"Mansions of Mud": Los Angeles and the Adobe Revival

Elizabeth Sexton
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Abstract
This thesis examines the beginnings of the Adobe Revival (c. 1894-1948) in Los Angeles. It presents an analysis of the economic, cultural, political, and environmental factors that worked together to shift biases and generate renewed interest in adobe's practical applicability for modern housing in the early twentieth century. By 1920, several architects, builders, and developers – most of whom were transplants to the state – began to experiment with adobe construction as a residential design solution for the rapidly expanding city. Prompted by a shortage of wood and resulting price surge following World War I, these individuals embraced adobe, claiming it better-suited to the region – rooted by style, tradition, and as an appropriate technology – than wooden construction. As these newcomers adopted adobe, recognizing the beneficial properties of the region's early extant examples, they simultaneously altered the traditional construction with cement-based modifications that purportedly modernized the building technology. An examination of the Adobe Revival thus offers to not only explore past attempts to build ecologically appropriate construction, but further to deconstruct notions of colonization and cross-cultural hybridity that can shed much light on placemaking and identity in Los Angeles, thus challenging the status quo.

Keywords
earthen architecture, adobe construction, appropriate technology, John Byers, Victor Girard

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TABLE OF CONTENTS

ACKNOWLEDGEMENTS ........................................................................................................... ii
LIST OF FIGURES ................................................................................................................ iv

CHAPTER 1: INTRODUCTION .............................................................................................. 1
  The Future is Adobe Electrified ...................................................................................... 1
  Adobe Defined ................................................................................................................. 8
  A Brief History of Adobe in the United States .............................................................. 12
  Adobe and Scholarship ................................................................................................. 15

CHAPTER 2: ARCHITECTURAL COLONIALISM IN LOS ANGELES: FROM BRUSH TO ADOBE TO WOOD AND BRICK ........................................................... 17
  Adobe’s Beginnings in Los Angeles, 1769 to 1850 ...................................................... 17
  Adobe and the Early Americanization of Los Angeles, 1850 to 1900 ....................... 25
  The Stucco Sticks: Appropriating the Adobe, 1890s to early 1930s ......................... 30

CHAPTER 3: THE BEGINNING OF THE ADOBE REVIVAL IN LOS ANGELES ........................................................................................................... 36
  An Earthen Opportunity: Adobe and the Post World War I Building Economy ....... 37
  Towards an “Authentic” California Architecture: Adobe Revival and Style .......... 42
  An Adapted Vernacular: Adobe Revival and Tradition ............................................. 44
  Cool in the Summer, Warm in the Winter: Adobe Revival and Appropriate Technology ........................................................................................................ 51

CHAPTER 4: VICTOR GIRARD MODERNIZES THE ADOBE ........................................... 58

CHAPTER 5: “MUD! NOW THAT IS INTERESTING”: JOHN BYERS AND THE ADOBE HOUSE ..................................................................................................................... 79

CHAPTER 6: CONCLUSION .............................................................................................. 131

BIBLIOGRAPHY .............................................................................................................. 137
INDEX ................................................................................................................................ 149
LIST OF FIGURES

Figure 1. Postcard showing the Adobe Electrical Home, n.d. Published by Western Publishing & Novelty Co., Los Angeles, CA. Collection of the author.................2

Figure 2. Floorplan of the Adobe Electrical Home, detailing outlets for electrical appliances, c. 1921. Clipping from Earl E. Whitehorne, “The Adobe House Electrical,” The House Beautiful, January 1922, 62.........................................................3

Figure 3. Interior of Adobe Electrical Home, original caption reads: “Meals in the sun-parlor without fussing, because there’s an electric percolator, toaster, and waffle-iron on the table,” c. 1921-1922. Clipping from Earl E. Whitehorne, “The Adobe House Electrical,” The House Beautiful, January 1922, 60..................4

Figure 4. A Tongva house in black and white photograph of painting by Ferdinand Deppe depicting Mission San Gabriel as it looked in 1828, c. 1900-1910. California Historical Society, USC Digital Library. ..................................................18

