CALIFORNIA AS MUSIC TO AMERICAN EARS:
Migration, Technology, and Rock and Roll in the Golden State, 1946-2000

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ABSTRACT

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Migrations and technological advances in California following World War II, spurred radical changes in the production and development of popular music, most notably rock and roll. California largely lacked the entrenched traditions of the American Northeast, and in many ways its exploding population translated into the growth of a culture built around embracing newer methodologies, whether technological innovations or radical artistic departures.

In large part owing to its increasing ethnic diversity during the economic expansion, California was uniquely poised to become a center of incredible postwar dynamism, especially when seen in the production, consumption, and stylistic development of music. Nevertheless, many of the radical departures in American music were contingent upon the contributions of a small group of inter-connected musical equipment manufacturers and musicians in California from the 1940s through the 1960s.

As the United States experienced dramatic changes during the awesome postwar boom, Californian artists, merchants, and equipment makers exploited opportunities, making the Golden State the national trendsetter in musical developments both technological and stylistic. In particular, the invention, development, and further refinement of solid bodied electric guitars and basses in Southern California permanently changed how music would be made. The transformation of West Coast music would produce differing reactions nationally, while foreign developments would impact California, challenging its hegemony.

Keywords: California, Music, 20th Century, History, United States, Popular Culture, Leo Fender, Electric Guitar, Electric Bass, Rock and Roll, Music Equipment, Migration, and Technology and Society.
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This work is dedicated to my two brothers: to Travis for opening both my eyes and my ears to music recording, and introducing me to the equipment side of the equation, and to Timothy who loved to hear me play rock, blues, soul, jazz, and folk on my Fender basses.

Timothy Robert Willett

1977—2009
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Introduction

In Santa Maria, on California’s Central Coast, two brothers began to play musical instruments in the late 1950s and early 1960s.\footnote{Santa Maria is a former oil town in an agricultural valley north of the Vandenberg Air Force Base, and the gave itself the moniker, “Missile Capital of the Free World,” as shown next to the title of the Santa Maria Times in the 1960s.} Jimmy Spittler was born in the 1940s and learned to play the accordion, while Tommy was born in the 1950s and learned to play the electric guitar. Jimmy picked up an Italian-made Morbidoni Paragon, while Tommy got an American-made Fender Stratocaster. Jimmy practiced music on an instrument that enjoyed popularity in America during the 1940s and 1950s and was developed, manufactured, and exported from Europe. Whereas, Tommy took his cues from musicians steeped in the sounds of the burgeoning surf scene, which had adopted the solid bodied electric guitar, an instrument developed and manufactured in California. Rock music soon made the electric guitar the symbol of American music, while the popularity of the accordion with American youth would rapidly fade.\footnote{The changing preferences, functions, and designs of musical instruments are discussed through the course of this paper, especially chapters 3, 4, and 5, pp 25-59.}

The musical choices and ultimate divergence of the brothers Spittler capture the essence of the critical changes that were occurring in the music industry in the decades following the Second World War. Californians began to develop the tools and advance the processes of making music, while growing to dominate the field. Simultaneously, American music became increasingly focused on young audiences, young performers, new equipment, and rock and roll music. On the one hand, many of the radical departures in American music after the war were contingent on the part of a small group of inter-connected musical equipment developers and musicians in California. On the other hand,
due to its recent and ongoing rapid development, California was uniquely poised to exploit the moment and became the de facto center of American musical expression.

Historically, California had been geographically isolated and therefore lacked much of the entrenchment that had developed in the American Northeast. Since so many new residents were pouring into the state, the acceptance of innovation was eased, in part, because layers of cultures were continuously being added to each other. The music from the Golden State during the postwar boom shows a massive cultural transformation that combined an intermingling of cultures with technological experimentation. Nevertheless, the various strands of the musical story are elaborately intertwined—we cannot separate production, consumption, and stylistic development from each other. Nor can we divorce the cultural ramifications of American music, especially rock, from the contributions of instrument and amplifier designers and builders. For the genesis of much of the transformation is directly dependent on the development of the solid body electric guitars and basses, and their subsequent adoption across genres. So while artists were making changes, the instruments (and other equipment) were the vehicles that enabled those changes to take place. Of course, artistic change was not occurring in a vacuum, and these modifications in the musical landscape were flowing alongside the deep social, demographic, and political developments unfolding concurrently.

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Californian isolation was so pronounced that it was for centuries considered an island; see Dora Beale Polk, The Island of California: A History of the Myth (Lincoln and London: University of Nebraska Press, 1991: see also, Derek Hayes, Historical Atlas of California (Berkeley, Los Angeles, London: University of California Press, 2007), 28-33.
Some historians discuss music as evidence of cultural changes, but largely omit the technological innovations that occurred in California. James N. Gregory and Kevin Starr do include music in terms of the larger style classifications within the frameworks of their cogent and well researched discussions on the state’s history, yet eschew the role specifically played by musical equipment developers. For example, Starr’s *Golden Dreams* misses the ripe opportunity to further illustrate the argument that different elements of Californian history illustrate the continuous reshaping of America; whereas, Elijah Wald neglects the role of the mechanical inventor alongside that of the musical innovator. If Gregory, Starr, and Wald, included the impact of musical equipment on style, they each could further demonstrate their individual arguments. Music conveniently demonstrates the intersection of regional affluence, technology, and social liberalism in California after the Second World War.

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4 The popular texts from Rawls and Bean; Rolle; and Rice, Bullough, and Orsi to some degree discuss music as a component of Californian culture, however they omit any explicit discussion of the development of electric guitars in the state. See also David P. Szatmary, *Rockin’ In Time: A Social History of Rock-and-Roll* (Upper Saddle River, New Jersey: Prentice Hall, 2010).


At the same time, the authors of guitar histories fail to ask the questions of larger political significance. Of those books specifically discussing musical equipment, many are the work of gushing fans that merely celebrate the aesthetics or purely technical features of these objects of adoration. Although well researched, much of the available published material is largely hero worship or plain antiquarianism, and suffers the defects of what Hayden White has termed the romantic mode of emplotment.\(^8\) Also problematic with many guitar histories, moreover, is the situation whereby each brand has its own cadre of adherents. For example, compare the work of Tony Bacon praising Fender products with that of Walter Carter extolling Gibson.\(^9\) What is missing is analysis of how these instruments and amplifiers truly had an impact on the larger culture, and the economic and geopolitical factors that enabled their developments. As historian George Lipsitz puts it, “Perhaps the most important facts about people and about societies have always been encoded within the ordinary and the commonplace...[so] by examining the relationship between collective popular meaning and commercial culture, we may be on the threshold of a new kind of knowledge.”\(^10\) This paper intends to bridge some of the gaps in the scholarship. By looking at the overlapping realms of audiences, artists, and engineers in the second half of the twentieth-century, we can trace much of the path that

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California followed after the Second World War, while it shaped the rest of the country through its multi-faceted musical journey.

“California as Music to American Ears” examines the role of migration and technological development in California following World War II, as seen by the radical changes in production and development of popular music. In examining the music without the artificial walls of genre and time, the contingencies of individual innovators are illuminated. This is not the longue durée of Fernand Braudel, this is the California of Clarence Leonidas Fender.¹¹ The course of the paper will concentrate on three themes, following a largely chronological organization. First discussed are the ramifications of World War II and the postwar boom on music and musical development in California. Second, is Californian opportunism during the incredible postwar boom as America underwent dramatic changes.¹² Third, is the impact of music technology on Californian (and by extension, American) culture, as the Golden State suddenly became the national trendsetter. This paper concludes that throughout its boom-and-bust history of declines and setbacks after each high tide, the hallmark of California’s protean character is its continual reinvention.

¹² For California and United States populations compared, see Appendix A, 123.
1. A Second Gold Rush: 
The Musical Ramifications of Multiple Migrations

“If there is such a thing as DNA codes for states—and there may very well be!—then crucial to the sociogenetic heritage of California would be ethnic diversity.”

—Kevin Starr, Californian Historian

California, in all of its incredible breadth, population, and diversity, is a whole region unto itself. Within the realm of twentieth-century music, distinct strains have overlapped, combined, and competed with each other, demonstrating the impact of numerous cultures on the state’s history. While the various strands of American popular music at mid-century may have initially been more similar than dissimilar, changes in instrumentation would ultimately make differing styles more distinct from each other. The shift in instrument usage and the incorporation of newer instruments bear witness to technological advances, but they also showcase how differing segments of the population contributed to the musical landscape. The music produced after the Second World War testifies, in part, to the layers of migrations within the country, but especially within California. Different groups brought different musical styles, and those styles later borrowed from each other, producing new styles that would then have a larger impact on the rest of the country.

Born in a gold rush and beset with waves of immigrants, American California has long been a destination for the migratory impulses of Manifest Destiny. From the mid-

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13 Starr, *California*, 304.
14 In fact, Americans were entering California well before it was acquired by the United States; see chapter six in Rawls and Bean, 66-77. Starr also makes this point about Manifest Destiny in *Embattled Dreams*, ix.
nineteenth through the early twentieth-century, Midwest transplants brought a border mix culture that was rooted in neither the Northeast nor the Deep South, and they brought their neutral midland American accent, their conservative politics, and their particular strains of Protestant religion as well.\textsuperscript{15} In the 1930s, conditions both domestic and international led many to leave their homes for the Golden State: the Great Depression brought Okies, while the rise of fascism brought Jews and other Europeans. Then America’s entry into war against Japan and Germany opened opportunities for employment in war materiel manufacturing, which caused the earlier migrants to stay and encouraged others such as African Americans to join them. Subsequently, the wartime labor shortages encouraged Mexican immigration, which would add another layer to the many already present. People were coming to California from other parts of the United States as well as Europe, and this process contributed to the construction of a cultural mosaic that affected many different aspects of visual arts and performing arts, especially music.

At mid-century, much of the music that was played publicly in America was specifically meant for dancing and home recreation, not for seated concert attendance.\textsuperscript{16} While distilling elements of European rooted musical forms with flavors of African and Anglo-Celtic derived folk ingredients, successful ensembles would be able to play a wide range of styles from swing jazz, to hillbilly, and polka depending on their audience, rather than relying solely on their own sound or material. For survival, competency was more important than originality. Music historians run the risk of distorting the context of the development of popular music by relying solely on the surviving recorded material.

\textsuperscript{15} Gregory discusses the establishment of churches belonging to Baptist, Pentecostal, Nazarene, and other denominations of the Holiness movement in \textit{American Exodus}, 191-221.

\textsuperscript{16} Wald makes this point, \textit{Beatles}, 250.
and overlooking the role of live music. Likewise, artificially categorizing music into styles for the convenience of the modern listener equally distorts the history.\(^\text{17}\) Obviously, composers from the eighteenth and nineteenth-centuries did not know at the time that works of Handel would later be classified *Baroque*; that of Haydn, *Classical*; and that of Brahms, *Romantic*: they simply composed their music in their respective eras without the foreknowledge of how their works would be later labeled. In this same manner, modern American popular music from the 1930s through the early 1950s blended and borrowed styles, with many of the demarcations of genre applied long after the fact. This is not to say that no differentiation existed, but only to point out that many of the styles now recognized as separate styles overlapped. For example, listen to the marked similarities of Willie Dixon’s work with the Big Three Trio in the late 1940s with that of Nat King Cole of the same period.\(^\text{18}\) As different immigrations to California brought different nascent musical styles with them, cross-pollinated musical communities began to emerge, which enabled further stylistic divergence later.

Although at times overlooked in terms of their contribution to Californian culture, Okies have played a significant part in musical development that still reverberates. Over a million migrants from Texas, Oklahoma, Arkansas, and Missouri relocated to California in the 1930s and 1940s, eventually constituting a ninth of the state’s population.\(^\text{19}\) As

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\(^{17}\) Over time, genre names may change and obscure similarities between artists of different times; see Elijah Wald, *Escaping the Delta: Robert Johnson and the Invention of the Blues* (New York: HarperCollins, 2004), 194.


depicted in fiction (in John Steinbeck’s *The Grapes of Wrath*) and in nonfiction (in James Gregory’s *American Exodus*), the Great Depression drew Okie migrants to California, changing both the migrants as well as their new host state.\(^\text{20}\) While the depression may have initially drawn them, the war kept them, and drew even more. Okies changed California in accent, religion, and especially music. The still-present drawl of the southern San Joaquin Valley bears testimony to the rapidity of the movement: if it were a slower migration, the accent would not have survived the trip.\(^\text{21}\) With the sounds of *hillbilly* and *western swing*, Okies changed the sound of what would be considered “California.”\(^\text{22}\) These migrant Texans and Oklahomans attracted Okie performers who followed their audiences to the Pacific shores, becoming house bands for large dances and radio performers in the urban areas of California. Furthermore, Southland performers such as Gene Autry, Roy Rogers, and Tex Ritter not only helped to pioneer country music as a genre as singing cowboys in motion pictures, they also establish an early Southern Californian connection within the history of country music.\(^\text{23}\)

In California, the Southwestern transplants developed something now labeled western swing. By combining the driving rhythm of swing jazz with western instrumentation, most notably fiddles, electric guitars, and the pedal steel electric guitar, a danceable precursor to modern country music was performed by white musicians in cowboy hats and neckerchiefs. Later, western swing would congeal the country elements


\(^\text{21}\) In contrast to Lotchin and Rhode, Gregory, addresses the importance of analyzing culture as primary evidence of the fundamental change to both the migrants and the host state, in his study on the 1930s and 1940s Okie migrations to California, *American Exodus*. Starr, *Endangered Dreams*, ix.


\(^\text{23}\) Tex Ritter moved to Los Angeles in 1936 to act in movies, and was Capitol Records’ first signed artist in 1942.
of Appalachian folk music, then derisively called hillbilly, to create what is now termed country music. Much like “rock and roll” was shortened to “rock”, “country and western” has largely been simplified as “country.” Owing to its noticeable Eurocentricity, however, modern country music hardly reveals its swing jazz ancestry through western swing.

Most famous of the western swing acts was Bob Wills and his band, the Texas Playboys, who were actually from Oklahoma, but performed mainly in Southern California through most of the 1940s, alongside other western swing acts.24 Wills also worked in Fresno, Sacramento, and San Francisco, before returning to Oklahoma in 1949. Other notable performers, such as Spade Cooley (moved to Los Angeles in 1930, until he ran afoul of the law and was incarcerated in 1961), Speedy West (moved to Los Angeles in 1946, until he went to work for Fender in Tulsa in 1960), Merle Travis (moved to Hollywood in 1944), and Tex Williams (moved to Los Angeles in 1942) were important in establishing country music as an idiom and a Californian commodity. Notably, Travis developed a then unique style of innovative playing dubbed “Travis picking” that later became a hallmark of country music. But more important, many of these artists would have a direct influence on the development electric guitars and hence, on rock. After all, Bob Wills and the Texas Playboys were inducted into the Rock and Roll Hall of Fame. The impact of their inclusion of electrified acoustic guitars and pedal steel guitars in Southern California will be discussed later.

The Second World War brought to the sunny shores of the Pacific, European artists that included playwrights and authors such as Thomas Mann, yet it also attracted

24 Upon arriving in Oklahoma in the mid-1930s, the Playboys were rechristened the Texas Playboys; see Rich Kienzle, liner notes for The Best of Bob Wills and his Texas Playboys, 3.
composers who revolutionized classical music. The group of European musical transplants included German-born conductor Otto Klemperer, yet more important would be the European émigré composers who pushed away from musical conventions and fostered revolutionary approaches to tonal concepts. With their help, classical music moved further into the esoteric. Chief among the new residents was Arnold Schoenberg the so-titled “liberator of dissonance,” who fled Nazi Germany for the United States in 1933, and began teaching at USC in 1935, before moving on to UCLA. In 1940, Russian composer Igor Stravinsky came to Southern California, while Darius Milhaud a French émigré arrived in Northern California. Milhaud began teaching at Mills College in Oakland and would later have Dave Brubeck, Philip Glass, and Steve Reich as students: Brubeck would become instrumental in jazz innovation, while Glass and Reich would define minimalism in art music. Important to remember, though, is that “elite music” does not exist in a separate world, and the innovations of these composers would influence popular music. Likewise, classical music is part of California’s legacy. Unlike the wartime migrants who departed Europe as it was descending into genocidal belligerency, most migrants to California during the 1940s were Americans who sought better employment, among them were African Americans.

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26 *Artists in Exile, Weimar on the Pacific*, also Starr; and Alex Ross, *The Rest is Noise*. Dorothy Lamb Crawford shows the growth of LA cultural maturity in “Art-Music” of the twentieth century and likewise presents the role of European exiles in developing an American modernism that displayed a kind of internationalism in its music akin to that which was also seen in architecture, *Evenings on and off the Roof: Pioneering Concerts in Los Angeles, 1939—1971* (Berkeley and Los Angeles: University of California Press, 1995).

27 Starr, *The Dream Endures*, 360; and *California*, 297; see also Rawls and Bean, 437.

Although African Americans have been in California as long as European Americans, the growth in the 1930s and 1940s was similar to the Okie migrations in that movement was relatively sudden. In the decade of the 1940s, roughly 260,000 African Americans relocated to California, starting a trend of black migration that would last for the next three decades. Before the war, a jazz and blues scene had developed in Los Angeles in the black community on Central Avenue. Then, the wartime needs for factory and stevedore employment enticed many African Americans to the East Bay communities such as Oakland and Richmond, as well as Southern California. More than 150,000 African Americans toiled in the shipyards, largely doing work in which they were previously excluded due to race. Although never a sizable portion of the state’s overall population, black communities did develop in Northern and Southern California. Many of the important African American jazz and blues artists stopped in LA. In particular, the black community around Central Avenue in Los Angeles attracted the visiting bebop musicians in the 1940s, some of whom had extended stays in Southern California. The music of California’s black migrants principally originated in Texas and Oklahoma, which stands in contrast to the music of black migrants to Chicago, having largely come from Mississippi. The blues in California would combine the rhythms and

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29 The original settlers of the pueblo that became Los Angeles were ethnically mixed and included those of African ancestry; see Rawls and Bean, 42; and Rolle, 42.
30 In the 1930s, forty-one thousand African Americans came to California, according to Historical Statistics, 1-518. California in the 1950s, 1960s, and 1970s saw 220, 327, and 310 thousand black migrants, respectively; see also Appendix B, 124.
31 Bryant, Central Avenue; DeVeaux, Birth of Bebop.
32 African Americans remained less than 2% of the state’s population until the 1950 census, when they became 4.4%, as a result of war migration.
33 Townsend, Chapter 7 “The Street,” Pearl Harbor Jazz, 191-199.
34 Wald illustrates the difficulties in classification of what is “blues” in Delta, 197-201, 209. Compare Wald’s broader geography with Robert Palmer’s focus on the transplanting of Delta blues in
loose arrangements of Kansas City jazz with the guitar playing of Texan blues.\textsuperscript{35} Most notable of the African American performers of Los Angeles of the 1940s was electric guitar pioneer T-Bone Walker. After studying under Blind Lemon Jefferson in the 1920s and associating with Charlie Christian in the 1930s, Walker made his way to the West Coast.\textsuperscript{36} Resembling large portions of his audience, Walker was born in Texas, mirroring in the African American community in California what had occurred in the Okie community. To further contextualize this, important Californian African American political leaders, Willie Brown and Tom Bradley were also born in Texas.\textsuperscript{37} Walker’s work in LA during the 1940s was later emulated by Chuck Berry in the 1950s. In the words of Johnny Otis:

Where rhythm and blues guitar is concerned, there is no need to strain the memory to come up with who the original influences were. There was exactly one. T-Bone. Aaron Thibeaux Walker. He single-handedly defined what rhythm and blues guitar was all about. From him spring B. B. King, Pee Wee Crayton, Freddy King, Albert Collins, Albert King, Buddy Guy, Lowell Fulson, Pete Lewis, Gatemouth Brown, Chuck Berry, and all the others down to the present day, who fall under the category of rhythm and blues guitarist.\textsuperscript{38}

Other non-whites were also important to the development of the state’s particular musical identity. Throughout California, the ubiquitous presence and continuous growth

\textsuperscript{35} Kansas City performers such as Count Basie borrowed heavily from blues in approach and form; see Ted Gioia, \textit{The History of Jazz}, 159-167; and \textit{Jazz: The Rough Guide}, 737.

\textsuperscript{36} The term “studying” is being used somewhat loosely here as both men were street performers; nevertheless, Walker would learn from and emulate Jefferson; see Wald, \textit{Delta}, 198; and Palmer, \textit{Deep Blues}, 107, 197. Charlie Christian auditioned for and first performed with Benny Goodman in Los Angeles in August 1939, see Thomas Owens, entry for “Charlie Christian” in \textit{The New Grove Dictionary of Music and Musicians}, Second edition, Volume 5, 795.

\textsuperscript{37} The parallel between political leaders and musicians extends to the white population too, as seen with Jesse Unruh who was likewise born in Texas.

\textsuperscript{38} Johnny Otis, \textit{Upside Your Head! Rhythm and Blues on Central Avenue} (Hanover, New Hampshire: Wesleyan University Press, 1993), 85.
of the Spanish language on American radio, demonstrates that ethnic identity in the West is beyond the black/white binary situation of eastern United States. Naturally, since California was carved out of Mexico during the nineteenth-century, it has always had a presence of Hispanic culture. Throughout the late nineteenth and early twentieth-centuries, heavy Anglo migration from within the United States relegated the Mexican culture to a diminished component of the overall populace, yet by the middle of the twentieth century, that trend would be entirely reversed. The Bracero program was responsible for bringing tens of thousands of Mexicans into California to meet wartime farm and rail labor needs from 1942 to 1964. These temporary laborers added to the Mexican Americans already in the United States, contributing to the ever-growing Hispanic population in California particularly.

Californian music has benefited from the direct involvement of Hispanic acts. For example, Richie Valens, from Pacoima, represented the visibility of Mexican Americans from California, and Valens’s Spanish language rock hit “La Bamba” testifies to the Latino contribution to rock from the earliest days of its development. Valens broke ground for other Latino artists. By the end of the century, Latinos would become the single largest ethnic group in the state. Now, the American music industry has separate charts in *Billboard*, separate tracking by the RIAA (the Recording Industry Association

39 The arbitrary category “Latin” lumps together disparate genres such as Mexican bamba and Tejano, with Dominican merengue, and Cuban mambo. The categorization found in the modern Latin Grammys, the separate grouping by the RIAA echoes the earlier “Sepia” and “Race” categories used for African American markets.

40 The state’s original constitution was written in both English and Spanish and even adopted some measures of Mexican law. Leonard Pitt discusses the role of Californios in the 1849 constitutional convention in *The Decline of the Californios: A Social History of the Spanish-Speaking Californians, 1846-1890* (Berkeley, Los Angeles, London: University of California Press, 1966), 42-47.


42 Latino artists such as Trini Lopez, Sam the Sham and the Pharaohs, Freddy Fender, Jose Feliciano, Carlos Santana, Sheila E., and the European Flamenco artists the Gypsy Kings benefited from inroads into Anglo musical tasted forged by Valens.
of America), and separate Grammy Awards to meet the needs of this segment of the market. According to the RIAA, Latin sales account for six to eight percent of total units shipped.

In terms of culture, language, and identity, Californian has always included a significant Mexican component, but it has also had an important Asian element as well. The multiplicity of Asian groups has likewise added to the complexity of the state’s racial policies and self-perception, and California’s historically rich ethnic mix would continue to diversify through the end of the twentieth-century. Illustrating its conflicted and almost schizophrenic temperament, California has hardly been an inter-ethnic paradise on the Pacific. The state has its long history of less than exemplary behavior, from the racism in the vigilante justice of the mining camps of the nineteenth-century, to racially restrictive housing covenants of the twentieth-century, to the Asian exclusionary laws, to the forced deportations of Chicanos in 1933, to Japanese internment during World War II. Nevertheless, the sheer rapidity of demographic changes in growth and origin has generally assuaged too narrow a focus for singular ethnic identity. Moreover, the presence of so many communities combining in such a quick fashion made for fertile ground for musical innovation, while early inroads made by pioneering populations would be utilized by merchants of later generations.

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44 Eventually, fuller integration of Latinos into Californian Anglo bands, would be seen for example with Robert Trujillo in the band Metallica. The forbearers of Governor George Deukmejian came from Armenia, as did those of the members of the rock band System of a Down, further illustrating the parallel between musical and political realms in California.

2. The Big War as Big Catalyst in Californian Development

“The Second World War is the largest single event in human history.”  
—John Keegan, Military Historian

“World War II has completely revolutionized the economy of California.”  
—Carey McWilliams, Californian Historian

Necessity is the mother of invention, and the Second World War had many cultural ramifications, one of which was inadvertently changing American music. First, America’s popular music styles changed in form and character. Second, military spending in California dramatically altered the cultural dynamics by augmenting the economic dynamic. Third, the nature of the recently concluded conflict further encouraged a reliance on technological solutions and an optimism in American ingenuity bought about through inventions. The most noticeable of these changes immediately, however, was the shift in the size and sounds of jazz ensembles, as they moved away from larger groups, the so-called big bands, to smaller combos. With that, the sound of American jazz moved away from the danceable swing jazz of Duke Ellington and Benny Goodman and towards the un-danceable bebop of Charlie Parker and Dizzy Gillespie. In short, jazz as an idiom became less “popular” and increasingly more “artistic.”

