-1991," ed. by Allen J. Scott and Edward Soja for *The City* (Los Angeles: University of California Press, 1996) 201.

⁵⁵ Fogelson, *Fragmented Metropolis*, 250. Michael Dear, "In the City, Time Becomes Visible: Intentionality and Urbanism in Los Angeles, 1781-1991," ed. by Allen J. Scott and Edward Soja for *The City* (Los Angeles: University of California Press, 1996) 201.

⁵⁶ Banham, *Los Angeles: The Architecture of Four Ecologies*, 3.

⁵⁷ Banham, *Los Angeles: The Architecture of Four Ecologies*, 17.

⁵⁸ Hise, "Imagined Geographies," 15.

⁵⁹ Hise, "Imagined Geographies," 24.

itself as a metropolis firmly developed within the modern age. Los Angeles was a city founded well past the enlightenment and industrial revolution, able to internalize rationality, capitalism, and industry from a unique perspective not available to most other American metropolises. Implicitly aware of this fact, the *Times* wrote:

The people of Los Angeles have reached the point where they realize that the future growth of Los Angeles must be systematic, scientific, modern... They showed it when they approved the Major Street Traffic Plan. They have shown it when they have given, constantly, their un-official but whole-hearted approval to the zoning and set-back regulations. The days of helter-skelter growth are gone. The time has come for an orderly upbuilding [sic] of Los Angeles.⁶⁰

Los Angeles boosters, during the 1920s, combined the essence of unfettered capitalism with rational conceptions of how the city should be planned. These two themes may seem at odds, but they both echoed two separate local desires for Angelenos. A booming metropolis independent of the rust belt or east coast industry unlike any other city, void of the squalor and shortcomings overcrowding and irrational, haphazardly organic growth creates. Greg Hise, a historian of the city, explaining in his article *Imagined Geographies*, “The 1920s was a generative period when civic elites, entrepreneurs, and workers fixed the coordinates for an industrial Los Angeles that has structured the pattern of city building and urban life from that time forward.”⁶¹

During the depression, as populations increase subsided and businesses contracted, the need, and the financial base, for planned growth and dispersal or segmentation slowed. Importantly, the depression did not unwind the progress and growth Los Angeles had made during the 1920s, it also retained the unique character built

⁶⁰ “The City,” *Los Angeles Times*, pg A4, January 12, 1925. www.proquest.com. The article urged City Hall to be moved to the new civic center so that all public buildings would be segmented to one district – a collection of public offices and buildings.

⁶¹ Hise, “Industry and Imagined Geographies,” 15.

over the past half century.⁶² With the final unraveling of the electric railway during the mid 1930s, the automobile became the primary mode of transportation. Again, the car was not a driving force behind L.A.'s demeanor but rather went hand in hand with the metropolises character. However, with the end deterioration of the light rail in the 1930s, the potential for peripheral hubs was no longer contingent on railroad tracks, but rather other fears of growth – congestion, environment, and industry.⁶³

“Thus, civilization, pressing ever westward, has passed and narrowed the desert and reached the sea. Here at the end of the Western Trail is being developed a manufacturing and marketing center that is destined to become the mistress of the Western Sea.”⁶⁴

-Frank L. Meline Company

The 1920s comprised of not only the manifestation of a cultural and urban tradition of boosterism and rational decentralizing, but also the tangible roots of the aviation industry already entangling themselves with military demand, federal government, and local politics. Especially, this meant the development of factories in Long Beach, Santa Monica, and Burbank. However, politicians, advisers, and businessmen also began to involve public policy with aerospace industry and business – from airports to corporations.

The Los Angeles Regional Planning Commission, while concerned with larger trends of industrial decentralization and municipal policy, exhibited intimate involvement and analysis of an aerospace presence in the city, its importance, and eventually, its necessity. In 1928 and 1929 the committee published reports on future airport sites, a nod to both the desire to disperse population, and the airports used by people, around the county and the inherent presence airplanes had come to have for the western metropolis.

⁶² Fogelson, *Fragmented Metropolis*, 273.

⁶³ Fogelson, *Fragmented Metropolis*, 274.

⁶⁴ Frank L. Meline Corporation, *Los Angeles: The Metropolis of the West*, 6

Colonel William J. Fox, later a general vital during the post-war years at Palmdale, represented the commission and presented forty-five potential sites for military or civilian airfield in 1928. A year later, he listed forty-nine fields.⁶⁵

Los Angeles, during the 1920s, looked to surge ahead as an aviation center, and succeeded “through actions taken by key local figures at critical historical junctures.”⁶⁶ Civic leaders tempted aviation corporations to relocate or develop a presence in Los Angeles, merging industry with the military presence and scientific research during the late 1920s and 1930s; this provided for a definitive foundation that reached critical mass with the mass manufacturing and demand of World War II and would not subside for decade. Los Angeles, fifteen years later, became the prototypical Fordist and Keynesian city because of the urban institutions established during the 1920s.⁶⁷ Mass consumption and production flourished in the city where the New Deal order settled in its own breed of partnership between government spending and big business.

Each city looking to become an aviation hub had its own boosters, from Dayton to

1929 Chamber of Commerce advertisement from From Tom Zimmerman, *Paradise Promoted: The Booster Campaign that Created Los Angeles*, (Santa Monica: Angel City Press, 2008).

Detroit or San Francisco. In Los Angeles, there exists a cultural legacy; it was the first city to host a major American air show, in 1910.⁶⁸ Los Angeles defies the intuitive notion that established industrial regions are more welcoming to new industries because

⁶⁵ “Los Angeles Aviation Progress,” published by Los Angeles County Board of Supervisors, Vol. 18, No. 5, Dec 1947, 1-5.

⁶⁶ Ann R. Markusen, *The Rise of the Gunbelt: The Military Remapping of Industrial America* (New York: Oxford University Press, 1991), 85. Simplify the argument to leaders at key times, but the point of including this quote is emphasis on local desires piggybacking on national trends in aviation and industrial development.

⁶⁷ Soja, *Postmetropolis*, 111.

⁶⁸ Markusen, *Gunbelt*, 85.

of prominent capital, labor, and research resources – as was the case with original Midwestern aerospace hubs in the steel belt. However, traditional industries can become static, deferring innovation to seek out other locations based on other metrics, like climate, space, and potential growth.⁶⁹ Aviation presence in L.A. was simultaneously both a synthetic and organic process. Boosters, local military men of the large armed presence, and politicians used visible hands to coerce aerospace industry to congregate, ironically, in the city that preached dispersion.

The founding fathers of early Aerospace companies, Glenn Martin, Donald Douglas, the Lockheeds, Jack Northrop, and Howard Hughes, naturally favored L.A. because it was either their home state, a hotbed for growth, a friendly climate for airplanes, or of superior economic cost.⁷⁰ The geographic and climate arguments are not sufficient, several firms would go on to fail in Los Angeles during the 1920s and San Diego never grew to hold the same weight as an aviation manufacturing center as Los Angeles did. Rather, the fears and anxieties of urban potential unmet of L.A. officials and businessmen that drove them to campaign for immediate industrialization met a match in the relatively vulnerable aviation business and aviation wing of the military. Together, the city boosters, businessmen, and military officials used each others resources in the L.A. area to establish this industrial presence. Lotchin called this an “extraordinarily air minded urban culture.”⁷¹ The air-minded urban culture had profound effects on shaping the political economy and capitalist system in Los Angeles, but also, as it spread during World War II, the entire country.

Groups like the All-Year Club, helped with the start of Harry Chandler, or the

⁶⁹ Markusen, *Gunbelt*, 76.

⁷⁰ Markusen, *Gunbelt*.

⁷¹ Lotchin, *Fortress California*, 68.

Aviation Department of the Chamber of Commerce publicized Southern California as a business and residential mecca.⁷² Chandler was a key aviation booster, a media mogul that prodded the Chamber of Commerce to further recruit Eastern industry, he helped finance the Western Air Express company, a founding half of what was to become TWA in a 1929 via merger.⁷³ The Chamber of Commerce, in the 1920s, began to aggressively woo industry and business, accepting and promulgating all arguments that concluded with Los Angeles as the ideal factory site.⁷⁴ By 1938, on the brink of war, about two thirds of the countries airframe manufacturers were present in the City of Angels.⁷⁵

Personal relationships, in many ways incubated by the urban culture of the city, were critical as well. Men throughout the military hierarchies and civilian corporate bureaucracies understood the Los Angeles economic environment as a unique one. Promising military men came to Los Angeles to be “cultivated” with the ambitions that they would grow into officers with significant industrial power. No man exemplifies this more than Hap Arnold, climbing to head the Air Corps and then the mastermind behind the structuring of the Air Force.⁷⁶ Figures like Donald Douglas, Von Karman, and Robert Millikan all developed personal relationships not just with their work and city, but also the military figures they worked with to develop defense technologies, factories, and contracts.⁷⁷

The California Institute of Technology, critical in producing the aerospace technology that became intrinsic to national defense during and after World War II, also

⁷² Markusen, *Gunbelt*, 88.

⁷³ Markusen, *Gunbelt*, 89.

⁷⁴ Fogelson, *Fragmented Metropolis*, 108.

⁷⁵ Lotchin, *Fortress California*, 65. This is one of Lotchin’s conclusions; he looks at the political and booster processes that ended up with this concentration. In other words, how did the city influence the concentration of aviation industry.

⁷⁶ Lotchin, *Fortress California*, 95.

⁷⁷ Lotchin, *Fortress California*, 95.

experienced the formative forces of 1920s boosterism. While founded in the 1890s, the California Institute of Technology began to hit full stride in the 1920s. During this period, research done at Caltech, in sunny Pasadena, became of paramount interest to politicians and generals involved with air defense projects.

Daniel Guggenheim, in 1926, wrote the Secretary of Commerce and soon to be President Herbert Hoover. Guggenheim, a recent convert to the field of aviation boosterism, announced in the letter a grant of \$1.6 million from the Guggenheim Fund towards serving engineers and scientists involved in aeronautics. By no coincidence, some of this money Guggenheim earmarked for Caltech – the scientist and school administrator Robert Millikan used the grant to fund Theodore von Karman’s transfer to the school. Von Karman, a brilliant physicist and aeronautics researcher, went on to produce significant work inside and outside the laboratory for Southern California as a scientist and adviser to Henry Arnold – future father of the Air Force and key figure in the story of Palmdale.⁷⁸

The same year that von Karman committed to CIT, the university announced a permanent building for studying aeronautics. To this day, it is known as the Guggenheim Laboratory.⁷⁹ In defending the financial commitment behind such an aspiration, it mentions the local importance of aviation – choosing to highlight Douglas’ Santa Monica factory.⁸⁰ In the building, a small wind tunnel, conceived by von Karma, was designed. Famous American warplanes key to Allied victory like the P-51 Mustang, B-17 Flying

⁷⁸ Daniel Guggenheim letter to Herbert Hoover, 16 January 1926, reprinted by Reginald M. Cleveland in “America Fledge Wings” (Chicago, Pittsburgh: 1942). Found in document collection, *The Wind and Beyond: Journey into the History of Aerodynamics in America*.

⁷⁹ “Historic Wind Tunnel to be Decommissioned,” Press release, California Institute of Technology, April 1, 1997. http://media.caltech.edu/press_releases/11792

⁸⁰ CIT announcement, “Development of Aeronautics,” 1926, from document collection *The Wind and Beyond: Journey into the History of Aerodynamics in America*.

Fortress, B-24 Liberator, and P-38 Lightning were all tested in the tunnel. The university felt the lab was so important to national defense that armed guards were stationed outside the lab during World War II.⁸¹

By the late 1930s, Southern California had an abnormal concentration of both civilian and military aviation activities that coalesced to develop the city together. *Fortune*, in 1941, wrote: “This [early aircraft] industry was sleeping in the same bedroom, if not in the same bed, with the U.S. Army and Navy.”⁸² Frighteningly foresightful, an almost “dynastic alliance later emerged between the two when Henry Arnold’s son Bruce Arnold married Barbara Douglas.”⁸³

Of equal importance was the spatial and geographic framework of the Los Angeles industrial area. By 1940, essentially all of the City of Los Angeles was built-up and industrialized – pushing the boundaries of an industrial zone fundamentally developed on the idea of dispersion. By accommodating postwar growth, Los Angeles developed what Soja calls “technopoles” – internal and peripheral industrial and urban hubs of the regional space that represented Los Angeles scaffolding.⁸⁴

Throughout the same period, as fascist countries turned to Darwinian principles in international politics to justify expansionary and militarism, the same principles were at work between California cities. Once competition between L.A., San Diego, and San Francisco took off, it picked up even more momentum as each city vied more and more for aviation and military puzzle pieces necessary in industrializing and urbanizing each

⁸¹ “Historic Wind Tunnel to be Decommissioned,” Press release, California Institute of Technology, April 1, 1997. http://media.caltech.edu/press_releases/11792

⁸² “City of Angels,” *Fortune*, March, 1941, 90-95.

⁸³ Lotchin, *Fortress California*, 95.

⁸⁴ Soja, *Postmetropolis*, 12.

of their cities.⁸⁵ World War II would bring a slight halt to such cut throat boosterism, but it represented a period of continuity and change in Los Angeles as the roots for a built environment in which militarized industry and development were integral were already laid. The boom in consumer demand and defense spending nurtured these roots and introduced new notions of decentralization, technology, and capitalism that pushed the implications and contradictions further to create America's first post-New Deal industrial metropolis.

Chapter 2

Los Angeles Boosters and Wartime Catalysts

“Los Angeles is a city looking for a ritual to join its fragments, and The Doors are looking for such a ritual also. A kind of electric wedding. We hide ourselves in the music to reveal ourselves.”

-Jim Morrison

In 1943, Milton Silver of the *San Francisco Chronicle* dubbed the period California's “Second Gold Rush.”⁸⁶ John Anson Ford, a county and municipal official for decades, stated “1,000 persons per day were settling” in Los Angeles County during the war.⁸⁷ The war “worked an economic miracle.”⁸⁸ However, from another perspective, Los Angeles, now in the climate of conflict, continued to work its own economic miracles yet again. With wartime demand for airplanes, steel, and other defense related products as the focal point of American industry, Los Angeles' tradition of aviation boosterism jumped at the bit – further entwining its economy with decentralized industry dependent on defense contracts.

⁸⁵ Lotchin, *Fortress California*, 131.

⁸⁶ Paul Rhode, “California in the Second World War: Analysis of Defense Spending,” ed. by Roger Lotchin for *The Way we Really Were* (Illinois: University of Illinois, 2000) 93.

⁸⁷ John Anson Ford, *Thirty Explosive Years in Los Angeles County* (Huntington Library, 1961), 109.

⁸⁸ Ford, *Thirty Explosive Years*, 109.

Scholars traditionally interpret the effect of World War II on Los Angeles and California's political economy in two ways. In one light, World War II carried drastic importance in solidifying the Keynesian industrial system that has defined American capitalism. To the contrary, but not mutually exclusive, World War II did not necessarily create new paradigms, but rather revised continuities and generalizations of Los Angeles political economy and culture from the pre-war period. Neither explanation trumps the other and both derived from bigger arguments about World War II's effects on the American nation, people, and identity as a whole that struggle with the complexities of the conflict. In Los Angeles industrial themes continued throughout the war the conflict influenced shaped post-war planning as it relates to Palmdale, Edwards, and Fontana, in fundamental ways. World War II did not rewrite the Angeleno economy, but it added new reagents to produce reactions simultaneously rooted in the city's earlier history, particularly the 1920s, but also dependent on the broad strokes of wartime America.

The transitions from wartime to peacetime economy were critical for Los Angeles, a city that had, for decades, internalized fears of inadequate economic and urban growth. The city and its proprietors, as was the case with many around the country, recognized a need to accommodate peacetime contractions. In 1949, amidst post-war developments in the Antelope Valley, *Fortune* reflected on the city's capitalist environment since the wars ending. A June article noted a remarkable fact about industrial Los Angeles, dubbed "The Undiscovered City." The article read, "postwar expansion of the Los Angeles industrial plant has very nearly equaled the wartime growth."⁸⁹ Industrial Los Angeles, explains *Fortune*, was undergoing changes in the postwar year, shipbuilding slowed and aerospace had employed a quarter of its wartime

⁸⁹ "The Undiscovered City." *Fortune*, June, 1949.

force in the region, but overall, industry fulfilled its intentions of avoiding any sort of downsizing.⁹⁰ This balancing was no accident, and is at the crux of the new type of growth that Los Angeles would find itself atop in the 1950s. Importantly, the transition to peacetime influenced the industrialization already beginning on Los Angeles new capitalist borders in Fontana and would spur new industrial presence in the Antelope Valley. At the same time, however, these transitions were rooted in continuing trends from before and during the war – echoing entrenched Angeleno sentiments about preparing for progress. Just as the metropolis prepared for peace, it also presented rooted ideas about how to best accommodate and advance the war effort synthesized more by the city’s tradition of growth than the declaration of war itself.