Figure 5. Design for a Mission Revival style house in stucco and wood frame, John Knapp, c. 1899. Clipping from California Architect and Building News 20, no. 5 (May 1899): 53. ..................................................................................................................33

Figure 6. The California State Building at the 1915 Panama-California Exposition, Bertram Grosvenor Goodhue, 1915. Photograph by Harold A. Taylor, c. 1915. Andrew Dickson White Architectural Photograph Collection, Cornell University Library, Artstor. .................................................................35

Figure 7. Example of a house in the California bungalow style, early twentieth century. ARTstor Slide Gallery, University of California, San Diego, Artstor. ......53

Figure 8. Photograph of a “Modernized Adobe” from the Walnut Park Subdivision, c. 1920. Clipping from Marion Brownfield, “Modernizing the Adobe,” Sunset 45, no. 4 (October 1920): 68.................................................................60

Figure 9. Cartoon accommodating Girard’s article detailing the “Modernized Adobe” method, cartoon by “Hal,” c. 1921. Clipping from Victor Girard, “How to Build of Adobe: Girard Tells Method,” Los Angeles Examiner, January 9, 1921, IV4, microfiche, UCLA Library.................................................................65

Figure 10. Advertisement for “Modernized Adobe” Homes noting thermal properties, December 4, 1920. Clipping from Victor Girard, “You Will Find Real Pleasure in an Inspection of These ‘Modernized Adobe’ Homes in Walnut Park!” Newspaper advertisement, Los Angeles Times, December 4, 1920. ProQuest Historical Newspapers. .................................................................................69

Figure 11. John Winford Byers, c. 1917-1925. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.................................................................80
Figure 12. John Byers’ first house, Santa Monica, California, c. 1917. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara. .........................................................83

Figure 13. John Byers’ first house, Santa Monica, California, c. 1917. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara. .........................................................84

Figure 14. Adobe construction, Johnson house, Brentwood, California, c. 1919. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara. .........................................................88


Figure 16. Foundation and adobe wall construction, Johnson house, Brentwood, California, c. 1919. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.................................89

Figure 17. Raised floor and adobe wall construction, Johnson house, Brentwood, California, c. 1919. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.................................90

Figure 18. Adobe construction prior to plaster coating, Johnson house, Brentwood, California, c. 1919. Photograph taken at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.................................91

Figure 19. Main façade, Johnson house, Brentwood, California, c. 1919. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.................................91

Figure 20. Main façade, Johnson house, Brentwood, California, c. 1919. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.................................92

Figure 21. View of back of house from rear courtyard, Johnson house, Brentwood, California, c. 1919. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.................................93

Figure 22. Living room, Johnson house, Brentwood, California, c. 1919. Photograph by Chas Roberts. Photograph taken at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.................................94

Figure 23. Interior showing fireplace and what appears to be hand-painted walls, Johnson house, Brentwood, California, c. 1919. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.................................95
Figure 24. Stevenson house, Hollywood, California, c. 1922. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara. .................................................................97

Figure 25. Arthur Rosson house, Beverly Hills, California, c. 1923. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara. .................................................................97

Figure 26. MacBennell house, Santa Monica, California, c. 1922. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara. .................................................................98

Figure 27. E.W. Zimmers house, Santa Monica, California, c. 1923. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara. .................................................................99

Figure 28. West elevation, Jean Irvine house, Santa Monica, California, c. 1921. Photograph taken of plan at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara. ....105

Figure 29. Elevation, Jean Irvine house, Santa Monica, California, c. 1921. Photograph taken of plan at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara. ....106

Figure 30. Section, Jean Irvine house, Santa Monica, California, c. 1921. Photograph taken of plan at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara. ..........................107

Figure 31. First floor, Jean Irvine house, Santa Monica, California, c. 1921. Photograph taken of plan at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara. ....108


Figure 33. Detail of adobero, the mold in which adobe blocks are formed, with published handwritten notes, John Byers. Photograph taken at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara from copy of “Adobe Construction,” The American Architect (May 1925): 473.................................................................111