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46 Although historians can sometimes lose the forest for the trees, the unsubtle words of British military historian John Keegan frame the significance of the conflict in truly succinct clarity, The Second World War (New York: Penguin, 1989), 5.
47 Carey McWilliams, Southern California: An Island on the Land (Salt Lake City: Peregrine Smith Books, 1946), 371.
American musicians enlisted and were drafted into the war, and wartime manpower shortages led to smaller jazz combos, which directly impacted how jazz ensembles would approach music. Not only was the pool of available musicians tapped, travel restrictions also contributed into a stylistic shift away from swing, as musicians were playing longer engagements in the larger cities and more regularly jamming (informal collaboration) in after-hours in nightclubs, bars, and hotel rooms.\textsuperscript{48} Likewise, wartime concentration of labor for manufacturing also further encouraged urbanization of music, which would expatiate the rate that change could be transmitted. With smaller ensembles playing in cities and experimenting more regularly, the scope of the musical language changed rather abruptly, especially as experienced by service personnel stationed abroad who were jarred by the radical sounds that had developed prior to their return home. Bebop was considered a radical departure from popular swing, and the course of the war only made the departure seem all the more extreme. During much of the war, a recording ban instigated by the musicians’ union was in place, so the development of bebop was not being heard everywhere.\textsuperscript{49} Likewise, a shellac shortage caused by wartime disruptions reduced recording. So once the fighting stopped, the record presses went back on line, and jazz fans were shocked by this apparently suddenly radical departure in their music.

Charlie Parker and Dizzy Gillespie, along with Thelonious Monk and other likeminded musicians, popularized bebop, an aggressive and un-danceable subgenre that split from swing jazz, in New York City in the 1940s. Here was a small ensemble consisting of a rhythm section of piano, bass, and drums, supporting one or more wind

\textsuperscript{48} Gioia, \textit{The History of Jazz}, 201, 214-216.  
\textsuperscript{49} Ibid., 155-156.
instruments—usually a trumpet and an alto or tenor saxophone, but occasionally included trombones, baritone saxophones, and even early electric guitars. Initially, the groups were largely *ad hoc* ensembles, but later the groups of musicians were booked outright.\(^{50}\) The small group and improvisational nature of bebop set the stage for the pattern followed by jump, country, rhythm and blues, and rock and roll. As the musical ensembles became smaller, from swing-playing big bands of a dozen to two dozen musicians to bebop groups of four to six men, stylistic differentiation became more pronounced, especially when technology introduced new instruments and sound reproduction methods. Although the major changes in trends in American popular music were taking place in the urban centers of the Northeast, many of the leading musicians were also playing in California. In the coastal communities of Los Angeles County, a new style emerged that combined elements of swing and bop.\(^{51}\)

The standard definition of West Coast jazz is that it was a whiter and smoother Californian variant of bebop, largely populated by former sidemen from the bands of Stan Kenton and Woody Herman.\(^{52}\) Some musicologists perhaps unkindly simplify it as merely “a watering-down of 1940s bebop,” yet if bop was hot, then West Coast was decidedly cool.\(^{53}\) In contrast to East Coast jazz, especially bebop and its derivative hard bop, West Coast jazz emphasized composition more, valued counterpoint, and had less dominating drumming with cleaner articulation and more fluid and polished execution.\(^{54}\)

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\(^{50}\) Joop Visser, *BeBop Spoken Here*, Proper Records, 2006, 8.

\(^{51}\) Ted Gioia, *The History of Jazz*, 287-289. Gioia, *West Coast Jazz*, 368. Gioia argues that Kansas City jazz, like West Coast overlooked as one of the last of the regional styles.

\(^{52}\) Mark C. Gridley confronts “the impression that all West Coast jazz of the 1950s is cool jazz and vice versa.” *Jazz Styles: History and Analysis*, Fifth Edition (Englewood Cliffs, New Jersey: Simon & Schuster, 1994), 174, and 192.


\(^{54}\) This is paraphrased from Gioia, *West Coast Jazz*, 362.
Although generally dismissed for its seeming conventionality, jazz historian Ted Gioia argues that California jazz in the late 1940s and 1950s was more open to experimentation than its detractors care to admit.\textsuperscript{55} Nevertheless, what doomed Californian-rooted cool jazz from being embraced by Eastern practitioners, was the focus of the jazz critical establishment on the hot style then popular in New York City.\textsuperscript{56}

Regardless of the level of West Coast originality, the development of jazz nationally was influenced in only a small measure by what was happening in LA. In fact, many of the important jazz artists originating in California, such as Charles Mingus made their fame by moving to New York; nevertheless, the scene fostered the development of a West Coast variant of bebop that would come to typify the time and place.\textsuperscript{57} The “cool jazz” honed at the Lighthouse in Hermosa Beach later was reinterpreted and improved by former guest Miles Davis.\textsuperscript{58} While he was not wholly dependant on Southern California for all of his many musical departures, he was nevertheless influenced by the collaboration with West Coast musicians such as Gerry Mulligan and others who appeared with him in the nine-piece ensemble that recorded the widely influential \textit{Birth of Cool} recordings of 1949. Davis, utilizing the cool mannerism of the West Coast, eased into modal jazz, liberated from the hard edges of the postwar bebop jazz that dominated the East. World War II opened up opportunities for stylistic developments, but it also changed Californian music in other ways.

While it elevated the state’s position of importance within the nation, the Second World War fundamentally reshaped many of the basic components of Californian

\textsuperscript{55} Gioia, \textit{West Coast Jazz}, 331.
\textsuperscript{56} See Gioia’s argument regarding the lack of local critics, \textit{West Coast Jazz}, 365-367
\textsuperscript{57} Gioia, \textit{West Coast Jazz}; and \textit{History of Jazz}; Gordon, \textit{Jazz West Coast}.
\textsuperscript{58} Dave, \textit{Miles}, 166-169.
society.\textsuperscript{59} Adding to the growing migrant population, workers by the thousands piled into the Golden State in the 1940s, to help build and transport the war matériel needed in America’s role as an “arsenal of democracy.”\textsuperscript{60} Besides the soldiers, sailors, and marines being readied for combat across the sea, the Golden State saw 300,000 employed in its shipyards and 280,000 employed in its aircraft plants. Plus, the Golden State served as the training ground and place of embarkation for thousands of service personnel, many of whom planned to return to the sundown shores of the Pacific West. In addition to having an immediate impact through promoting the massive migration to California and inadvertently changing the stylistic development of music nationally, as seen with the development of bebop, the war was also a creative catalyst in two major ways. First, the heavy military investment through the war essentially subsidized the state, fostering the conditions that allowed California to become both an economic and cultural driver for the country. Second, the war and its aftermath further encouraged a reliance on technology.

Since its admission into the Union, California has been the beneficiary of federal dollars by way of military spending. Besides its port facilities in the San Francisco Bay region, Los Angeles-Long Beach, and San Diego, sunny Southern California in particular was especially attractive to aviation. Los Angeles and San Diego had available labor, a favorable climate, and intellectual resources, with which city boosters successfully lured

\textsuperscript{59} Starr demonstrates how the state would “never be the same” through the process of experiencing the changes of the war years, \textit{Embattled Dreams}; the theme is briefly outlined in the preface, vii-xi. Furthermore, standard college texts covering Californian history echo the transformative aspects of the war: for example, in \textit{California}, Rawls and Bean show that the war was dramatic in its unprecedented impact, 345-350; and Rolle recognizes World War II as “one of the major turning points of Californian history” \textit{California}, 270.

\textsuperscript{60} David M. Kennedy presents the war as central to remaking America as the Revolution and the Civil War; Kennedy, \textit{Freedom From Fear: The American People in Depression and War, 1929—1945} (New York and Oxford: Oxford University Press, 2005).
American air power. Moreover, the Army also occupied plenty of Californian soil with bases and training facilities, some of which would become Air Force bases. Throughout the twentieth-century, the martial subsidy grew to the point where during the Cold War the Golden State was the recipient of nearly one fifth of all national military spending. During World War II, specifically, the federal government spent $35 billion in California, tripling personal income of residents between 1939 and 1945. Having a ripple effect, military spending buttressed nearly every conceivable facet of Californian lifestyles. In short, military money made much of modern California possible, and Californians would subsequently spend their bountiful dollars on new inventions often created in California.

Invariably, historians would come to differ as to how great an impact the Second World War, itself, would have. For example, Gerald D. Nash argues that the war fundamentally altered the structures and practices of the states in the American West, by transforming them from colonial backwaters of the country to becoming the national pacesetters. Meanwhile, other scholars such as Roger W. Lotchin and Paul Rhode argue that war-borne changes to California were merely an acceleration of trends already present in the state, minimizing the actual domestic impact of the war, even going so far as to deny any radical transformation. Yet, regardless of the fact that the large-scale transformation of the state was predicated upon earlier developments, the rapidity and

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62 California was exceeded only by Michigan and New York
63 Starr summarizes Lotchin in *California*, 242.
depths of the change are what make this era particularly revolutionary. In essence, modern California came into being through the heavy military spending, enabling its residents to enjoy a standard of living better than many other regions of the nation. Moreover, the war and its outcome for Americans encouraged a rising of expectations, and a growing faith in technology: life could be improved through the application of electricity, and this would be true for music as well.

Advances in technology directly changed how music was stylistically constructed. While Californian developments are the primary focus here, we must first acknowledge that the precedent was initially set with advances in microphones, which was then carried further with other advances in instruments. With the use of microphones in musical performance, individual singers and instrumentalists could better broadcast their music to their audiences instead of having the audience rely on large ensembles to make adequate volume. Increasingly becoming the focus of the ensemble, individual singers could then become more identifiable with emotional articulation in the crooning style of singing made possible by better microphones being used closer to the actual performer. The singing changed, but by the 1950s, so too did the instrument playing, and solo instrumentalists became increasingly more significant with the ability to capture electrically broadcast intimacy.


After the adoption of microphones, the vocals became a more prominent component of Paul Whiteman’s outfit, which featured Bing Crosby; see Elijah Wald, *How the Beatles Destroyed Rock*, 83.

For example, listen to the Harmon-muted trumpet of Miles Davis of the late 1950s or breathy saxophone of Stan Getz of the early 1960s.
figuratively amplified when they were literally amplified. The combination of smaller ensembles with better microphones translated into a movement away from the collective identity of an ensemble by the sum of its members towards to singular importance of individual performers, permanently changing popular music, and how listeners related to it. With this refocusing, the stage was set for the electric guitar and small groups to become the de facto template for American musical expression.

The state, as a whole, developed cultural markers that distinguished it from the eastern portions of the country, and this was evident not only in its ethnically rooted stylistic development of music, but the ready acceptance of newer technological innovations in Californian music. Since the state was basically new, it had no firmly established tradition, so it could employ new techniques to the industry as well as music. In short, innovations in California were not treated as being iconoclastic, regardless of how radical they would be perceived elsewhere in the country. So as California was growing more important with each decade of the twentieth-century, the

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69 In general, the State of Washington shares the overall pattern of development and contributions to music as California, yet only on a smaller scale. Washington resembles the California with its varied topography, Pacific orientation, ethnic mix that includes more Asians and Hispanics than African Americans, a historic growth rate higher than the national average, and sharing a border with one of the two continental neighbors of the United States. Both states have mixed economies that include high technology and agriculture; have port facilities that receive Asian goods; and both are important aviation centers, seen especially in Washington with Boeing. Likewise, military investment in the state, especially during the Second World War, encouraged the infrastructure that fostered growth in technology, the most notably case being Microsoft. In other words, owing to the parallel developmental histories of the two states, Washington’s case in large measure proves the Californian rule of westerners supplanting easterners in spearheading postwar cultural transformation.

Similarly, Washington has made its own marks in music from the Kingsmen singing “Louie, Louie” in the early 1960s, to Jimi Hendrix revolutionizing the possibilities of electric guitar playing in the late 1960s, to the Wilson sisters furthering the opportunities of female rockers in their band Heart in the 1970s and 1980s, to the grunge rock “invasion” of American in the 1990s. Moreover, the Pacific Northwest was most notably home to Ampeg, which began to produce trend setting bass amplifiers in the late 1960s. Furthermore, Richard Berry, the composer and original performer of “Louie, Louie” was a Southern Californian; see Wald, *Beatles*, 194. Meanwhile, Ann and Nancy Wilson, of Heart, were born in San Diego and San Francisco, respectively. Generally included with surf bands, the Ventures likewise were from Washington. The notable acts associated with grunge include Nirvana, Pearl Jam, Alice in Chains, and Soundgarden.

70 For a listing of the founding of numerous Californian record labels, see Appendix H-1, 134.
new music developments were a sign of its continuing growth. The biggest single development was that the music was becoming electrified, so while Californians and other Americans were plugging in their instruments, the forms and styles of musical expression began to change dramatically.
3. California, Rock, and the Electric Guitar

“There are two symbols in the world. One is the AK-47 and one is the Fender Stratocaster. When you look at each, you know exactly what you see. When you see the AK-47 you think of death, destruction, revolution, pain, and suffering. When you see the Stratocaster you think of freedom, music, America.”

—Jeff “Skunk” Baxter, Guitarist for Doobie Brothers, Steely Dan

Historians sometimes look to objects themselves to tell the stories of a culture and its development. Whether or not the music of the past is ever heard again, we can nevertheless learn about the culture and economy that demanded the production of the instruments that played that music. With electric guitars and basses in particular, the musicians and songwriters present themselves alongside the designers and manufacturers, working in conjunction with each other, to tell the story of postwar changes in California and how they altered American society. By understanding the instruments, we can see the spiraling effect whereby music was changing the function and intentions of the instruments, which in turn offered new possibilities and dramatically changed the direction of the music. Subsequently, the changes within American popular music had an indelible impact on the culture outside of the music itself, both at home and abroad.

When defining American music of the twentieth century, rock looms heavily in the popular imagination. Accordingly, rock must be addressed as the principle driver of American music from the mid-1950s forward through the end of the century. Many of the

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71 Jeff “Skunk” Baxter quoted in Music Merchandise Review, January 2008, 38. As Baxter further articulates his point of view with a touch of hyperbole, “It’s an incredible dichotomy, and I am glad to see that the guitar has become the symbol of freedom throughout the world.”

significant developments within the musical landscape either took place in California or with Californian hardware. In any case, rock has been in the center of American musical development as both the heir of the previous traditions and the instigator of future changes. According to the Recording Industry Association of America (RIAA), rock music is far and away the most popular form of music in America, and in 2007, the genre labeled “rock” accounted for 32.4% of the domestic market. Those categories defined as “classical” and “jazz” accounted for 2.3% and 2.6%, respectively, of the volume; whereas, the rock-derived genres “rap/hip-hop” and “R&B/urban” make up 10.8% and 11.8%. Moreover, rock has also influenced and been incorporated into genres listed as “country” (11.5%), “pop” (10.7%), “religious” (3.9%), “soundtracks” (0.8%), and “oldies” (0.4%), pointing to a near synonym between “rock” and “American” music. Furthermore, “pop/rock” accounts for a third of the music sold in American that is classified as “Latin.”

From his late century assessment of the importance of rock music in the second half of the twentieth century, music historian Joe Stuessy declares, “Rock will undoubtedly prove to be the single most potent economic factor in the multi-billion-dollar music industry.” Stuessy continues:

Musically, rock has influenced the music we hear on television, in films, and in commercials...Socially, the rock culture’s influence has been felt in hairstyles, clothing, language, life-styles, and politics. In other words, any historian of the last half of our century must devote significant consideration to rock and roll as one of the primary forces in our society as a whole (socially, culturally, economically, politically, and musically).

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74 Joe Stuessy, Rock & Roll: Its History and Stylistic Development (Englewood Cliffs, New Jersey: Prentice Hall, 1990), 1
75 Ibid., 1-2.
Importantly, it was the invention and successful production of solid body electric guitars and basses that helped launch and maintain rock and all its myriad of derivative styles. Solid bodied electric guitars and basses transformed and helped to merge the rockabilly of Bill Haley, Carl Perkins, Jerry Lee Lewis, and early Elvis Presley with the rhythm and blues and jump music of Chuck Berry, Louis Jordan, Fats Domino, and Little Richard. Early rock would have been merely another of the many musical fads that had passed through popular music, without the introduction of the new equipment.

The electrification of guitars for greater volume was not without precedent, though. Before electric amplification, a mechanical means for amplification was invented and developed by John Dopyera, a Californian immigrant from Slovakia. Dopyera, with the help of his brothers and George Beuchamp, invented the resonator guitar, where a thin metal cone within the body of the guitar reverberates and mechanically projects a louder sound. They sold this instrument under the name National in 1927. They would sell the name rights and reestablish the company under the name Dobro (short for Dopyera Brothers), which would eventually become the generic name for the resonator guitar. The resonator would quickly find itself in the hands of blues players in the Mississippi Delta during the 1930s and 1940s; Delta blues legends such as Robert Johnson and Muddy Waters drew inspiration from Son House and Bukka White playing National steel bodied resonators. Establishing a trend, when musical products were needed, Californians provided the solutions—enter the electric guitar.

Electric guitars were easier to move than pianos, and with amplification could reach audiences of greater size than acoustic jazz instruments. Although large classical

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77 Smith, Fender, 60-61.
ensembles could make appropriate levels of volume for large venues, they were expensive to maintain and required musicians of greater technical abilities than young rock musicians. Rock was LOUD, CHEAP, and EASY. Leo Fender and other Californians played no small part in the formation of this truism. In turn, the electrified guitars and basses of rock music eventually influenced rock’s own antecedents–country, blues, jazz, and classical.\(^78\) In the 1940s and 1950s, rock changed their structure, musical vocabulary, and even instrumentation. In styles ranging from western swing to Chicago electric blues to surf rock, several models of Californian-made guitars and basses were always on hand.\(^79\)

Electric guitars as American instruments had several developers and advocates throughout the middle decades of the twentieth-century; however Leo Fender and the company he founded stands out for the significant and lasting changes made in modern world music and American culture.\(^80\) For Fender and his Southern Californian colleagues and competitors, the “American System” was applied to musical equipment. Fender shepherded products rooted in simple but innovative designs that had easily exchangeable and reparable parts. Yet, one key to Fender’s success as a designer and businessman was the adaptability of his products and the company itself. While Fender products were initially built for the country and western acts residing in and returning to California on tours, the Fender stable grew to include the instruments that enabled rock and roll to develop.\(^81\)

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\(^{80}\) For a timeline of significant guitar model introductions, see Appendix I-1, 136.

\(^{81}\) Smith discusses Fender’s connection with early country acts, especially with amplifiers and the pedal steel, *Fender*, 48-52.
The electric guitar was introduced into swing jazz in the 1930s, and into western swing and other hillbilly music in the 1940s. But to put it more accurately, the initial “electric guitars” were electrified *acoustic* guitars: that is, they were hollow-bodied wooden instruments with an electromagnetic pickup. Companies such as Martin of Nazareth, Pennsylvania and Gibson of Kalamazoo, Michigan manufactured most of the guitars, before the war. Archtop guitars, however, are hollow-bodied acoustic guitars, with two F-holes similar to those found on mandolins and violins instead of a large centered sound hole, and are usually strung with steel strings.\(^{82}\) Since they do not have a large centered sound hole, they became the ideal models for use with electric pickups, which were placed directly under the strings, on the face of the guitar. The significance is that the electrification of guitars allowed smaller combos to adapt to the wartime manpower shortages. Jazz and hillbilly groups began utilizing electric guitars during the war, but once the solid bodied guitars were developed in California, the entire nature of the construction and usage radically changed. Oddly enough, the bridge between these two instruments ran through Hawaii.\(^{83}\)

After the United States acquired Hawaii in 1898, the island culture and music was introduced to the mainland through California. Along with surfing, which would have a later impact, Americans heard the music that featured ukuleles and slide guitars, with slack key tuning.\(^{84}\) Slide guitar playing was adapted to newly developed steel guitars

\(^{82}\) Archtop guitars were developed by Orville Gibson in 1894, and featured an arch that supported the face of the guitar without the sound-altering cross-bracing used on flat top guitars. Gibson was a mandolin builder, which is where this designed originated; see Carter, *Gibson*, 9.


\(^{84}\) The terms “Hawaiian” and “Spanish” was employed to denote the differences between guitars played flat across the player’s lap (Hawaiian) and those played facing away from the player (Spanish). The use of a steel bar to change pitch in Hawaiian guitar playing, instead of fretting with fingers, gave rise to the term “steel guitar,” which is different from a “steel bodied” guitar that may or may not be played in a Hawaiian style.
equipped with electromagnetic pickups. The electrified pedal steel guitar then found a home in hillbilly music in Southern California, most notably western swing. Hawaiian in origin, and Californian by transmission, the pedal steel provided the characteristic “twang” country music. Leo Fender began to make pedal steel and amplifiers to go with them. While country acts adopted the Hawaiian slide style, rock was later formed with help from these electrical instruments. In response to popular interest in Hawaiian music at the time, George Beauchamp and Adolph Rickenbacher built the first fully electric guitars with non-resonating bodies in Santa Ana, California in 1931. The original A-22 model of the instrument, nicknamed the “Frying Pan” due to its distinctive shape, was initially constructed out of aluminum, before Beachamp moved on to Bakelite, an early plastic for later models. The Rickenbacker company was eventually sold to F. C. Hall, a former Fender business partner in 1953.

Leo Fender inadvertantly entered the musical equipment business by repairing radios. After tiring of his clerical job with California Highway Patrol in San Luis Obispo, Fender returned to his native Fullerton to follow his interest in electronics. Most importantly though, Fender’s initial connection with guitars was building electromagnetic pickups to assist live performance, recording, and radio broadcast. Fender was not a luthier, and he never learned to play the guitar. Musicians came to

85 Palmer points to non-Polynesian contributions to pre-electric slide playing in the Mississippi Delta, which was later enhanced with the introduction of resonators, *Deep Blues*, 46.
86 The pedals of a pedal steel guitar alter the tuning, which offers different shaped chords to be made while using a sliding device in a Hawaiian playing style. Pedal steels are similar to laptop guitars, differing in that they are mounted onto a supporting surface with affixed legs. Pedal steel guitars also commonly feature multiple necks, each with a set of strings generally tuned differently.
87 Smith, *Fender*, 61. The spelling of Rickenbacher was later changed to Rickenbacker with the hopes of capitalizing on the fame of World War I flying ace Eddie Rickenbacker.
90 Fender’s uncle from Santa Maria originally spurred his interest in electronics and radio repair.
Fender to electrify their acoustic instruments. Initially, Leo Fender partnered with Doc Kaufman, a Midwest transplant, in a business that began even before the war was over, and the two of them began making steel guitars and amplifiers for local a visiting country acts. Kaufman was unsure about the viability of manufacturing musical equipment, so he and Fender parted ways in 1945. After George Fullerton, a former Lockheed employee, was roped into Fender’s operation, the young company had to compete with the Southern Californian defense industry for materials, especially the copper wire used for winding in the pickups.91

Elsewhere in the Southland, motorcycle mechanic and musician, Paul Bigsby built a specially designed solid bodied “Spanish” guitar for Merle Travis in 1948, after previously building pedal steel guitars for Southern Californian-based country musicians Earl “Joauquin” Murphey and Speedy West. While it is entirely possible that Leo Fender borrowed more than just inspiration for what would eventually become the Telecaster from Bigsby’s guitar, the genius of Fender is akin to that of Henry Ford, who greatly improved on a concept and put the idea into practice.92 One key element marks the difference between Fender and Bigsby, and that is production. While Fender’s shop in Fullerton was intended to mass-produce models designed within the company, Bigsby’s shop in Downey was meant only for custom orders one at a time. Besides coming up with the body design that would eventually be found in the Gibson Les Paul, Bigsby also developed a tremolo device that was later adopted for use on Gretsch and Gibson guitars.