“The Vision to See, the Faith to Believe, the Courage to Do.”
- A sundial in Union Station

War, for the United States nominally began in 1941, but, in practice, the wartime mobilization began earlier, in anticipation of conflict. Los Angeles, the dynamic metropolis, was not far from this effort. Mayor Bowron and advisers had produced and revised ample plans in anticipation of U.S. entry into the war before. Meeting with city official in city hall immediately after the attack on Pearl Harbor, Bowron put into operation the contingency plans they had created.⁹¹ In May of 1940, the private sector began to gestate civic defense when Chamber of Commerce organized the Defense Committee of Southern California. The committee was a collection of two hundred business leaders tasked with assisting military presence in the area as they organized a defense effort.⁹²

⁹⁰ “The Undiscovered City.” *Fortune*, June, 1949.

⁹¹ Sitton, *Los Angeles*, 51.

⁹² Sitton, *Los Angeles*, 52.

The city, as a whole unit and not just the back room politicians, had also experienced a shift towards war well before the official declaration. From 1940 to 1941, aircraft production in the county doubled as aircraft and “allied industry” became the leading employers in the region.⁹³ Arthur G. Coons, a Claremont professor and consultant of the National Resources Planning Board and California State Planning Board in only December of 1941 already noticed the implications of defense industry on the regional economy, playing on the anxieties that many blame for perpetuating a militarized economy. In an address at the Pacific Southwest Academy, he argued, “[market domination by aviation defense spending] establishes a significant amount of dependence upon a single industry and heightens the vulnerability of the economy in the event of a cessation of aircraft demand.”⁹⁴ While prescient, there was little way of avoiding the necessary demands for plans and tanks and little traction for any argument that could be twisted to suggest growth and patriotism did not go hand in hand.

As it did through the growth of the 1920s, the L.A. Chamber of Commerce played nominal and real roles for installing frameworks of industrial evolution. In January of 1942, the directors agreed to permanently establish their “war contract plan.” The plan had begun sixth months prior as a trial run for producing business during the expected U.S. entry into the war. Meeting in January 1942, both in light of the trial’s success and the full mobilization of the American country into conflict, the board approved establishing the expensive plan indefinitely. The plan called for building a war pool of

⁹³ “Defense Industry and Southern California’s Economy,” by Arthur G. Coons, professor at Claremont Colleges, December 1941, Los Angeles, CA Pacific Southwest Academy. From Honnold-Mudd Special Collections. Coons was a consultant for National Resources Planning Board and California State Planning Board, but did not represent them at conference.

⁹⁴ Coons, “Defense Industry and Southern California’s Economy.” In the same address, Coons noted the need for a steel plant and the turn towards a centralized, corporate organizational political economy.

contracts and chamber staff members, daily, went through about 250 government contract proposals and delivered early notification to the L.A. manufacturing firms best set to bid on the proposals. *Business Week* reported the chamber cataloged and analyzed the cities 6,000 industrial firms in order to better understand the manufacturing supply the city could use to meet federal demand for wartime goods.⁹⁵ World War II presented an opportunity for the Chamber to aggregate the city into a collective unit bargaining for military contracts. The wartime agenda continued the Chamber's drive to further "produce" business in the area. However, progress was made within the context of unprecedented worldwide conflict that drove the U.S. government to previously unseen heights of federal spending – during the wartime period, the federal government spent more than it had in its previous entirety from the founding.⁹⁶

The county Chamber put forth an industrial development plan early in the war that placed economic growth strictly within the confines of the war effort, diplomatically deflating their own opportunism in light of the conflict. However, it reiterated the challenge Los Angeles boosters self-imposed, "The issue is squarely before business men of Los Angeles County," the plan declared, "as to whether we shall come forward now with a well conceived program of industrial development."⁹⁷

While carrying two thirds of the \$1.5 billion dollar backlog for Pacific aviation factories, Los Angeles' factories did "not dominate the landscape," wrote *Fortune*. Only one factory lay within city limits, the zoning policy and a decentralization culture spaced the rest around the county. *Fortune* noted, in 1941, that only two factories caused

⁹⁵ "L.A.'s War Pool," *BusinessWeek*, February 7, 1942. Pg 68.

⁹⁶ John W. Jeffries, *Wartime America: The World War II Home Front* (Chicago: Ivan R. Dee, 1996), 5.

⁹⁷ "An Industrial Development Plan for Los Angeles County," published by County Board of Supervisors and L.A. Chamber of Commerce, 1940. From Honnold-Mudd special collections.

significant traffic due to their close proximity.⁹⁸ The fears of decentralization that drove industrial development during the 1920s pervaded throughout war years, foreshadowing the rise of arguments about pushing defense industry into the periphery.

Over the course of the war, beginning in 1939, Los Angeles moved from the seventh ranked industrial area, based on value of industrial product, in the United States to the second. Only Detroit was ahead of Los Angeles, an area that ranked ninth in the country as late as 1929.⁹⁹ Boosters had long planned for Los Angeles to grow into the next great American industrial city, but it was not until they capitalized on aviation and other wartime dividends that this became a reality.

As federal demand for war materials drove never before seen levels of deficit spending, the national economy finally emerged out of depression. Unemployment, nationally, dropped to 1% national during war years.¹⁰⁰ Los Angeles, while perhaps more ably equipped to haul in federal contracts with its legacy of civilian and military aviation, was not the only city that matured into an industrial giant. Buffalo, Norfolk, San Diego, Portland, and Las Vegas were all American cities that capitalized in the short run on the wartime economy.¹⁰¹

Even as the backlog approached two billion in 1942, double the previous year, contracts did not come fast enough to satiate the city's desire for growth.¹⁰² Los Angeles, was unable to secure federal funds for improving its airports, unlike San Diego and San Francisco. The mayor and politicians, unable to pump as much visible municipal money

⁹⁸ "City of the Angels" *Fortune*, March 1941. Ansel Adams took photos for the article.

⁹⁹ "Los Angeles: The City Unlimited," *BusinessWeek*, August 1946.

¹⁰⁰ Jeffries, *Wartime America*, 48.

¹⁰¹ "Los Angeles: The City Unlimited," *BusinessWeek*, August 1946.

¹⁰² Marvin Miles, "Arsenal of American Air Power," *Los Angeles Times*, Jan. 2, 1942, pg. C3, <http://proquest.com>.

to drive a military presence towards the city before the war, did not secure a “sufficiently high priority rating” from the Civil Aeronautics Administration.¹⁰³ Mayor Bowron was aware that if he could expand Mines Field the Navy and Army might be persuaded to increase operations in the Southland. He accused the government and military of favoring other areas over Los Angeles.¹⁰⁴ Tomm Sitton, a historian and biographer, argues that Bowron’s administration became increasingly dependent on federal assistance, and thereby exacerbating the competition for federal contracts.¹⁰⁵

While Los Angeles felt alienated from other Californian cities receiving federal wartime money, its officials simultaneously argued the west, as a region, was antagonized by the Eastern cities. National, or at least non-Angelino, calls for industrial decentralization or dispersal became a grave fear to Los Angeles politicians like Bowron. The city that heralded urban decentralization now feared its next evolution – industrial decentralization on a national scale for reasons of economic and military necessity. The Chamber of Commerce came to calling decentralization “industrial evacuation” and Mayor Bowron frequently used rhetoric that suggested the federal government often overlooked Los Angeles or that interior cities were in league against the City of Angels.¹⁰⁶ In a letter to *Life* in 1942, he wrote, “We do feel...the many serious problems in connection with the war industrial development in and around Los Angeles are not fully understood and appreciated to the extent that they are given adequate consideration at Washington.”¹⁰⁷

¹⁰³ Lotchin, *Fortress California*, 140.

¹⁰⁴ Lotchin, *Fortress California*, 140.

¹⁰⁵ Sitton, 52. Lotchin also argues this point – the return of Darwinian urban competition in CA.

¹⁰⁶ Lotchin, *Fortress California*, 148.

¹⁰⁷ Bowron, Fletcher letter to Editor, *Life*, Oct. 14, 1942.

This paranoia was both a product of internal urban anxieties but also based on real external skepticism of Los Angeles development as the cradle of American aviation – the industry most necessary to Allied success. Los Angeles officials, happily ingesting promises of future growth in the airplane business, had focused on the need to develop airports and aviation companies before the war started. The war, though, “taught [the city] that the airplane would be equal to even the hyperbole of the boosters.”¹⁰⁸ World War II was fought and won in the skies by bombers, fighters, and transports. General Henry Arnold and Cal Tech scientist Theodor von Karman were more aware of this than city officials – eager to use it as a stepping-stone for a permanent Air Force presence in Los Angeles and increased federal funding of aeronautical research in Cal Tech.¹⁰⁹

In the summer of 1944, at La Guardia Airport in New York, Arnold approached von Karman on the tarmac. Arnold explained to von Karman, before asking him to organize the Scientific Advisory Group to the Air Force, “The next Air Force is going to be built around scientists – around mechanically minded fellows.” When the SAG was established, later the Scientific Advisory Board, von Karman worked with four other men to mold the institution, including Cal Tech colleagues – H.S. Tsien and Frank Wattendorf. On a five-man commission that developed the literal blueprint for the Air Force and an implicit blueprint for how the military industrial complex would interact amongst its subsidiaries, Los Angeles natives held three seats. In compiling a report on the war effort and material the board researched on a visit to German aeronautical institutions, the board argued to the military and government, “that air power had been

¹⁰⁸ Lotchin, *Fortress California*, 139.

¹⁰⁹ Lotchin, *Fortress California*, 178.

the decisive factor in the Allied victory.”¹¹⁰ It was more than a convenient coincidence of capitalism that Arnold placed von Karman at the head of SAG and he, in turn, helped to produce the study that emphasized the importance of air power during World War II. Generals and FDR, in the opening days of the war, had of course realized this fact, but it was now institutionalized as the founding tenet of the military’s scientific advisory board – the report became the guiding plans for establishing the new Air Force.¹¹¹ Los Angeles and the surrounding desert became central to this expansion.

A *Fortune* article, preceding Pearl Harbor, commented both on L.A.’s newfound role as American aviation center and the worries surrounding air power’s new “cradle.”¹¹² The article called Angeleno air power an incongruity, but just another in a long line of “eternal incongruities” for the city. Thousands of miles away from the metals present in the Midwest and necessary for industry, but thousands of miles closer to potential air attack, the eastern biased *Fortune* was critical of Angeleno aviation but still celebrated the “Arsenal of the U.S. Bomber,” writing, of the cherry attitude around aviations local success, “they are making dive bombers in the land of Oz.” The article quoted aviation local Donald Douglas, also clearly aware of the industrial paradox. “It’s all sort of a mad dream,” he said.¹¹³

Los Angeles, unlike any other California martial metropolis, developed anxieties about industrial decentralization – seeing any drive to move industry out as a direct inhibitor to the “boomtown,” an attempt at urban character assassination. The Chamber of Commerce took up the banner once again, defending L.A.’s right to the aviation

¹¹⁰ Lotchin, *Fortress California*, 79.

¹¹¹ Lotchin, *Fortress California*, 179.

¹¹² “City of the Angels” *Fortune*, March 1941.

¹¹³ “City of the Angels” *Fortune*, March 1941.

industry. A laundry list of arguments was made: the city was far enough from Tokyo, German air power was not significant in destroying British industrial strength and thus the Japanese would not be able to destroy Los Angeles' forges, other cities were constructing arguments for industrial evacuation not from reason, but personal desires for their own growth.¹¹⁴

“Every city has had its boom, but the history of Los Angeles is the history of booms. Actually, the growth of Southern California since 1870 should be regarded as one continuous boom punctuated at intervals with major explosions.”
-Carey McWilliams¹¹⁵

Cities across America built up urban and economic assets from the war, just as the country itself built a portfolio that would soon catapult it to top as one of two superpowers. However, Los Angeles' officials differentiated their city, falling in line with their tradition of progress, by not only increasing their pre war assets, but further connecting them with the military and related arguments about urban decentralization.

Mayor Bowron, who publicly defended local industry and defense contracts often, was less subtle in a letter to a Navy official about his intentions to develop a big defense establishment. He wrote, in 1945, of plans to establish a permanent peacetime supply depot in the area, “You may be assured that the City will be reasonable in the matter of acquirement by the Navy of the additional land required, now owned by and under the control of the City's Harbor Department.”¹¹⁶

In the industrial age, the spoils of war are not reparations or natural resources. Rather, they are several degrees removed from conflict. The modern spoils of war are the

¹¹⁴ Lotchin, *Fortress California*, 149. Lotchin's chapter “Urban Economies in a Statist War” in *The Bad City in the Good War* argues the ambiguity of growth in California and points out that the war period cannot be seen through only a lens of growth.

¹¹⁵ Qtd. in Edward W. Soja, *Postmetropolis: Critical Studies of Cities and Regions* (Wiley-Blackwell, 2000), 122.

¹¹⁶ Qtd. in Lotchin, *Fortress California*, 142.

tanks, planes, and weapons produced by domestic factories working at full capacity, stimulated by a federal demand that can drive the national economy to new prosperity. Los Angeles, explained Leroy Edwards, president of the Chamber of Commerce, needed to “fight to maintain the hard won [industrial] supremacy we have achieved during the war.”¹¹⁷ Palmdale, in particular, was an extension of this fanaticism. Fontana, while more a product of the war, was also a key facet of this capitalist struggle of the metropolis – the Southland should not just retain steel industry, but grow Kaiser’s plant into the dominant furnace on the West coast, leaving Provo, Utah’s plant in the dust of the Mojave desert.

In June of 1949, *Fortune* noted, “postwar expansion of the Los Angeles industrial plant has very nearly equaled the wartime growth.”¹¹⁸ Shipbuilding was waning and aerospace only employed 25% of what it had during the war, but collective urban growth had not dissipated.¹¹⁹ Deliberate and directed policy was a the crux of transitions to peacetime that prevented contraction just as focused and visible policy was behind the growth of the 1920s, the emphasis of aviation, and the courting of Cal Tech and the military.

The state Chamber of Commerce echoed *Fortune*’s conclusions in their postwar economic review albeit with less optimism. The report warned that postwar growth created challenges, in addition to benefits, for business and government in not only Los Angeles but also the state.¹²⁰ A complete disarmament, the report’s authors felt, would

¹¹⁷ Lotchin, *Fortress California*, 161.

¹¹⁸ “The Undiscovered City,” *Fortune*, June, 1949, Volume 39.

¹¹⁹ “The Undiscovered City,” *Fortune*, June, 1949, Volume 39.

¹²⁰ “Summary of The California Economy 1947-1980” by Stanford Research Institute, published 1961 by California Chamber of Commerce. USC special collections. This is a study to understand that growth since WWII and project for next 20 years Defense was so important to report they devoted three possible projections of national defense expenditure to gauge affect on CA economy.

have had significant effect on the nation's economy, but in particular, California's.¹²¹ Los Angeles' bureaucrats, well before this report was published, were determined to not sit and wait for such disarmament. Adaptation, before the war was even over, was key. Once again, conservative officials' skepticism of planning overcame their fears with pragmatic desires for increased municipal wealth – government's role could include the measures designed to procure further growth and local enterprise.

Even with incredible wartime growth, Los Angeles maintained a real ability to not allow its urban corridors and industrial segments to become congested. In 1946, Los Angeles averaged about 4,400 people per square mile. New York had a density six times as much, Chicago four.¹²² Los Angeles during the war years and immediately afterward, grew "horizontally rather than vertically."¹²³ As the city transitioned to peacetime, arguments for maintaining this decentralization emphasized the importance of peripheral industry like Fontana and Palmdale – naturally incorporating the two, far away from downtown, as a new sort of crux for the regional economy.