Figure 34. Typical detail of a two-story exterior wall, with published handwritten notes in pen, John Byers. Pencil notes in archive copy as shown. Photograph taken at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara from copy of “Adobe Construction,” The American Architect (May 1925): 472. .................................................................119
Figure 35. Typical detail of window frame, sill, lintel, and anchors, with published handwritten notes, John Byers. Photograph taken at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara from copy of “Adobe Construction,” The American Architect (May 1925): 473.................................120

Figure 36. Bradbury house, Santa Monica, California, c. 1930. Photograph by Miles Berné. Photograph taken at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara. ....122

Figure 37. Gallery of courtyard, Bradbury house, Santa Monica, California, c. 1930. Photograph by Miles Berné. Photograph taken at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara. ................................................................123

Figure 38. First and second floor plan, Bradbury house, Santa Monica, California. Clipping from John Winford Byers, “Adobe Houses,” The Architect and Engineer 167 (October 1946): 13................................................................................124

Figure 39. Bradbury house, Santa Monica, California, c. 1930. Photograph by Miles Berné. Photograph taken at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara. ....125

Figure 40. Variety of tile in courtyard, Bradbury house, Santa Monica, California, c. 1925. Photograph by Margaret Craig. Photograph taken at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara. ................................................................126

Figure 41. Entrance hall showing tiled stairs, Bradbury house, Santa Monica, California, c. 1930. Photograph by Margaret Craig. Photograph taken at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara. ................................................................127

Figure 42. Clipping from pamphlet for Bitudobe showing treated and untreated brick, American Bitumuls Company, n.d. Courtesy of Frank Matero..........133

Figure 43. Clipping from pamphlet for Bitudobe, American Bitumuls Company, n.d. Courtesy of Frank Matero.................................................................134
CHAPTER 1: INTRODUCTION

By the 1920s, amidst a population surge and real estate boom, a revival of adobe construction in Los Angeles was well underway. Adopted and adapted by a select group of Anglo-American newcomers, adobe was used in an attempt to create a house both appropriate for the California environment and evocative of a mythicized Spanish heritage. The Adobe Electrical Home, a model home built of adobe and exhibiting the new technology of electricity, provides a brief example to introduce the ways in which adobe had come to be implemented and accepted for residential construction in Los Angeles by 1921.

The Future is Adobe Electrified

The Adobe Electrical Home, “built and outfitted for the purpose of exhibiting a model of an ideal modern home,” opened to the public in the Windsor Heights subdivision in mid-city Los Angeles on January 20, 1921. Designed in the “Spanish style” with the “same material as was extensively used in the early Spanish period,” “the thick adobe walls…veined with electric wiring” showcased the possibilities of electricity in the home; 40 electrical outlets throughout and a variety of appliances, “an electrically-run dishwasher and dishdrier,” “an electric refrigerator,” an “electric piano,” exhibited a “model servantless house” for Los Angeles’ middle- and upper-class Anglo-American

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1 The title for this thesis, “Mansions of Mud,” takes its name from a promotional film that was made by Victor Girard at his tract in Walnut Park to explain and promote his “Modernized Adobe” homes. The film ran at the Alhambra Theater and allegedly solicited “wide interest.” At this time the film has not been located. See “‘Modernized Adobe’ Popular For Houses,” Los Angeles Herald, November 13, 1920, California Digital Newspaper Collection.

The house remained open to the public, day and night, for approximately three weeks and was toured by roughly 75,000 people, all mostly local with the farthest reportedly coming from 100 miles away.  

Figure 1. Postcard showing the Adobe Electrical Home, n.d. Published by Western Publishing & Novelty Co., Los Angeles, CA. Collection of the author.