92 Smith, *Fender*, 95-97; White, *Fender*, 33-35. In listing individuals who “made a difference” to the music industry, *The Music Trades* compares Leo Fender to Antonio Stradivari, whereby both men “perfected their respective instruments,” *100th Anniversary Issue*, 1990, 204. For illustrations, see Figure 3, 37 and Figure 5, 38.
Perhaps underappreciated by Californian historians, the development of the solid bodied electric guitar is a page out of the history of the state, demonstrating the sense of possibilities in the Golden State during the postwar boom. Rickenbacker developed the first solid body electric guitar in Santa Ana in 1931, twenty years before any East Coast instrument maker entered the market. Fender was established in 1946, and became the most well-known guitar manufacturer from the West Coast, while Carvin was established in 1946 in San Diego. These companies borrowed ideas and personnel from each other, even as they were fiercely competing, and continuing innovation. Later Californian additions to the field include Alembic in 1969, Taylor in 1973, Modulus in 1977, and Jackson in 1978. After selling the company he founded, Leo Fender started Music Man in 1971 with Forrest White, a former Fender associate, and then G&L in 1979 with George Fullerton, another former Fender associate.93 As seen with guitar manufacturing, Orange County of the late 1940s signaled the future: no longer would quality guitars be limited to the Old World artisan craftwork skillfully displayed in acoustic string instruments played by trained masters.94 Leo Fender, like an upstart bucking convention and established protocol, had no formal training or education in the field of electronics, yet he designed his own original wiring schemes and wrote out his own patented diagrams. Numerous potential guitar and pickup developers shared the quest to make a practical electric guitar. As George Fullerton puts it, “Leo and I spent a lot of time making notes on the important qualities we wanted to build into our new type of guitar. Mostly we wanted to solve the problems created by pickups mounted inside hollow-body

94 An article on a New Jersey guitar firm in The Music Trades from January 1962, illustrates the divergence of guitar building between the sections of the country, stating “Guild imports and trains workers from Europe in the many hand operations that require skill, patience and dexterity,” 10.
guitars. One major issue was the horrible feedback the instrument created. Another problem was the way hollow-body guitars were built.\textsuperscript{95} From the very beginning, the intention of the solid bodied electric guitar was practicality, reparability, interchangeability, and affordability. Again, Fullerton explains: “In addition to having a pickup without the feedback problem, our new guitar had to have a neck that was easy to replace.”\textsuperscript{96} The intended customers were the working musicians playing live dance gigs and recording artists, and Fender wanted to sell his instruments to them. As Fullerton recounts the philosophy, “We relied on Duco colors, which were basically automotive colors. These paints could be purchased almost anywhere, so the customer could easily touch up or completely refinish the instrument.”\textsuperscript{97}

Importantly, the success of Fender’s Telecasters and Stratocasters of the early 1950s signal a major shift in production methods of America mid-twentieth-century.\textsuperscript{98} Fender began to fabricate stringed musical instruments out of solid slabs of wood with a relatively unskilled labor force. This stands in contrast to the sound boxes of acoustic and archtop guitars made in the East. Craftsmen were no longer required to fabricate, shape, and perfect an instrument that was largely replaced by just two pieces of wood cut by a machine from a standard template in a new factory in the midst of Southern Californian citrus groves.\textsuperscript{99} Continuing the pattern seen in Southern Californian aircraft plants, Fender employed women as a large component of its semi-skilled manufacturing labor;

\textsuperscript{95} Fullerton, George & Leo, 20.
\textsuperscript{96} Ibid., 21.
\textsuperscript{97} Ibid., 33.
\textsuperscript{98} The Telecaster was originally christened the Broadcaster, and began production in 1949. A drum manufacturer was using the name, so Fender re-branded its guitar the Telecaster in 1951. For illustrations, see Figure 3, 37 and Figure 4, 38.
\textsuperscript{99} Fender began using pine for the bodies, but having found it too soft moved to ash, with maple for the necks. As Carter points out, the people at Gibson derided the rudimentary early Fender guitars for their simplistic construction and piercing sound, Gibson, 32.
moreover, Fender’s workforce had a sizable portion of Hispanic employees. Guitar makers in Orange County did not need to rely on luthiers who were members of guilds. In Santa Ana, then Fullerton, Mexican-American women were wiring the electronic components of guitars and amplifiers that would be used by young musicians across the country and overseas regardless of ethnicity or national origin. Nevertheless, in spite of Fender’s success in designing, manufacturing, and popularizing electric guitars, some myths about the instrument’s origins refuse to subside.

Inexplicably, the sole credit of the “invention” of the electric guitar often times goes to jazz and pop guitarist Les Paul of Waukesha, Wisconsin, even though Paul’s impact on the history of the electric guitar is really quite marginal, excluding his work for his own recordings. To be perfectly clear, Les Paul did not invent the electric guitar. While he was a clever innovator, and had a working solid body in 1941, the instrument that Gibson produced and named the “Les Paul” model remarkably used little input from Les Paul, himself. In fact, the only notable contribution Paul made to the Gibson model that would bear his name was its so-called “trapeze” bridge, and Gibson actually began manufacturing the instrument with Paul’s design implemented incorrectly (it was positioned upside down). Paul did develop the concept for a working model of a solid bodied electric guitar on his own, and he even tried to interest Gibson in his instrument in 1945. Gibson, however, was not interested and saw no use for his device, rebuffing his

100 Note the photos of factory employees reprinted throughout Richard Smith, *Fender*.
102 Les Paul’s first sold body, dubbed “The Log” was a 4x4 post with a guitar neck, strings, and an electromagnetic pickup attached to it. It drew attention the audience away from his playing when he was performing live, so he affixed the upper and lower portions (the wings) of an Epiphone as functionless cosmetic enhancements; see Steve Waksman, *Instruments of Desire: The Electric Guitar and the Shaping of Musical Experience* (Cambridge, Massachusetts and London, England: Harvard University Press, 1999), 43-44; Millard, *The Electric Guitar*, 50; and Carter *Gibson*, 29.
offer. Meanwhile, other individuals elsewhere were also developing many of the same ideas regarding electromagnetic pickups and solid bodies for use in guitars in the 1930s and 1940s.\textsuperscript{103}

Important for Paul and Midwest guitar builders were that after Fender guitars hit the market in 1948, Gibson decided to try its hand at the instrument. In 1948, the Gibson ownership brought in former auto engineer Ted McCarty to run the company, and they soon thereafter developed an instrument that used Bigsby’s body design for the guitar built for Merle Travis—Fender began using Bigsby’s headstock design in 1954.\textsuperscript{104} Two different stories exist: one is that Paul oversaw development of his namesake; while the other is the Gibson had a completed model without a name. Perhaps Gibson remembered that Paul had already propositioned them earlier, or maybe they had simply taken his idea and developed it without his direct involvement. In any case, Gibson needed a celebrity endorser, more than anything, and they chose Paul because he was a famous guitarist. Therein lies the irony, in that Paul had already peaked in popularity as a performer. Nevertheless, by allowing the famous back-story of Paul’s “discovery” of the electric guitar to perpetuate the myth, Gibson retained some measure of credibility in the world of electric guitar marketing and competition.\textsuperscript{105} Of course, the Les Paul model is now a

\textsuperscript{103} Paul Tutmarc’s 1936 un-copied development of a fretted electric bass likewise demonstrates the parallel evolution; see Roberts, \textit{Fender Bass}, 28-30.

\textsuperscript{104} See photo of Bigsby’s guitar in Smith, \textit{Fender}, 95.

\textsuperscript{105} This is not to deny any credit to Paul for his work in guitar development in general, nor is this to give any undue credit to Fender. The primary difference between Les Paul and Leo Fender is that Fender built a company around the instruments that bore his name and introduced many different instruments, pickup designs, and amplifiers. Paul was a guitarist and his concern was governed by his own needs as a musician: prior to the 1950s, he never designed any production models. Conversely, Fender was not a guitarist and was advantaged by not having any biases regarding how the instrument should be made, and especially was not bound by tradition. Somebody was bound to put all of the elements together, yet events are contingent upon what actually did happen. The specific musical needs and local advantages of Orange County in the 1940s and 1950s played a large part of how, when, where, and why electric guitars and basses changed American music.
classic, but another model from Fender would become an icon and the absolute embodiment of the electric guitar.

Introduced in 1954, the Fender Stratocaster (or, simply Strat) went on to become the most popular model to be played or copied by other manufactures.\textsuperscript{106} Gibson’s Les Paul, introduced in 1952, began to fall off in sales as it was competing with the Stratocaster, with a double cutaway body that reduced its weight and allowed even further access to the fingerboard. Meanwhile, Gibson discontinued the heavy and expensive Les Paul in 1961, being replaced by its a thinner bodied double cutaway, the SG model, which abandoned the unique body style of the Les Paul. Out of production for the bulk of the 1960s, the Les Paul was reintroduced in 1968. Although it gained popularity in the 1970s after it returned, historians must not read the story backwards and force a sense of anachronistic inevitability onto the original introduction by overemphasizing its initial impact. Overlooked, are George Beachamp, Aloph Rickenbacher, and Paul Bigsby, (and others) and their work in meeting the needs of hillbilly artists playing dance music in Los Angeles. Les Paul had a much more significant, and still largely unheralded, impact on all musical forms through his pioneering development of multi-track recording, which we will discuss later. In any case, Strats and Teles were not the only Fender items to change music; Leo would have plenty more to contribute.

Figure 1. Martin D 28 Dreadnought Acoustic Guitar

Figure 2. Gibson ES-359 Semi-Hollow Electric

Figure 3. Fender Telecaster
Figure 4. Fender Stratocaster

Figure 5. Gibson Les Paul

Figure 6. Rickenbacker 360
4. Commodities and Tools of a New Music

“Leo Fender never grasped the full impact of his discoveries on rock and roll, or for that matter how the new style would change his life. He never liked rock and roll and surely dismissed the style at first, although he had designed guitars for roots musicians who had laid its foundations in the late 1940s.”

—Richard Smith, Fender biographer

“For where your treasure is, there your heart will be also.”

—Jesus of Nazareth

Fender instruments were designed for, and initially adopted by hillbilly artists. Nevertheless, the Orange County instruments would soon find their way into the hands of rock musicians and studio aces of all types around the world. Fender-styled guitars and basses would be adopted, popularized, and eventually commoditized as badges of contemporary culture of the 1960s. In the early 1950s, Fender was used by country acts, but by the early 1960s, Fender became inseparable from rock as a genre. Even though the electric guitar was absolutely central to the creation of rock as a style, the electrification of that instrument actually took place in the 1930s. The real change in how electrified string instruments made their huge impact actually came with the perfection and popularization of the electric bass as developed by Leo Fender in 1951.

Leo Fender saw the need to upgrade the capacities of the string bass in relation to his Telecaster guitar, so he designed the Fender Precision Bass, but a Hawaiian guitarist in the Pacific Northwest can claim to have answered Fender’s question even before he

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107 Smith, Fender, 167.
109 As the draft board was determining the military fate of Elvis Presley, Buddy Holly appeared on the Ed Sullivan show in January 1958, with his white Fender Stratocaster; see Carter, Gibson, 45,48.
asked it. In 1936 Paul Tutmarc, a bandleader and guitarist from Seattle, introduced a solid bodied fretted electric bass, yet the timing during the depression was less than ideal. Furthermore, prewar Washington was hardly in the spotlight of American musical culture. Tutmarc produced only a relatively modest number and they made little lasting impact. However, the instrument demonstrates the parallel evolution that was happening in the sunny stretches of Orange County under the busy hands of Leo Fender.

Importantly, three departures from the upright acoustic string bass took place. First, Fender’s bass used a solid wood slab body similar to the guitars, which made the instrument more portable than its predecessor. Second, electromagnetic pickups were designed specifically for the instrument, which also made it louder than its predecessor. Third, the instrument was fretted and played horizontally, like a guitar. This last alteration was perhaps the most radical, because the bass became easier to play, and guitarists could then double as bassists with only a minor level or reorientation. The acoustic upright string bass has no frets and is thus more difficult to play well, so by having frets, bassists could then play with greater ease in pitch and hence, with greater precision, which is where the name of the instrument derived. The Fender Precision Bass (often rendered simply P-Bass), found its way quickly into Chicago electric blues and then became permanently linked with rock, when Bill Black, bassist for Elvis Pressley, began using it in 1957 on “Jailhouse Rock.”

Leo Fender permanently changed music. While invented decades before rock and roll developed, the modern drum kit and electric guitar had changed jazz and popular music, most noticeably in elevating the volume. However, when playing in sizable

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111 Moreover, the neck length and string spacing developed by Leo Fender became the de facto standards for the instrument. For illustrations, see Figures 7A and 7B, 48.
groups or ensembles featuring electric guitars, the volume of the acoustic double bass limited the overall volume of bands, but once freed from this constraint through electronic amplification, bands became louder and styles dramatically changed. The radical departure in stylistic development is due in large part to the amount of sonic space occupied by the electric bass: no longer would it simply shuffle barely noticed through straight rhythm patterns like before. Plus, the other members of the rhythm section had to make room for counter-melodic bass lines, freeing them to further incorporate polyrhythmic phrasing. The electric bass changed how drums, guitars, and pianos would be utilized and changed how music would be written, performed, and enjoyed.

With the Precision Bass, Fender played a central part in the cross-genre development of electrified blues, country, and rock. The creation of the P-Bass allowed the entire rhythmic section to come forward in the mix (in relation to the other instruments), which enhanced the dominance of the beat, enabling the music of small ensembles to be both danceable and energetic. This bass literally changed the forms, practices, and directions in popular music, and an analogy that utilizes imagery from war aviation is appropriate: the American-made P-51 Mustang fighter aircraft was improved after it incorporated the British-made Rolls Royce Merlin engine. That is, the adoption of the new power plant allowed the famous aircraft to finally operate with legendary success in its duties as a bomber escort and fighter interceptor in World War II. Similarly,

112 A symphony orchestra may employ a section of string basses along with low brass and winds sections to outline the root (or foundation) of the harmonic component of the musical work; however, acoustic jazz, jump, blues, country, and rockabilly acts had no such luxury prior to the introduction of the P-Bass.
113 In 1961, Fender introduced its second famous bass model, the Jazz Bass, also known as the J-Bass. It featured a more contoured body than the P-Bass, and had two independently controlled single coil pickups, helping to give it a wide tonal variety. See Figure 8. 49 and Figure 9, 49.
114 Roberts, *Fender Bass: change in Chicago blues*, 51; Keith Richard statement on the significance of the P-Bass, 58; ramifications of the bass, 85.
without the electric bass, the rhythms sections of popular music would still resemble those in swing jazz. Without exaggerating the point, rock music, and by extension nearly all facets of modern American music, is directly contingent upon Leo Fender designing this one instrument.

By comparing bassists and drummers as occupational specialists to plumbers and carpenters—merely common skilled laborers working with their hands—a Fender bass, then, is like a #2 Phillips screwdriver, a tool so ubiquitous in its presence and universal in its application, that its absence would be noteworthy. The most famous absence, of course, is from one of the most famous bassists, Paul McCartney of the Beatles. As a left-handed player, he opted for a violin shaped Höfner bass, manufactured in Germany, which would be easier to play when flipped over than a standard shaped solid body like Fender’s basses. Since any bassist using a Höfner would invariably draw comparisons to McCartney, electric bassists by and large remained using the widely available models produced by Fender. In fact, the solid bodied electric bass designed and produced by Leo Fender was so commonplace, that the name “Fender” itself was often used as a generic name, even occasionally going without its proper noun capitalization.

Fender instruments, along with those of Rickenbacker, Gretsch, and Gibson became hot commodities as the music shifted to the guitar driven sounds of rock. Dick Dale and Beach Boys conveniently utilized the musical products from their Southern

115 Nearly all professional session musicians were, in fact, men. Carol Kaye stands out as one of the only women to gain widespread acclaim for her work primarily as an LA session bassist, but also as a guitarist.

116 Moreover, that bass was inexpensive and lightweight and readily available in Germany, where the Beatles were performing, when McCartney was tapped to switch from guitar to bass after the departure of original bassist, Stuart Sutcliffe. See Figure 10, 49.

117 On the Miles Davis’s 1969 album Bitches Brew, released by Columbia Records, Harvey Brooks is listed as playing the “Fender Bass.” Jazz critic Leonard Feather was never consistent in his capitalization in his columns and reviews in the Los Angeles Times from the 1960s through the 1980s.
Californian home region, but once the British invasion began with the 1964 arrival of the Beatles in America, guitars of all manners increased in sales. Electric guitars were a commodity, and plenty of corporations wanted in on the rock fad. Fender was itself bought by CBS in 1965, which was looking to expand its portfolio. The impact of the Beatles on guitar production and development can be quantified, and comparing the actual sales for selected instruments, demonstrates the shifting tastes of the instrument buying public.

What should be borne in mind is that those instruments were manufactured and distributed by real people whose employment was affected by the changes in popular music. For example, accordions were imported mostly from Italy, with a smaller amount coming from Germany, and the importers in the United States had exclusive rights to wholesale them to contracted dealers. Once rock became the dominant musical form, accordion dealers were then stuck with unwanted merchandise that they already invested in. When demand for accordions fell, the initial reaction of the importers was that customers were somehow bypassing the middleman and securing the merchandise through some nefarious means.¹¹⁸ Not suspecting that their product would fall completely out of favor, they instead hoped to squelch what they saw as unfair business by insisting that only listed authorized dealers sell the instruments.

<table>
<thead>
<tr>
<th>Year</th>
<th>Accordion Sales by Unit</th>
<th>Guitar Sales by Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>123,200</td>
<td>220,000</td>
</tr>
<tr>
<td>1955</td>
<td>120,200</td>
<td>245,000</td>
</tr>
<tr>
<td>1958</td>
<td>92,000</td>
<td>305,000</td>
</tr>
<tr>
<td>1959</td>
<td>93,000</td>
<td>400,000</td>
</tr>
<tr>
<td>1960</td>
<td>100,000</td>
<td>420,000</td>
</tr>
<tr>
<td>1961</td>
<td>82,000</td>
<td>400,000</td>
</tr>
<tr>
<td>1962</td>
<td>65,000</td>
<td>435,000</td>
</tr>
<tr>
<td>1963</td>
<td>60,000</td>
<td>700,000</td>
</tr>
<tr>
<td>1964</td>
<td>50,000</td>
<td>1,065,000</td>
</tr>
<tr>
<td>1965</td>
<td>38,000</td>
<td>1,500,000</td>
</tr>
<tr>
<td>1966</td>
<td>42,000</td>
<td>1,430,000</td>
</tr>
<tr>
<td>1967</td>
<td>35,000</td>
<td>1,040,000</td>
</tr>
<tr>
<td>1968</td>
<td>38,000</td>
<td>1,570,000</td>
</tr>
<tr>
<td>1969</td>
<td>30,500</td>
<td>1,576,691</td>
</tr>
<tr>
<td>1970</td>
<td>31,800</td>
<td>2,214,686</td>
</tr>
</tbody>
</table>

As to be expected with new and methods of production and shifts in popular tastes, the changes of the 1960s unsettled the commercial order, and the shake-up had a definite regional component to the reactions. The so-called Rust Belt of the American Northeast was hit by more than just manufacturing losses to ascendant European and Asian rivals with their cheaper steel and automobiles. The Rust Belt was also going to lose out in the musical realm to California and the Pacific West. With the growing popularity of electric guitars, demand fell for marching band instruments, accordions, and pianos. Conversely, companies that made guitars, guitar accessories, and amplifiers were expanding product lines and enlarging their work forces. Those supplying non-guitar
instruments developed microphones and pickups for their instruments with the hope that budding musicians would be interested in being the accordion player in a rock band. At any rate, kids were no longer interested the anachronistic instruments, and this translated directly to more construction for buildings at the Fender facilities in Fullerton.

With the arrival of the Beatles merchants, wholesalers, and manufactures shifted into high gear to supply the demand for their wares. An article in *The Music Trades* from May 1964 cynically pointed out: “Every youngster wants to be a Beatle. Smart merchants sell enthusiasts too young for a full size guitar a ukelele and call it a ‘junior guitar.’” One ad, featuring a drawn illustration of some Beatlesque foursome in the same issue of *The Music Trades* read, “KENT is ready for the invasion! Are YOU ready with Kent solid body electrics?” Never mind that Kent was a line of poorly made imported knock-offs of Fenders, the point was that the revolution in popular tastes was opening up opportunities for some intuitive merchants to capitalize on the fad before it receded. In a parallel of sorts, the Los Angeles-based television show and rock band, the Monkees borrowed from both the Beatles and fellow Southern Californians the Byrds in both style and creative animal spelling.

The dynamism that saw the old order upset, also fueled the revolutionaries into further product development. Fender saw success with its various models of guitars and basses. Less successful, though, Leo Fender even developed solid bodied electric mandolins and violins. Increasingly, the Fender Stratocaster became an iconic emblem

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119 See the Kent ad in *The Music Trades*, April 1965, 34.
121 *The Music Trades* May 1964, 44. See also “No End In Sight For Booming Guitar Sales,” *The Music Trades*, December 1964, 42
for the young performers who brandished them in growing numbers, especially as the Gibson Les Paul went out of production in 1960. When Gibson brought back the Les Paul in 1968, music had already shifted. The Les Paul would have a much stronger second life after its reintroduction spurred in large part by British blues rockers who favored its sound. The Les Paul would go on to become an icon in its own right even if the Gibson company itself would eventually relocate to Nashville, Tennessee in the 1970s. Again, as popular preferences shifted and the economy bounced, Gibson would nearly go under in the mid-1980s.

The instruments of the profession are physical examples of the intersection of art and commerce, and tell their own stories. Early users of the Stratocaster in the 1950s include Buddy Holly, Richie Valens, Carl Perkins, and James Burton, plus Buddy Merrill was seen each week on the Lawrence Welk Show with various models of Fender guitars. Once audiences of the 1960s saw surf rockers and Jimi Hendrix strumming them, the Orange County products became identified with the youth movement that held an incredible attachment to its music and the musicians who performed it. Bob Perine designed clever ads for Fender between 1958 and 1969 that showed photos of individuals, ostensibly guitar players, doing non-musical activities ranging from scuba diving to piloting a fighter jet, with various models of Fenders strapped on. The caption for these ads reads simply, “You won’t part with yours either.” Fender successfully designed and built the instruments of the new music, which was as forward looking as California itself.

In many ways, Fender developed and grew like the community in which it was founded. With the exception of San Francisco and some of the original town cores of

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123 See twenty-three examples of this campaign in Smith, *Fender*, 166 and 178-179.
California’s oldest communities, most cities in California were developed after the introduction of the automobile and were physically shaped by the understanding that people would be moving about in cars, not on foot, by horse, or in trains. The layout of Californian urban and suburban spaces stands in particular contrast to older cities of the Eastern Seaboard, which had to adapt to cars. In a similar situation, Fender began as a company that manufactured both input and output devices that were electronic: the instruments and the amplifiers. Unlike Gibson, Epiphone, Gretsch, and other established guitar builders of the East, Fender never passed through a formative acoustic stage. Fender did not have to react and retool as a company with the introduction of electric guitars, basses, and amps in American popular music, because it was the company that was doing the introduction. But electric guitar, basses, and electric pianos were not the only implements to wear the Fender name (or the only Californian product) that had a dramatic impact on the changing direction of music.

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124 Monterey, the capital of Spanish and Mexican California, is not particularly easy to navigate by automobile for a lost driver late to a historical conference.
125 See Kaplan’s reaction to the difference between Los Angeles with the urban spaces of Boston and New York in Empire Wilderness, 79-80. The larger cities of California generally lack city centers adversely impacting the feasibility of public transportation by rail.
Figure 7-A. Double Bass
(also String Bass, or Upright Bass)

Figure 7-B. Fender Jazz Bass
(for size comparison)
Figure 8. Fender Precision Bass

Figure 9. Fender Jazz Bass

Figure 10. Höfner Bass
5. Making Noise and Controlling It:
Amplifiers and Recording Equipment

“What was new, of course, was electricity: Amplification of instruments and voices enabled nuances that once would have been lost in the noise floor to be clearly heard and developed further in a seemingly infinite progression.” 127

—Phil Lesh, bassist for Grateful Dead

When other musical products were needed, Californians often provided the solutions for those as well, especially with electronic equipment. Fender made guitars, but they also made amps. 128 For sake of definition, if needed, a guitar amplifier is the speaker box and power source that transforms the electrical signal of the plugged-in instrument into projected audible sound. The amplifier portion of the system may or may not be attached to the speaker portion, and the size and number of speakers in the enclosure may vary as well. Likewise, amps generally feature controls that alter the timbre of the sound, sculpting it to the preferences of the musician (and hopefully the audience and recording engineers as well). Perhaps unsurprisingly, the loudspeaker itself was developed in California. In Napa, in 1911, Edwin S. Pridham and Peter L. Jensen developed the “Magnavox,” the first practical moving-coil loudspeaker and basis for future speaker designs. 129 Jensen loudspeakers later gained publicity by being used in an address by Woodrow Wilson in 1919 at San Diego’s Balboa Stadium. Jensen would leave

128 Tom Wheeler successfully argues that even if Leo Fender had not developed the Telecaster, Stratocaster, Precision Bass, or Jazz Bass, Fender “would remain the preeminent figure in the history of electrical instruments because of the amplifiers,” The Soul of Tone: Celebrating 60 Years of Fender Amps (Milwaukee, Wisconsin: Hal Leonard, 2007), 23.
the company to found Jensen Radio Manufacturing, and relocate to Chicago: he would later further develop the loudspeakers commonly used in future guitar amplifiers.