Lotchin succinctly explains the snowballing effect of the decentralization and dispersal arguments:

The city builders had lured the aircraft industries in the first place; these in turn brought the contract which created congestion; and instead of bringing a decentralization of these defense industries, the congestion provided instead more leverage for these metropolitans to rationalize the need for still more government spending in the Southland.¹²⁴

Decentralization, as an urban and industrial idea, was also dynamic. In the 1920s, it meant the use of highways and zoning to make sure industry and communities were

¹²¹ "Summary of The California Economy 1947-1980" by Stanford Research Institute, published 1961 by California Chamber of Commerce. USC special collections.

¹²² Scott, *Metropolitan Los Angeles*, 50.

¹²³ Carey McWilliams, *California: The Great Exception*, (Connecticut: Greenwood Press, 1949), 238.

¹²⁴ Lotchin, *Fortress California*, 144.

spread across the plain. During the war, it was defined more on terms of strategic necessity to prevent the consolidation of vital industries in one area – creating a target for Japanese bombers. Los Angeles boosters co-opted both definitions to serve Los Angeles' continuing growth and sprawl across the area, soon reaching into the agricultural and desert hinterlands once considered well outside the city's urban sphere.

Chapter 3

Manifesting Destiny in the Desert: Edwards Air Force Base and the Military's Arrival as a Cornerstone of Los Angeles' Decentralized Economy

“A nearly perfect physical environment, Southern California is a great laboratory of experimentation. Here, under ideal testing conditions, one can discover what will work, in houses, clothes, furniture, etc. It is a great tribal burial ground for antique customs and incongruous styles. The fancy eclectic importations soon cancel each other out and something new is then substituted.”

-Carey McWilliams¹²⁵

Ninety-nine miles away from downtown Los Angeles, the Corum family established a small town far into the desert in 1910. The town was named Muroc, their name spelled backwards. The Corum brothers, homesteaders, slowly grew their desert yeoman farmer community.¹²⁶ In less than 50 years, the desert-farming outpost became the site of perhaps the Air Force's most important jet testing center, a key training center, and a massive bombing range. The base and its development coincides with both the growing partnership between boosters in the region and the military, as well as the allure of the desert as the next frontier for Los Angeles developer intent on decentralization.¹²⁷

General Henry “Hap” Arnold, the father of the U.S. Air Force and a Pasadena native, had been trying to develop Muroc as a gunnery and bombing range for years

¹²⁵ Carey McWilliams, *Southern California: An Island on the Land*, (Utah: Gibbs Smith, 1946, 1973), 369.

¹²⁶ John Ball Jr., *Edwards: Flight Test Center of the U.S.A.F.* (New York: Duell, Sloan and Pearce, 1962), 14.

¹²⁷ "Anti-aircraft Range Sought :Proposal to Purchase Mojave Desert Tract Made by President." *Los Angeles Times*, January 26, 1940, <http://www.proquest.com/> (accessed February 22, 2011).

during the 1930s. Arnold, in his autobiography, reflected on discovering the site, “Taking off from this dead lake, thousands of young men were to learn how to send their bombs down accurately on Berlin.”¹²⁸ However, it was not until he enlisted the help of the L.A. Chamber of Commerce in spreading interest among congressmen for the project did he secure a title. President Roosevelt followed up a year later, in 1940, and supported the proposal to buy 750,000 acres in the Mojave for use as a firing and training range.¹²⁹ Proclaimed Southern California’s first major Army field training base, the gunnery range later grew into the premier testing site for next generation jets, designed and manufactured within driving distance of the Mojave.¹³⁰

In the domestic military build up to World War II, bonds formed between businesses, the military, and politicians. The partnerships would have long-term consequences on the sprawling desert and the region’s economy. The relationship between the Chamber and the military, willingly coerced by men like Army Colonel William J. Fox, key in the ensuing development of Palmdale’s airport and factories ten miles to the south, simultaneously echoed the already present importance of L.A.’s boosters and foreshadowed the frantic and devout fishing of government defense contracts that swept through the area during and after WWII.

“Hap” Arnold was a critical figure – the patron military booster for Edwards. However, allowing Edwards to claim all of Arnold would neglect his incredible role in

¹²⁸ Henry Arnold, *Global Mission* (New York: Harper & Brothers, 1949), 137.

¹²⁹ Arnold, *Global Mission*, 137. Lotchin, *Fortress California*, 82.

¹³⁰ The “technopoles” of the regional economy. Palmdale and Fontana, thanks to industry developed during WWII, are peripheral urban hubs, or “technopoles.” From Edward W. Soja, *Postmetropolis: Critical Studies of Cities and Regions* (Wilsey-Blackwell, 2000).
 Anti-aircraft Range Sought: Proposal to Purchase Mojave Desert Tract Made by President. *Los Angeles Times*, January 26, 1940, <http://www.proquest.com/> (accessed February 22, 2011).

forming the U.S. Air Force as a five-star general with forty-one years of active service.¹³¹ Arnold, an officer at March Field, first proposed the use of Muroc Dry Lake as a bombing range, establishing the physical foundations of Edwards. During the 1930s, Arnold also developed his own brain trust at March Field in Riverside, filled with the names of Spaatz, Eaker, Hunter, McNaarney, and Beebe – men that went on to fill key roles in the bureaucracy of air power Arnold presided over.¹³² Arnold, while serving at Riverside, realized, by no coincidence, both the incredible tactical importance of aircraft in future conflicts and the variety of opportunities Los Angeles presented to the growth of an air force.

Muroc's site sat on the periphery, where the desert geography lent itself to testing the Bell Aircraft SP-59A, the first American jet, and provided isolation from prying minds, both foreign and domestic.¹³³ John Ball Jr., in his 1962 summary of the base's history, explained the attraction of the hard dry lakebed, an "unprecedented natural airport" that combined with excellent flying weather.¹³⁴ While the test center would grow to have vast importance in the region, during the war years, Muroc, was just one of many signs of Los Angeles' militarization and had yet to distinguish itself.¹³⁵

In a county that fanatically worshipped development, Muroc would transform overnight. "Here...aviation history is written on a day-to-day basis," claimed Ball, writing amidst the bases frantic years.¹³⁶ This claim was certainly true, beginning on December 7th, 1941. The same day the Japanese bombed Pearl Harbor, the Army Air

¹³¹ Thomas Coffey, *Hap* (New York: Viking Press, 1982), 2-10.

¹³² Coffey, *Hap*, 152.

¹³³ Roger W. Lotchin, *The Bad City in the Good War*, (Bloomington: Indiana University Press, 2003), 10.

¹³⁴ Ball, *Edwards*, 3.

¹³⁵ Ball, *Edwards*, 6.

¹³⁶ Ball, *Edwards*, 4.

Corp ordered a bomber reconnaissance squadron to Muroc, a small base at this point still 65 miles across the lake from the desert farming community the Corum brothers founded 30 years ago.¹³⁷ Within a year, though, jet engines would overshadow alfalfa fields. By the end of a decade, the lake bed was no longer a buffer zone but a landing site for the nation's cutting edge military technology manufactured ninety miles south where aerospace industry was centralized in Long Beach, Glendale, and Orange County.

In 1942, Arnold visited Muroc again, this time with the goal of researching potential sites for testing the XP 59 jet. Later that year, in October, Colonel Laurence Cragie flew the first American jet at Muroc Air Force base – whisking through the dry and sparsely populated desert utilizing the almost organic runway created by the dried lakebed.¹³⁸ After the war, Chuck Yeager broke the sound barrier flying out of Muroc, which became Edwards Air Force Base in 1950 in honor of Captain Glen W. Edwards' 1948 death during a test flight.¹³⁹ Muroc, a fit for Arnold's bombing range, was just as appealing for a test-program. Isolated, yet close enough to the major industrial and manufacturing area for aviation, his past moves to buy up government property in the middle of the high desert began to pay out its first dividends for the Air Force.¹⁴⁰ Soon, the base evolved into a huge aerospace complex, touted by manufacturers as the pre-eminent testing location for their products, created just south as another leg of the Angeleno economy.

Lancaster, the city of 140,000 now just south of Edwards and north of Palmdale, was a community contingent on the arrival of the Air Force and manufacturing. In 1951,

¹³⁷ Ball, *Edwards*, 15.

¹³⁸ Markusen, *Gumbelt*, 105.

¹³⁹ Markusen, *Gumbelt*, 105. "Muroc Field Renamed for Capt. Edwards." *Los Angeles Times*, December 8, 1949, <http://www.proquest.com/> (accessed February 22, 2011).

¹⁴⁰ Ball, *Edwards*, 39.

civilian labor was still largely imported to Edwards. The environment, while hospitable to large jets and experimental aircraft, provided for difficult living conditions in a remote and underdeveloped area. Title VIII of the Federal Housing Administration, a new military housing program elongating the New Deal into post-WWII America, revealed that forces from the top increasingly began to focus on the shortage of labor. The Air Force officers in Muroc used Title VIII, in one of its initial projects, to develop 724 residences in Muroc. All were air-conditioned and, representing both the consumer society and Cold War anxieties of 1950s America, insulated and sealed against a poison gas attack.¹⁴¹

Tom Wolfe's *The Right Stuff*, set at Edwards, and later the film of the same name, synthesized a cultural narrative of the barren communities at the heart of the western military-industrial complex.¹⁴² Twentieth century cowboys, the pilots provided the final glamour to an assembly line process that involved boosters and bolts. At Edwards, the 20th century cowboys tested the planes and bombs manufactured at either Air Force Plant 42 in Palmdale or in the original aerospace hubs of Los Angeles. A romanticized and modernized notion of manifest destiny nevertheless, does not adequately explain what motivated the production of jets among the dunes. The environment and open space played significant roles in attracting the Air Force, but in the end it was a conglomeration of arguments made by colonels, businessmen, and politicians that urbanized the outermost periphery of Los Angeles and revised the region's political economy.

At Edwards, acceleration was a tautology both during and after the war. From 1945 through the early 1950s, a barrage of bi-yearly reports on the newest jets tested at

¹⁴¹ "Air Force Housing, Mojave Desert," *Architectural Record*, Vol. 109., May 1951. 123-125.

¹⁴² Markusen, *Gunbelt*.

Muroc Dry Lake filled the pages of the *Los Angeles Times*. Each topped the previous' speed record, each more efficient, each a greater sign of American economic, intellectual, and military dominance, each its own cause for celebration. Manifest Destiny was no longer the cliffs of the Pacific but an invisible wall, the sound barrier. Chuck Yeager, in 1947, broke the barrier at Muroc; Mach 1 was a reality. The *Times* wrote in 1948 of the previous year, "Speed was the key word for Southern California's air year 1947."¹⁴³ Six years later, a plane reached Mach 2. By 1961, Mach 6.¹⁴⁴ Research aircraft pushing the edge of American destiny a bit further came "on a fairly regular schedule" at Edwards.¹⁴⁵

Edwards remained a single denomination site – strictly under military control through the 1940s and 1950s. In its own right, though, the base came to be referred to as a city.¹⁴⁶ The remote location of Edwards is more a testament to the Air Force's need for a strategic test site. However, the base's incredible importance in the Cold War years was a testament to Los Angeles' continuing emphasis of an "air-minded urban culture" that coalesced with the military. Just miles south of Edwards, boosters built Palmdale Airport and Air Force Plant 42 within just a few years after the wars ending. These boosters brought the foundations for an urban populace into the desert, attracted to the desert by its proximity to Edwards.¹⁴⁷ These foundations went on to become the cities of Palmdale and Lancaster and decentralizing industry even further – now embattled by a changing national economy and dependence on the military industrial complex. Even in

¹⁴³ *Los Angeles Times*, Jan 2, 1948, pg. D18. <http://www.proquest.com/>.

¹⁴⁴ Ball, *Edwards*, 52.

¹⁴⁵ Ball, *Edwards*, 58

¹⁴⁶ Ball, *Edwards*, 58.

¹⁴⁷ "Air Force Plant 42," Global Security, Last modified April, 2005. <http://www.globalsecurity.org/military/facility/afp-42.htm>.

1949, before the expansion of Palmdale, Carey McWilliams was able to conclude, “California has been driven, and will continue to be driven, to seek federal support.”¹⁴⁸

Chapter 4

The Distant Suburb: Palmdale and the Partnership of Decentralization and Defense Industry

“The future was always a hot commodity in Antelope Valley. When I was a boy, the area was mostly talked about as the future home of the Palmdale International Airport – a vast facility that would eventually replace dinky little LAX...By then, greater L.A. would be so big, the Antelope Valley would be somewhere in the Middle of town.”
-William Finnegan¹⁴⁹

In June of 1996, forty-five years after John Anson Ford, county supervisor, and General Fox dedicated Palmdale Airport, Sonia Nazario published two columns painting a grim picture of the American Dream’s grinding halt in Palmdale and the Antelope Valley. The title of her first column, “Suburban Dreams Hit Roadblock,” set the stage. She blamed plummeting real estate values and the advent of an imposed commuter culture, thanks to scaled back production at nearby aerospace factories, for Antelope’s agonizing state. Nazario explained that, an increase from years past, nearly half of Antelope Valley residents commute, 30 percent for over two hours. She connected the strains of a desert commute spent gliding along the Antelope Valley Freeway with the alarming social and cultural problems plaguing the region.¹⁵⁰

¹⁴⁸ Carey McWilliams, *California: The Great Exception* (Connecticut: Greenwood, 1949), 345.

¹⁴⁹ William Finnegan, *Cold New World*, (New York: Random House, 1998), 279.

¹⁵⁰ Nazario, Sonia, “Suburban Dreams Hits Roadblock,” *Los Angeles Times*, June 23, 1996; and “Class Struggle Unfold in Antelope Valley Tracts,” *Los Angeles Times*, June 24, 1996.

However, Nazario fails to recognize the ironic twist of fates that have tangled Palmdale's dreams. Palmdale's architects, building a city connected with Edwards Air Force base and aerospace industry, never saw Palmdale as a suburb. Rather, Palmdale was supposed to grow, becoming another peripheral hub for the Los Angeles regional economy. Palmdale, as a hub, would develop to further the Angeleno residential staple of single-family homes that are owned, not rented. Hand in hand with the military's needs for an ex-urban aerospace hub, based on contradicting arguments for decentralization, Los Angeles County boosters, particularly Fox and Ford, placed an airport in Palmdale with the explicit intention of the airport and Edwards Air Force Base providing the basis for a new corner of growth. The Antelope Valley would have its own residents, businesses, industry, service workers, and municipal facilities – each of these contributing taxes to the county.¹⁵¹ The planning behind Palmdale was defined by ideas about dispersion and decentralization established during the 1920s a hundred miles south in the city's traditional heart. Additionally, the city was a result of the pronounced presence of aviation industry throughout the area but, during WWII, moved into the high desert, also under the guide arguments about the need for decentralization.

John Anson Ford, in his memoir chronicling his time as a public official for the county, placed Lancaster, another Antelope Valley city, and Palmdale squarely within the county. He explained tactfully, "They enjoyed the economies and engineering benefits of the county's expert technical guidance."¹⁵² However, he considered them distanced "desert systems" too far removed to connect with typical county networks of

¹⁵¹ Lotchin, *Fortress California*, 192.

¹⁵² John Anson Ford, *Thirty Explosive Years in Los Angeles County* (Huntington Library, 1962), 104.

sanitation.¹⁵³ Ford, a driving figure behind the arrival of aerospace in Antelope country, provided reflections that both emphasized the importance of aircraft factories in the area's growth and also defined them not as suburbs below a metropolis, but urban and industrial hubs leeching off of a larger regional economy.¹⁵⁴

Palmdale and Antelope Valley's roots begin with a different notion of utopia.¹⁵⁵ Westward migrating Swiss and German farmers settled Palmdale in 1886. When drought struck in the 1890s, only one family survived. In 1899, the family resettled next to the new Southern Pacific railroad station.¹⁵⁶

It is doubtful that, in 1913, when William Mulholland stood over the just completed Los Angeles Aqueduct and said, "There it is. Take It," that he had the drought stricken German families of Palmdale in mind. However, the people of Palmdale, after two decades of dust, were able to restore the town's agriculture with the completion of the aqueduct.¹⁵⁷ Alfalfa became the valley's primary commodity, a far cry from the stealth bombers and fighter jets that have dominated the economy since 1950.¹⁵⁸

Only gods and heroes can be brave in isolation. A man may call upon his courage only one way, in the ranks with his brothers-in-arms, the line of his tribe and his city. Most piteous of all states under heaven is that of a man alone, bereft of the gods of his home and his polis. A man without a city is not a man. He is a shadow, a shell, a joke, and a mockery...No one may expect valor from one cast out alone, cut off from the gods of his home.