Of the most famous loudspeakers, though, the name James B. Lansing stands out. Lansing, an Illinois native and electronics enthusiast, moved to Los Angeles from Salt Lake City in 1927. Lansing became involved with MGM in developing some of the early sound technology used in movie theaters that were beginning to present the first talkies. After running into financial trouble with the death of his business manager, Lansing joined forces with Altec Service, a theater sound system company in 1941, becoming Altec Lansing. Lansing soured with his new business arrangement, and founded a rival company in Los Angeles in 1946. Using his initials, he called the company JBL. In the subsequent years, Altec Lansing and JBL would design and manufacture all manner of loudspeakers, from full enclosures, to drivers and horns, to studio monitors, to home high fidelity speakers. They had roots in movie theatre sound, but maintained and expanded that into live music and sound reinforcement, filling concert venues, lecture halls, and houses of worship worldwide.

When Southern Californian surf guitarist Dick Dale repeatedly damaged the speakers of his early Fender guitar amp by his loud playing, Leo Fender redesigned the amp with new JBL speakers as the drivers, creating a new product, the Fender Showman Amp in 1960. The convenience of having the audience, performer, amp designer, and loudspeaker maker in the same community cannot be overstated in how it enabled rapid changes in newer equipment. Dale’s demands for better-designed amplifiers prompted

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132 For a timeline of amplifiers, see Appendix I-1, 136.
Fender to collaborate in designing and building more powerful equipment that allowed the electric guitar to continue its rise in popularity, changing popular American tastes. (The same was true with country artists as well.) Leo Fender was influenced greatly by the demands of artists using his products, in effect, using professional musicians as his test lab for further development—akin to automobile companies using racecar drivers to both elaborate and trouble shoot new products.\(^{133}\)

But just like his guitars and basses, other manufacturers emulated Leo’s successful amp designs, especially in England. As Fender products were expensive imports in the British market, cheaper solutions were sought to satisfy the growing demand for quality guitar and bass amps. In 1962, Jim Marshall, a London drum shop owner, borrowed the design of a 1959 Fender Bassman amp to produce guitar amps for British musicians such as Pete Townsend.\(^{134}\) Likewise English, the initial Vox model was inspired by the Fender Twin. The British invasion of the 1960s resulted from American musical influence both during and after the war. The Second World War brought Americans and British closer together both militarily and culturally, while the Cold War reinforced that relationship. Furthermore, the concurrent developments in transportation and communication aided the cultural assimilation, as artistic movements have largely hit both countries nearly simultaneously. The British colonies of North America initially imported their culture from their mother country, yet in the wake the largest war in world history, the Americans became culturally preeminent and exported their music to Britain.

\(^{133}\) Smith, *Fender*, 196-197.

\(^{134}\) In the words of Jim Marshall, “Obviously we looked at the Fender amps, because they were my favorite amplifier, and the Bassman seemed to be nearer the sound that people were talking about, rather than their lead amplifier. So we were influenced by it, but after all, there is nothing new in valve technology; it’s all been done before,” quoted in Michael Doyle, *The History of Marshall: The Illustrated Story of “The Sound of Rock”* (Milwaukee, Wisconsin: Hal Leonard, 1993), 12. For illustrations, see Figure 11, 59 and Figure 12, 59.
The British, for their part, made new of that which they received, adding rich layers of artistic embellishment. Winston Churchill remarked:

Undoubtedly this process means that these two great organizations of the English-speaking democracies, the British Empire and the United States, will have to be somewhat mixed up together in some of their affairs for mutual and general advantage. For my own part, looking out upon the future, I do not view the process with any misgivings. I could not stop it if I wished; no one can stop it. Like the Mississippi, it just keeps rolling along. Let it roll. Let it roll on full flood, inexorable, irresistible, benignant, to broader lands and better days.  

Instead of discussing granting leases of British bases to the United States, Churchill could very well have been discussing the two-way movement of popular music, and the designs of musical equipment. Briton, Jim Marshall borrowed Leo Fender’s guitar amp design to develop one of the most recognized models ever. Imported American guitars were plugged into those Marshall amps and the music was recorded and sold to appreciative American audiences. Likewise, the top country importing American guitars was the United Kingdom, putting Southern California at a convenient crossroads for importing Asian goods, yet manufacturing exports to Britain.

Southern California has been home to not only Fender and Carvin instrument amplifiers, but also Acoustic (founded in 1967 in Van Nuys, California), Mesa-Boogie (which started in 1969 in a Chinese grocery converted into a music shop in Petaluma, California), SWR (beginning in 1984 in Sylmar, California), and Line-6 (in 1996 in Calabasas, California).  Other West Coast outfits include the very significant bass amp manufacturers Ampeg of Washington, and Sunn of Oregon, which was purchased by Fender and later discontinued as a brand. Among musical equipment manufacturers,

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136 Robert Marks and Steve Marks, the founders of Acoustic were the father and brother, respectively, of Beach Boy David Marks.
Peavey (1965) of Mississippi and Kustom (1968) of Kansas stand out as exceptions for being outside of the Pacific Time Zone. Yet, even when considering Ampeg and Peavey, the important thing to note is that the American Northeast was not the production or development center during the second half of the twentieth-century. To drive the point home, QSC power amps became a standard for the industry in powering loudspeakers, from concert venues, to movie theaters, to houses of worship, again demonstrating a local and Southern Californian connection between the makers of music and the makers of equipment. QSC began with producing guitar amps in Costa Mesa in 1968, before focusing almost exclusively on power amps. Californians not only changed music globally by introducing instruments and amplifiers of modern music, they changed film, television, and radio production by developing the modern means to record.

Bing Crosby, one of the most popular and successful American singers of all time, who likewise changed the performance style of singing, also found success in film and television. Nevertheless, his radio show led directly to the industry adoption of recording on reel-to-reel tape, and the invention and popularization of multi-track recording. At the close of the war in Europe in 1945, Santa Clara University graduate, John “Jack” Mullin, a soldier in the US Army, found a German magnetophon at a seized radio station in occupied territory. Mullin brought the machine, a reel-to-reel tape recorder designed in 1935, home to California where Ampex, a firm from San Carlos, California, began developing a prototype. Mullin demonstrated the machine for Crosby in 1947, who liked the machine so much that he invested in the company and then began

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137 The speaker manufacturer Bose of Massachusetts, caters to home entertainment. Whereas British guitar amplifier companies such as Marshall, Vox, and Hiwatt, stocked with British Celestion speakers further demonstrate the lack of output from the American Northeast.

138 Again mirroring a West Coast developmental connection with the Pacific Northwest, Mackie, based in Washington, also manufactures power amps, mixers, and loudspeakers.
using it to prerecord his radio show in 1948.\textsuperscript{139} Crosby, like many other show business performers lived in California, and the Golden State benefited from entertainers choosing to live here. Crosby invested in the equipment side of the business, and was even behind the development of videotape. Most significantly, though, Crosby gave Les Paul the Ampex Model 200 machines that were then converted into the first multitrack recording and playback devices, the importance of which cannot be overstated. Even though his name is famous as the model of an iconic guitar, Paul’s contribution to sound recording is truly immeasurable.\textsuperscript{140}

During World War II, Les Paul worked for Armed Service Radio in Southern California, and after being discharged, he moved to Hollywood in 1943. Paul recorded for Capitol Records in the 1940s, and was influential as a jazz guitarist having numerous hits performing and recording with his wife, Mary Ford.\textsuperscript{141} Les Paul’s time in California had major impact on the story. Besides his work in guitar designing, Paul is also known for his Edison-like discovery of multitrack recording. Here, a tape recording machine has multiple parallel heads for recording and playback, enabling a performer to record separate passages on adjacent portions of tape. Through the use of multitracking, Paul simultaneously opened up possibilities for smaller groups and electronic manipulations of performances, which would otherwise be physically impossible. Without exaggeration, the further development and adoption of multitrack recording is comparable to the

\textsuperscript{139} See \texttt{http://history.sandiego.edu/gen/recording/derbingle.html}.

\textsuperscript{140} For example, see Paul’s obituary in the \textit{New York Times}, where Jon Pareles states, “by 1941 he had built what was probably the first solid-body electric guitar;” according to Pareles, The Log, “if not the first solid-body electric guitar, became the most influential one;” 14 August 2009, B14. Moreover, the Rock and Roll Hall of Fame, notorious for its dubious and secretive selection methodology for its inductees, explicitly states the following error on its web site: “1941: Les Paul invents the first solidbody electric guitar;” they likewise confuse multitracking (where adjacent tracks are utilized on a recording and playback device equipped with multiple tracks) with overdubbing (where one sound source is combined with a previously recorded sound source); see \texttt{http://www.rockhall.com/inductee/les-paul}.

\textsuperscript{141} Mary Ford was the stage name of Les Paul’s Californian wife, Iris Colleen Summers.
incorporation of personal computers in business and academia. While ostensibly simplifying the job, infinite complexities also became possible; this brought rising expectations of hopefully better quality products, by giving the ability to better perfect the final outcome of a recording in ways never before possible. Paul’s work with recording equipment and electric guitar designs simultaneously demonstrates the role of technical innovations in changing the development of music and the role of California in enabling them.

As the multi-track recording unleashed the possibilities for unlimited tracking, the role of producers changed. With more tracks available, more avenues could be explored; so rather than relying solely on the composers to pin the songs and performers to execute them, the producer could then add or color as much individual perfectionism as studio time would allow. The net result would be one more move away from large live ensembles as the sonic clarity improved with fewer musicians actually needed for a recording session. Also, since the music could be produced with increasing fidelity, radio stations had little need for in-studio orchestras, which only reinforced the primacy of popular forms of American music, such as rock and country. Among producers pushing the creative envelope was Phil Spector, working in Los Angeles with his “wall of sound” technique, whereby layers of recordings from multiple sessions could be incorporated

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142 Even though recording onto actual tape is now almost entirely obsolete, the methodology utilized with computer-based digital recording is largely the same as the analog system that Paul developed.

143 The fact that Paul designed his guitar is considerably less important than the fact that he recorded it. The real importance of Paul’s guitar playing is that he was a very talented musician, and he made records that people bought, which in turn brought scrutiny to his remarkable playing. The recordings of Les Paul and Mary Ford drew attention to his revolutionary overdubbing first and then the possibilities of multitracking. Understandably, having The Log as a physical artifact on display in a museum is easier than attempting to explain multitrack recording.
into one individual song. Following in his footsteps, was Brian Wilson whose work with his band the Beach Boys, would increasingly utilize professional studio musicians from the area, who dubbed themselves the Wrecking Crew. Different regions had different “house bands” that backed many of the artists who recorded in the various local studios. LA was blessed with the interconnected film and television industry that shared songwriters and musicians and therefore possessed more regularly employed studio musicians, some of whom became notable recording artists on their own, for example Glen Campbell. The nearly anonymous, but widely influential work of the Wrecking Crew is significant for what Wilson and others were able to do with them as a sonic pallet. But more than that, their elasticity, longevity, professional competency, and reach colored the sounds of 1960s and 1970s popular music as heard in television commercials, film scores, and pop records.

The session musicians made factory music during the beginning of rights revolution. Not until the 1971 release of Marvin Gaye’s *What’s Going On* did Motown list the musicians present on the recording. At the risk of making an overstatement, we could observe that what Marvin Gaye did for studio musicians was in some small way akin to what César Chávez was attempting with migrant farmers in California. Without grossly exaggerating the actual impact of naming the studio musicians, we can see that

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144 Bronx, New Yorker by birth, Phil Spector moved with his family to Los Angeles when he was thirteen. After performing as a teenage vocalist with LA based group the Teddy Bears, Spector soon went into production and songwriting; see Liz Thompson “Phil Spector” for *Grove Music Online* available through <<http://www.oxfordmusiconline.com>> accessed 24 February 2010.


146 The Wrecking Crew recorded for TV, movies, commercials, and popular music recordings. See also <<http://www.wreckingcrew.tv/songlist.html>>.
Gaye was operating in a manner contemporary with the celebratory recognition of the working class that was becoming more fashionable at the time. Motown nevertheless moved to Southern California as *What’s Going On* was being produced: the album was recorded in Detroit, and mastered in Los Angeles. This illustrates the movement west, which we will look at later.

By looking at musical instruments as the tools of a profession, guitars fit within a pattern of industrial innovation seen elsewhere in postwar America. Fender’s solid bodied guitars in a sense helped to democratize American popular music. These instruments were playable and well constructed, yet they were also relatively inexpensive when compared to the models from Gibson that were geared towards professional musicians. The labor ease in LA showed its regional variance with employees within the music business: even within the guitar industry, Southern California maintained its inhospitality to organize labor. In the words of Forrest White, “There were five major unions that tried to organize the Fender Electrical Instrument Co. during the period of my management. None was successful.” Anonymous Hollywood film studio musicians, railed against their perceived “dumbing down” of classical music. Yet, the grumblings of studio musicians and recording studios changed little in American film culture in this regard. Plus the vapid music on TV and overly simplistic and melodramatic scores on film, engendered the resentment of studio musicians, but they enjoyed the pay.

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148 White, *Fender*, 130.

Figure 11. Fender Bassman Amplifier

Figure 12. Marshall Half Stack
6. Rapid Californian Ascendancy:
Postwar Optimism, Consumerism, and the Utopian West

“Who would have dreamed that Fullerton would become ‘The Guitar Capital of the World?’”

—George Fullerton, business partner of Leo Fender

The rapid postwar growth in California was coupled with the creation of youth culture. The dynamism of a booming economy and ascendant political stature went hand-in-hand with the optimism that accompanied the surging birth rates and western relocations. Subsequently, the increased emphasis on automobile transportation, as seen with the expanded highway construction, merged with the youth movement in the creation of a Californian culture dominated by beaches and hot rods. Surf music of the 1960s is an example of the imagined coastal lifestyle that fits within the Western idealism of the nation, and gave it a particularly Californian flavor. Following American victories over Japan and Germany in 1945, the culture of postwar consumerism expressed the near-religious sentiment of national optimism, yet was also tempered by fear of catastrophic destruction through nuclear warfare. Nevertheless, the economic expansion during the Eisenhower and Kennedy years further fueled the confidence in American prosperity at home and abroad. Highway and education spending combined

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151 Patterson, *Grand Expectations*. Motion picture director Stanley Kubrick released his scathing broadside against American nuclear strategy in his 1964 release *Dr. Strangelove: Or, How I Learned to Stop Worrying and Love the Bomb*, released by Columbia Pictures. Also from Columbia in 1964, was Sidney Lumet’s *Fail Safe*.
with military investments in bases, training centers, and producers of military hardware to contribute to California’s awesome and rapid postwar and Cold War growth.

Since joining the Union upon the conclusion of the Mexican War in 1848, the Golden State has grown in population at an exceptional rate.\textsuperscript{153} Naturally the Gold Rush brought an abundance of new Californians, yet the subsequent decades also showed increases well beyond the national averages. Incredibly, in the hundred years from 1860 to 1960, the number of California’s residents more than doubled every twenty years.\textsuperscript{154} When California was averaging 44\% growth for each decade from 1870 to 1970, the rest of the nation averaged just under 18\%; that is, when the population of the United States increased 382\%, that of California increased over 3462\% during the same years!\textsuperscript{155} Importantly, though, between the radically transformative years 1940 and 1960, the state’s population grew more than twofold. While the nation as a whole added 71 million people between 1940 and 1970, over 18\% of that growth was in California alone.\textsuperscript{156} Between 1950 and 1990, California grew by 22.9 million or roughly one fourth of the increase in total American population outside of California.\textsuperscript{157} This spectacular growth reflects the visible confidence that residents and newcomers alike had in the Golden

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\textsuperscript{153} For California and United States populations, see Appendix A, 123.
\textsuperscript{154} When California became part of the United States, it was greeted with a nearly instant population, upon the discovery of gold. Resisting tradition, it very quickly transformed from an American military conquest to become the Thirty-first State without enduring the tediousness of territorial status.
\textsuperscript{155} Only the slowdown induced by the economic malaise of the 1970s brought an end to the trend; nevertheless, the Californian population of 1980 was merely 2.75\% short of doubling that of 1960.
\textsuperscript{156} The 1940 census records California’s population as 6.9 million, while the subsequent two decades added 8.8 million residents to the total. In the 1980s, Californian growth accounted for 27.5\% of the nation’s gain. In other words, better than one out of every four new Americans in the 1980s was a Californian—these were the children of the Baby Boomers.
\textsuperscript{157} California grew by 22.9, while 93.7 million were added to the rest of the United States between 1950 and 1900.
State, feeding the dynamism of the optimistic surge. Understandably, this rapid growth would yield cultural as well as institutional byproducts.\textsuperscript{158}

After the Second World War the population of the United States did not just grow, it grew younger. As to be expected, America’s birthrate dropped during the Great Depression, so then younger parents and older parents alike began having babies in big numbers immediately following the war. The median age of Americans increased decade-by-decade from its founding until the beginning of the Second World War.\textsuperscript{159} The five decades from 1890 to 1940 showed an increase in the median age by 1.1 years. By 1940, the median age was 29.0 years old, which was a considerable jump in aging of 2.5 years over that of 1930, when seen in context of the overall historical trajectory. With the coming of the Baby Boom, however, many of the characteristics of the population changed. For the 1950s, the median age dropped by 0.7 years, and the 1960s showed a drop by 1.4 years. This trend-bucking demographic change helps to explain the growth of the size of younger Americans and illustrates the growth of a “youth culture” during the time of American economic expansion following the war. In the dozen or so years following the Second World War, half of the people of California were fresh arrivals in one way or another.

The boom of young adults in Californian created a youth market. Californians who were aged 15 to 19 years old composed a smaller percentage than the national average, throughout the twentieth-century.\textsuperscript{160} However, those aged between 20 to 24 and 25 to 29 composed a larger percentage than the national average in the 1960, 1970, 1980,

\textsuperscript{158} “I attended a dinner the other morning given for the Old Settlers of California. No one was allowed to attend unless he had been in the State 2 and one half years,” Will Rogers, \textit{The Illiterate Digest}, 1924; quoted in \textit{Travellers’ Dictionary of Quotation}, 886.

\textsuperscript{159} For median ages, see Appendix D-1, 127.

\textsuperscript{160} See Appendix D-2, 129.
and 1990 censuses. Importantly though, for America and California, in the 1960s and 1970s the teenage and twenty-something population grew as a portion of the population, which logically encourages the establishment of a youth market and identity. Education was also a key ingredient in postwar music expansion, as classroom music instruction fueled purchases that began as wind and brass instruments, yet eventually included guitars. An obvious correlation existed between the increase in music education in the postwar boom, and the surge in music equipment manufacturing. Likewise, when economic strains hit America, music education was summarily cut, creating a ripple effect within the industry. The increase in amateur and student musicians within California was a byproduct of the dominant American economic position in general and that of the West Coast in particular.

Californians, like most Americans, were understandably spending more money on leisure activities in the two decades after the war, and music was an increasing segment of the total. Like personal spending and the GNP, music industry retail sales increased year-by-year from the 1940s through the 1960s. Yet when compared to overall personal consumption itself, the musical component actually grew faster. Signaling the shift in American musical preferences, guitars became a larger proportion of the number of instruments, and by the mid 1970s, one out of twenty Americans owned a guitar. To meet this rapidly growing demand, some Californian businesses created the products,
while other Californian businesses sold the products. Guitar Center, currently the world’s largest supplier of musical instruments with $2.3 billion in annual sales, opened its first store in Hollywood in 1959. Guitar Center then branched out from its original store in Hollywood to open facilities in other locations throughout the state in the early 1970s, and going national by 1980. Here is only another example of the Golden State centrality in nearly every aspect of the music industry, from production to consumption, from artistic to technological. To put it in perspective, Sam Ash, the nation’s second largest musical instrument retailer was established in Brooklyn in 1924, but did not branch out beyond the New York City area until the 1990s, finally arriving in California in 1998.

After President Eisenhower successfully fought a campaign for improved highways to link the nation and facilitate commerce and defense in the mid-1950s, roadways became more important to a culture that already was built with the automobile in mind. Much of the new construction was in California, expanding what Earl Warren, as governor had begun a decade earlier. From the early to mid-1960s, transportation would spur the inspiration of a new form of popular music, which would ultimately prolong rock as an American idiom. The lyrical and lifestyle linkages to transportation would include the automobile, certainly, but they also introduced riding waves as fodder for youthful diversions. Out of the suburban stretches of Southern California, surf music would be developed utilizing the vocal harmonies of Northeastern doo-wop with the guitar-centered rock distilled form blues and country.

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165 Guitar Center went public in 1997 and is presently is based in Westlake Village, in western Los Angeles County; see <<http://premium.hoovers.com/subscribe/co/factsheet.xhtml?ID=hyfycsrckxffx>> accessed 21 January 2009. According to Hoovers, “What AutoZone is to the garage, Guitar Center is to the garage band. The nation’s #1 retailer of guitars, amplifiers, drums, keyboards, and pro-audio equipment operates more than 210 stores in 40-plus US states.”

166 Jane Freundel Levey, NAMM 100th: A Century of Service to the Music Products Industry (Carlsbad, California: NAMM-International Music Products Association, 2001), 134.
Californian reliance on automobiles has colored both its development and its culture. The Golden State is large, and its urban centers are distributed throughout much of its expanse, and no one community or region of the state can claim to be its cultural center. Throughout the sizable and arid space of California, communities are often spread apart from each other, like islands in a terrestrial sea. Naturally, the unique challenge of tying the whole of the region together has meant constructing incredible amounts of roadways. Building freeways reinforced the primacy of automobiles, which subsequently led to suburban growth and sprawl, which reinforced the need for even more freeways. The ubiquity and necessity of automobiles would shape nearly every aspect of Californian culture, from worship to lodging.

Although not unique to the Golden State, Californians had a certain knack for expressing the love affair with the automobile, especially as treated by surf bands. Naming the genre “surf music” however identifies the beach culture while minimizing the car culture. For example, the Jan and Dean song from 1964, “The Little Old Lady from Pasadena” perfectly illustrates the tie between the growth of the youth culture of surf bands and the maturation of the car culture. This was not Pittsburg, Poughkeepsie, Pittsburg, Poughkeepsie.

167 “California is huge… It extends over nearly 10° latitude, with a coastline of 1264 miles, and its land surface is almost exactly 100 million acres,” Rawls and Bean, 4.
170 In 1925, Californians would bring the motel into being in San Luis Obispo.
171 Richard Aquila identifies forty-nine songs about cars, five songs about motorcycles, and ten bands named after motor vehicles between the years 1955 and 1964 in “List #13: Cars and Motorcycles,” from That Old Time Rock & Roll, 79-80. Of particular note are the nineteen songs included on the list by the Beach Boys and ten by Jan and Dean. Aquila’s listing does however exclude relevant titles, such as the Beach Boys’ 1964 hit “Fun, Fun, Fun,” whose lyrics tell the story of a teenager girl’s misuse of her father’s T-Bird.
or Pine Bluff; this was Pasadena! Like an elixir of eternal youth and liberation, Southern California was painted by lyrics and musical feel as a new start for Americans. Jan and Dean described a place removed from urban decay of shuttering factories, striking industrial union members, existential ivory towers, or battles over segregation.

Nevertheless, the growth and subsequent popularity of surf music must be put in the context of the seemingly sudden end to the rock fad, as it was seen at the time. That is, the initial wave of American “Rock ‘n’ Roll” receded with the close of the 1950s. This rockabilly-rooted phase of rock ended with Elvis Presley serving in the Army from March 1958 to March 1960; Little Richard trading rock for the ministry in 1957; Jerry Lee Lewis having a marriage scandal in the summer of 1958; Buddy Holly, Big Bopper, and Richie Valens dying in a plane crash in February 1959, made infamous as “the day the music died”; Chuck Berry running afoul of the law with his “hat check girl” Mann Act violation in December 1959; Alan Freed’s payola scandal of 1959-1960; and Eddie Cochran dying in an automobile accident in April 1960.¹⁷³ For American listeners, the older “rougher” music of rockabilly gave ground to the newer “cleaner” music of suburban California.

Youth culture was a byproduct of postwar growth, and surfing was in the middle. This particular strain of rock music then evoked the playfulness of this newly created lifestyle, continuing the Californian connection to Hawaii and the expanded Pacific orientation of the country. California is a coastal territory, and the lands of the Franciscan Missions still held the bulk of the state’s acknowledged cultural identity. One dividing line of the state is north and south of the Tehachapi, yet another is east and west of the San Andreas Fault Line. The Central Valley with its country music was affixed to the

¹⁷³ See David Szatmary, Rockin’ in Time, 56-57; Stuessy, Rock & Roll, 79-80, 85.
North American Plate, while the communities west of the Coastal Ranges with their
tastes in rock, jazz, and classical music, were stationed on the Pacific Plate. Obviously,
the Bay Area violates this paradigm; nevertheless, the notion that Californian identity is
bound in the sea facing strip on the edge of the continent looms heavily in the popular
definition of the Golden State. From this coastal outlook, California projected itself onto
the postwar country.

Surf represented a rebirth of rock, like a new set of musical waves coming ashore.
Southern Californian surf music seemed less raw than the rebelliousness of rockabilly,
and the young original songwriters were quaintly celebrated. The music seemed safe. The
music sold well. Surf music tapped into a particular lifestyle and reflected it to the larger
American listening audience and it was even made outside of California. Unlike the
groups that put out the strikingly popular novelty records that were hits throughout the
early days of rock, surf bands were not one hit wonders: the Beach Boys and Jan and
Dean (and to a lesser degree Dick Dale and the Ventures) had multiple charting releases
and would even prove to have an international influence. The Beach Boys, of
Hawthorne, California, merged the guitar playing of Chuck Berry with the harmonies and
singling styles of doo-wop vocal groups of the urban Northeast, and recorded and
performed the music themselves on their new Fender instruments.