-Steven Pressfield¹⁵⁹

¹⁵³ Ford, *Thirty Explosive Years*, 104.

¹⁵⁴ Ford, *Thirty Explosive Years*, 87.

¹⁵⁵ Lotchin, *Fortress California*, 192.

¹⁵⁶ "Antelope Valley Frequently Asked Questions," County of Los Angeles Public Library, last modified August 2007, <http://www.colapublib.org/history/antelopevalley/faq.html#q5>.

¹⁵⁷ "Antelope Valley Frequently Asked Questions," County of Los Angeles Public Library, last modified August 2007, <http://www.colapublib.org/history/antelopevalley/faq.html#q9>.

¹⁵⁸ "Antelope Valley Frequently Asked Questions," County of Los Angeles Public Library, last modified August 2007, <http://www.colapublib.org/history/antelopevalley/faq.html#q9>.

¹⁵⁹ Steven Pressfield, *The Gates of Fire* (United States and Canada: Bantam Books 1998), 45.

Palmdale's factories, located about ten miles south of Edwards and ninety north of Los Angeles are the prototypical examples of combining civic and public Angeleno desires for dispersal and development with military industry, all in the name of urban glory. Carey McWilliams, in the immediate aftermath of the drive to expand Palmdale's airport, addressed the relationship, "The spread-out, highly dispersed geographical pattern of Los Angeles manufacturing happens to square with the modern trend toward uncrowded, one-story manufacturing plants located on the periphery of built up areas."¹⁶⁰ A trend derivative of the 1920s, fear and loathing of crowded industry and urban communities eclipsed any other way to define Los Angeles as a metropolis with the rise of industry, thanks to the needs of war, on the periphery of the county.

Historian Roger W. Lotchin, in defining the relationship of war and defense with urbanization, places Palmdale at odds with the centralized interests of the city, Los Angeles. In many ways, it was – a distant desert beacon of industry that did little for the city. This characterization overlooks the themes of decentralization, fears of a congested metropolis that festered and arrived during the booming 1920s. Los Angeles' factories, from movies to aviation and rubber, never wanted neighbors, each receiving its own segmented community, a sliver of the "earth worm," the metaphor Jean Paul Sartre used to describe the city. As L.A. growth hurtled outward, and population headed towards inevitable increases after World War II, placing the next big airport, along with the next vital aerospace manufacturing complex, away from current congestion seemed not only logical, but an urban necessity to maintain what made Los Angeles grow in the past.

Palmdale was just beginning to enter the sphere of aerospace industry at the close of WWII. Colonel William J. Fox, as director of the newly formed county Department of

¹⁶⁰ McWilliam, *Island on the Land*, 236.

Aviation, set his sights on the Antelope Valley with the public intentions of developing Palmdale Airport, now a civilian landing site, and soon to be revealed plans for an engagement to Edwards and military industry.¹⁶¹ If Edwards Air Force base has its patron military booster in Henry Arnold, Palmdale can look to canonize General Fox integral in bringing Lockheed and the manufacturers that followed to Palmdale. In recognition of Fox's importance to their town, the people of Palmdale, not yet an incorporated city, watched Fox grand marshal their Memorial Day parade in 1949.¹⁶²

Plans to engineer the civilian airport, turned over to the County in 1946 after six years of war service, into a trilateral industrial, civilian, and defense location, began long before this. Airports as aviation industrial parks, rather than just airfields, was a common theme throughout Metropolitan California – just as easily, these industrial theme parks could be accommodated to include a defense presence.¹⁶³ As early as 1947, months after civilian leadership assumed control of the airport, the South Antelope Valley Press reported on negotiations between Lockheed and the County on a potential lease of Palmdale Airport property to the corporation.¹⁶⁴ *Aviation Week*, in 1948, reported on plans to expand the airport to 5,000 Acres and construct a massive 12,000 foot runway. Not publicly announced by Fox at that point, it was still widely known that Lockheed would be chosen as the private corporation spearheading development.¹⁶⁵ In December of 1949, the Counter Chamber of Commerce Board of Trustees approved a \$300,000 construction product at the civilian airport transitioning to accommodate military

¹⁶¹ Lotchin, *Fortress California*, 191.

¹⁶² "Aviation will be Palmdale Event Theme," *Los Angeles Times*, May 22, 1949, <http://www.proquest.com/> .

¹⁶³ Lotchin, *Fortress California*, 84.

¹⁶⁴ "Aviation Progress" compiled by the Aviation Department of the L.A. County Chamber of Commerce, December 1947. USC regional special collections.

¹⁶⁵ "Giant Test Center Seen at Palmdale," *Aviation Week*, August 23, 1948.

presence and manufacturing. The building was an administrative center 100 miles north of downtown, adjunct the Palmdale airport.¹⁶⁶ The plans were symbolic of L.A.'s lack of commercial center and traditional L.A. mythology, but also highlighted the critical geographic and political alliances between business leaders and the military.

William Fox, collaborating with the Lancaster and Palmdale Chambers as well as state assemblyman Julian Beck, presided over the groundbreaking of the administrative building in 1950. He was well aware of the site's future importance as not just a municipal airport but also military and industrial establishment.¹⁶⁷ Fox noted the long process behind developing the air field and claimed that plans for a major air terminal in Palmdale originated over twenty-five years prior. Fundamentally integrated with plans for industrial and population growth at Palmdale, Fox cited agreements that set aside two thousand acres for factory locations on the airport property, foreshadowing the imminent federally financed Lockheed project.¹⁶⁸ Fox and company did not officially make their plans to make the airport an official military installation and Air Force plant public until 1952. However, the cultivation of the military relationship was longwinded, linking back not just to explicit agreements made after the war but the importance of Edwards' growing value during.

As a political move, the drive to develop Palmdale's airport with military contracts echoed desires for manufacturing. During WWII, boosters recognized that manufacturing now often followed military testing. Military testing was often dependent

¹⁶⁶ Chamber of Commerce board minutes Dec. 8th, 1949. USC regional special collections. Upon groundbreaking, the project was expected to cost \$100,000 but had been approved to cost \$300,000. "Administration Building Started at County Airport" *Los Angeles Times*, Jul 28, 1950, <http://proquest.com/>.

¹⁶⁷ Lotchin, *Fortress California*, 190-92. Lotchin has extensive personal sources that build a narrative of Fox's longwinded involvement as a military aviation booster.

¹⁶⁸ "Administration Building Started at County Airport" *Los Angeles Times*, Jul 28, 1950, <http://proquest.com/>.

on the presence of existing airports.¹⁶⁹ Boosters were not going to make the same mistake they had made in prewar years when they failed to finance significant municipal airport expansions. In turn, county and local officials turned towards the new surplus airport, a donation from the War Assets Administration.¹⁷⁰ Lotchin explains, “Fox felt that the county must have an ‘airport in being,’ ready for occupancy, or risk losing the ‘great game’ of industrial development to some other area in the Southwest.”¹⁷¹

Aviation Week, in August of 1948, reported on the planned “giant test center” for Air Force jets at the county owned Palmdale Airport. The article cited Fox. He explained that the plans called for developing the airport into the primary testing facility for high-speed aircraft in the country.¹⁷² Fox asked the Board of Supervisors to fund the site as a new jet airport, not as a field designed for propeller planes – an industry of the past thanks to developments at Cal Tech and Edwards.¹⁷³ The airport was attractive because it was just ten miles from Edwards, the other testing site, and shared the same environmental benefits.¹⁷⁴ While no firms signed contracts to purchase land until 1950, the county continued to purchase land around the newly acquired airport. Fox was sure to keep the Air Force informed of these purchases as well.¹⁷⁵ Just as the announcement of Kaiser’s arrival in Fontana sparked a real estate boom, rumors of the county’s purchases inspired a “mini-boom” in the Mojave.¹⁷⁶

Palmdale’s location, a remote desert community largely outside Los Angeles’s peripheral vision at this point, meshed with national and broader debates about industrial

¹⁶⁹ Lotchin, *Fortress California*, 191.

¹⁷⁰ Lotchin, *Fortress California*, 190-192

¹⁷¹ Lotchin, *Fortress California*, 194.

¹⁷² “Giant test center seen at Palmdale,” *Aviation Week*, Vol. 49, August 23, 1948, page 24.

¹⁷³ Lotchin, *Fortress California*, 194.

¹⁷⁴ “Giant test center seen at Palmdale,” *Aviation Week*, Vol. 49, August 23, 1948, page 24.

¹⁷⁵ Lotchin, *Fortress California*, 194.

¹⁷⁶ Lotchin, *Fortress California*, 194.

decentralization. Lotchin writes, “The Machiavellian maneuver to dispossess the central Los Angeles region of some of its aerospace manufacturers could also be portrayed as a means of defeating the cry of interior cities for decentralization.”¹⁷⁷ The project, however, still honored urban Los Angeles’ interests. Still within Los Angeles County, a county that at one point L.A. boosters were intent on consolidating every square foot of into Los Angeles proper, the project allowed aerospace to simultaneously leave and remain in the Southland while creating a new manufacturing center.

Fox received most of the credit for developing the airport, but he acted within an ecosystem that married business to aviation – allowing for the series of “Machiavellian maneuvers” that brought aerospace out into the Valley.¹⁷⁸ The Los Angeles Chamber of Commerce, a principled group in the area, demonstrated a policy of intimate involvement with the Air Force and aviation. The Digest of Board of Trustees action from 1947-1952 revealed considerable attachment to the business of aviation and military contracts, taking an official position that public policy was intertwined with the concerns of those that represented Los Angeles industry and commerce.¹⁷⁹ The Board frequently debated national policy issues pertinent to the aerospace industry – from subsidizing municipal airports to converting wartime Air Force and Navy outposts to permanent military bases. In August of 1949, members decided to pursue bringing the soon to be founded Air Force Academy to Los Angeles and launched an initiative to find a suitable location.¹⁸⁰ The “air minded urban culture” Lotchin identified as key in the arrival of aviation industry in

¹⁷⁷ Lotchin, *Fortress California*, 192.

¹⁷⁸ Lotchin, *Fortress California*, 192.

¹⁷⁹ “Digest of action,” Los Angeles Chamber of Commerce Board, 1947-1952. USC regional special collection.

¹⁸⁰ Los Angeles Chamber of Commerce Executive Board minutes August 18th, 1949. USC regional special collection.

the 1920s evolved to encompass both the military and the need for industrial decentralization – driving urban growth throughout the postwar years.

Palmdale’s role as a capitol of aerospace directly derived from two projects: the growth of Edward’s Air Force Base at the hands of the government and regionally pushed civilian development of the Palmdale Airport. Eventually, the two grouped together, sharing mutual interests. Edwards provided jobs, important in developing the urban populace, but also imported themes on Palmdale’s cultural narrative, its top-secret military aircraft “helped give the valley its futuristic sheen.”¹⁸¹

The partnership, implicit thanks to the work of men like Fox, united the their causes under one project: Palmdales Airport was to become an aerospace theme park, with industry, military, and municipal branches. In 1951, the Air Force purchased back the airport and contracted Lockheed to develop a master plan for establishing a multi-use Air Force plant and testing center on the site.¹⁸² In February of 1952, the County Board of Supervisors formally announced the vote to turn the airport over to the Air Force.¹⁸³ In ramping up progress, Lockheed appointed a coordinator for community development to work with Antelope Valley officials as operations increased. Neil D. Smith, a Cal Tech graduate, was selected.¹⁸⁴

In the turnover, Fox, an urban booster as well as military man, faced opposition from the Air Force. The non-local Air Force officers wanted Palmdale to turn completely over to the military and become a base similar to Edwards. Fox, an urban booster hoping

¹⁸¹ William Finnegan, *Cold New World*, (New York: Random House, 1998), 279.

¹⁸² “Air Force Plant 42,” Global Security, Last modified April, 2005.

<http://www.globalsecurity.org/military/facility/afp-42.htm>.

¹⁸³ “County Hints Air Force Will Get Palmdale Field” *Los Angeles Times*, Feb 16, 1952. ,

<http://www.proquest.com/>.

¹⁸⁴ “Lockheed Names Co-ordinator at Palmdale Center,” *Los Angeles Times*, March 22, 1952,

<http://www.proquest.com/>.

to construct an urban population around the site, wanted to airport to include a Palmdale municipal presence and the capacity to operate civilian flights.¹⁸⁵ While the generals blocked the county's call for civilian flights in 1951, the county acquired land back in the 1970s for civilian flights – a sign of the continuing and dynamic relationship between the military and urban officials.¹⁸⁶

The Air Force expected the facility to cost \$50 million dollars, with \$20 million spent in the first year and half of construction.¹⁸⁷ By March 1952, Lockheed, working with L.A. county officials, had already begun operating at a new \$400,000 hanger just completed on site, paid for by the Air Force.¹⁸⁸ Eighteen months later, the plant employed 3,600 people.¹⁸⁹ North American Aviation and Northrop Aviation later joined Lockheed, the driving force behind the original contracts, at the facility. Deemed Air Force Plant 42, the county seceded full control of the airport the Air Force in 1954 after the county and Air Force approved Lockheed's master plan for the site in 1953. Looking to best capitalize on the investment, the Palmdale Chamber of Commerce chartered its Palmdale Industrial Development Council in 1953 with the goal of settling incoming manufacturing in the Valley – still largely vacant and unincorporated.¹⁹⁰

The development of Air Force Plant 42 under military, industrial, and civilian interests placed Palmdale within the trajectory of rooted decentralized development and urban dispersal in the Southland. However, it also came to define the post-WWII

¹⁸⁵ Lotchin, *Fortress California*, 196.

¹⁸⁶ Dan Weikel, "Palmdale to Run Troubled Local Airport," *Los Angeles Times*, November 12, 2008. <http://articles.latimes.com/2008/nov/12/local/me-palmdale12>

¹⁸⁷ "Master Plan Completed for Jet Flight Center," *Los Angeles Times*, Dec 7, 1952, <http://www.proquest.com/>.

¹⁸⁸ "AF Acquires Airport for Jet Test Base," *Aviation Week*, March 17th, 1952.

¹⁸⁹ "AF Acquires Airport for Jet Test Base," *Aviation Week*, March 17th, 1952.

¹⁹⁰ "Palmdale Group Helps Industry." *Los Angeles Times*, May 18, 1953; <http://proquest.com/>.

political economy - industrialization and urbanization as dynamic processes determined by both the city and the sword.

Even during the period, city municipal officials concerned themselves with these transitions. Los Angeles' Mayor Poulson, interviewed in 1955, said:

The city has plenty of space for growth as well as the county... We have about 2,225,000 in the city and the rest of the county has 2,275,000, including all the cities that immediately adjoin Los Angeles like Burbank and Glendale and Pasadena. You usually can't tell the difference whether you're in Los Angeles or in one of these cities, except some change the style of numbering their streets.¹⁹¹

Poulson does not explicitly mention Palmdale, a fledgling city at this point, but it was not long before an urbanized Palmdale came to resemble the already urbanized more central cities. Poulson continued, foreshadowing the growth of Palmdale, arguing the city had little limitations on its growth, postponing problems prevalent in Eastern cities.¹⁹² This uninhibited urbanization, however, produced a bumper crop of its own problems.

While Poulson concerned himself more with the effects on Los Angeles proper, the urban expansion of Los Angeles further away from the traditional had already sparked a debate. By the mid 1950s, many recognized that they had filled up Los Angeles' valley plain's traditional borders – some envisioned a Los Angeles stretching 200 miles, well beyond the urban beginnings in Palmdale or Fontana.¹⁹³ Officials discussed a possible consolidation of businesses and population downtown, but the past problems of such development returned to denounce such a plan – traffic, smog, and congestion once again ruled urban planning discussions.¹⁹⁴ The city's downtown did

¹⁹¹ "Problems of Fastest-Growing City in the U.S." *U.S. News and World Report*, September 16, 1955, 58-61.

¹⁹² "Problems of Fastest-Growing City in the U.S." *U.S. News and World Report*, September 16, 1955, 58-61.

¹⁹³ "Motor-borne Los Angeles gives industry that open air touch," *BusinessWeek*, May, 1957, 172-178.

¹⁹⁴ "Motor-borne Los Angeles gives industry that open air touch," *BusinessWeek*, May, 1957, 172-178.

expand, due to civic works and the growth of financial firms, but the periphery also continued to press outwards. In this round of dispersal, the city pushed even farther into the desert, perhaps to the area's limits as one monolithic metropolitan economy. The story of Palmdale illuminates the implications of that outward progression.

The pessimists who thought Los Angeles was headed for a big bust were misjudging one set of facts...They expected Los Angeles to suffer more than most cities, in the postwar recession, because it had grown so fast during the war. If the warworkers stayed, there would be critical unemployment; if they went home, there would be surplus housing in Los Angeles, layoffs in dry-cleaning plants, department stores, and all the way through the retail and service lines”
 -“The Undiscovered City”¹⁹⁵

Most of the country, with the close of World War II began to prepare themselves for a deceleration in things both economic and social. GIs returned homes and factories closed, recession and strikes return. Each American city dealt with the close of the war independently. Officials and boosters around the country sought to protect their local interests. In Los Angeles these interests lay with the explosion of aviation industry and a militarized economy. In a city blurring line between municipality and region, many leaders began confronting the slower years of the peace dividend before victory was on the horizon. Remarkably, Angelenos adapted to peacetime – dulling the blades of a militarized economy to maintain production, research, and employment. Carey McWilliams, surprisingly, noted in his 1949 monograph on the city that Los Angeles filled 55 percent of the government's orders for planes after the war, compared with 26 percent during the conflict.¹⁹⁶

Employment in the aviation sector did decrease immediately after the war and the city turned to other industries, like apparel, in its reconverting to a peacetime

¹⁹⁵ “The Undiscovered City.” *Fortune*, June, 1949.

¹⁹⁶ McWilliams, *Island on the Land*, 225.

economy.¹⁹⁷ Aviation companies, in 1949, only employed about a quarter of the wartime peak.¹⁹⁸ However, with the Korean War, Cold War, and emphasis on high tech defense products, aviation boomed once again, this time in a partnership with missiles. By 1952, aircraft and parts industry comprised 59 percent of all new manufacturing in the county and 160,000 employees worked in the industry – returning the number to wartime levels.¹⁹⁹

Palmdale, today masquerading as a suburb sending people over the mountains to work, had local labor shortages through the 1970s. When Lockheed was developing its L-1011 Tristar, the company recruited workers from Burbank – offering packages of relocation or company buses for daily commuters.²⁰⁰ The airport and Plant 42 urbanized Palmdale. Edwards, by influencing industry to arrive at Palmdale, of course played a key role as well. Urban growth did not occur on a significant level until the 1960s, but its figurative roots lie in the 1920s.

The defense contracts that piled into Los Angeles reached incredible heights in the postwar years. Prime contracts awarded in California during World War II, the money paid directly by the Department of Defense to private companies, ranked third with 8.7% of the total. New York led with 11%. By 1958, California captured 21% of prime contracts. New York, second, still had only 11%.²⁰¹ In dollar values, this translated to 4.4 billion dollars, of the 20.4 billion total allocated, for California prime

¹⁹⁷ “The Undiscovered City,” *Fortune*, June, 1949, Volume 39.

¹⁹⁸ “The Undiscovered City,” *Fortune*, June, 1949, Volume 39.

¹⁹⁹ Lotchin, *Fortress California*, 231.

²⁰⁰ Markusen, *Gunbelt*, 106.

²⁰¹ “The Defense Industries of California,” Economic Consultant Dr. G. N. Rostvold of Pomona College and the State Chamber of Commerce, L.A., Oakland, San Diego, San Francisco, San Jose, May 1959. Honnold Mudd Special Collections.

contracts.²⁰² In reporting such numbers for California contracts, the state Chamber postulated, “Private Industry in California continues to play its traditional role of leadership in meeting the complex defense needs of the nation.”²⁰³ More importantly, well over half of these companies, year after year, for decades, came to the Los Angeles

Prime contracts continued to pour into California, outpacing their growth in every other state, after the war. Ann R. Markusen, *The Rise of the Gunbelt: The Military Remapping of Industrial America* (New York: Oxford University Press, 1991),

regional basin.²⁰⁴ Federal money for civilian airports also arrived in the County. California received about \$4.5 million in federal money, of the \$66 million, appropriated by Congress for the 1948 airport aid program. Of that \$4.5 million, over \$1.1 went to airports in Los Angeles County.²⁰⁵

Southern California often contained the largest increase in new factories and plant expansions, yearly, during the 1950s. Population increased at a higher rate in the region relative to the rest of California. Los Angeles metropolitan area factory payrolls accounted for 63% of state factory payrolls in 1956 – remaining around that number for most of the decade.²⁰⁶ A 1958 report on state development highlighted prime contracts that went towards capital investment rather than production of goods. The authors noted the abundance of contracts with a favorable “rapid amortization” and credited their presence booster politicking. The “steel mills, aircraft and parts firms, electronic, guided missiles, machinery, and ordinance plants,” the report outlined, “rose to exceptional

²⁰² “The Defense Industries of California.”

²⁰³ “The Defense Industries of California.”

²⁰⁴ Markusen, *Gunbelt*, 84.

²⁰⁵ “Cash Earmarked for Airport Here.” *Los Angeles Times*, Aug 5, 1947, pg. 2. <http://proquest.com/>.

²⁰⁶ Economic Survey of California 1958 (California Blue Book) prepared by research dept of State Chamber of Commerce. USC regional special collection.

peaks in early 1950s and were concentrated in Southern California.”²⁰⁷ On a national level, by 1954 Los Angeles surpassed Detroit as the country’s third largest manufacturing center. The state chamber of commerce, in its annual blue book, attributed this ranking, among other things, to the county’s development of aviation manufacturing during the War.²⁰⁸ Palmdale, a prominent fixture of the defense related economy, developed within a broader environment created by the boosters. However, urban Palmdale, founded solely on the booster’s marriage of decentralization and defense spending, would later face a greater economic burden with the peace dividend.

Los Angeles represents the urban implications of federal money doled out by the Department of Defense. However, scholars have also noted the more subtle ways federal money has trickled throughout the metropolis during the post New Deal years. Urban theorist Edward Soja, in particular, while not quite as critical as Davis, calls Los Angeles “the prototypical Keynesian state-city, a federalized metro-sea of state rescued capitalism.”²⁰⁹ Juxtaposed against what seems to be irreconcilable claims that Los Angeles is the ultimate free market, capitalist urban body, these notions paint the complex narrative that is not just Los Angeles’ own history and economics, but also the historiography and frameworks that have been developed to study the region.

Soja underscores the prevalence of federal programs that subsidized a brand of consumption in almost organic synergy with Angeleno capitalism – in particular the bureaucracy behind housing, transportation, and water development.²¹⁰ In Los Angeles,

²⁰⁷ Economic Survey of California 1958 (California Blue Book) prepared by research dept of State Chamber of Commerce. USC regional special collection.

²⁰⁸ Economic Survey 1954, research dept of State Chamber of Commerce. USC regional special collections.

²⁰⁹ Edward Soja, “Taking Los Angeles Apart: Towards a Postmodern Geography,” ed. by Richard Legates for *The City Reader*, fifth edition (New York: Routledge, 2000), 184.

²¹⁰ Soja, “Taking Apart Los Angeles” 184

even before the advent of the 1950s, single-family housing shifted from a desired good into the norm.²¹¹ Palmdale, and its housing developments pouring out over the desert, enriched by federally funded irrigation projects and mortgages paid by aerospace federal contracts, represented one unraveling of such an injection of the military industrial complex. World War II provided, or is at least perceived to, a watershed period that militarized Los Angeles industry and Keynesianized the region. However, the stories of Muroc and Palmdale, as well as industry throughout the region, were not necessarily produced by the war, they are continuities of economic and political traditions long rooted in the city.

During World War II, there was, nevertheless, a major shift for Los Angeles industry. This was not a shift of material or goal – aviation had long been present in L.A. and only increased in breadth and technology. Rather, for the first time on a large scale, L.A. industry fundamentally linked itself to national interests of the federal government. No longer were just individual Angeleno boosters forming a collective to advance their city, they now could attach their urban environment to national politics in significant ways. Edwards is a clear example of this process. Palmdale is a slightly more homegrown instantiation on the periphery, but still falls within this tradition. Cal Tech, and its associated characters like Theodore von Karman, were even more connected. After all, it was Hap Arnold that approached von Karman, then a Cal Tech scientist, in 1944 to serve on the soon to be established Scientific Advisory Group, later Board, to the Air Force.²¹² The *Los Angeles Times* endorsed the need to develop supercarriers and nuclear-powered submarines on a national level because those were products in which

²¹¹ Bass Warner, Jr., “The Megalopolis 1920-,” ed. by Richard Legates for *The City Reader*, fifth Edition (New York: Routledge, 2000) 69-70.

²¹² Lotchin, *Fortress California*, 178.

their “urban futures” depended.²¹³ Palmdale founding fathers placed the city alongside military industry. Occurring at the same time as the federal government began to subsidize the aircraft industry to develop not only combat planes, but also cargo and transport aircraft, Palmdale’s boosters further developed Los Angeles urban air minded culture and sought out federal money for aviation.²¹⁴ This established a practice of designing and constructing civilian and military transports together, paralleling the larger confluence of civilian urban growth, that emphasized decentralization, as it related to military strategy and defense related industries.²¹⁵

Aggregating and analyzing twenty years of growth for Palmdale and the Antelope valley, the Palmdale City Council and Planning commission released a master plan for the city in 1968. Palmdale’s population was only 20,000 in Palmdale and the Antelope Valley’s only 110,000. However, Palmdale’s population, in the ten years after Plant 42 opened grew by 500%. 86% of the houses within Palmdale proper had been constructed in the previous fifteen years. Massive growth continued through the 1990s, the new transplants continued to give the same reasons for moving – “less crime, less congestion, less smog, cheaper housing.”²¹⁶ Giving credit where due, the Palmdale City report registered the area’s critical shift towards aviation industry in the years after World War II and associated the growth at a fundamental level with defense related employment.²¹⁷

Palmdale developed as an “independent urban center,” the council argued, but strongly added that its distance to Los Angeles was a factor in the areas social and

²¹³ Lotchin, *Fortress California*, 238.

²¹⁴ Lotchin, *Fortress California*, 245.

²¹⁵ Lotchin, *Fortress California*, 246.

²¹⁶ Finnegan, *Cold New World*, 272.

²¹⁷ Palmdale General Plan, City Council and Planning Commission, December 1968. Honnold Mudd special collection.

economic evolution. In the coming decades, Palmdale would come to be considered part of the L.A. regional area. The council concluded their report with an account of the recent county decision to incorporate the Palmdale Airport, now leased for civilian flights and jet-testing, as a major civilian aviation hub for the region.²¹⁸

In one sense, with a local and narrow view, World War II and defense projects defined and produced Palmdale's growth. World War II undoubtedly provided a transformative environment for the agricultural village to begin transforming into an industrial city – out of these beginnings sprung Plant 42 and Edwards. However, by assuming a perspective based on decade long Angeleno beliefs about urban dispersal, Palmdale represents the newest frontier of urbanization and industrialization for the city. World War II therefore catalyzed the ongoing growth beyond the archaic city borders that later characterized Los Angeles as a regional metropolitan economy rather than contained urban city. Neither of these viewpoints is a contradiction or incorrect. Instead, they illuminate the two sides of a relationship that urban boosters and the federal military forged together. This relationship can create both marked problems and transform the process of urbanization.

The implications of this relationship came to fruition during the 1990s and are still felt today. While the city's population has continued to grow, the economy faltered. Recession created a web of social and political problems derivative of the larger changes in the urban industrial economy. Beginning in 1990, the region's economy began to slow due to cutbacks in the aerospace industry. Los Angeles County lost more half a million jobs, but Antelope Valley was hit particularly hard. Housing prices dropped 50 percent.

²¹⁸ Palmdale General Plan, City Council and Planning Commission, December 1968. Honnold Mudd special collection.

The area's primary employers, for forty years, had been Edwards, Lockheed, and Rockwell – all aerospace companies. Before the end of the Cold War, a high school graduate from Palmdale High could easily acquire a job with Lockheed and Rockwell and earn \$16 an hour after only a few years of work. If that same graduate chose to stay in the valley after 1990, their best options for jobs became in the service industry – “at Taco Bell or in telemarketing.”²¹⁹

William Finnegan, in his *Cold New World*, called a “status report on the American Dream,” wrote, “The imploded local economy had changed everything for many of the valley's kids....the Cold War was over and the aerospace and defense jobs were not coming back.” The previous generation came to Antelope and found an affordable single family home and a fair, stable pay check, the aspirations of their children were much different. He wrote, “For three years running, when asked about their post-graduation goals, more than 90 percent of Kennedy's seniors had proclaimed their first ambition to be getting out of the Antelope Valley.”²²⁰ Aware, just like Nazario and Finnegan, that living in Palmdale as if it was a suburb, necessary after local aerospace's, demise only lead to further troubles. The future, and theirs, was not located in the high desert – breaking away from the tradition of earlier boosters, pilots, and generals.

Located 60 miles southeast of Palmdale, Fontana, a city void of any aviation industry, parallels the arc of Palmdale – an agrarian community urbanized by rooted industrial development catalyzed by World War II and the rise of the military industrial complex. Equally dependent on industry developed during World War II, changes in the

²¹⁹ Finnegan, *Cold New World*, 273.

²²⁰ Finnegan, *Cold New World*, 280.

American economy since have required the city' officials and people to adapt and find a new form of economic sustenance.

Chapter 5

From Farm to Forge: Fontana and the Industrialization of Los Angeles' Periphery

“If I’m against development, then I’m a hypocrite. As farmers we created the model for this type of growth. We came here, ripped apart the native desert landscape, and continually tried to increase our yield per acreage. It’s essentially the business model for any suburban development.”²²¹

-Matthew Moore, farmer

A city of almost 200,000, Fontana’s economic lifeblood is, now, predominantly post-industrial and post-fordist. The city engulfs key highway junctures. The Interstate 10, 15, and State Route 210 run through the area, gridding off a landscape for trucking based industries – industrial sales, storage centers, and product distribution warehouses. Located in an unincorporated area just outside the city, the Auto Club Speedway, lying upon the foundations of the original Steel Mill, provides a vital attraction to the city – a boon for the service economy located amongst the city’s many strip malls and shopping centers. Oddly enough, the city’s largest employer, in 2009, still bore the name of Kaiser. However, rather than a steel mill emblematic of the blue collar, middle class, California industrial dream, it is a Kaiser-Permanente Hospital that claims the largest chunk of the city’s labor force.²²²

Since its incorporation in 1952, but more so in recent years, boosters have sold Fontana as a low cost suburban city – where jobs and a house were the basic tenets of

²²¹ Qtd. in “Crop Cul-de-sac,” by Randi Greenberg. *Metropolis Magazine*, July 17, 2006. <http://www.metropolismag.com/story/20060717/crop-cul-de-sac>. Moore is a fourth-generation farmer and artist. He presides over a farm in Sunrise, Arizona that was fighting growing suburban housing developments encroaching on its territory.

²²² “Comprehensive Annual Financial Report,” The City of Fontana. Prepared by City of Fontana Management Services Department. June 30, 2010. Accessed via city website.

residency. However, like of the rest of the Inland Empire, Fontana's housing market plummeted during the national foreclosure crisis. Witness to a flurry of new housing developments, the subprime mortgage crisis drove median prices for both new and existing housing down to 2004 levels by the 2010 fiscal year.²²³ Fontana, along with other areas in San Bernardino and Riverside Counties, and the Antelope valley, were no strangers to distressed real estate. The grim numbers of 2007 through the present, David Streitfeld notes in the *Los Angeles Times*, do not eclipse the 1990s housing crises – a time when boarded up houses in Fontana were just as common as pit crews.²²⁴

Fontana, as just one part of the Inland Empire, defined as San Bernardino County, Riverside County, and parts of eastern Los Angeles County, only grew into a significant urban and residential community in the post World War II years. Fontana's identity, like Palmdale's, identity as a once industrial hub and now a depreciating, but aspiring affordable, post-fordist suburb, has much more tangible roots in the changes brought to Southern California by World War II. Before a suburb, Fontana became an industrial center.

In 1942, the agrarian community was “abruptly reshaped to accommodate the dream of a Rooseveltian industrial revolution in the West.” Henry Kaiser, working in hand with the forces and trends of New Deal Keynesianism and wartime mobilization, spurred the arrival of an industrial workforce. Kaiser Steel, in a 1942 pamphlet announcing the plans for a steel mill, portrayed the attack on Pearl Harbor as not just an attack on a nation, but also a call to arms of firearms and furnaces:

²²³ “Comprehensive Annual Financial Report,” The City of Fontana. Prepared by City of Fontana Management Services Department. June 30, 2010. Accessed via city website.