The development and widespread popularity of surf music is a perfect illustration
of the marriage between car culture and beach culture that became hallmarks of youthful

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174 The Rivieras from South Bend, Indiana scored a hit with “California Sun,” May, *Golden State, Golden Youth*, 110.
175 Although generally included with surf bands of California, the Ventures actually hailed from Washington, yet they illustrate the general pattern of development in the postwar Pacific West.
176 The Four Seasons (featuring Frankie Valli), a popular chart-topping vocal group with success concurrent with the Beach Boys likewise built its vocalization style on doo-wop.
Southern Californian utopianism. Surf made the format of synthesizing rock elements with pop style feasible, which was confirmed and expanded upon by the Beatles. As a point of record, the Beatles were taking notes from the Beach Boys: when the Brits produced *Rubber Soul*, the Yanks came up with *Pet Sounds*, to which the Brits responded with *Sgt. Pepper’s Lonely Heart Club Band*. Paul McCartney, of the Beatles, recounts that his two main inspirations were James Jameson’s Fender Bass playing for Motown and Brian Wilson’s songwriting for the Beach Boys.¹⁷⁷ Rock became the central popular music in America, but it remained infused with Californian imagery, played with Californian instruments, and recorded on Californian machines. In the Beach Boys’ tune “Surfin’ USA” the lead vocal line named off various Californian surf spots while the backing vocals repeated “inside, outside, USA.”¹⁷⁸ After surf had receded in popularity in the second half of the 1960s, more Californian pop music made marks with vocal groups such as Mamas and the Papas, the 5th Dimension, and the Association. Californians reinforced their growing presence, signaling that this was the era of Pacific dominance in American thinking and listening preferences.

American culture has a long history of westernism, and this permeated leisure activities as well as business opportunities.¹⁷⁹ In other venues of entertainment, Walt Disney helped to remake postwar America in his own image, albeit in a distinctly

Californian manner; after all, Tomorrowland was in Disneyland, not Coney Island.\(^{180}\) In essence, American amusements such as professional sports and the ever-expanding reach of cinema and family amusement mirrored aerospace and computer development in the state. Western leaders—presidents, vice presidents, and speakers of the house were no longer from the Northeast. The founding of the United Nations in San Francisco illustrates the hope placed in the West: in 1945, in the midst of the terrible war, Europe looked to the United States, and Americans looked to the shores of the Pacific.

California would help shape this western future. The United States added states to the union in 1959, both of which had Pacific coastlines, and then California surpassed New York as the most populous state in the early 1960s.\(^{181}\) Americans are passionate about sports, which were affected quite visibly as well by the western migration, testifying to the new importance of the West Coast.\(^{182}\) The war movement and postwar growth illustrate the manifestation of California as a destination both real and imagined, while from the late 1950s, through the 1960s the relocation of many facets of American entertainment to the Golden State serve as evidence of the higher Californian profile.

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\(^{180}\) In the Californian tradition of odd juxtapositions, Disney’s park in Anaheim contained both Frontierland and Tomorrowland, combining nostalgia and sanitized history with postwar optimism; see Michael Steiner, “Frontierland as Tomorrowland: Walt Disney and the Architectural Packaging of the Mythic West,” *Montana: The Magazine of Western History*, vol. 48, no. 1 (Spring, 1998): 2-17.


\(^{182}\) In 1926, the Los Angeles Buccaneers football team would play all of their games on the road; twenty years later, in 1946, the All American Football League established the San Francisco 49ers and the Los Angeles Dons. Also in 1946, the National Football League Rams moved from Cleveland. In 1958, The Dodgers of Major League Baseball left Brooklyn for Los Angeles, and the Giants left Manhattan for San Francisco. In 1960, the American Football League would found inaugural teams in California, with the Raiders in Oakland and Chargers in Los Angeles; while also in 1960, the Lakers of the National Basketball Association would leave their home in Minnesota for Los Angeles. This trend would continue through the 1960s: Major League Baseball’s Los Angeles Angels were founded in 1961; and the Warriors of the National Basketball Association moved from Philadelphia to San Francisco in 1962; and the National Hockey League’s Oakland Seals and Los Angeles Kings were both founded 1967. Major League Baseball’s Athletics moved from Kansas City to Oakland in 1968, while the San Diego Padres were established in 1969.
Californian rooted television and motion pictures advertised and reinforced Californian utopianism. But even beyond sports and family entertainment, the spirit of westernism was prevalent throughout the twentieth century. Moreover, this orientation would help to maintain an ideological and even cartoonish focus on the West, and ensured that California would play a large part in the development of postwar American self-definitions. In fact, Ronald Reagan found success politically by exploiting the mythic west. The celebrated archetype of the western protagonist, would find kinship in the hero-worshiping of musicians and singers. The gunslinger became guitarist. The six-gun became six-string. Since money was to be made, California buttressed itself as a brand name.

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183 Slotkin highlights the cultural ramifications of western mythology in the national psyche in *Gunfighter Nation*.
185 Marketing of the state has been seen in everything from healthful climate to superior fruit, to cheese from happy cows.
7. Easy Innovation and Californian Identity: 
The Eclectic Manufacture of Musical Rebels

“But the importance of California history lies not so much in its colorful variety or its feverish pace as in the enduring consequences of these changes as felt by succeeding generations of Californians, by their neighbors in the West, and to an appreciable degree by the world at large.”

—John Caughey, Californian Historian

Since so many of the residents have always been new arrivals, developments have been facilitated by the general lack of constraints: in other words, California has been an easy place to be musically innovative, or even radical. Through the twentieth-century, Californians were young, urban, and quickly growing in number, which meant that demographic forces were stronger than artistic traditions. By 1950, over 80 per cent of Californians were considered urban residents, compared to the average of 63 per cent for the rest of the nation. By 1970, urban dwellers made up over 90 per cent of the state’s population. In this young and urban mix, different idioms cross-pollinated, particularly when aided by the state’s multi-ethnicity.

California has long been multi-ethnic and growing increasingly more diverse. While “nonwhite” Californians accounted for a third of the state’s population in 1990, they totaled less than a fifth for the rest of the nation. Even if the other states of the Union have collectively contained a larger proportion of African Americans than California, the Golden State itself has been more ethnically diverse altogether than the nation as a whole.

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188 For urban and rural populations, see Appendix E, 130.  
189 For ethnic breakdowns in the population, see Appendixes C-1, and C-2, 125-126.
With the notable exception of the borderlands of the Southwest, most of the United States east of the Sierras has been almost wholly binary, containing only the two racial categories black and white. Conversely, in the 1970s, citizens in California classified as “other nonwhites” accounted for over twice the population of blacks, and by 1990 “other nonwhites” grew to more than three times the black population. Moreover, African Americans have always composed a lesser portion of the population of California than for the nation as a whole; whereas, “other nonwhites” have been less than one per cent of the country’s population outside of California for most of the twentieth-century. These ethnic realities, though, framed the development of popular music. Even if they were not always reflected directly in terms of the number of performers or instrument inventors, the nonwhite segment of the state’s population nevertheless influenced the manner in which Californians interacted with newer musical ideas.

In the American Southeast, rock music was perceived as rebellion, in part because it challenged generational tastes, but also because it challenged racial order. White rockabilly artists with southern roots such as Elvis Presley, Carl Perkins, and Jerry Lee Lewis challenged the established binary racial order of the 1950s. Similarly black artists of the same time, such as Little Richard, Fats Domino, and Chuck Berry were enjoyed by white teens much to the distaste of their parents. Californians, however, marketed their own home-brewed surf bands of the early 1960s as safe and wholesome entertainment from nice young men from white suburbs. Then, after the Beatles and other British acts demonstrated the commercial viability of rock as a youth-targeted, mass-market music, the major record labels pushed the later 1960s rockers because these artists had proven

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190 Datapedia, 16-26.
191 May makes this point in Golden State, Golden Youth, 98; see also Starr, Golden Dreams, 378.
broad appeal. Surf music aside, integrated rock groups become increasingly more common as facets of California’s contribution to the American culture.

From the Los Angeles musicians’ union integration in 1953 with the merger of Local 767 and Local 47 of the American Federation of Musicians, to the growing acceptance of integrated rock groups of the late 1960s, the Golden State made legitimate claims to changes in the old racial order. Even Bay Area jazz pianist Dave Brubeck had an integrated group, featuring Eugene Wright on bass from 1958 to 1967. Still, as rock grew to dominate American music, various Californian multi-ethnic ensembles became popular, such as Santana, Sly and the Family Stone, Tower of Power, and WAR. By the 1970s, a politically incorrect joke developed about having the obligatory African American musicians in the rhythm section. For example, black bassists recorded and performed in numerous successful Californian ensembles such as Santana (David Brown), Steely Dan (Chuck Rainey), Crosby, Stills, Nash, and Young (Greg Reeves), and the Doobie Brothers (Tiran Porter, then Willie Weeks); while Three Dog Night featured a black drummer (Floyd Sneed). Californians established new standards.

Gender also played a role in the commercialization of the product, and again Californian innovators led the way. In the aftermath of the introduction of the oral contraceptive Enovid in 1960, and the subsequent passage of Civil Rights legislation, the

192 First-hand accounts of the merger are detailed in Bryant et al., Central Avenue Sounds; see Buddy Collette, 156-159; William Douglass, 247-254; and Marl Young, 385-399.
193 More recent examples from California include Suicidal Tendencies, Metallica, Rage Against the Machine, and Armenian rockers System of a Down; plus Latino-dominated group The Mars Volta and Ozomatli; and Chicano rappers Cypress Hill.
194 In the 105th episode of the animated television show Southpark, which originally aired on 29 October 2003, the African American character, “Token Black” is assumed to be able to play the bass, merely because of his ethnicity. The punch line is that he can, in fact, play the bass quite well.
195 While Booker T & the MGs, the house band for Stax Records, were racially integrated and overlapped their membership with the Mar-Keys, they were primarily employed as a backing band.
status of women was changing in measurable terms. At the same time the Congress and state legislatures were pondering gender equality with the proposed Equal Rights Amendment to the United States Constitution, women were becoming an increasingly visible component of the diversity of Californian music. American popular music ensembles had featured female vocalists for decades, sometimes a single female vocalist and at other times several, yet the advent of the “girl band” was largely a Californian phenomenon. Instead of merely singing in front of a group of backing musicians, girl bands actually played and recorded with instruments formerly reserved for male musicians, specifically the electric guitar, electric bass, and drums. Just as the first woman appointed to the United States Supreme Court was a Stanford graduate nominated by a Californian president, and later joined by two other Cardinal alumni, women from the state would be pioneers.

While surf music popularized the self-contained band composed of male members in the early 1960s, girl bands adopted the same model that likewise showed successes one decade later. In Southern California, female musicians redefined the roles available for women in rock music. Through the 1960s, Carol Kaye was well respected and in demand as a session bassist working in Los Angeles, yet her behind-the-scenes job generally brought little notice initially, even if her résumé is very impressive. Conversely, the Runaways, a widely influential teenage girl band formed in Los Angeles in 1975, demonstrated that female musicians could play in the aggressive style dominated by

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196 For a breakdown of gender ratios, see Appendix D-3, 129.
198 Despite occupying the almost exclusively male-dominated position of bassist, Carol Kaye is one of the most famous session aces recording with many acts across the musical spectrum.
males. While eventually spinning off members to solo careers, the Runaways’ breakthrough of the late 1970s was quickly followed by other more successful Southern Californian girl bands, such as the Go-Go’s and the Bangles in the 1980s.

The so-called “chick rockers” differentiate themselves from the women in the singer-songwriter vein of folk. Although Joan Baez, Judy Collins, and Joni Mitchell did play guitars, they played acoustics for sake of accompaniment, not electric guitar as a solo instrument. One exception, perhaps, is Californian Bonnie Raitt, whose blues guitar has received due accolades. Nevertheless, because these groundbreaking young women were playing crass and loud rock music, their contributions to challenging gender roles have largely been overlooked. Still, despite their unseen role in academia, these particular musicians became groundbreaking role models. When girls across America could hope to follow the path-clearing courses of Gloria Steinem or Betty Friedan, they could otherwise look to Runaways Joan Jett and Lita Ford for musical inspiration. Californian diversity and innovation changed music beyond the ethnic and gender descriptions of the membership: it also changed stylistic development.

In a similar manner that contributions to the overall sounds of rock were made by pioneering non-whites and women, European immigrants and native Californians also added to the mix of resident classical composers to further develop modern serious art music. Connected to the earlier European émigré community, classical composers in California pushed the envelop of recognizable music. The avant-garde music expressed in musique concrète—random noises recorded—later found its way into mainstream popular music through the experimental music of the Beatles and Frank Zappa. While at

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the same time, rock instrumentation would infiltrate classical music. Nevertheless, Western classical music was becoming less accessible, in essence, not music that listeners would consider music at all: it lacked melody, harmony, and rhythm. Revolutionary composers such as Arnold Schoenberg and Karlheinz Stockhausen had an indelible impact on Lou Harrison, John Cage, and Dave Brubeck but more importantly, Californian rockers such as Jefferson Airplane, Grateful Dead, Frank Zappa, and Beck, along with non-Californians such as the Beatles, U2, Pink Floyd, Talking Heads, and Sonic Youth. Stockhausen taught at UC Davis in the mid-1960s, while Luciano Berio taught at Mills College in Oakland in the early 1960s, influencing the later minimalism of Terry Reilly, John Adams, and Steve Reich. Berio also taught Phil Lesh, encouraging the growth of what would later be termed acid-rock San Francisco.

Composers who scored for films and television blur the line between the art music of the classical world and the commercial sonic ambience of the visual media of movies and TV. Several prominent film composers including Danny Elfman, James Newton Howard, James Horner, Jerry Goldsmith, Randy Newman, and David Newman were born in Los Angeles, while John Williams arrived as a child. Many others moved to Southern California as adults. Yet, even if a few of the LA based score masters have achieved some level of distinction for contributions to modern classical music, the field is generally artificially segregated from the mainstream of serious composition. Nevertheless, the opportunity to compose for motion pictures has, in effect, subsidized

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200 As Kyle Gann argues, “Growing up in an environment pervaded with rock music has become an almost universal experience. It is increasingly rare, then, for composers to write without taking the rhythms, instrumentation, or performance conventions of rock into account. For many, rock has become the vernacular bedrock from which music must grow in order to gain any currency with a large audience,” American Music in the Twentieth Century (New York: Schirmer Books, 1997), 354-355.

201 This would likewise set the stage for hip hop uses of sampling in the 1990s.

the employment for these individuals in their academic appointments and regular engagements with established orchestras. In a linking of two local institutions, popular music and motion pictures, rock musicians eventually joined classically trained composers in scoring for cinema, keeping the spirit of Californian hunger for new techniques available for any avenue.

Southern Californians were not the only technological innovators—acid rockers could be as experimental as surfers when it came to instruments. California became known nationally for embracing its alternative lifestyles, and the hippie scene in the Haight-Ashbury district of San Francisco became a very visible component of the 1960s counterculture. In the midst of this cultural churning, Jann S. Wenner, a 20-year-old UC Berkeley dropout, founded the rock music oriented magazine *Rolling Stone* in San Francisco in 1967. But the spirit of experimentalism normally associated with California, and especially with San Francisco, was also manifest in the technology incorporated in the music and the images the region expressed to the outside world. Phil Lesh of the Grateful Dead and Jack Casady of Jefferson Airplane began to radically modify their basses, eventually using instruments built by another Californian upstart instrument maker, Alembic. Dissatisfied with the pickup placement and selection of his bass, Lesh modified his Gibson EB-1 shortly after he acquired it, by installing two humbucking pickups manufactured by Guild; moreover, Lesh soon employed “the first active electronics ever installed in a string instrument.” So it seemed, then, that in California, anything was possible.

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204 Phil Lesh, *Searching for the Sound: My Life with the Grateful Dead* (New York: Little, Brown and Company, 2005), 49, 144. “Humbucking” pickups have two magnetic coils wired oppositely, negating the electromagnetic hum, hence the origin of the name—they literally buck hum.
8. Infinite Variety in the Land of Infinite Possibilities:

Regional Implications of Stylistic Distinctions in Form and Experimentation

“Q: In what way does the Holy Land resemble the Sacramento Valley?
“A: In the type and diversity of its agricultural products.”

—Joan Didion, “Notes from a Native Daughter”

“California is like the United States, only more so.”

—Wallace Stegner, One Way to Spell Man

From topographic features to linguistic markers, California has incredibly broad range geographically, ethnically, and philosophically, so it is fitting that the music from the state mirrors this diversity. Moreover, since California has several different cultural and economic centers, the state has lacked an overarching unified artistic order, especially in the second half of the twentieth-century. Beyond the expanse of the Los Angeles region, the San Francisco Bay Area, including Oakland, San Jose, and San Francisco itself, also heavily influences the state. At the same time, other urban centers of cultural impact include the San Diego, Bakersfield and the southern San Joaquin Valley, Sacramento, and Santa Barbara. Yet what is considered the Los Angeles area is on its

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206 Wallace Stegner describes California as a “new country without marked provincial or regional character, [a] young people’s country, outdoor country, sport country, fun country, peach bowl, experimental society, without history, adrift in the present, addicted to Now and Wow—America, only more so,” in One Way to Spell Man (Garden City, New York: Doubleday, 1982), 55; see also 106, 108.

207 California’s multiple geomorphic landforms comprise a wholly unique area, which is greater in diversity than any other region in North America; see Crane S. Miller and Richard S. Hyslop, California: The Geography of Diversity (Mountain View, California: Mayfield Publishing, 1983), 7-9. Furthermore, because the depth of the geographic diversity and the impact on the pattern and manner of development, histories of California usually devote a full chapter to describing and defining the topographic, climatic, and ecological features of the state instead of merely doling out a few short paragraphs: for example, Rice, Bullough, and Orsi use fifteen pages; Rawls and Bean use nine pages; Rolle uses eight pages; and Starr uses seven pages.
own quite varied, from South Central to Santa Monica, from Malibu to Laurel Canyon, from the Inland Empire to the San Fernando Valley. Each of these centers produced competing versions of California.208

Although surf music of the early 1960s and psychedelic music of the late 1960s are easily identified as Californian in origin, the Golden State produced much more than these two subgenres of rock-based pop music. With the geographic and cultural diversity within the state, the different metropolitan regions of the state each produced a bevy of influential stylistic contributions in a crosspollination of musical forms. Owing in equal parts to its rich ethnic diversity and creative opportunities Californian music mixed together diverse stylistic elements. The possibilities were quite open, as heard in the fusion of rock, jazz, and Latin with both Santana and WAR; rock, funk, and soul with Sly and the Family Stone; jazz, rock, and pop with Steely Dan; and country and rock with the Eagles.

With the re-centering of American music, California would become even more dominant as the 1960s led into the 1970s. Much of the heavy representation within American music was a byproduct of the fact that the state possessed so many different concentrations of musicians and producers in numerous communities north and south, from the coast to the interior. The San Francisco Bay Area produced many significant and diverse acts such as the Grateful Dead, Jefferson Airplane, Santana, the Doobie Brothers, Credence Clearwater Revival, Sly and the Family Stone, Steve Miller Band, and Big Brother and Holding Company (featuring the vocals of Janis Joplin) among others. Importantly though, Los Angeles simply defies any easy musical categorization.

208 Carey McWilliams called Los Angeles both a city-state and an archipelago; Southern California: An Island on the Land, (Salt Lake City: Gibbs Smith, 1946, 1973), 12, 314.
Within Los Angeles, Laurel Canyon, itself, was home to many influential artists in the 1960s and 1970s.\textsuperscript{209} Out of LA grew folk rock of the mid 1960s. One major hallmark of folk rock is that it’s “jangly” sound came from the Californian-made Rickenbacker twelve-string guitar featured in the Beatles and the Byrds. California was also the birthplace of country-rock.\textsuperscript{210} Admittedly, Bay Area band Creedence Clearwater Revival added a large measure of country flavor to their musical offerings, yet with acts such as the Eagles, Nitty Gritty Dirt Band, Linda Ronstadt, Poco, and Jackson Browne, Los Angeles became the home of the subgenre.

From Central Avenue in the heart of Downtown LA, to the Sunset Boulevard in Hollywood, Los Angeles has displayed incredible professional breadth, both regionally and stylistically. In true Californian tradition of odd juxtapositions, Southern California produced country rock alongside jazz-rock, and soft rock alongside hardcore punk rock (usually rendered simply, “hardcore”). Yes, the land of gritty heavy metal was also the land of slick pop; the home of the violence of gangsta rap was the home of peace-professing hippies; the birthplace of acid rock was also the birthplace of Christian rock. Some music historians, such as Joe Stuessy overlook the centrality of Los Angeles in changing American music. Even though the San Francisco scene of the late sixties was identifiable as a specific setting, Los Angeles became the home to many of the significant performers from the early sixties through the present.\textsuperscript{211} Part of this slight is likely due to the multiplicity of genres that the region perfected or produced. Additionally, the

\textsuperscript{209} Michael Walker, \textit{Laurel Canyon: The Inside Story of Rock and Roll’s Legendary Neighborhood} (New York: Faber and Faber, 2006).
\textsuperscript{211} Stuessy devotes a chapter to San Francisco without one for Los Angeles, and even lumps LA-based band, the Doors with other Bay Area acts, in \textit{Rock & Roll}, 236-257.
anonymity of studio musicians, and the elasticity of their professional abilities meant that they would be paid as artists, not recognized as stars. Like the hometown business of the motion picture industry, most of the employed are not known—the person on the street can name only the few visible folks in front of the camera, or perhaps the director if already famous.

In popular music, the lyrical content and the stylistic manner in which it was presented shed a unique light for historians onto moments and movements hidden between the black and white lines more typical of professional academic history. To ensure commercial viability, popular songs prior to the mid-1960s were often light-hearted tunes whose lyrics espoused a lifestyle of affluence and material abundance. This was not the serious music of intellectuals who were preoccupied with rebuilding the shattered economies of Asia and Europe following World War II. Nevertheless, developments in music happened simultaneously with other artistic and political developments, which were predicated upon specific non-musical political and economic circumstances. As the mood of the country shifted, the music became more assertive in style as well and content, pushing aside the former methods and manners of the previous generation.

When the Baby Boom generation began to reach adolescence, the impact of youth culture would be felt socially as well as economically. When combined with postwar

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212 Many of the top selling LPs throughout the 1950s and early 1960s were soundtracks and cast recordings of popular Broadway musicals, *Billboard*.

213 Elizabeth Armstrong, *Birth of the Cool: California Art, Design, and Culture at Midcentury* (Newport Beach and New York: Orange County Museum of Art and Prestel Publishing, 2007). Published in conjunction with the art exhibit of the same name, this work features visual media from painting, to architecture, to animated television, to jazz album covers, to furniture design, to photography in telling a story of how an artistic supra-theme grew in postwar California. Armstrong’s essay, “The Square and the Cool” is particularly insightful in that she puts reasons behind the mythic peculiarity of California in its relation to artistic development at mid-century, 23-61. Moreover, Armstrong effectively ties various strains of artistic expression together in creating this place in time.
progressive ideology, the impact would indeed be profound. The free speech movement that started at the Berkeley campus of the University of California in 1964 was the initial wave of Baby Boom kids hitting college and advancing the “rights revolution” modeled in part on the civil rights struggle, but breaking away from the class struggles of the Old Left. Obviously, their cries of unfair academic treatment with poor student-to-teacher ratios contrasted with the more serious fights for voting rights and desegregation. They invited a backlash with working class voters who subsequently elected Ronald Reagan into the governor’s mansion as the “law and order” candidate for California to “clean up that mess in Berkeley.”

California has long featured politically charged music, from Woody Guthrie’s fellow traveler chronicles of the hardships of Dust Bowl migrants in California during the Great Depression to Berkeley’s Country Joe and the Fish lamenting American foreign policy of the late 1960s in their “I-Feel-Like-I’m-Fixin’-To-Die Rag.” California in the postwar boom was politically charged, especially as the Baby Boomers entered the age of political engagement and activity. The music coming from the state loudly expressed the opinions, observations, and demands of the nation in the midst of political crisis.

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215 For the impact on the political future of gubernatorial candidate Ronald Reagan, see Lou Cannon, Governor Reagan: His Rise to Power (New York: Public Affairs, 2003), 157, 159, and 274; for the impact on Governor Pat Brown, see the chapter “Berkeley” in Ethan Rarick, California Rising: The Life and Times of Pat Brown (Berkely, Los Angeles, London: University of California Press, 2005), 292-313; for a brief description see Starr, California, 328-329.

216 Ronald Reagan recollects in his autobiography, “At that time, the public universities in California were going up in smoke; rioting students were literally setting fire to them. Californians were rightfully proud of and dedicated to their great system of higher education—especially the nine campuses of the University of California—and they were upset by what was going on.... I thought that the students had no business being at the university if they weren’t willing to abide by the rules; if they refused to obey them, they should go somewhere else,” An American Life (New York: Simon and Schuster, 1990), 152.

217 The lyrics were famously sung at Woodstock music festival in 1969 with the refrain, “One, Two, Three, What am I fighting for, don’t ask me, I don’t give a damn, next stop is Viet-Nam,”
Fittingly, the lyrical content of music from the state showed incredible ideological diversity. The anti-establishment radicalism of San Francisco-based Jefferson Airplane, as illustrated on the 1969 album *Volunteers*, contrasts to the tongue-in-cheek anti-rebel traditionalism of Bakersfield-based Merle Haggard, as expressed in the 1969 song “Okie From Muskogee.”

When Jefferson Airplane proclaimed, “We are forces of chaos and anarchy… up against the wall, motherf****r,” Haggard countered that “we don’t burn our draft cards down on Main Street, we like livin’ right and bein’ free.”

Different Los Angeles ensembles also displayed a level of transformative social commentary within their lyrical content. Turned off by internal contradictions of the sixties idealism and protest culture, Steely Dan revealed their detached and sardonic wit in their ironic jazz-pop of the 1970s, as seen with their criticism of corporate seriousness and business values. Also in the 1970s, the Eagles revealed their misgivings of the dark underside of the fame and wealth in the Californian experiment. The tone eventually moved to the angry defiance of the 1990s, with Rage Against the Machine mixing hard rock, funk, and hip hop to protest the purported corruption and racism of American security forces. In their widely popular yet infamous track “Killing in the Name,” singer Zack de la Rocha ends the song by shouting sixteen times in a crescendo,

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219 Paul Kantner, “We Can Be Together,” *Volunteers*.


“F**k you, I won’t do what you tell me!” Curiously, as part of a supposed protest against the crass commercialism of the music industry and famed producer Simon Cowell, it became the number one song in the United Kingdom during Christmas in 2009, seventeen years after the track was released. Ironically, the success of the protest stunt earned a sizable profit for Sony Music, the global entertainment conglomerate that released the track.

Initially though, rock and roll was seen as an act of rebellion either politically, racially, socially, generationally, or a combination thereof. Even when it was literally enriching the so-called Establishment, rock music was still largely viewed through the prism of defiance by both its practitioners and listeners, as long as the listeners were still young. Some historians, such as Linda Martin and Kerry Segrave, argue that rock always rebels, and each wave of rock innovators is merely a more radical parallel of its predecessors. Of course, this may be a bit of an overstatement—after all, Elvis Presley did release several highly successful Gospel albums at the height of his performing career, and served in the United States Army. Their argument does, nevertheless, show a connection between racism and antipathy for rock, from its earliest days until decades later: in other words, “rebellion” is in the eye of the beholder. As seen with the challenge of ethnic boundaries, though, generational mores were summarily challenged.

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222 Tim Commerford, Zack de la Rocha, Tom Morello, Brad Wilk, “Killing in the Name,” Rage Against the Machine, Epic Records, 1992. Appropriately for the Golden State, the 2009 campaign against Simon Cowell was launched through social networking web site Facebook, which is headquartered in Palo Alto.

223 Linda Martin and Kerry Segrave, Anti-Rock: The Opposition to Rock ‘n’ Roll (Hamden, Connecticut: Archon Books, an Imprint of The Shoe String Press, 1988). Their argument skips the integrationist capacity of performers such as Tony Bennett, by calling his music “white,” even though he recorded and performed with noted African American musicians. They also avoid mentioning Elvis Pressley performing “There Will Be Peace in the Valley” on the Ed Sullivan Show and the popularity of surf music, because they do not easily fit into their scheme. Nevertheless, Martin and Segrave do express one viewpoint of a complicated picture.

224 Elvis Presley released the four song EP Peace in the Valley (1957), which was followed by full length LP releases of His Hand in Mine (1960), How Great Thou Art (1966), and He Touched Me (1972).
Stylistic distinctions often do carry political overtones of self-identification.225 American scholars, especially historians, should take these self-applied labels seriously, because they signify what people are expressing as their ideals. The stylistic choices made are as telling as address and shopping habits.226 The protest culture of the New Left was an educated middle class phenomenon, and as political observer Michael Barone puts it, “This was a culture of the affluent, with a more than faintly rebellious tone, which young people shared with others of their age and no one else.”227 The adversarial culture of the late 1960s was a byproduct of the confluence of Baby Boomers entering college, becoming adults, and disagreeing with American foreign policy in Southeast Asia. The growth and popularity of folk-rock, however, demonstrates the marketability of rebels. Bob Dylan grew from the folk tradition of the rural heartland and found success in New York City. By mixing the folk of Dylan with the pop of the Beatles, Southern Californians spawned their own folk and rock hybrid with the aid of professional studio musicians as seen with the Byrds, Buffalo Springfield, and the Monkees. If we include other Los Angeles acts, such as the Turtles, the Mamas and the Papas and Sonny and Cher to the mix, we can see how far away from protest music folk had indeed strayed.

The Beach Boys greatest hits compilation *Endless Summer* was released in 1974, and featured only material from the 1960s that was recorded prior to their departure from the surf rock formulas that came with the 1966 release of the somewhat experimental and more serious *Pet Sounds*. The double album *Endless Summer* was a huge success and

225 Dixie Chicks became outspoken in their left-leaning political rebuke of the GOP and became more identified with rock as a crossover act, leaving the “orthodoxy” of country music.
226 Joli Jensen, in *The Nashville Sound*, demonstrates that country musicians and songwriters celebrate ideals of agrarianism, in a manner that is sympathetic to the arguments in Kenneth Jackson, *Crabgrass Frontier*.
reintroduced the carefree music of the early Beach Boys to new American audiences too young to have heard it the first time as well as the Baby Boomers who were reluctantly advancing through adulthood. Surf nostalgia came after the tumultuous student protests of the late 1960s, the assassinations of Robert Kennedy and Martin Luther King Jr., the Watergate scandal, and the national spiritual reassessment following the American military winding down its action in Vietnam. A resonant chord had been struck with the soaring harmonies and songs about the beach in a simpler time. Much in America had changed in a decade.

Nevertheless, Baby Boom marketing was, and remains huge. First it was coonskin caps, then rock and roll, and then an inter-generational power grab to redirect the course of government policies both foreign and domestic. Later, advertisers for prescription drug programs, retirement, and safe investments would equally besiege Baby Boomers. The wave of this demographic anomaly has moved over much of the shore, and changing music tastes nationally are part of it. When the strange music of the youth was recognized for its commercial potential, the target of the angst, that is the dreaded Establishment itself, joined the so-called counterculture. As Thomas Frank illustrates, Madison Avenue eventually adorned its advertising campaign with the trappings of the sights and sounds of consumers who were weaned on rock. While Frank may ultimately overstate his case about the centrality of advertisers in co-opting the counterculture, he nevertheless

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228 As pointed out by B. H. Liddell Hart, strategists in a democracy are dependant on “the man on the street” he who pays the piper, calls the tune: that is, support for the military holds while it is winning. Strategy, Second Revised Edition (London: Faber & Faber, 1967; New York: Meridian, 1991), 132. The appearance of losing in Vietnam spurred a re-evaluation of strategic priorities which came as the former enemies of Japan and Germany were regaining their financial strength at an apparent loss of prestige to American dominance especially when compared to America’s position in 1946.

229 Frank, Conquest of Cool, 7-8, 113-114.
correctly identifies the desire of corporate powers to sell their wares, be it cars, clothing, or popular music.

As Californian Baby Boomers embraced rock, their attachment carried over into seemingly unorthodox musical juxtapositions—in the Golden State, even the sacred mixed with the profane. Unsurprisingly, in the ultimate marketing coup of the ultimate message, California was the birthplace of Christian rock. In furthering the state’s penchant for experimentation as well as opportunism, religiously devout artists began recording and performing material specifically proselytizing through the music of the youth. Branching out of the “Jesus Movement” that grew from the hippie culture of the West Coast, artists such as Larry Norman, beginning in the late 1960s, with Keith Green and Randy Stonehill in the 1970s, established a musical alternative to both the contemporary music of the secular youth and the traditional music of the church. Later, Orange County Christian act Stryper would break further ground playing heavy metal in the mid-1980s alongside other likeminded Southern Californian ensembles.

During the second half of the twentieth-century, the breadth of Californian musical expression knew nearly no bounds. Composers and performers from the Golden State regularly practiced musical miscegenation of every race and philosophy in membership and style, while simultaneously incorporating a wide spectrum of viewpoints.

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230 More people regularly hear and perform live music in houses of worship than in concert halls or any other venue, and much of this church music is played on rock instruments with largely rock-derived musical structure. This fact is not lost on equipment manufacturers and retailers who sell, rent, and install the gear. To the point, rock music is now simply the “normal” music, and its instruments have been firmly established as the “normal” musical instruments of the time.

231 Although Gospel music and performance in churches are briefly mentioned in passing for their influence on performers, especially in soul music, the received tradition of rock history ignores the impact of rock on religious music. By the omission, the scholarship unhistorically implies that the flow of musical ideas were only in one direction; see David Szatmary, *Rockin’ in Time*; and Joe Stuessy, *Rock & Roll*. 
and methodologies in the lyrics that reflected the larger changes of the society. Even as the music diverged radically in form and content, consumers bought the products.
9. Relocation, Regionalism, and Reaction

“The attraction and superiority of California are in its days. It has better days, and more of them, than any other country.”

—Ralph Waldo Emerson, Journal

“The Philadelphia music scene was fading. Frankie Avalon, Fabian, and Bobby Rydell had moved out to California to make it in Hollywood… The surf music thing was starting out there. Everywhere we looked things said, ‘California definitely is happening.’ California truly looked like the ‘promised land’ back then, just like that old Chuck Berry song says.”

—Dick Clark, Host of American Bandstand

By the end of the 1960s, Californian music was significant, if not outright dominant, beyond style or genre, and the rest of the nation simultaneously embraced and rejected Californian innovations. Musical institutions and many artists relocated to or were founded in California; meanwhile, the shifts in musical equipment needs spurred regional reactions as a new hegemony was established. As American musical tastes shifted, different instruments become favored, and this had a real and measurable impact on the merchants and manufacturers of the equipment waning in popularity. Former centers of production became backwaters. Moreover, as styles changed, California began to dominate across different segments within the industry, eliciting displeasure from some regions and musical communities. Nevertheless, migrations and relocations serve as

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windows in American history, as seen by the western movement of Americans that colored the nation’s development from colonial times, through the expansion and struggles over slavery, through the numerous gold and silver rushes, through the changes brought by Second World War, and beyond.\textsuperscript{234} Illuminating the importance of the Pacific Coast are the relocations of institutions and artists that were not merely Western in general, but specifically Californian.\textsuperscript{235}

As attested to by the longevity of both its broadcast run and the apparent un-aging permanence of its host, \textit{American Bandstand} established itself as an important institution to popular music. The show moved from Philadelphia to Los Angeles in 1964, as if it were one more plank on the reconstructed boardwalk of American musical culture being built in California.\textsuperscript{236} \textit{American Bandstand} began in 1952 as a local television program to capitalize on after-school teen markets, by playing popular recordings and showing teens dancing to performers lip-syncing their new hits. In 1956 Dick Clark took over duties as the host, and successfully pitched the show to ABC to broadcast it nationally.\textsuperscript{237} In large part owing to its Philadelphia location, the show regularly featured various male teen idols from Philadelphia; among them were Italian American pop vocalists Fabian,

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  \item\textsuperscript{236} Kirse Granat May, \textit{Golden State, Golden Youth}, 111.
  \item\textsuperscript{237} Shore, with Clark, \textit{American Bandstand}; also see the entry explaining the history of \textit{American Bandstand} included on the web site for the Museum of Broadcast Communications at \texttt{<<http://www.museum.tv/eotvsection.php?entrycode=americanband>>}.
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Frankie Avalon, and Bobby Rydell, and African American Chubby Checker. As Clark recounts the decision to move, “the times were changing in the music business, and since it was the business of myself and the show to stay on top of trends in the music business, we were well aware of it... It just didn’t make sense to stay in Philadelphia. And California just kept looking better and better. So—we went.” Confirming the Pacific orientation growing in the youth culture, Frankie Avalon would eventually star in the Beach Party films alongside former Mouseketeer Annette Funicello beginning in 1963. The teenage pop crooning of the teen idols featured on the earlier years of American Bandstand was losing favor to the guitar-based music coming from West Coast and was then completely supplanted by the music that came from England.

So like Dick Clark and other followers of the age-old pathway, the Establishment itself moved westward. Echoing the pattern begun with the movie industry of the 1920s, lobbying and advocacy groups for the music recording industry were created in 1950s. The Motion Picture Association of America (MPAA) was established in the nation’s capital in 1922, while the Academy of Motion Picture Arts and Sciences (AMPAS), which awards Oscars, was established in Los Angeles 1927. Following suit three decades later, the Recording Industry Association of America (RIAA) was established in Washington, D.C. in 1952, while the National Academy of Recording Arts & Sciences (NARAS), which awards the Grammies, was established in Los Angeles in 1957.

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238 Szatmary, Rockin’ in Time, 60-62; Joe Stuessy, Rock & Roll, 72-73.
239 Shore, with Clark, American Bandstand, 94-95.
organizations representing the *consumption* side of the music equation were established in California, the *production* side would likewise make the move.

NAMM (formerly the National Association of Music Merchants) the music equipment industry’s trade association, was established in New York City 1901 as the National Association of Piano Dealers of America (NAPDA).\(^{242}\) After years of having its annual conventions in several cities, but mostly New York and Chicago, NAMM moved to Chicago in 1945, and moved from Chicago to northern San Diego County in 1984. Chicago was between the band instrument home in Elkhorn and the business center of New York, and very near the population center of the United States.\(^{243}\) After decades of holding its summer convention in Chicago, NAMM held its first winter tradeshow in Los Angeles in 1970. Held each year in January, the winter show was particularly assisted by the convenience of the academic year, whereby retailers could make their school orders for the fall, and manufacturers could pace their production schedules months in advance.\(^{244}\) When Larry R. Linkin became president of NAMM in 1981, he recognized that the industry had changed, and a move away from Chicago was necessary: “California proved to be a winner for dealers and manufacturers alike, with its pleasant weather in January, natural attractions, and its location—equidistant from both Europe and Asia.”\(^{245}\)

Like institutions, artists (the *development* side of the music equation), left the East for California, signaling the establishment of a new locus of creative power in America. Without getting caught up in the celebrity personalities of the individual performers, they must be viewed in the larger context of employment opportunists. Musical relocations

\(^{242}\) Levey, *NAMM 100th*, 5.
\(^{243}\) From 1900 through 1970, the population center of the country was in either Indiana or Illinois; *Datapedia*, 2.
\(^{244}\) Levey, *NAMM 100th*, 120-121.
\(^{245}\) Ibid., 126.
took place, yet what was perhaps more important was the musical infrastructure
development and expansion that coincided with other sectors of the economy in the past.
Earlier relocations were desperate families and needy workers; the newer migrants were
not going to be working in the fields and orchards, nor were they looking for work
building ships, plane, or automobiles.

Motown relocated in 1971, while Northeastern songwriters from Leiber and
Stoller, to Carole King, James Taylor, and Billy Joel, relocated for stretches in Southern
California. Even Walter Becker and Donald Fagen found their success in Los Angeles.
Southern rock musicians moved to California, composing members of Little Feat and
Tom Petty’s group, the Heartbreakers. Even British musicians found California
eventually: Eric Burdon (of the Animals) helped found WAR; in Fleetwood Mac, three
already-established British musicians joined forces with two Southern Californian
musicians; and Graham Nash of the Hollies, would team with Los Angeles folk rockers
David Crosby and Stephen Stills. Following suit, famed New Yorkers, Bob Dylan and
Barbara Streisand relocated to Malibu: In 1973, Dylan would re-associate in his new
beachside hometown with collaborator Robbie Robertson and the Band, who also
relocated. Each had different reasons, yet the point is that the new central space had
been created, and artists were attracted to it.

Drawn by its advertisements of beneficial climate, many American migrants to
the Golden State sought health, but found instead their end. Owing to its generally
favorable climate and its penchant for mythologizing itself, Southern California, has

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246 Fleetwood Mac even included the USC Marching Band on their album Tusk.
247 Rob Bowman, liner notes for The Band, Northern Lights—Southern Cross (Capitol Records,
1975, 2001); see also William McKeen, Bob Dylan: A Bio-Bibliography (Westport, Connecticut and
since the 1880s, created “amalgam of death and sunshine, morbidity and romance.”\textsuperscript{248} In a macabre echo of the state’s history, numerous famed Easterners of the mid and late twentieth-century made their final migration to and saw their last sunsets in California. After relocating to Southern California when his career was in ruins, famed Cleveland disc jockey Alan Freed died in Palm Springs in 1965.\textsuperscript{249} Beatle, George Harrison married a Mexican-American Angeleno in 1978 and died in a mansion in the Hollywood Hills in 2001; Harrison was cremated in Hollywood.\textsuperscript{250} And while the Ramones were the godfathers of New York punk, two died in their Los Angeles homes; Johnny Ramone’s cenotaph was installed in 2004 in Hollywood Forever Cemetery near where Dee Dee Ramone was buried in 2002.\textsuperscript{251} In a change of geographic orientation normally associated with his music, Hoboken, New Jersey-born Frank Sinatra released the album \textit{L.A. Is My Lady} in 1984. Sinatra, moved to Southern California early in his career, and was ultimately buried near his Italian-born parents in a family plot in Desert Memorial Park in the sun-drenched landscape of the Coachella Valley.\textsuperscript{252}

The Pacific Coast was in many ways the end of the line. The Beatles famously ended their live touring at Candlestick Park in San Francisco in 1966. Later, the violence during the Rolling Stones performance at the Altamont Speedway in December 1969 symbolized a turning point of the sixties, where some large measure of 1960s idealism

\textsuperscript{251} All of the Ramones took the surname “Ramone” as part of their stage persona, and continued the usage even after leaving the band.
was lost. Then writing the postscript for the period, the Band ended their road journey with a concert that featured Bob Dylan and various Beatles, Stones, Yardbirds, and originators of American electric blues in a farewell performance at the Winterland Ballroom in San Francisco, in 1976.

Initially in the Northeast, rock upset the New York based commercial songwriters and folksingers alike, even if the Big Apple eventually produced its share of songwriters who contributed to the canon of rock. In complete denial that the tide was turning, New York songsmiths Dick Manning and Al Hoffman were trying to convince themselves in 1956 that “The real barometer of the popularity of a song… is in the sale of sheet music—not records.” The songwriters were dismissing rock as merely another fad, and one that cut directly into their source of income. Some of the hostility towards rock was left over from the BMI-ASCAP fight, where the New York songwriters were chiefly antagonistic towards hillbilly music, and BMI for publishing them. Mostly though, the introduction of Californian instruments themselves upset the commercial culture however seriously it took itself. The Monterey Pop Festival of 1967 was the first large scale musical festival presenting rock performers in the manner of previous folk and jazz festivals, setting the precedent for the later events in Woodstock, New York in 1969 and Watkins Glenn, New York in 1973. The Californian audience would celebrate Jimi Hendrix for his showman’s extravagance, which featured him dousing his Fender

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253 Grateful Dead bassist Phil Lesh, who witnessed both events as a participant, contrasts Woodstock and Altamont in his memoir, “one can’t seriously discuss one without the other. They seemed, even then, to be two sides of a coin, and the passage of time has only strengthened that impression. One could perhaps describe them as the ‘Utopian’ (Woodstock) and the ‘atavistic’ (Altamont) facets of the emerging rock culture,” *Searching for the Sound*, 165.

254 The concert was recorded and released as a documentary film directed by Martin Scorsese, *The Last Waltz* (MGM, 1978, 2002) and nostalgically recognizes that an era has closed on that night in the City by the Bay.

Stratocaster with lighter fluid and bringing it to flames. Yet, folk singer and guitarist, Bob Dylan was infamously rejected at Newport in 1965 for using his Strat.²⁵⁶

Outside of the experimentation of the rock and jazz fusion of the 1970s, jazz has largely remained wedded to World War II era instruments as if frozen in time at an arbitrary apogee of past genius.²⁵⁷ Jazz as defined by New York critics, was a New York commodity, whereas rock had become a very Californian mode of expression and business. Jazz would splinter with the close of the 1960s in reaction to the ascent of rock and the introduction of electric basses and louder guitars; meanwhile, rock would itself blossom as the de facto center of American musical creativity and commercial product. Many jazz aficionados loathed the electrification of the bass. Even three decades after its introduction, jazz critic Leonard Feather was still openly derisive about the use of the electric bass in jazz. Part of this hostility is due to the ease of playability of the Fender bass, as Leo designed it. Any idiot can play this bass, and unfortunately, many idiots were playing this bass. Not until legendary Californian recording session heavyweight, Carol Kaye, played in combos in the 1970s, did Feather find musicians of sufficient talent who used the instrument.²⁵⁸ Apparently, some jazz critics were not listening to James Jameson’s work on most of Motown’s 1960s releases.

The acoustic upright string bass requires talent, training, and stamina, yet the solid body electric bass is instantly usable. Jazz critics who were not fans of rock as an idiom were dismissive of the popular music that employed the instrument, and awards given to

²⁵⁶ Robert Shelton, *No Direction Home: The Life and Music of Bob Dylan* (New York: Beech Tree Books, 1986), 302-303. Dylan was called “Judas” by one heckler in Manchester, UK a year later. Dylan was also photographed playing a Fender Jazzmaster, when he went electric.
²⁵⁷ Note the proliferation on archtops and the dearth of Fenders featured amongst the artists presented in “75 Great Guitarists,” *Downbeat*, February 2009, 27-43.
players of the Fender bass, classified it as a “popular instrument” separate from other traditional instruments. So despite the early adoption and endorsement respected jazz bassist, Monk Montgomery in 1951, jazz critics and self-described purists bemoaned its usage. Bassist Ron Carter left the group headed by Miles Davis over the direction of music that was including the electric bass.\textsuperscript{259} Although he did eventually record some material with the electric bass, Carter preferred the acoustic upright and returned to it full time. Today, the acoustic upright is still favored, especially after the resurgence of bebop and traditional New Orleans sounds that came with the work of Wynton Marsalis starting in the 1980s.\textsuperscript{260}

The New York rock reaction was seen in a move away from the centrality of the guitar, and in essence rejected the primary Californian contribution to modern music. The New York rooted rock subgenres of disco and new wave, for example, specifically eschewed using the electric guitar as the lead voiced instrument in favor of horns and the rhythm section in the case of disco, and synthesizers in the case of new wave. Punk, the other New York rooted style however did feature the solid bodied electric guitar, yet without the virtuosity or melodicism found in more western derived rock.\textsuperscript{261} In fact, the abrasive and noisy guitar playing in punk rock purposely utilized its overdriven and extremely distorted timbre in a Dadaist refutation of the Baroque or classical guitar playing evident in what had become commonplace with guitar solos. The punk guitarist

\textsuperscript{259} Davis, \textit{Miles}, 293.
\textsuperscript{261} Hip hop, which was rooted in 1970s Brooklyn, likewise developed without the use of guitars. However, in following the pattern of bebop of the 1940s, hip hop found a following in the greater Los Angeles area and combined elements of Californian gang culture, creating the new form of hip hop, “gangsta” rap, in the 1980s. West Coast gangsta rap would later influence New York area hip hop in the 1990s.
was neither Dick Dale nor Jimi Hendrix, even if he played a Fender or Mosrite that was built in California.

Country music reacted to Californian developments in two phases. First, “country” and “western” merged with the assistance of Californian instruments, namely the pedal steel and Fender Telecaster. Then, Bakersfield rejected Nashville. That is, Californian country artists such as Buck Owens and Merle Haggard individually began to rebel against the slick production heard in the Nashville Sound and artists such as Patsy Kline and Eddie Arnold by playing a sparser rougher country sound.\textsuperscript{262} Kentucky-born Ohioan, Dwight Yoakam, later relocated to Southern California to rebel against the pop-country of the early 1980s, adopting the Bakersfield ethos, and even recording “The Streets of Bakersfield” with Buck Owens.\textsuperscript{263} Next, though, bluegrass rejected Bakersfield. Some practitioners of country music reacted to the rock elements within their genre and developed (or re-popularized) bluegrass music, which trades acoustic instruments for electric instruments. Particularly noticeable is that bluegrass features the acoustic double bass instead of the electric bass, likewise, the pedal steel and six string electrics are also missing, and the genre lacks drums altogether. They purge the rock and Californian elements in “their” music.\textsuperscript{264} Political and regional identities were combining with class-consciousness in these personal artistic choices.

\textsuperscript{262} However, they were later surpassed in importance as so-called “Outlaw Country” acts by Waylon Jennings and Willie Nelson. The Nashville Sound became referred to as Countrypolitan and featured artists such as Glen Campbell with his famous song “Rhinestone Cowboy” from 1975.\textsuperscript{263} Starr, \textit{California}, 298.