²²⁴ David Streitfeld. “Foreclosures in state hit record high; The housing crisis spreads to middle-class buyers. The economic outlook ranges from a slowdown to recession,” *Los Angeles Times*, July 25, 2007, <http://www.proquest.com/> (accessed April 3, 2011).

On December 7, 1941 the village of Fontana was bathed in California's winter sunshine... Then the bombs crashed in far Hawaii, and their explosions were echoed and re-echoed by the roaring and hammerings of America's furnaces, factories, and workshops, gearing for the production of weapons and all the accoutrements of war.²²⁵

The village, the pamphlet, explained, was about to become a vital location for the war effort – simultaneously protecting democracy across the world and developing the farming community into a leading symbol of industrial prosperity among the developing West.²²⁶ Importantly, echoing calls from the rise of Lockheed and Muroc, Kaiser Inc. explained the factory should not be seen as a “war baby,” rather as the fruits of the inevitable pregnancy birthing continuous Western growth.²²⁷ To the contrary, the corporation could not help but romanticize the factory's construction in the context of a burgeoning “arsenal of democracy,” writing, “On April 6, 1942 the pigs and piglets rooted their last root on the farm at Fontana, and before the last squeal had died away it was drowned by the rattle and bang of a mighty construction project.”²²⁸ In retrospect, even with the steel mills downsizing, San Bernardino, in a postwar planning commission, could not help but regard its growth into a metropolitan area as “war winnings” in the same way similar commissions were torn between calling Palmdale's growth a product of or paralleling symptom, both the cause of California capitalism.²²⁹

Sixty miles east of Los Angeles, and well enough removed from the peripheral wealth of Pasadena and Claremont, Fontana was an inconspicuous and remote agricultural desert community before the war. Within a few decades of Muroc and Palmdale's founding, A. B. Miller, an entrepreneur and farmer, began working to plant

²²⁵ “Desert Harvest” Kaiser Company Inc., Iron and Steel Division. Honnold Special Collection.

²²⁶ “Desert Harvest” Kaiser Company Inc., Iron and Steel Division. Honnold Special Collection.

²²⁷ “Desert Harvest” Kaiser Company Inc., Iron and Steel Division. Honnold Special Collection.

²²⁸ “Desert Harvest” Kaiser Company Inc., Iron and Steel Division. Honnold Special Collection.

²²⁹ Lotchin, *Fortress California*, 165.

the beginnings of Fontana. A forgotten name when compared to the other real estate and business figures of the Southland, like William Mulholland and George Chaffey, Miller was a prominent figure in the agricultural development of several rural desert communities and a student at Pomona College for one year. Mike Davis, a Fontana native, profiled the city in the final chapter for his 1992 *City of Quartz* and critiqued the capitalist forces that left the city a “junkyard.”²³⁰ Davis, of Miller, writes, “He was a brilliant real-estate promoter who fully grasped the combination of advertising and infrastructure required to alchemize the dusty plains of the San Bernardinos into gold.”²³¹ Cornelius De Bakcsy, the founder of the *Fontana Herald*, wrote in his history of the city, “It was that man who had the vision to turn this huge waste land to great fruit, poultry, and live stock farm, to make the desert into a garden spot of the southland.”²³²

In 1906, after success as a developer of a canal in the Imperial Valley, Miller was able to purchase the majority interest in the Fontana Development Company from the San Francisco Savings Union.²³³ In purchasing the company, Miller and his associates took ownership of approximately 20,000 acres of land – soon to become Fontana.²³⁴ Over the next years, Miller undertook an ambitious project to irrigate the company’s land. Before 1913, but really beginning in 1909, Miller began to intensively develop the property.²³⁵ In preparing for planting, Miller applied his knowledge of irrigation and agriculture to ready the land – building a 3,600 feet long tunnel along the edges of Lytle Creek and

²³⁰ Davis, *City of Quartz*, 373.

²³¹ Davis, *City of Quartz*, 380.

²³² De Bakcsy, Cornelius. *The History of Fontana*, edited by Ernest Cadwell, (San Bernardino: San Bernardino County Historical Society and Fontana Chamber of Commerce, 1955), 3. Honnold Mudd special collection.

²³³ Davis, *City of Quartz*, 380. *Notables of the West*, Press Reference Library, Volume 2, (New York: International News Service), 1915. Accessed via Google Books.

²³⁴ De Bakcsy, *Fontana*, 7.

²³⁵ De Bakcsy, *Fontana*, 7.

shafts to create a subterranean reservoir.²³⁶ In total over \$1,500,000 was spent on the irrigation system.²³⁷ As spring arrived in 1910, Miller's Fontana Development Company began to plant. In the next three years, they had planted over 1,000 acres of orange and lemon trees, along with half a million-eucalyptus trees planned to serve as windbreakers for the land.²³⁸

After a reorganization of the Fontana Company and the Fontana Land and Water Company, on June 7th, 1913, the town officially opened. A crowd of 4,000 gathered to hear Miller's own mother speak and break a bottle of Fontana's own grape juice on the base of the town's flagpole.²³⁹ Judge Bledsoe presided over the festivities and opened with, "There is just one person to whom the people here assembled are more obligated than they are to Blanchard Miller, to whose genius for organization and whose faith in the future, today's results may be traced...and that one person is Mrs. Eliza B. Miller, the mother of Blanchard Miller." Mrs. Miller, in a quick toast after cracking the bottle on the flagpole explained her son had "done that great service of making two blades of grass grow where but one grew before."²⁴⁰

While it would soon separate itself from the pack, Fontana was just one of many "irrigation colonies" in the valley. More successful than those of the high desert in Antelope Valley, the beginnings of today's inland empire suburbs began with citrus franchises. Fontana, Redlands, Claremont, and Ontario all were desert communities twisted by man to be bountiful plots of oranges and other crops brought capital, labor, and urban foundations to the area.

²³⁶ De Bakcsy, *Fontana*, 7.

²³⁷ De Bakcsy, *Fontana*, 8.

²³⁸ De Bakcsy, *Fontana*, 8. Davis, *City of Quartz*, 380.

²³⁹ De Bakcsy, *Fontana*, 9.

²⁴⁰ De Bakcsy, *Fontana*, 10.

However, Fontana, Davis argues, presented a unique interpretation to citrus capitalism. Miller and his Fontana Company both brought in corporate agriculture with Fontana Farms, a massive pig farm that in 1925 was the biggest in the world, but also segmented the property into smaller holdings.²⁴¹ Fontana Farms aimed these plots for the masses, foreshadowing the mass market and consumer economy that Kaiser Steel would capitalize on in the 1940s, catapulting Fontana into a suburb of identical housing development around a race track, rather than farms around a hog pen.

Miller's Fontana grew into a peripheral farming community where Los Angeles' garbage was sold to feed pigs. Poultry, later, joined hog and tree crops as a presence in Fontana. By 1930, there were 3,000 small farms under Miller's Fontana plan and 900 poultry plants.²⁴² The number of families running poultry farms had increased from ten to over 500 during the 1920s.²⁴³ Growth slowed during the 1930s, but, as with other agricultural establishments in California, depression brought new faces and changes. Ernest Cadwell, the historian that compiled the local history for the Fontana Chamber of Commerce, himself came to Fontana from Chicago during depression. He wrote:

It was June, 1934 when I saw a small advertisement of the Fontana Farms Co. in a Chicago paper. I telephoned Mr. Post, the local real estate agent, who called on us promptly and showed us some alluring pictures of Fontana. Then he offered to take us to Fontana.²⁴⁴

Four years later, Fontana celebrated its "silver anniversary." 7,000 people, living in 2,000 homes now called the town home.²⁴⁵ A.B. Miller addressed the crowd during the three-day jubilee. He said:

²⁴¹ Davis, *City of Quartz*, 381. De Bakcsy, *Fontana*, 12.

²⁴² Davis, *City of Quartz*, 382.

²⁴³ De Bakcsy, *Fontana*, 12.

²⁴⁴ Ernst Cadwell, chpt. in De Bakcsy's *History of Fontana*, 24.

²⁴⁵ Cadwell, chpt. in De Bakcsy's *History of Fontana*, 36.

A new era for Fontana can be visualized, as this community can and will become not only one of the most outstanding farming and residential sections of this part of the Southland, but also should share in the industrial developments which should come to this valley. To pave the way for this bright future, we must cooperate wholeheartedly and wisely, keeping our eyes and arms open.²⁴⁶

The budding agricultural “colony,” thanks to the influence of a local breed of L.A. developmental doctrine, was poised to mold around the coming industrial and urban transformations that would synthesize a new landscape for the Los Angeles region during and after World War II.

“Then came the war, then came a multitude of new people – men who were hunting for jobs found that jobs were hunting men.”
-Ernest Cadwell in his *History of Fontana*²⁴⁷

Outside the county borders, Fontana and the arrival of its steel mill were key developments not just for the rural desert, but the entire metropolitan area. In many ways, Fontana was an afterthought for the aviation and oil industrialists that had already made their mark by 1940. However, the steel mill’s presence forced the town’s name into the vernacular of Los Angeles boosters, politicians, and businessmen. Before Kaiser had publicly announced Fontana as the location for the first Western steel plant, steel was a prominent topic. With wartime mobilization, a policy that began before official declaration in December 1941, the notion that a local steel mill was necessary to underwrite the continuing growth of the area’s manufacturing became commonplace among boosters and politicians.²⁴⁸

²⁴⁶ Cadwell, chpt. in De Bakcsy’s *History of Fontana*, 36.

²⁴⁷ Cadwell, chpt. in De Bakcsy’s *History of Fontana*, 46.

²⁴⁸ “Defense Industry and Southern California’s Economy,” by Arthur G. Coons, professor at Claremont Colleges, December 1941, Los Angeles, CA Pacific Southwest Academy. Honnold Mudd special collections.

For years, Los Angeles power figures had enveloped themselves in a narrative of urban development that pitted their city against the East – an us and them binary that established a competition of urban growth and eventually spread to infect the relationship between all Western cities.²⁴⁹ The entire West Coast felt they remained an economic colony of the east.²⁵⁰ Forced to import steel, and other raw goods at high markups over thousands of miles, businessmen across the state, from Kaiser to Douglas, felt a need to define the area as an autonomous manufacturing base. Simultaneously though, but naturally for the city, Los Angeles was able to capitalize on the need for the West to import all its raw materials. The southern city served as a transportation hub for raw and manufactured goods. A 1940 report on the city’s growth explained the importance of this, “Los Angeles by virtue of its great distance from eastern manufacturing centers traded on the margin in transportation rates between manufactured goods and basic materials, serving the western consumer market at a competitive advantage over eastern manufacturers.”²⁵¹

For the city’s boosters, it was the differences they found in their built landscape that defined many of their arguments for Los Angeles exceptionalism. As early as 1925, Sherley Hunter in his sprawling argument for the inevitability of Los Angeles’ greatness, wrote, “Los Angeles has planned well – known that, some day, the disconsolate world would turn faces from the jostle and smoke and congestions of less favored environments and come to her.”²⁵² As industry, in particular the aviation industry, did in fact turn

²⁴⁹ Lothcin, *Fortress California*, 173.

²⁵⁰ Lotchin, *Fortress California*, 174-176.

²⁵¹ “An Industrial Development Plan for Los Angeles County,” published by County Board of Supervisors and L.A. Chamber of Commerce, 1940. Honnold Special Collections.

²⁵² Sherley Hunter, *Why Los Angeles will become the World’s Greatest City*,” (H.J. Mallen & Co., Inc., 1923). Honnold Special Collections.

towards Los Angeles, the city and its planners, needing to maintain urban decongestion, further pushed the urban borders. In a particularly prescient bit, Hunter wrote, again, not in 1942, but 1925:

When the hundred-mile radius is filled to a comfortable convenience, for factory and work and transportation, the radius will take on another fifty miles or so, the circle will, constantly, remain a metropolitan district reaching almost to San Diego and up to the San Jacinto mountains – another network of motor roads, electric lines, air-navigation landing fields, ware-housed – and always a mingling of agriculture and fruit-growing with industrial establishments and everyone enjoying the year round outdoor climate and healthfulness.²⁵³

Fontana fit this understanding of growth perfectly. Miller’s dual agricultural community, both yeoman and corporate, was a friendly match for a Los Angeles decentralization that was coming to demand, or at least its boosters, a local steel mill to source the raw material necessary for the area’s factories.

Long before the war, Kaiser discussed with other California capitalists the ways in which the states, but particularly Los Angeles’ economy, could still grow. The figures included A.P. Gianni, founder of Bank of America and Kaiser’s primary backer as he lead the conglomerate of construction companies behind the Hoover Dam, steel mogul Stephen Bechtel, and airplane man Donald Douglas.²⁵⁴ Kaiser was a complicated figure, seemingly contradictory, an entrepreneur fully aware of the New Deal Order and its opportunities. A stalwart Republican, Kaiser “avidly” supported the New Deal. *Forbes*, posthumously in 1986, declared he “symbolized American Capitalism at its best” because of his ability to build a ship a day, in response to government demand, and establish an industrial empire of raw goods, often financed by government loans and subsidies.²⁵⁵

Kaiser, riding the New Deal, maintained popular labor practices – installing daycares in

²⁵³ Hunter, *Los Angeles*.

²⁵⁴ Davis, *City of Quartz*, 386-7.

²⁵⁵ Allan Sloan and Peter Fuhrman, “An American Tragedy,” *Forbes*, October 20, 1986, 30.

his Richmond factories and distributing high-wages as a basic tenet of his industrialism.²⁵⁶ “A hero of the West,” Davis wrote, “Kaiser personified the spirit of the war-generated high productivity, high-wage economy that later economic historians would refer to as Fordism.”²⁵⁷

At first, Kaiser focused on the demand a war in the Pacific would create for ships – installing mass production assembly at his Richmond shipyards. However, when a shortage of steel plate slowed the creation of his liberty ships, Kaiser became involved in the creation of a West coast steel mill. This interest further incubated Kaiser’s role in the Los Angeles economy. Kaiser proposed, not by happenstance, to borrow federal money to build a steel mill in the Los Angeles area and use power from the Hoover dam to drive the furnaces.²⁵⁸ For months, before the panic of Pearl Harbor, Fontana had clamored for a munitions or aircraft factory.²⁵⁹ Miller and his crew of agricultural pioneers had passed away just that year and the next crop of Fontana boosters looked to war industry to further the small community. Confident that wartime demand could be converted into a booming postwar market, Kaiser accepted a \$110 million loan from the Reconstruction Finance Corporation.

Kaiser chose Fontana for reasons that seemed at odds with each other. It was simultaneously in a military strategic location located away from the coast, but not too far enough away to not be considered an industrial cornerstone of the almost complete Los Angeles metropolitan manufacturing behemoth.²⁶⁰ Cadwell dated the announcement to

²⁵⁶ Davis, *City of Quartz*, 385.

²⁵⁷ Davis, *City of Quartz*, 385.

²⁵⁸ Davis, *City of Quartz*, 388.

²⁵⁹ Davis, *City of Quartz*, 390.

²⁶⁰ “Steel Making in San Bernardino Valley,” an address by Jack L. Ashby in Fontana, May 2, 1952, to San Bernardino Industrial Conference, he was VP and general manager of Kaiser Steel Corporation. For reasons on Fontana as the location. Honnold Mudd special collections.

late 1941 or early 1942 – just weeks into the war but months into mobilization efforts by New Deal veterans Kaiser and his associates. In true Angeleno fashion, the proclamation that the steel mill would be built in Fontana sparked a land grab as real estate along Sierra Ave, the main business thoroughfare.²⁶¹

As the torch passed from Miller to Kaiser, one dreamer to another, Fontana underwent “sensational” transformation and growth.²⁶² For the Los Angeles area, defined broadly, the arrival of steel was sensational not for the growth it brought – this was no new occurrence – but the industrial autonomy it symbolized. With the advent of Western steel, subsidized and financed by a federal government determined to furnish the arsenal of democracy, the region free itself of dependence on East for the barest of manufacturing essentials.²⁶³ While Los Angeles officials and boosters would continue to argue that their metropolis was overlooked or undervalued as an industrial center for years to come, the Fontana plant, fully underwritten by the federal government, along with mill in Provo, Utah built during the war, became symbols of a new Western industrial epoch.²⁶⁴

Kaiser and his steel company defended their choice of Fontana as a deliberate calculation. They recognized, in a perfect fit with Angeleno boosters, the incredible business opportunity posed by the vacancy of local steel. Writing in a 1942 promotional pamphlet, entitled “Desert Harvest,” Kaiser public relations noted the “branch” character of Western cities – acting as distributors of raw goods rather than producers.²⁶⁵ In

²⁶¹ Cadwell, in *Fontana*, 46.