\textsuperscript{264} Jensen, argues that the definitions of authenticity change over time, and looks at the development of a particular production methodology in Nashville that challenged notions of what was or was not considered Country. Conveniently, other musical genres can often be substituted where Jensen writes “country,” in that each genre has its own lines of demarcations and acceptable ideology. Jensen likewise shows the role of post-war consumerism and mass commercialization of art. Tied to the importance of image and authenticity, Jensen showcases the seemingly fake pedigree of a music that is rooted as much in the American urban experience as it is rural, \textit{Nashville Sound}.  

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Other changes seen in the regionalism of American popular music in the second half of the twentieth-century reflect many of the changes that were also happening concurrently in American culture outside of music. With the arrival of surf music, the success of self-contained rock bands of four to six members points towards the greater individualism seen at large in the culture of postwar America.\(^{265}\) Surf bands of the early 1960s were “self-contained” in that the band members could play all of the instruments, sing all of the vocals, write the majority of the songs, and perform live as an ensemble.\(^{266}\) The Beatles and the other British bands of the 1960s confirmed the *commercial viability* and *audience preference* for this development, reinforcing this successful business model. The rock band (or country band for that matter) existing as a standalone entity contrasts to the popular singers and crooners of the big bands of the 1940s.\(^{267}\) In essence, East Coast acts are continuing the old pop tradition with back-up bands. Paul Simon and Billy Joel hire their bands, but Metallica is a band.\(^{268}\) East Coast rock bands appeared well after surf and British bands had already successfully established themselves. The Loving Spoonful was one of the first East Coast bands to actually play and record all of the parts, and stands as one of the rare exceptions. Generally though, rock bands from Massachusetts, New York, and New Jersey such as the E Street Band (who backed Bruce

\(^{265}\) Buddy Holly with his band, the Crickets also fit this pattern; unfortunately, Holly’s time in the spotlight was limited by his tragic death.

\(^{266}\) Although the Beach Boys would later famously utilize studio musicians under the direction of the band’s musical leader Brian Wilson, they nevertheless began their career as a band by recording and performing their music themselves.

\(^{267}\) When Frank Sinatra began as the singer in Tommy Dorsey’s Big Band, the bandleader’s name got first billing. After Sinatra successfully branched out on his own, the individual musicians and songwriters and backing band became less relevant than the singer’s performance of the tunes. Similarly, touring jazz groups employed writers and arrangers to supply the written music.

\(^{268}\) In the 1990s, the East Coast pop tradition of a singer with backup band was repeated with much success: the new spin on the old model was simply including more singers. For example, the New Kids on the Block (of the late 1980s and early 1990s) hailed from Boston, while the Backstreet Boys and *NSYNC (of the early-to-mid 1990s) both originated in Orlando. The vocalists of these three groups did not perform or record with musical instruments.
Springsteen), Kiss, Aerosmith, and Boston, and new wave and punk acts Ramones, Talking Heads, Blondie, and the New York Dolls came from the 1970s.\footnote{269} In this case, East followed West.

\footnote{269} Those ensembles from the Northeast achieved popularity after acts from the Southeast, such as the Allman Brothers Band, had already made impacts on the national music scene.
10. A Golden Coda: 
Californian Sunsets and the Hope for New Days

“And it never failed that during the dry years the people forgot about the rich years, and during the wet years they lost all memory of the dry years. It was always that way.”

—John Steinbeck, *East of Eden*

“This is about as far west—with the exception of Alaska—as you can go on this continent. This is where Manifest Destiny ends—right here, in the middle of all these surfboards and volleyball nets and motor homes.”

—Don Henley of the Eagles

Besides the impact of its rich diversity and special geography, Californian history can be punctuated by two major themes: the irony of unintended consequences and the boom and bust cycle. The Golden State has repeatedly suffered by its own doing from failed ecological engineering and environmental catastrophes to fiscal crises and political chaos. Between periodic energy crises and reoccurring droughts of the 1970s and 1980s, California endured difficult times. And while military spending was subsidizing it, the Golden State became and then remained the center of American popular music and technological innovation. However, once the Cold War ended, Californian fortunes changed. With the collapse of its military patron, the state was looking for answers, and so it blamed Japan, Mexico, the Democratic Party, the Republican Party, and even Governor Gray Davis. Again and again, California created new problems out of well-intended solutions for old problems. Despite a history of failed dreams, Californians have

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271 Don Henley, reflecting on the inspiration he drew from Zuma Beach in Malibu, California, from the liner notes for *Eagles: The Very Best Of*, (Warner Music Group, 2003), 28.
shown a resilient adaptability and a certain penchant for reinvention. Naturally, music in California tells this story. Patterns were established which would signal that California would still be a primary participant in its own future development. Since California, and Los Angeles in particular, stands at the intersection between Asia and Latin America, the crossroads of American music would remain Californian.272

The Golden State is often used as a historical laboratory for the nation as a whole. Through the latter half of the twentieth century, events relating to Asia became increasingly important to the United States.273 California was in a critical position nationally in regards to Asia and the Pacific. American automobile production ran into stiff competition from Japanese—Californian auto plants were especially hurt. Specifically in the realm of musical equipment though, Japanese manufacturers upset the status quo, by bringing to market keyboard synthesizers in the early 1980s. The Asian impact was twofold: it helped to unleash a radical shift in popular musical styles, while it also signaled the movement in locus of technological innovation. British bands equipped with newly developed Japanese keyboards created a fresh musical landscape in America (and Europe).274 The sounds of new wave, synth-pop, and otherwise keyboard heavy dance pop emphasized the beat less than disco, but stood in stark contrast to the guitar driven rock of the 1970s. Quality synthesizers from Japanese companies, such as Roland,


273 Having seen the fighting against the Japanese in World War II, the Chinese-backed communists in Korea, and the Russian-backed guerillas in Vietnam, The United States had plenty of Asian concerns. Plus, the standoff over Quemoy and Matsu, the Mayaguez incident, the instability in Cambodia, Laos, Indonesia, and the Philippines, Nixon’s visit to China, and the KLA shooting reminded Americans, that Asia would play a big part in its future.

274 Early 1980s British ensembles that favored keyboards include Howard Jones, the Human League, Depeche Mode, a-ha, Soft Cell, Duran Duran, Eurythmics, Bananarama, and the Pet Shop Boys among many others; see Szatmary, Rockin’ In Time, 263-265.
Korg, and Yamaha were introduced in 1983, crashing like a tsunami through the American music industry.\footnote{In 1983, Roland released its JX-3P, Korg released its Poly 800, and Yamaha released its very popular DX-7; \textit{NAMM 100th}, 115. See Appendix I-2, 137.} The Yamaha DX-7, in particular, ushered in a new era of music much in the way Fender Teles, Strats, and P-Basses had three decades earlier.\footnote{Levey, \textit{NAMM 100th}, 113.} Casio then entered the market, making a lower cost alternative that was sold outside of traditional music equipment retailers, such as K-Mart and Sears. This flood of Asian keyboards cut deep into the sales of guitars, while the resultant change in popular tastes in the 1980s was particularly hard on American instrument makers.\footnote{\textit{American Music Conference}, 1984, 3-4.} According to estimates by \textit{The Music Trades}, “during the decade, the U.S. music industry lost over four million square feet of factory capacity and over 6,000 manufacturing jobs.”\footnote{\textit{Music Trades Centennial}, 200.}

Mirroring the history of the United States in general, the locus of innovation in musical technology and manufacturing shifted ever westward, from the Atlantic coast to the Pacific coast to the Asian coast.\footnote{Gibson opened shop in Kalamazoo, Michigan in 1902. Epiphone began in Ottoman Turkey before relocating to New York City in 1903. In the 1950s Epiphone moved to Philadelphia, before being acquired by Gibson in 1957. C. F. Martin tired of fighting guilds in his native Germany relocated to New York City in 1833, before moving on to Nazareth, Pennsylvania in 1833. In the first quarter of the twentieth-century, Martin introduced numerous innovations to acoustic guitars, which would become commonplace for the instrument. Another German, Friedrich Gretsch began his guitar and drum company in Brooklyn, New York in 1883. They manufactured archtops used by the Beatles and the Monkees. Piano maker, Baldwin bought Gretsch, and production was eventually moved to Arkansas. The shape and functionality of different models of electric guitars serve as poignant indicators of how their place of origin fit into the narrative of American history. As first introduced, the Gibson Les Paul model still possessed Old World features in its design, and was more expensive than the Fender Telecaster. The Eastern Establishment was treating the growing solid body market of the 1950s as a side project, while the Californians were betting the house on the new paradigm. Richard Smith, \textit{Fender}, 122-123.} With keyboard instruments, the Hammond organ was East Coast and prewar; the Fender Rhodes electric piano and the precursor to the Melotron were Californian; the Yamaha synthesizers and Roland drum machines were Japanese.\footnote{Bob Moog’s synthesizers lacked the practicality of Japanese digital instruments.} With guitars and basses, Martin was East Coast and acoustic; Gibson started...
acoustic then went electric, then moved south; Fender and Rickenbacker changed popular music; then Yamaha and other Japanese companies took market share and production duties, signaling a changing global manufacturing change. In 1960, the Japanese surpassed the British in exporting goods to the United States. In 1976, Japan exported more to Americans than the British, French, and Germans combined. By 1986, Americans were importing more goods from Japan, than from Canada.\(^{281}\)

Moreover, California’s position as a major port of entry for the rest of the United States became increasingly significant as Japanese, Korean, Chinese, and Indonesian goods became more desirable.\(^{282}\) Most visibly, the products were consumer electronics, yet even the mundane items of Asian factories became ubiquitous in everyday applications.\(^{283}\) Yamaha has become the world’s largest manufacturer of musical equipment produces quality gear in its pianos, drums, keyboards, acoustic guitars, electric guitars, electric basses, brass instruments, mixing consoles, digital audio workstations, power amps, loudspeakers and even studio monitors.\(^{284}\) In the hands of rock stars Paul McCartney and Michael Anthony (of Van Halen), studio ace Nathan East, and jazz master John Patitucci, Yamaha expanded its global reach and good reputation as an instrument manufacturer. Other brands such as Roland, Korg, and Takamine likewise carved out sizable niches in the American music instrument industry, while Sony makes the devices on which we listen to music in addition to being one of the big four record

\(^{281}\) See “Series U 335-352,” in George Thomas Kurian, Datapedia, 361.


\(^{283}\) While facing auto plant closures due to competition from Japanese imports, California was “reminded, sometimes painfully, that the Pacific is a two-way ocean and that proximity to Asia can have disadvantages as well as advantages,” Robert Lindsey, “Coast Jobs Disappear Through ‘Gateway to Pacific,’” New York Times, 26 November 1982, A16.

\(^{284}\) Established in 1960, Yamaha Corporation of America is headquartered in Buena Park, California and is currently the largest supplier of musical instruments in the United States.
labels. Californian guitar manufacturers not only faced competition from foreign suppliers, they also faced competition within the industry as stylistic shifts in the 1980s meant that synthesizers were replacing guitars. Guitar music would resurface, but California would be different: Fender moved its headquarters to Arizona. So as the music industry reflected the larger Californian economy, the painful changes in the macroeconomic realm adversely affected the health of the microeconomic worlds of music.

California enjoyed a boom with defense spending. California endured a bust when that spending was cut. Through wartime growth (both the Second World War and the Cold War) federal money was being spent in California, which ricocheted in the state’s infrastructure and internal market. Military needs brought people and industry to the Golden State, so musicians and guitar makers benefited alongside aerospace engineers and computer programmers as participants in the postwar labor force. When the Cold War between the United States and the Soviet Union ended with the dissolution of the Soviet Union, a so-called “peace dividend” was trumpeted as a positive outcome. The reasoning was that since the American adversary no longer existed, the military could be scaled back, thus yielding a savings for the country. Of course, cutbacks in military spending would impact California in particular as a supplier of military hardware and the home to service personnel. Without Mars in its pocket, the Golden State hit hard times.

Even with its abundantly fertile soil, California would be in dire straits attempting

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285 Fitting for its connection to Californian history, Sony is also one of the major American motion picture studios.
286 *American Music Conference*, 1984, 4-10.
287 Perfectly encapsulating the turn of events, Japanese automaker, Toyota began leasing General Motors’ now-shuttered auto plant in Fremont in 1984.
288 The symbolism of Mars, the Roman god of war is borrowed from Lotchin, *Fortress California*, 131.
to grow new jobs. While agriculture has always been a primary economic component of the Golden State the manufacturing and technological sides of the economy were changing through the postwar period. The older Californian technological economy was based on physical things to manufacture and sell—steel, aircraft, and ships; whereas the newer economy was based on information and ideas to market. Music production in the state was one element of the new economy. Technology brought many benefits to the Golden State, but in fabricating something like Frankenstein’s monster, the state would be harmed by its creation. The problems would be on two fronts. First, The technology sector of the Californian economy would eventually tank, bringing down capital gains and the taxes on them. For the state’s coffers, this would spell doom. As the “Dot-Com” bubble burst the Californian economy sank with the fortunes of Silicon Valley, and with the state bleeding, music sales would obviously be hurt as well.

Second, Californian music would suffer from Internet piracy. Ironically, Californians literally created the tools, which would cause the harm. Each year from 1999, onward, sales would drop. Facing similar threat, attendance at movie theaters would likewise flatten, beguiling the formerly recession-proof Californian industry. Illegal duplications and downloads onto computers and personal digital listening devices designed in California would sap marketability: why buy something when it is available for free? Fittingly, Californian band Metallica gained infamous notoriety for its legal fight against digital file sharing network Napster, eventually including testimony before the Senate Judiciary Committee on problems facing copyright protection in the new information age.289 The large labels in the music industry became dinosaurs like the

289 Fellow Californian, hip-hop artist Dr. Dre followed their lead and also brought suit against Napster. For figures showing the precipitous drop in sales, see Appendix G, 133.
studios in the film industry and the Detroit companies in the auto industry, even Tower Records, which had begun in Sacramento, closed its 89 stores in 2006.290

Real people populate this story. In the late 1950s and early 1960s, two brothers began to play musical instruments in their hometown of Santa Maria, on California’s Central Coast. In true California fashion, those dreams did not materialize, like so many of the migrants of the Gold Rush, whose arrival in California netted no gold. Tommy Spittler never became a rock star like his musical heroes. This budding guitarist soon entered California’s booming construction business, operating a backhoe; he married a defense contractor employee and eventually moved his family into a house in the semi-rural suburbs north of Santa Maria. His older brother, Army Specialist 4th Class Ira James Spittler III was killed in action while serving in Vietnam in 1967.291 The Golden State is a land of broken dreams, yet it is also a place of reinvention.292 The booms and busts in California within the music industry mirror the ebb and flow of the state itself.293 Music in California showcases the changes in the nation, and illustrates the themes of the state’s developmental history. Culture is not wholly within the designs of cynical merchants and crass marketers. Without removing agency from the artists who made music in the later half of the twentieth-century or the listeners who consumed it, musical changes were also contingent upon technical and stylistic innovators. By looking at common items such as musical instruments, and listening to the music that they made, we can hear how California changed America after the Second World War.

290 Szatmary, Rockin’ In Time, 370.
291 “Sixth Santa Marian Dies In Viet War,” Santa Maria Times, 9 February 1967, 1.
292 Frank Sinatra, the thirty-seven year old former bobby socks idol began his career anew when he began recording for Capitol in 1953; see Pete Kline, liner notes for Frank Sinatra: The Capitol Years (Capitol Records, 1990), 32.
293 For the potential for Californian rebirth, see Flanagan Smile Southern California; and Lowenthal Global California.
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(This text had editions in 1990 and 1994; Scott Lipscomb was added as additional author for the third starting in 1999, and the subsequent editions from 2003, 2006, 2009.)


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**Other:**


### APPENDIX A:

**CALIFORNIA AND UNITED STATES POPULATIONS, 1850-2008**

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<th>Year</th>
<th>California</th>
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<th>% of USA</th>
<th>Rank</th>
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<td>23,191,876</td>
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<td>2000</td>
<td>33,871,648</td>
<td>13.8%</td>
<td>1</td>
<td>281,421,906</td>
<td>13.2%</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>36,756,666</td>
<td>8.5%</td>
<td>1</td>
<td>304,059,724</td>
<td>8.0%</td>
<td></td>
</tr>
</tbody>
</table>

---

294 2008 estimate for 1 July 2008 from US Census Bureau.
### APPENDIX B:

**CALIFORNIA BLACK POPULATION AND MIGRATION, 1850-1990**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Population</th>
<th>Black Population</th>
<th>% of Total Population</th>
<th>Black Migrants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1850</td>
<td>92,597</td>
<td>962</td>
<td>1.0%</td>
<td></td>
</tr>
<tr>
<td>1860</td>
<td>379,994</td>
<td>4,086</td>
<td>1.1%</td>
<td></td>
</tr>
<tr>
<td>1870</td>
<td>560,247</td>
<td>4,272</td>
<td>0.8%</td>
<td></td>
</tr>
<tr>
<td>1880</td>
<td>864,694</td>
<td>6,018</td>
<td>0.7%</td>
<td></td>
</tr>
<tr>
<td>1890</td>
<td>1,213,398</td>
<td>11,322</td>
<td>0.9%</td>
<td></td>
</tr>
<tr>
<td>1900</td>
<td>1,485,053</td>
<td>11,045</td>
<td>0.7%</td>
<td></td>
</tr>
<tr>
<td>1910</td>
<td>2,377,549</td>
<td>21,645</td>
<td>0.9%</td>
<td>9.8</td>
</tr>
<tr>
<td>1920</td>
<td>3,426,861</td>
<td>38,763</td>
<td>1.1%</td>
<td>16.1</td>
</tr>
<tr>
<td>1930</td>
<td>5,677,251</td>
<td>81,048</td>
<td>1.4%</td>
<td>36.4</td>
</tr>
<tr>
<td>1940</td>
<td>6,907,387</td>
<td>124,306</td>
<td>1.8%</td>
<td>41.2</td>
</tr>
<tr>
<td>1950</td>
<td>10,586,223</td>
<td>462,172</td>
<td>4.4%</td>
<td>258.9</td>
</tr>
<tr>
<td>1960</td>
<td>15,717,204</td>
<td>883,861</td>
<td>5.6%</td>
<td>220.4</td>
</tr>
<tr>
<td>1970</td>
<td>19,953,134</td>
<td>1,400,143</td>
<td>7.0%</td>
<td>327.3</td>
</tr>
<tr>
<td>1980</td>
<td>23,667,902</td>
<td>1,819,281</td>
<td>7.7%</td>
<td>310.4</td>
</tr>
<tr>
<td>1990</td>
<td>29,760,021</td>
<td>2,208,801</td>
<td>7.4%</td>
<td>62</td>
</tr>
</tbody>
</table>

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295 *Historical Statistics*, p1-192, p1-518; Table Ac43-52, 498-503.
APPENDIX C-1:

RACIAL BREAKDOWN, CALIFORNIA AND UNITED STATES, 1930-1990

<table>
<thead>
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<th>California</th>
<th>United States (Less California)</th>
</tr>
</thead>
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<tr>
<td></td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>1930</td>
<td>White</td>
<td>5,408,260</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>81,048</td>
</tr>
<tr>
<td></td>
<td>Other Nonwhite</td>
<td>187,943</td>
</tr>
<tr>
<td>1940</td>
<td>White</td>
<td>6,596,763</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>124,306</td>
</tr>
<tr>
<td></td>
<td>Other Nonwhite</td>
<td>186,318</td>
</tr>
<tr>
<td>1950</td>
<td>White</td>
<td>9,915,173</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>462,172</td>
</tr>
<tr>
<td></td>
<td>Other Nonwhite</td>
<td>208,878</td>
</tr>
<tr>
<td>1960</td>
<td>White</td>
<td>14,455,230</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>883,861</td>
</tr>
<tr>
<td></td>
<td>Other Nonwhite</td>
<td>378,113</td>
</tr>
<tr>
<td>1970</td>
<td>White</td>
<td>17,761,032</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>1,400,143</td>
</tr>
<tr>
<td></td>
<td>Other Nonwhite</td>
<td>791,959</td>
</tr>
<tr>
<td>1980</td>
<td>White</td>
<td>18,030,893</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>1,819,281</td>
</tr>
<tr>
<td></td>
<td>Other Nonwhite</td>
<td>3,817,728</td>
</tr>
<tr>
<td>1990</td>
<td>White</td>
<td>20,524,327</td>
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<tr>
<td></td>
<td>Black</td>
<td>2,208,801</td>
</tr>
<tr>
<td></td>
<td>Other Nonwhite</td>
<td>7,026,893</td>
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APPENDIX C-2:

NONWHITE AND FOREIGN BORN, CALIFORNIA, 1850-1990

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Population</th>
<th>Other Nonwhite</th>
<th>Foreign Born</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>% pop</td>
<td>Number</td>
<td>% pop</td>
</tr>
<tr>
<td>1850</td>
<td>92,597</td>
<td>-</td>
<td>21,802</td>
<td>23.5%</td>
</tr>
<tr>
<td>1860</td>
<td>379,994</td>
<td>52,731</td>
<td>13.9%</td>
<td>146,528</td>
</tr>
<tr>
<td>1870</td>
<td>560,247</td>
<td>56,551</td>
<td>10.1%</td>
<td>209,831</td>
</tr>
<tr>
<td>1880</td>
<td>864,694</td>
<td>91,495</td>
<td>10.6%</td>
<td>292,874</td>
</tr>
<tr>
<td>1890</td>
<td>1,213,398</td>
<td>85,136</td>
<td>7.0%</td>
<td>366,309</td>
</tr>
<tr>
<td>1900</td>
<td>1,485,053</td>
<td>71,281</td>
<td>4.8%</td>
<td>367,240</td>
</tr>
<tr>
<td>1910</td>
<td>2,377,549</td>
<td>96,232</td>
<td>4.0%</td>
<td>586,432</td>
</tr>
<tr>
<td>1920</td>
<td>3,426,861</td>
<td>123,387</td>
<td>3.6%</td>
<td>757,625</td>
</tr>
<tr>
<td>1930</td>
<td>5,677,251</td>
<td>187,943</td>
<td>3.3%</td>
<td>1,073,964</td>
</tr>
<tr>
<td>1940</td>
<td>6,907,387</td>
<td>186,318</td>
<td>2.7%</td>
<td>924,865</td>
</tr>
<tr>
<td>1950</td>
<td>10,586,223</td>
<td>208,878</td>
<td>2.0%</td>
<td>1,060,375</td>
</tr>
<tr>
<td>1960</td>
<td>15,717,204</td>
<td>378,113</td>
<td>2.4%</td>
<td>1,343,698</td>
</tr>
<tr>
<td>1970</td>
<td>19,953,134</td>
<td>791,959</td>
<td>4.0%</td>
<td>1,757,990</td>
</tr>
<tr>
<td>1980</td>
<td>23,667,902</td>
<td>3,817,728</td>
<td>16.1%</td>
<td>3,580,033</td>
</tr>
<tr>
<td>1990</td>
<td>29,760,021</td>
<td>7,026,893</td>
<td>23.6%</td>
<td>6,458,825</td>
</tr>
</tbody>
</table>

### APPENDIX D-1:

**MEDIAN AGE, UNITED STATES, 1850-2000**

<table>
<thead>
<tr>
<th>Year</th>
<th>Median Age</th>
<th>Change</th>
</tr>
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<tbody>
<tr>
<td>1850</td>
<td>18.9</td>
<td>1.1</td>
</tr>
<tr>
<td>1860</td>
<td>19.4</td>
<td>0.5</td>
</tr>
<tr>
<td>1870</td>
<td>20.2</td>
<td>0.8</td>
</tr>
<tr>
<td>1880</td>
<td>20.9</td>
<td>0.7</td>
</tr>
<tr>
<td>1890</td>
<td>22.0</td>
<td>1.1</td>
</tr>
<tr>
<td>1900</td>
<td>22.9</td>
<td>0.9</td>
</tr>
<tr>
<td>1910</td>
<td>24.1</td>
<td>1.2</td>
</tr>
<tr>
<td>1920</td>
<td>25.3</td>
<td>1.2</td>
</tr>
<tr>
<td>1930</td>
<td>26.5</td>
<td>1.2</td>
</tr>
<tr>
<td>1940</td>
<td>29.0</td>
<td>2.5</td>
</tr>
<tr>
<td>1950</td>
<td>30.2</td>
<td>1.2</td>
</tr>
<tr>
<td>1960</td>
<td>29.5</td>
<td>(0.7)</td>
</tr>
<tr>
<td>1970</td>
<td>28.1</td>
<td>(1.4)</td>
</tr>
<tr>
<td>1980</td>
<td>30.0</td>
<td>1.9</td>
</tr>
<tr>
<td>1990</td>
<td>32.8</td>
<td>2.8</td>
</tr>
<tr>
<td>2000</td>
<td>35.3</td>
<td>2.5</td>
</tr>
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</table>
### APPENDIX D-2:

**YOUNG ADULT AGE, CALIFORNIA AND UNITED STATES, 1930-1990**

<table>
<thead>
<tr>
<th>Year</th>
<th>California</th>
<th>United States (Less California)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>1930</td>
<td>Total Pop.</td>
<td>5,677,251</td>
</tr>
<tr>
<td>15-19</td>
<td>428,684</td>
<td>7.6%</td>
</tr>
<tr>
<td>20-24</td>
<td>475,127</td>
<td>8.4%</td>
</tr>
<tr>
<td>25-29</td>
<td>496,029</td>
<td>8.7%</td>
</tr>
<tr>
<td>1940</td>
<td>Total Pop.</td>
<td>6,907,387</td>
</tr>
<tr>
<td>15-19</td>
<td>544,601</td>
<td>7.9%</td>
</tr>
<tr>
<td>20-24</td>
<td>574,930</td>
<td>8.3%</td>
</tr>
<tr>
<td>25-29</td>
<td>612,849</td>
<td>8.9%</td>
</tr>
<tr>
<td>1950</td>
<td>Total Pop.</td>
<td>10,586,223</td>
</tr>
<tr>
<td>15-19</td>
<td>629,743</td>
<td>5.9%</td>
</tr>
<tr>
<td>20-24</td>
<td>773,170</td>
<td>7.3%</td>
</tr>
<tr>
<td>25-29</td>
<td>924,910</td>
<td>8.7%</td>
</tr>
<tr>
<td>1960</td>
<td>Total Pop.</td>
<td>15,717,204</td>
</tr>
<tr>
<td>15-19</td>
<td>1,096,022</td>
<td>7.0%</td>
</tr>
<tr>
<td>20-24</td>
<td>983,660</td>
<td>6.3%</td>
</tr>
<tr>
<td>25-29</td>
<td>1,016,083</td>
<td>6.5%</td>
</tr>
<tr>
<td>1970</td>
<td>Total Pop.</td>
<td>19,953,134</td>
</tr>
<tr>
<td>15-19</td>
<td>1,817,379</td>
<td>9.1%</td>
</tr>
<tr>
<td>20-24</td>
<td>1,740,966</td>
<td>8.7%</td>
</tr>
<tr>
<td>25-29</td>
<td>1,457,614</td>
<td>7.3%</td>
</tr>
<tr>
<td>1980</td>
<td>Total Pop.</td>
<td>23,667,902</td>
</tr>
<tr>
<td>15-19</td>
<td>2,130,465</td>
<td>9.0%</td>
</tr>
<tr>
<td>20-24</td>
<td>2,355,965</td>
<td>10.0%</td>
</tr>
<tr>
<td>25-29</td>
<td>2,232,964</td>
<td>9.4%</td>
</tr>
<tr>
<td>1990</td>
<td>Total Pop.</td>
<td>29,760,021</td>
</tr>
<tr>
<td>15-19</td>
<td>2,053,148</td>
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</tr>
<tr>
<td>20-24</td>
<td>2,510,794</td>
<td>8.4%</td>
</tr>
<tr>
<td>25-29</td>
<td>2,854,057</td>
<td>9.6%</td>
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</tbody>
</table>
APPENDIX D-3:

YOUNG ADULT AGE BY GENDER, CALIFORNIA, 1930-1990

<table>
<thead>
<tr>
<th>Year</th>
<th>California</th>
<th></th>
<th></th>
<th>United States</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>1930</td>
<td>Total Pop.</td>
<td>2,942,595</td>
<td>2,734,656</td>
<td>62,137,080</td>
<td>60,637,966</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15-19</td>
<td>215,304</td>
<td>213,380</td>
<td>5,757,825</td>
<td>5,794,290</td>
<td></td>
</tr>
<tr>
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<td>20-24</td>
<td>246,080</td>
<td>229,047</td>
<td>5,336,815</td>
<td>5,533,563</td>
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<td>25-29</td>
<td>260,590</td>
<td>235,439</td>
<td>4,860,180</td>
<td>4,973,428</td>
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</tr>
<tr>
<td>1940</td>
<td>Total Pop.*</td>
<td>3,515,730</td>
<td>3,391,657</td>
<td>50,553,748</td>
<td>50,549,176</td>
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<tr>
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<td>15-19</td>
<td>275,635</td>
<td>268,966</td>
<td>6,180,153</td>
<td>6,153,370</td>
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<tr>
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<td>20-24</td>
<td>291,552</td>
<td>283,378</td>
<td>5,692,392</td>
<td>5,895,443</td>
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<td>25-29</td>
<td>312,809</td>
<td>300,040</td>
<td>5,450,662</td>
<td>5,645,976</td>
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<td>1950</td>
<td>Total Pop.*</td>
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<td>5,290,594</td>
<td>54,601,105</td>
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<td>326,160</td>
<td>303,583</td>
<td>5,323,470</td>
<td>5,321,755</td>
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<td>390,711</td>
<td>382,459</td>
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<td>453,331</td>
<td>471,579</td>
<td>5,904,975</td>
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<td>1960</td>
<td>Total Pop.*</td>
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<td>7,800,497</td>
<td>61,315,358</td>
<td>64,961,189</td>
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<tr>
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<td>15-19</td>
<td>567,486</td>
<td>528,536</td>
<td>6,698,837</td>
<td>6,588,597</td>
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</tr>
<tr>
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<td>20-24</td>
<td>503,508</td>
<td>480,152</td>
<td>5,283,228</td>
<td>5,519,937</td>
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<tr>
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<td>25-29</td>
<td>515,818</td>
<td>500,265</td>
<td>5,333,282</td>
<td>5,537,104</td>
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<tr>
<td>1970</td>
<td>Total Pop.*</td>
<td>9,816,685</td>
<td>10,136,449</td>
<td>71,485,878</td>
<td>77,910,094</td>
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<tr>
<td></td>
<td>15-19</td>
<td>930,884</td>
<td>886,495</td>
<td>9,718,189</td>
<td>9,485,229</td>
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</tr>
<tr>
<td></td>
<td>20-24</td>
<td>872,256</td>
<td>868,710</td>
<td>7,761,209</td>
<td>8,354,509</td>
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<tr>
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<td>25-29</td>
<td>726,974</td>
<td>730,640</td>
<td>6,569,934</td>
<td>6,810,076</td>
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<tr>
<td>1980</td>
<td>Total Pop.*</td>
<td>11,666,485</td>
<td>12,001,417</td>
<td>83,824,951</td>
<td>91,482,678</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15-19</td>
<td>1,091,684</td>
<td>1,038,781</td>
<td>10,769,185</td>
<td>10,408,943</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20-24</td>
<td>1,213,068</td>
<td>1,142,897</td>
<td>10,639,312</td>
<td>10,654,502</td>
<td></td>
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<tr>
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<td>25-29</td>
<td>1,132,811</td>
<td>1,100,153</td>
<td>9,678,198</td>
<td>9,793,296</td>
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</tr>
<tr>
<td>1990</td>
<td>Total Pop.*</td>
<td>14,897,627</td>
<td>14,862,394</td>
<td>93,817,315</td>
<td>101,324,687</td>
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<td>15-19</td>
<td>1,077,682</td>
<td>975,466</td>
<td>9,102,698</td>
<td>8,651,317</td>
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<tr>
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<td>20-24</td>
<td>1,348,808</td>
<td>1,161,986</td>
<td>9,675,596</td>
<td>9,344,716</td>
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<tr>
<td></td>
<td>25-29</td>
<td>1,494,692</td>
<td>1,359,365</td>
<td>10,695,936</td>
<td>10,617,109</td>
<td></td>
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</tbody>
</table>

297 American total male and female populations from 1940 onward exclude those under the age of 15.
APPENDIX E:

URBAN AND RURAL, CALIFORNIA AND UNITED STATES, 1850-1990

<table>
<thead>
<tr>
<th>Year</th>
<th>California</th>
<th></th>
<th>United States</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
<td>(Less California)</td>
<td>Urban</td>
</tr>
<tr>
<td>1850</td>
<td>7.4%</td>
<td>92.6%</td>
<td>15.4%</td>
<td>84.6%</td>
</tr>
<tr>
<td>1860</td>
<td>20.7%</td>
<td>79.3%</td>
<td>19.8%</td>
<td>80.2%</td>
</tr>
<tr>
<td>1870</td>
<td>37.2%</td>
<td>62.8%</td>
<td>25.5%</td>
<td>74.5%</td>
</tr>
<tr>
<td>1880</td>
<td>42.9%</td>
<td>57.1%</td>
<td>27.9%</td>
<td>72.1%</td>
</tr>
<tr>
<td>1890</td>
<td>48.6%</td>
<td>51.4%</td>
<td>34.9%</td>
<td>65.1%</td>
</tr>
<tr>
<td>1900</td>
<td>52.3%</td>
<td>47.7%</td>
<td>39.5%</td>
<td>60.5%</td>
</tr>
<tr>
<td>1910</td>
<td>61.8%</td>
<td>38.2%</td>
<td>45.3%</td>
<td>54.7%</td>
</tr>
<tr>
<td>1920</td>
<td>67.9%</td>
<td>32.1%</td>
<td>50.8%</td>
<td>49.2%</td>
</tr>
<tr>
<td>1930</td>
<td>73.3%</td>
<td>26.7%</td>
<td>55.5%</td>
<td>44.5%</td>
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<tr>
<td>1940</td>
<td>71.0%</td>
<td>29.0%</td>
<td>55.9%</td>
<td>44.1%</td>
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<tr>
<td>1950</td>
<td>80.7%</td>
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<td>63.0%</td>
<td>37.0%</td>
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<tr>
<td>1960</td>
<td>86.4%</td>
<td>13.6%</td>
<td>68.3%</td>
<td>31.7%</td>
</tr>
<tr>
<td>1970</td>
<td>90.9%</td>
<td>9.1%</td>
<td>71.7%</td>
<td>28.3%</td>
</tr>
<tr>
<td>1980</td>
<td>91.3%</td>
<td>8.7%</td>
<td>71.7%</td>
<td>28.3%</td>
</tr>
<tr>
<td>1990</td>
<td>92.6%</td>
<td>7.4%</td>
<td>72.8%</td>
<td>27.2%</td>
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</table>

APPENDIX F:

INSTRUMENT SALES BY CATEGORY, 1940-1983

<table>
<thead>
<tr>
<th>Year</th>
<th>Piano</th>
<th>Organ</th>
<th>Accordion</th>
<th>Fretted*</th>
<th>Amps</th>
<th>PA</th>
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<tr>
<td>1940</td>
<td>136,332</td>
<td>-NA-</td>
<td>-NA-</td>
<td>190,000</td>
<td>-NA-</td>
<td>-NA-</td>
</tr>
<tr>
<td>1950</td>
<td>172,531</td>
<td>10,000</td>
<td>123,200</td>
<td>220,000</td>
<td>-NA-</td>
<td>-NA-</td>
</tr>
<tr>
<td>1960</td>
<td>198,200</td>
<td>106,000</td>
<td>100,000</td>
<td>420,000</td>
<td>-NA-</td>
<td>-NA-</td>
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<tr>
<td>1965</td>
<td>245,600</td>
<td>143,000</td>
<td>38,000</td>
<td>1,500,000</td>
<td>-NA-</td>
<td>-NA-</td>
</tr>
<tr>
<td>1966</td>
<td>243,800</td>
<td>130,000</td>
<td>42,000</td>
<td>1,430,000</td>
<td>-NA-</td>
<td>-NA-</td>
</tr>
<tr>
<td>1967</td>
<td>222,300</td>
<td>147,000</td>
<td>35,000</td>
<td>1,040,000</td>
<td>-NA-</td>
<td>-NA-</td>
</tr>
<tr>
<td>1968</td>
<td>225,378</td>
<td>142,000</td>
<td>38,000</td>
<td>1,570,000</td>
<td>-NA-</td>
<td>-NA-</td>
</tr>
<tr>
<td>1969</td>
<td>219,657</td>
<td>131,000</td>
<td>30,500</td>
<td>1,576,691</td>
<td>-NA-</td>
<td>-NA-</td>
</tr>
<tr>
<td>1970</td>
<td>193,814</td>
<td>137,500</td>
<td>31,800</td>
<td>2,214,686</td>
<td>-NA-</td>
<td>-NA-</td>
</tr>
<tr>
<td>1971</td>
<td>205,214</td>
<td>145,000</td>
<td>21,800</td>
<td>2,444,639</td>
<td>96,000</td>
<td>16,000</td>
</tr>
<tr>
<td>1972</td>
<td>232,507</td>
<td>186,000</td>
<td>27,346</td>
<td>2,541,480</td>
<td>110,000</td>
<td>18,000</td>
</tr>
<tr>
<td>1973</td>
<td>247,701</td>
<td>202,275</td>
<td>22,330</td>
<td>2,048,053</td>
<td>133,980</td>
<td>18,900</td>
</tr>
<tr>
<td>1974</td>
<td>248,405</td>
<td>233,845</td>
<td>19,030</td>
<td>2,291,212</td>
<td>140,000</td>
<td>60,000</td>
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<tr>
<td>1975</td>
<td>217,329</td>
<td>205,772</td>
<td>12,877</td>
<td>1,540,234</td>
<td>154,000</td>
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<tr>
<td>1976</td>
<td>246,235</td>
<td>217,267</td>
<td>13,215</td>
<td>1,758,000</td>
<td>158,000</td>
<td>$</td>
</tr>
<tr>
<td>1977</td>
<td>258,918</td>
<td>222,400</td>
<td>-NA-</td>
<td>1,655,572</td>
<td>161,000</td>
<td>$</td>
</tr>
<tr>
<td>1978</td>
<td>282,172</td>
<td>199,654</td>
<td>-NA-</td>
<td>1,872,185</td>
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<td>$</td>
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<tr>
<td>1979</td>
<td>275,600</td>
<td>175,159</td>
<td>-NA-</td>
<td>1,890,006</td>
<td>177,000</td>
<td>$</td>
</tr>
<tr>
<td>1980</td>
<td>233,000</td>
<td>138,724</td>
<td>-NA-</td>
<td>1,102,041</td>
<td>177,000</td>
<td>$</td>
</tr>
<tr>
<td>1981</td>
<td>231,000</td>
<td>131,329</td>
<td>-NA-</td>
<td>1,332,550</td>
<td>177,000</td>
<td>$</td>
</tr>
<tr>
<td>1982</td>
<td>203,000</td>
<td>101,000</td>
<td>-NA-</td>
<td>1,213,138</td>
<td>177,000</td>
<td>$</td>
</tr>
<tr>
<td>1983</td>
<td>197,000</td>
<td>88,000</td>
<td>-NA-</td>
<td>875,106</td>
<td>157,000</td>
<td>$</td>
</tr>
</tbody>
</table>

Figures are from *Music USA*, 1976, 9-11; 1980, 4-9; 1984, 6-11.

“Fretted” includes electric and acoustic guitars, ukeleles, mandolins, and banjos. The years 1965 to 1970 include estimates of amplifier and PA sales.

1977 was the last year AMC included accordions and concertinas as a distinct category.
APPENDIX F (Continued):

INSTRUMENT SALES BY CATEGORY, 1940-1983

<table>
<thead>
<tr>
<th>Year</th>
<th>Winds</th>
<th>Brass</th>
<th>Strings</th>
<th>Synths</th>
<th>E. Piano</th>
<th>Portbl. Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>1940</td>
<td>110,000</td>
<td>75,000</td>
<td>-NA-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1950</td>
<td>122,000</td>
<td>85,000</td>
<td>-NA-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1960</td>
<td>241,000</td>
<td>153,000</td>
<td>40,600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>322,000</td>
<td>230,000</td>
<td>64,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1966</td>
<td>352,000</td>
<td>255,000</td>
<td>75,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1967</td>
<td>346,000</td>
<td>240,000</td>
<td>78,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1968</td>
<td>332,000</td>
<td>241,000</td>
<td>80,340</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1969</td>
<td>305,000</td>
<td>242,000</td>
<td>79,185</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>304,000</td>
<td>225,000</td>
<td>75,700</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1971</td>
<td>303,000</td>
<td>218,000</td>
<td>51,138</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1972</td>
<td>329,207</td>
<td>219,800</td>
<td>61,565</td>
<td></td>
<td></td>
<td>15,000</td>
</tr>
<tr>
<td>1973</td>
<td>353,000</td>
<td>254,000</td>
<td>54,866</td>
<td>7,000</td>
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<td>19,000</td>
</tr>
<tr>
<td>1974</td>
<td>402,645</td>
<td>267,360</td>
<td>63,655</td>
<td>10,000</td>
<td></td>
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</tr>
<tr>
<td>1975</td>
<td>359,000</td>
<td>253,000</td>
<td>91,225</td>
<td>15,000</td>
<td></td>
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</tr>
<tr>
<td>1976</td>
<td>343,245</td>
<td>238,600</td>
<td>83,000</td>
<td>18,000</td>
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<td>23,300</td>
</tr>
<tr>
<td>1977</td>
<td>337,400</td>
<td>234,060</td>
<td>75,000</td>
<td>23,500</td>
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<td>1978</td>
<td>340,000</td>
<td>229,000</td>
<td>83,500</td>
<td>24,050</td>
<td></td>
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<tr>
<td>1979</td>
<td>328,000</td>
<td>220,000</td>
<td>92,000</td>
<td>24,172</td>
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<td>38,737</td>
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<td>1980</td>
<td>321,000</td>
<td>197,000</td>
<td>94,000</td>
<td>36,606</td>
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<td>1981</td>
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<td>201,500</td>
<td>109,500</td>
<td>34,500</td>
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<td>37,000</td>
</tr>
<tr>
<td>1982</td>
<td>343,000</td>
<td>168,000</td>
<td>120,000</td>
<td>43,000</td>
<td></td>
<td>40,000</td>
</tr>
<tr>
<td>1983</td>
<td>326,000</td>
<td>165,000</td>
<td>93,000</td>
<td>66,000</td>
<td></td>
<td>44,000</td>
</tr>
</tbody>
</table>

300 “Synths” is an abbreviation for synthesizer keyboards; “E. Piano” is an abbreviation for electric pianos; and “Portbl. Key” is an abbreviation for portable electronic keyboards.
APPENDIX G:

RECORDS SHIPPED, 1962-2007

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Units Shipped (in thousands)</th>
<th>Value (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1962</td>
<td>$687.0</td>
<td></td>
</tr>
<tr>
<td>1963</td>
<td>$698.0</td>
<td></td>
</tr>
<tr>
<td>1964</td>
<td>$758.0</td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>$862.0</td>
<td></td>
</tr>
<tr>
<td>1966</td>
<td>$959.0</td>
<td></td>
</tr>
<tr>
<td>1967</td>
<td>$1,173.0</td>
<td></td>
</tr>
<tr>
<td>1968</td>
<td>$1,358.0</td>
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</tr>
<tr>
<td>1969</td>
<td>$1,586.0</td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>$1,660.0</td>
<td></td>
</tr>
<tr>
<td>1971</td>
<td>$1,744.0</td>
<td></td>
</tr>
<tr>
<td>1972</td>
<td>$1,924.0</td>
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</tr>
<tr>
<td>1973</td>
<td>$2,016.6</td>
<td></td>
</tr>
<tr>
<td>1974</td>
<td>$2,199.7</td>
<td></td>
</tr>
<tr>
<td>1975</td>
<td>$2,388.5</td>
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</tr>
<tr>
<td>1976</td>
<td>$2,737.1</td>
<td></td>
</tr>
<tr>
<td>1977</td>
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</tr>
<tr>
<td>1978</td>
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</tr>
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<td>1979</td>
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<td>1980</td>
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</tr>
<tr>
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<td>1983</td>
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<td>1984</td>
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<td>1985</td>
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<td>1986</td>
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<tr>
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</tr>
<tr>
<td>2006</td>
<td>558.8</td>
<td>$11,755.1</td>
</tr>
<tr>
<td>2007</td>
<td>464.4</td>
<td>$10,322.7</td>
</tr>
</tbody>
</table>
APPENDIX H-1:

CALIFORNIAN RECORD LABELS:

1942: Capitol—Featured artists such as Nat King Cole, Frank Sinatra, and Beach Boys, and handled the American distribution of the Beatles and Pink Floyd.

1946: Dial—Set up to record Charlie Parker while he was in Los Angeles; closed shop in 1949.


1949: Fantasy—This San Francisco-based label featured Dave Brubeck, Cal Tjader, and Vince Guaraldi.

1951: Contemporary—Featured “West Coast” artists such as Art Pepper, Sonny Rollins, Shelly Manne, and Barney Kessel, among others.

1952: Pacific Jazz—Included “West Coast” artists such as Chet Baker, Gerry Mulligan, Paul Desmond, and Gerald Wilson among others. Folded into Liberty in 1957.


1958: Warner Brothers Records—An offshoot of the motion picture studio, but very successful on its own merits as a music industry force.


1962: A&M—Founded by Herb Alpert and Jerry Moss.

1964: Dunhill—Founded by Lou Adler, sold to ABC in 1966, Adler started Ode which released Carol King’s Tapestry. Dunhill had Three Dog Night, closed shop by ABC in 1975.

1972: Concord—This Beverly Hills-based label grew from the Concord Jazz Festival.

1991: Death Row—Trendsetting label that released West Coast hip hop, or more specifically “gangsta” rap. Continued the tradition of earlier attempts to define regional variances within music.
APPENDIX H-2:

OTHER RECORD LABELS

FILM & TELEVISION STUDIO-BASED LABELS:

1946: MGM
1950: Dot (Moved to Hollywood in 1956, sold to Paramount Pictures in 1957)
1955: ABC (New York)
1956: Disneyland
1958: Warner Brothers
1958: UA
1958: 20th Century Fox
1969: Paramount Records (Merged into ABC in 1974, bought by MCA 1979)

NEW YORK-BASED MAJOR LABELS:

RCA-Victor
Columbia
Decca (merged with MCA in 1962)

NEW YORK UPSTARTS:

1939: Blue Note
1942: Savoy (Newark)
1947: Atlantic—Jazz then Rock
1949: Prestige
1953: Riverside
1956: Verve
1960: Impulse

NON-CALIFORNIAN & NON-NEW YORKER UPSTART LABELS:

1945: Mercury (Chicago)
1951: Word (Waco)—Christian
1952: Sun (Memphis)—Rockabilly and Country
1952: Chess/Checker (Chicago)—Blues
1957: Stax (Memphis)—Soul
1959: Motown (Detroit)—Pop and Soul
1959: Island (Jamaica)—Caribbean
1969: Capricorn (Macon)—Southern Rock
APPENDIX I-1:

CHRONOLOGY OF ELECTRIC GUITARS AND AMPLIFIERS

GUITARS AND BASSES:

1922: Gibson L-5
1931: Rickenbacker A-22, “Frying Pan” Guitar
1936: Paul Tutmarc bass
1936: Gibson ES-150 Guitar
1943: First Kauffman and Fender Electric Guitar
1945: K&F (Kauffman and Fender) Hawaiian Lap Steel Guitar
1946: First Fender Steel
1948: Bigsby Guitar
1949: Fender Broadcaster (name changed to Telecaster in 1951)
1951: Fender Precision Bass
1952: Gibson Les Paul
1954: Fender Stratocaster
1954: Gibson Electric Mandolin
1956: Fender Electric Mandolin
1957: Fender Precision Bass (Modern Model)
1957: Rickenbacker 4000 Bass
1958: Fender Jazzmaster Guitar, Fender Electric Violin
1958: Gibson Explorer Guitar, Flying V Guitar, and ES 335 Guitar
1960: Fender Jazz Bass
1961: Gibson SG Guitar
1962: Fender Jaguar Guitar
1963: Gibson Firebird Guitar and Thunderbird Bass
1976: MusicMan Stingray Bass

AMPLIFIERS:

1946: Fender Princeton, Deluxe, and Pro
1948: Fender Champ
1952: Fender Twin
1954: First Fender Bassman Four-Speaker Model
1960: Fender Showman
1959: Improved (and Now-Legendary) Fender Bassman
1962: Marshall JMT45
1969: Ampeg SVT
APPENDIX I-2:

CHRONOLOGY OF TAPE RECORDING AND DIGITAL KEYBOARDS

TAPE RECORDING:

1935: Magnetophon reel-to-reel tape recording machine introduced in Germany.
1947: Les Paul pioneers overdubbing with discs.
1948: Big Crosby begins tape delayed radio broadcasting.
1952: Les Paul pioneers 8-Track recording.
1954: Ampex 8-Track
1968: Ampex 16-Track

DIGITAL KEYBOARDS, SYNTHESIZERS, AND DRUM MACHINES:

1973: MiniMoog
1978: Roland Jupiter 4 Synthesizer
1978: Prophet 5 Synthesizer
1979: Oberheim OB-X Synthesizer
1980: Linn LM-1 Drum Machine
1980: Roland TR 808 Drum Machine
1981: Roland Jupiter 8 Synthesizer
1981: Oberheim DMX Drum Machine
1982: LinnDrum Drum Machine
1984: Casio Synthesizer