²⁶² Cadwell, in *Fontana*, 49.

²⁶³ Lotchin, *Fortress California*, 154-155.

²⁶⁴ Lotchin, *Fortress California*, 154. Lotchin goes into much detail about the alienation Bowron and other officials felt by the federal government. See Chapter II.

²⁶⁵ “Desert Harvest,” Kaiser Company, Inc. Iron and Steel Division, 1942. Honnold Special Collections.

bringing a Kaiser Steel Mill to Southern California, “the world’s fastest growing market,” a new era of manufacturing began in the eyes of Kaiser and Company:

The dawn is now rising on a new empire – an industrial empire for the West. Built on foundation of Western steel, from Western ore, it promised a new ear of prosperity as Western industry grows and as Eastern industry shifts it factories beyond the rockies.²⁶⁶

Fontana was to become an unlikely throne, of many, to this industrial empire. Henry Kaiser explicitly sought out a community that could support an industrial factory as well as continued agricultural growth. Victory was not just for the allies, but also for the “sun-spangled Pacific...where manufacture and husbandry go hand in hand.”²⁶⁷ Jack L.

Ashby, the general manager of the Fontana Plant and a Vice President for Kaiser Steel, explained that Kaiser often placed his factories in agricultural communities where his industry could compliment the farms in a partnership of mutual prosperity.²⁶⁸

Additionally, Fontana offered cheap water and power, thanks to Miller, and very convenient rail connections – the San Bernardino and Colton rail yards were nearby as well.²⁶⁹

In 1952, reflecting on the ten year anniversary of the factory, Ashby used the same arguments as the metropolitan boosters and businessmen of Los Angeles in their quest for development. He said, in an address at a local Industrial Conference, “Mr. Kaiser.... [was] impressed by the growth possibilities of San Bernardino valley itself. The large areas available for development meant that future growth would not be retarded

²⁶⁶ “Desert Harvest.”

²⁶⁷ “Desert Harvest.”

²⁶⁸ “Steel Making in San Bernardino Valley,” an address by Jack L. Ashby in Fontana, May 2, 1952, to San Bernardino Industrial Conference. Honnold Mudd Special collection.

²⁶⁹ Davis, *City of Quartz*, 390.

by industrial and population congestion.”²⁷⁰ While Miller’s Fontana may have been distant and removed from Los Angeles’ urban identity, that gap eventually disappeared as the metropolitan economy grew to require yet another industrial hub. With the security requirement of the war further emphasizing industrial decentralization, Miller’s Fontana, with its unique blend of corporate agriculture and middle class yeoman, became an obvious extension of the city’s sprawl. Just over a year after the attack on Pearl Harbor, Fontana’s main furnace, nicknamed “Big Bess,” was turned on. By May of 1943, the plant celebrated its first steel. While supply costs for Fontana remained high, the plant produced steel at incredibly rates that far exceeded expectations.²⁷¹

Along with the aircraft factories and military bases in the Southland, Fontana and Kaiser did not intend to downsize after the war. Ernest Cadwell explained that many in Fontana expected Kaiser’s entrepreneurial work in Fontana to stop. Instead the steel industry, and Fontana with it, continued to expand.²⁷² Federal political interests, in particular, representatives from California, hijacked the issue of Kaiser’s RFC loans. After the war, after repaying part of the loan, Western industrialists and politicians supported Kaiser in his attempt to have some of the debt written off in exchange for lower steel prices. Los Angeles Chamber of Commerce President Kenneth T. Norris, after Kaiser agreed to lower prices, led a lobbying effort for Kaiser Steel in Washington D.C. after Kaiser agreed to agreed to rethink his steel prices. Substantial refinancing never occurred at the magnitude Kaiser or Norris desired, but there efforts did not go

²⁷⁰ Steel Making in San Bernardino Valley,” an address by Jack L. Ashby in Fontana, May 2, 1952, to San Bernardino Industrial Conference. Honnold Mudd special collections.

²⁷¹ Davis, *City of Quartz* 392.

²⁷² Cadwell, in *Fontana*. Honnold Mudd special collections.

unheard in the federal government as it developed a prominent relationship with West coast steel and the aviation industry.²⁷³

Two postwar expansions were added to the Fontana plant and Kaiser repaid the original RFC loan, after the years of attempted, refinancing, in 1950. In a turn away from New Deal and wartime loans, Kaiser steel repaid the initial 1942 RFC investment and financed the expansions privately by selling bonds, increased credit from the ever-friendly A.P. Gianni and his Bank of America, and selling more equity.²⁷⁴

The plant employed 5,700 people in 1950 and would grow to a labor force of over 6,000 with the new expansions. The Fontana plant, and Kaiser Steel, reacted directly to a growing market for West Coast steel. In 1940, the western states consumed 2,500,000 tons of steel. In 1951, those same states consume 6,000,000 tons and only 3,600,000 was being produced in the West.²⁷⁵ Ashby, as the spokesperson for Kaiser steel and the Western economic empire at the San Bernardino Industrial Conference in 1952, saw no near contraction to the steel bubble. He said:

The Pacific Coast has a long way to go just to catch up with the rest of the country in the per capita consumption of steel. Last year the nation as a whole consumed 1,036 pounds of steel per person, while here in the seven western states we consumed only 718 pounds of steel per person.²⁷⁶

Fontana agriculture had also benefited, at least in terms of numbers, from the plant.

Farming production increased from \$39 million to \$106 million from 1941-1951.²⁷⁷ *The New Yorker* wrote, “Manufacturers of everything from steel file cabinets to steel buckets to chain-link fences grew up around Fontana, and so did large machine shops that

²⁷³ “Help for Henry,” *Time*, June 2, 1947.

<http://www.time.com/time/magazine/article/0,9171,934584,00.html>

²⁷⁴ “Steel Making in San Bernardino Valley,” an address by Jack L. Ashby in Fontana, May 2, 1952, to San Bernardino Industrial Conference. Honnold Mudd special collections.

²⁷⁵ Steel Making in San Bernardino Valley.”

²⁷⁶ Steel Making in San Bernardino Valley.”

²⁷⁷ “Steel Making in San Bernardino Valley.”

serviced steelmaking equipment.”²⁷⁸ In the transition to peacetime, like much of Los Angeles, Fontana was able to sustain a golden age of seemingly eternal booms.

Within forty years of the wars closing, Fontana’s industrial mantelpiece was no longer heralded as a throne of a Western empire, but now an “American Tragedy.”²⁷⁹ However, during its transition from war to peace, as the steel mill still employed the city and produced the raw goods necessary for various manufacturers around the basin, Fontana came to settle as a peripheral industrial establishment within the Los Angeles metropolitan area. With historic Route 66 running just north of the furnaces and stable and high paying jobs offered by Kaiser employing 50% of the city’s workforce during the Korean War, Fontana became emblematic of the postwar suburban ideal in which a job and house became fundamental rights.²⁸⁰ Kaiser chose Fontana in 1942 and envisioned such progress. Jack Asbhy, in his famous 1952 address, spoke with a confidence – the plant was linked with the community’s narrative by more than just historical context or coincidence.²⁸¹ The local boosters and Kaiser Steel developed Fontana into a utopian decentralized community with both suburban staples and an industrial infrastructure.

In 1956, the plant again expanded. Increasing production of ingot and finished steel by 40%, the \$113 million expansion program began long after Korean War demand but still introduced a state of the art Basic Oxygen Furnace – the last technological upgrade for fifteen years at Fontana.²⁸² Blue collar Fontana pushed the American Dream even further, becoming an ever-desirable suburb beneath ever growing Los Angeles.

²⁷⁸ John Seabrook, “American Scrap,” *The New Yorker*, January 14, 2008. Accessed via Lexis Nexis.

²⁷⁹ “An American Tragedy,” *Forbes*.

²⁸⁰ Davis, *City of Quartz*, 403, for stat on employment.

²⁸¹ “Steel Making in San Bernardino Valley.”

²⁸² “West coast to get more steel as Kaiser expands Fontana plant,” *BusinessWeek*, May 1956, page 36. Davis, *City of Quartz*, 408.

Union leaders were often seen playing golf; steelworkers spent their leisure time on tennis courts or racing in the Mojave.²⁸³ Fontana, with its agrarian roots, industrial behemoth, and egalitarian capitalist suburban identity – all either derivative of Southern Californian boosterism or militarized demand and federal spending – became a fresh prototype of the new American Dream. This iteration was steeped simultaneously in the tradition and opportunism of old, but had co-opted the importance of industry and modernity thanks to the economic stimulus provided by World War II and its related militarization. All of these things made Angelenos proud to place Fontana within the Los Angeles Metropolitan Area. Even eastern steel looked on with admiration, Pennsylvania steel workers believed that Kaiser’s plant, in prosperous California, was “recession-proof.”²⁸⁴ Fontana was a distant suburb well incorporated into decentralized urban sprawl and simultaneously a vital industrial foundation for the sprawling economy.

Palmdale occupied a similar role, one degree closer to the military industrial process with its airplane factories and direct military presence. Both cities owe the culmination of their industrialization and urbanization to World War II, but the form of that industrialization was a product of the booster’s tradition of decentralization and dispersal. Fontana and Palmdale are rich stories – representative of the results of a partnership between the booster’s concerns about decentralization with defense related industry. Both communities, as the nation’s economy and demand for defense products changed, shrunk as prominent examples of post war urban progress in Los Angeles. They drifted back outside the periphery, alone dependent on their fragile and failing economies for rejuvenation.

²⁸³ Davis, *City of Quartz*, 407-8.

²⁸⁴ Davis, *City of Quartz*, 404.

Regardless, to look at that first satellite picture was a revelation, a way to remove myself from the city's piecemeal chaos, to pull back the lens. Still, for all that this allowed me to imagine L.A. as part of a larger landscape, a carpet of gray grid extending from the ocean to the mountains, with small tendrils of urbanization creeping though the passes to nourish ancillary offshoots in the San Gabriel Valley and the Inland Empire, it also revealed another sort of chaos, the formless growth of a megalopolis in which development filled every corner like a kind of moss.²⁸⁵

-David L. Ulin

The Kaiser Steel Mill in Fontana began a decline of almost too perfect a fit for the broader strokes of de-industrialization in the United States. Inverse to Kaiser Steel's decline was the rise of Japanese steel, beginning in the mid 1960s. Kaiser, at first, also benefited from increased Japanese demand for steel and increased American demand during the Vietnam War. However, as Kaiser lagged in meeting demand, Japan began to develop a prominent steel industry of its own, "able to confiscate all the Vietnam-boom growth in Western steel demand."²⁸⁶

By 1976, steel profits had gone into the red and, with the rising concern of smog, expensive mandates were imposed on the Fontana plant. Originally, the Kaiser family engaged in selling Fontana to Nippon Kokan KK, the world's fifth largest steelmaker at the time. The deal collapse and the continuing years of recession, these under Paul Vockler and Reagan's high interest rates, sent a shockwave through America steel – essentially beginning of a nationwide purge.²⁸⁷

²⁸⁵ David L. Ulin, "L.A. Day/L.A. Night," published online 4/5/11, <http://places.designobserver.com/feature/la-day-la-night/25228/>. Foreword for Michael Light's book of the same title.

²⁸⁶ Davis, *City of Quartz*, 411.

²⁸⁷ Davis, *City of Quartz*, 412.

Kaiser Steel then sold iron ore possession in Australia and resources in Canada “to help feed the money-gobbling steel operation.”²⁸⁸ Stephen Girard, a former Kaiser Steel chairman described it as “selling your tiara to raise food money.”²⁸⁹ Even the boosters began to change their opinions about the factory. While worried about the loss of jobs, San Bernardino County leaders were also eager for the anticipated increase in real estate value the closing of the factory, a huge producer of pollution, could stimulate.²⁹⁰

In 1983, Kaiser Steel closed its doors as a steel producer – in October, 1983 the last ore was smelted into steel in Fontana.²⁹¹ Shuttering the \$12 million-a-month draining business opened the doors to a financial bidding war for the company’s remaining “undervalued assets.” Irwin Jacobs of Minnesota, J.A. Frates of Oklahoma, and Monty Rial, masquerading as a coal baron from Colorado, entered the fray. Rial, who “suddenly appeared, uninvited and unknown” and in actuality had produced no steel from his holdings, borrowed money from Bank of America to finance a takeover of Kaiser.²⁹² The bank that, due to the partnership of Giannia and Kaiser, had once served as both a defensive and expansive line of credit for Fontana was now being used to purchase, and then sell off the plant.

After the bidding war, Rial agreed to a joint buyout of Kaiser with Frates. He eventually also bought out Frates share. This deal required the re-leveraging of Fontana and Kaiser to finance the buyout. Under Rial, and with the Fontana Mill dark, Kaiser focused on its coal industry. However, the company was “virtually worthless.” Rial was

²⁸⁸ “An American Tragedy,” *Forbes*.

²⁸⁹ “An American Tragedy,” *Forbes*.

²⁹⁰ Davis, *City of Quartz*, 415.

²⁹¹ Davis, *City of Quartz*, 416.

²⁹² “An American Tragedy,” *Forbes*.

pushed out of a leadership position in 1986 and 1987, three years after the plant's closing laid off the Fontana workers. By 1986, all they had left were Kaiser Steel shares, then valued at less than \$2 a share. The steelworkers without federally insured pensions living in a community that's value to the broader L.A. economy came from its steel industry, had "seen millions of dollars evaporate."²⁹³ Riall, in contrast, took \$2.4 million in salary in 1985.²⁹⁴ The *New York Times* proclaimed the mill had become "a symbol of wrenching changes in the economy, its roaring furnaces burdened by international competitions, environmental regulations, labor disputes, and the encroachments of corporate raiders."²⁹⁵

The remaining shareholders sold the company to Bruce Hendry, a Minnesota financier infamous as a "scrap dealer in distressed companies."²⁹⁶ Hendry canceled between 5,000 and 6,000 former employees' health coverage and pension plans.²⁹⁷ Workers and their families began to leave Fontana in significant numbers. The cheaper real estate attracted residential developers, though, beginning to transition Fontana to a commuter-based city, not unlike what Palmdale experienced after the downsizing of its factories in the 1990s.²⁹⁸ For Davis, this exodus, similar to Lockheed's in Palmdale,

²⁹³ "An American Tragedy," *Forbes*.

²⁹⁴ "An American Tragedy," *Forbes*.

²⁹⁵ Seth Mydan, "Steel Mill Is Shadow Of What It Once Was :A symbol of U.S. strength is cut up and sent to China." *New York Times*, September 6, 1994. <http://proquest.com/>.

²⁹⁶ Davis, *City of Quartz*, 418.

²⁹⁷ Nancy Rivera Brooks, "The Long Winter of Kaiser Steel The industrial empire it once anchored is gone, and the firm struggles to survive, beset by an internal battle for control and a hostile economy," *Los Angeles Times*, February 9, 1987, <http://www.proquest.com/> (accessed April 21, 2011).

²⁹⁸ William Trombley, "2 Communities Take Greatly Differing Paths Fontana, Left for Dead After Kaiser Mill Closed, Shows Strong Signs of ," *Los Angeles Times*, August 15, 1985, <http://www.proquest.com/> (accessed April 21, 2011).

began a decline that turned Fontana into a scene from *Mad Max*, “a post-apocalyptic society of industrial scavengers and metal vultures.”²⁹⁹

There is little doubt the closing of the Fontana mill hurt the town. Jobs, without pension, disappeared. Real estate plummeted. Financially, the city has suffered. The abandoned steel site was used to film a TV movie called “Hiroshima.”³⁰⁰ But perhaps most telling is Victor Volhardt’s, a capitalist now part of Fontana’s semi-rejuvenation, take on the affect. He said, in an interview on Fontana industry since the closing:

This was a close-knit community, when people worked around here," "But the politicians drove local businesses out, because people don't like to be around industry, and replaced them with all these malls and fast-food places and what have you, and forced people to drive into L.A. to work, and when people have spent three hours in the car they don't go to PTA meetings and community-oriented things-and so the community falls apart.³⁰¹

This idea is not far from the arguments made about the root of Palmdale’s recent crisis. Just as in Fontana, the loss of the primary manufacturing source in a peripheral hub reverberates through the community – evident in decreased paychecks, increased commutes, and changing family dynamics. Dependence on a meager service economy is not sufficient in developing a self-sustainable economic unit, forcing residents to opt for jobs elsewhere.

Davis, a resident of Fontana, is a product of a city that vividly remembers the plants decline and the ensuing implications on its local life and role as a broader fixture of the Angeleno Economy. Ernst Cadwell, the founding editor of the *Fontana Daily Herald*, was an immigrant to and resident of a different Fontana. As Davis remembers distressed real estate, Cadwell can remember the land grab that erupted in 1942 as

²⁹⁹ Davis, *City of Quartz*, 432.

³⁰⁰ Shav Glick, “New Track Is a Steel : California Speedway Will Be Built on Site of Old Fontana Mill,” *Los Angeles Times*, November 27, 1995.

³⁰¹ “American Scrap,” *The New Yorker*, 2008.

Fontana entered the “industrial epoch” – the queen of the newly independent industrial west.³⁰² For Davis, Fontana is a “model of a California warped by greed and development.”³⁰³ Preceding these implications, Cadwell perceived Fontana as the model of a balancing act between a *Grapes of Wrath*-esque orchard patch and mass consumer industry.

Before NASCAR came to Fontana, another industry continued to prosper in the city. Frankel Iron and Metal Company, founded in the mid-1950s in Fontana, profited from the tearing down of the factory in the 1980s. Garbage companies, *Fortune* and *The New Yorker* explain on recent profiles of the corporation, consolidated in the early 1990s – leading to the incorporation of the small Frankel scrapyards in Fontana under a larger conglomerate. However, in the late 1990s, Nathaniel Frankel, son of FIMCO’s founder, was able to buy back a small yard in Fontana merge it with his company, American Steel Recovery. Since then, Frankel’s business has succeeded as an example of how a 21st century American company can profitably tread the line between industrial and post-industrial. Frankel, in a unique move, began to use shipping containers to ship scrap around the world. Southern Fontana, like most of the Inland Empires, serves as a holding tank for Chinese goods imported to the United States. In exchange for these goods, Frankel ships off scrap in near identical shipping containers to China and other parts around the world where increased demand makes it profitable to sell scrap metal 5,000 miles away from its origin.³⁰⁴

³⁰² Cadwell, in *Fontana*. Honnold Mudd special collections.

³⁰³ “American Scrap,” *The New Yorker*, 2008.

³⁰⁴ “American Scrap,” *The New Yorker*, 2008. Justin Fox, “21st-Century Scrap.” *Fortune* 153, no. 9 (May 15, 2006): 81-82. *Business Source Premier*, EBSCOhost (accessed April 16, 2011).

The *Los Angeles Times* was once full of stories on Fontana that covered plant expansions, Kaiser's refinancing, increasing population and jobs, and the importance of Fontana as a industrial cornerstone of the regional economy. Now, for post-industrial Fontana, it is found throughout the paper's sports section when race results and the spectacular crashes are relayed to the city and world.

Built atop almost 500 acres of the 1500 total that the steel mill occupied, the Auto Club Speedway now hosts a NASCAR Sprint Cup event among various other races. Before its construction, the remaining smelting furnaces were sold to steel plants in China. "A symbol of U.S. strength [was] cut up and sent to China" in 1994, a year after the Chinese economy grew by 13%.³⁰⁵ South of the tract there still exists some steel manufacturing. However, it is owned by JFE, a Japanese holding company.³⁰⁶

Beginning in 1995 after 3,000 cubic yard of toxic dirt was removed, Kaiser Ventures partnered with Penske Speedways, Inc. to begin constructing the track and stadium. The project cost about \$120 million dollars, just less than the original RFC loan taken to finance the steel mill.³⁰⁷ The track, an oval with a circumference of 1.3 miles, was finished in June of 1997 – in time for the Winston Cup series race NASCAR had promised to hold when construction began.³⁰⁸ Since then, the track has expanded by 25,000 to hold over 90,000 fans at a single event. Originally called California Speedway, the Automobile Club of Southern California bought the naming rights in 2008.³⁰⁹

³⁰⁵ Seth Mydan, "Steel Mill Is Shadow Of What It Once Was." *New York Times*.

³⁰⁶ Glick, "New Track is a Steel," *Los Angeles Times*.

³⁰⁷ "California Speedway: Track Facts," *Los Angeles Times*, June 18, 1997, <http://www.proquest.com/> (accessed April 16, 2011).

³⁰⁸ "California Speedway," *Los Angeles Times*. Jim Murray, "It's Home Sweet Home for Racing," *Los Angeles Times*, September 25, 1997, <http://www.proquest.com/> (accessed April 16, 2011).

³⁰⁹ "Looking Back: Key Dates," *The Press Enterprise*, <http://www.pe.com/sports/projects/2007/10years/#>.

In the end, the military industrial complex did not cause the demise and then adaptation to a new sort of industry in Fontana. It was far more complicated than that – international markets, production methods, and financiers not concerned with any sort of defense spending were all involved. However, Fontana’s character, shaped by the narrative of the plant and the ensuing outside-inside-outside characterizations of the city from the Los Angeles metropolitan area, is a direct product of urban boosters partnering with demand for defense products. Each side coalesced and aligned their various arguments about industrialization, urbanization, and decentralization. Fontana was a very real product, with its own problems, of this process.

Fontana once held a glamorous symbol of the American economy. However, as the forces of the economy shifted in America, the steel mill became less glamorous. The environmental movement targeted its pollution and its rising competitive costs infuriated its owners – a far cry from the glory and modernism it instilled during its construction and postwar golden age. To the working class of Fontana, the plant, while perhaps not as illustrious, was still an important community fixture when it closed. Even America at large recognized the loss as a sign of broader tragedy – a transformation of the economy that would undermine the traditional American Dream. This process occurred in Palmdale as well, but in a much more explicit context of the military industrial complex.

In Fontana, the boosters went back to work once again to redefine the community. While once a focal point of the West’s industrial roadmap, Fontana now finds itself on two other road maps. As a trucking hub and a stockcar racing destination, Fontana’s has been able to prevent itself from falling off the map completely. Certainly, the community has suffered distressed real estate and a loss of a strong commercial institution to

underwrite the city and people's prosperity. It still represents the edges of industrial and urban decentralization in Los Angeles, from its days as a farming community, to cherished industrial hub, to peripheral working class suburb. Whether the boosters of the 1920s would be proud is a confusing question. However, twenty first century Fontana is not what Kaiser, FDR, A.B. Miller, Henry Arnold, General William J. Fox had in mind after they helped sew lasting economic and military institutions into the Angeleno economy before, during, and after World War II.

Conclusion

On the Edge of Progress: California City and the Limits of Decentralization

In 1958, Nathan Mendelsohn, just like the Air Force and Lockheed in Palmdale, or A.B. Miller and then Henry Kaiser in Fontana, purchased a chunk of real estate in the buffer zone between Los Angeles and the Cadillac Desert. Mendelsohn, a Columbia University Sociology professor who self made himself into a real estate developer, had even grander plans, though. He purchased 82,000 acres in Kern County. The massive plot was 100 miles from Los Angeles in the barren Antelope valley, at a time when Palmdale had yet to ferment its urban footprint.³¹⁰ Whereas western San Bernardino, for Kaiser and Company, was a growing agricultural country ripe for inclusion into the ongoing urbanization and industrialization occurring Los Angeles County, Kern was, and still is, firmly within the high desert. Still, following in the steps of Fontana, Palmdale, and all of Los Angeles's forefathers and boosters, Mendelsohn imagined a great development, rampant urbanization, and a new flavor of the modern American utopia.

³¹⁰ Mike Anton, "A Desert City that Didn't Fan Out; A professor turned developer believed California City would become a metropolis. His eccentric dream ended up a mirage." *Los Angeles Times*, August 14, 2010, <http://www.proquest.com/> (accessed April 16, 2011).

Mendelsohn, though, did not see his community as just another extension of Los Angeles' now regional sprawl. Named California City, Mendelsohn felt this would become California's next great "metropolis."³¹¹ By some obscene imagination, the Columbia professor misinterpreted the time period and thought California's growth, in population and industry, would continue at a great pace. Like the city planners, military men, and boosters before him, Mendelsohn asked, where could all these newcomers find a yard to call home and a job to pay the mortgage?³¹² A vigorous advertising campaign was designed, the *Los Angeles Times* explained the motif: "California City, with its clean air and mountain vistas, lay directly on the path of progress."³¹³

Many lots were sold in Mendelsohn's city, more than a few site unseen by speculators. Even in 1962, Mendelsohn wrote of the city's progress, "Words alone can only suggest what is occurring." Most of these lots remained empty, but some did move to California City, swooned by Mendelsohn's natural ability at sales, explained Jay Sprague. Sprague moved there in 1965 to get away from the "congestion," determined to not raise his kids around "all that concrete in the big city. He remains there to this day. The same cannot be said for Mendelsohn's manmade lake, the centerpiece of a desert iteration of New York's Central Park. Today, an abandoned Holiday Inn lies on the lake's shores."³¹⁴

Behind Los Angeles and San Diego, California city is the third largest city - by land area. Today, 14,000 people live there. Geoff Manaugh, an architectural critic fascinated with the failed utopia, wrote the people of California city live "Surrounded by

³¹¹ Anton, "A Desert City that Didn't Fan Out," *Los Angeles Times*, August 14, 2010.

³¹² Anton, "A Desert City that Didn't Fan Out," *Los Angeles Times*, August 14, 2010.

³¹³ Anton, "A Desert City that Didn't Fan Out," *Los Angeles Times*, August 14, 2010.

³¹⁴ Anton, "Desert City," *Los Angeles Times*, August 14, 2010.

a sprawling ghost-grid of empty streets scratched into the dust and gravel with nary a finished house in sight.”³¹⁵ The community’s largest employer, like Lancaster or Palmdales, is Edwards Air Force Base, only 35 miles south.³¹⁶ Honda operates a vehicle test center, paralleling both the Japanese owned steel mill in today’s Fontana and the importance of Edwards as a jet test site, a continuing testament to the geography of the desert.³¹⁷

Mendelsohn expected the “city” to become the next great Western metropolis, both an “urban hub” and retirement destination – fusing Palm Springs with Fontana. He “laid out roads and divided the desert into plots, many outfitted with water, electricity and gas lines.”³¹⁸ Today, there are over 185 square miles of dirt roads, planned out over fifty years ago. Geoff Manaugh, an architectural critic, writes, “The uninhabited street plan has become an abstract geoglyph—unintentional land art visible from airplanes—not a thriving community at all.”³¹⁹ The empty streets and plots are striking symbols of the limits of urban decentralization. At some physical point, a point that Mendelsohn discovered by accident, the metropolis cannot be synthesized without ample commercial infrastructure –whether it by natural resources or a nearby urban economy of which it can become a peripheral hub.

In many ways, it is a landscape that only makes sense from above. Intended as a place of middle-class economic security, California City has become something much more interesting—an optical training system for Air Force pilots and skydivers, as well as an oddly beautiful example of misguided optimism.

³¹⁵ Geoff Manaugh, “Ghost Town: The Abandoned Suburb of California City,” *GOOD*, April 16, 2010. <http://www.good.is/post/ghost-town-the-abandoned-suburb-of-california-city/>

³¹⁶ Manaugh, “Ghost Town.”

³¹⁷ Manaugh, “Ghost Town.”

³¹⁸ Ben Muessig, “Welcome to California City: The Imaginary Metropolis,” *AolNews*, February 21, 2011, <http://www.aolnews.com/2011/02/21/welcome-to-california-city-the-imaginary-metropolis/>

³¹⁹ Geoff Manaugh, “California City,” *BLDGBLOG*, November 24, 2009, <http://bldgblog.blogspot.com/2010/02/expedition-to-geoglyphs-of-nowhere.html>

-Geoff Manaugh³²⁰

Ideas about urban dispersion and decentralization profoundly affected the development of the Los Angeles' early years. As Los Angeles grew even further and defense related industries began to drive significant aspects of the economy during and after World War II, the boosters and capitalists revised the ideas to accommodate new fears about industrial centralization. Palmdale and Edwards Air Force Base resulted from these new pairings, including a fear that consolidating aviation industry in the immediate area around Los Angeles was threat to American national defense as a whole. Whereas Glendale, Long Beach, and Pasadena had once been the periphery of Los Angeles, they are now well within the city's sprawl. The high desert in the Antelope valley was the new geographic and industrial frontier for a key military base, municipal airport, and a variety of aerospace factories.

Kaiser's steel mill personified similar themes. Also not born entirely out of the

A portion of California City's empty grid.

Geoff Manaugh, "Ghost Town: The Abandoned Suburb of California City," *GOOD*, April 16, 2010. <http://www.good.is/post/ghost-town-the-abandoned-suburb-of-california-city/>

wartime period, demand for steel established by increase in production due to the war accelerated the process of bringing a steel mill to the West. A symbol not just of American wartime economic growth, but also Los Angeles' continued imagined and real struggle for urban and commercial autonomy. For Fontana, the effect was monumental in transforming the agrarian community. Of equal magnitude was the negatives brought on the town when the mill was shuttered forty years later. All are testaments to the

³²⁰ Geoff Manaugh, "Ghost Town."

tenuous relationship of industry and defense spending – especially when married under the specter of Los Angeles boosterism.

California City is an American Pompeii – a ruin less than 75 years old that captures, in a freeze frame of urbanization, the limits of California's prosperity. Just like with Fontana and Palmdale, capitalism is not to blame for the failures of California City. Planned communities, industry, and cities falter in all sorts of economic markets. Boosters promised California City's original population, like Fontana and Palmdale's, the frontiers of the next wave of prosperity. In Fontana and Palmdale the promises made by the local officials and boosters were not entirely empty. However, they depended on a regional economic system in which defense industry was key. When broad changes to the national economy, including the end of the Cold War and the rise of a post-Fordist system, undermined the dependence on these industries, Fontana and Palmdale were examples of the communities that bore the brunt of such transformations. Located on the periphery of Los Angeles, defense industry underwrote Fontana and Palmdales' inclusion into the decentralized urban area. When that defense or manufacturing related industry downsized, the communities were left to fend for themselves without the necessary economic infrastructure needed to underwrite any city and too far from Los Angeles to smoothly shrink into suburbs.

California City's boosters, on the other hand, simply imagined their community as a continuation of the urban sprawl. Thus, the community failed in an earlier stage of development than Fontana and Palmdale. While the failure harmed the people who had already purchased real estate in the "city," it did not create the same systemic socio-

economic problems that swept through Palmdale and Fontana in the 1990s and into the present.

The original boosters, that saw such promise in their beginnings, are witnessing a sad ending to their stories of Palmdale and Fontana. While Antelope Valley has lost the luster that attracted thousands there, it continues to grow. Journalists like William Finnegan paint a grim picture of the destruction the military industrial complex left behind. In Fontana, the city's residents and boosters turned to new industries that do not provide the same sort of vibrant economy that the steel mill could. However, life goes on in the desert cities – new boosters have taken up the empty posts. The idea of progress has not left the communities. The socio-economic problems derived from the boosters' fanciful notions of utopia limit the economic mobility and the futures of many residents today, but that does not mean the communities are dying out. Fontana and Palmdale are well enough established. Albeit the narratives behind their developments left them frail and challenged, they still possess the urban spirit and institutions necessary for adaptation to the continuing transformations of American capitalism. Even in California City, the boosters will not allow the desert to swallow up Mendelsohn's dream. While not suburban homes, developer NextEra has partnered with utility conglomerate FPL Group and California City officials to build dozens of solar farms on hundreds of thousands of empty desert acres in the northern area of the city. The plan, still in its infancy, may revive the area's economy – shifting the focus from military industry to energy and environmental issues.³²¹ What will remain is the unwavering presence and power of the local booster's desire to bend and twist the capitalist system to benefit their home –

³²¹ Todd Woody, "Tree Deal Revives Southwest Desert Solar Plan," *Los Angeles Times*, February 14, 2010. <http://articles.latimes.com/2010/feb/14/business/la-fi-solar-water14-2010feb14>

adapting to whatever form America's economy has taken at that moment. Whether the adaptation results in prosperity or tragedy remains to be seen, but some of the answer can be found in the mistakes and successes of Los Angeles' past.

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