In reporting on the public opening, *Los Angeles Times* claimed the house to exemplify the future of California’s single-family home stating:

The California home of the future, when the State’s vast hydro-electric sources shall have been developed and when every domestic need can be operated or supplied by electric power at low cost, has been materialized today in a model adobe house.\(^5\)

The architect and developer of the house, S.H. Woodruff, aimed for this experimental, ideal model to be “Californian” in every regard, its architecture, furniture (excluding the “oriental rugs”), and the majority of lighting and electrical devices made locally; in this sense, the project served to “show the people of Los Angeles what could be done here in the way of home-making by using materials made in Los Angeles and by conforming to the artistic traditions of architecture and furnishing which are distinctly adapted to the

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\(^5\) “Run by Electricity.” *Los Angeles Times.*
California climate.” Woodruff’s adoption of adobe construction, which had been experiencing a revival in Los Angeles, paired with a “Spanish style,” the leading style for residential construction at the time, appears an attempt to substantiate the house’s rightful place in Los Angeles. With the integration of a new technology, this architecture seemingly softened and naturalized an introduction of the electrical within the domain of the home; as Los Angeles Times reported:

The scheme has been carried out with such artistic finish that the house seems, at first, neither new nor modern though in reality it combines the homelike and beautiful features of a day that is past with dozens of conveniences and labor-saving devices, that, for general use, will characterize days that are still to come.⁷

Figure 3. Interior of Adobe Electrical Home, original caption reads: “Meals in the sun-parlor without fussing, because there’s an electric percolator, toaster, and waffle-iron on the table,” c. 1921-1922. Clipping from Earl E. Whitehorne, “The Adobe House Electrical,” The House Beautiful, January 1922, 60.

⁶ “Run by Electricity,” Los Angeles Times.
⁷ “Run by Electricity,” Los Angeles Times.
To achieve a romanticized Spanish vision that incorporated imagined notions of California’s past, Woodruff engaged a Spanish-born builder, Juan Hernandez, who had experience working with adobe in both Spain and Mexico, to direct the project. While news reports claimed the Spanish style appropriate for the California environs, Hernandez specifically touted adobe for its insulating abilities, claiming an adobe house’s interior temperature to be “‘cool under a tropic or semi-tropic sun and warm in chilling breeze or cold night.’”8 As he promoted adobe for the Los Angeles region, he criticized the general lack of regional appropriateness of modern building materials: “The peoples of earlier civilizations used better judgment in choosing their materials for building than modern civilized man.”9 Thermally insulating abilities acknowledged, the Adobe Electrical Home presented an exemplary house of the future as one that hybridized modern conveniences and passive, ancient building technology. While this vision soon vanished to be replaced by cheap electricity and mass-produced housing, the project reveals the extent to which a progress-driven, Anglo-American populace considered and acknowledged adobe as a viable, appropriate, and desirable construction mode during a moment of extensive growth for the city.

This thesis examines the beginnings of the Adobe Revival (c. 1894-1948) in Los Angeles and the cultural, political, environmental, and economic factors that worked together to shift biases and generate renewed interest in adobe’s practical applicability for modern affordable housing.10 Despite a contentious and complex early history, by the

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10 The date range provided was assigned by SurveyLA, which defined the Adobe Revival as “a construction type” typically carried out in the Spanish Colonial Revival style or the Monterey Revival style. For a description of Adobe Revival see “Context: Architecture and Engineering,
early 1920s, characterizations of adobe had been reworked by a sector of Anglo-Americans – architects, builders, developers, historians, boosters; what this group had previously typified as “old mud hovel” construction soon became perceived as an appropriate form of building for the region, celebrated for its economic, traditional, technological, aesthetic, and environmentally appropriate qualities.  

Approximately 30 years of equating Los Angeles, and Southern California at large, to a romanticized Spanish identity for Anglo-American residents had been brewing, forging an identity for those settling and claiming the land. The region’s extant adobe forms provided early examples for reference in the fabrication of this purportedly local style, which developed as the Spanish Colonial Revival style. Following World War I, Los Angeles experienced massive economic growth and population increase. Within the fairly young and rapidly growing city, a predominately transplanted, Anglo-American population used its architecture, the single-family house, to explore the unfamiliar environment alongside a negotiating of claim to a regional identity of a fantasized Spanish or Mediterranean origin.

By the early 1920s, Anglo-American home builders and owners increasingly accepted adobe as a viable building material to execute the Spanish Colonial Revival style, encouraged by a shortage and price surge in wood alongside perceived


improvements to the technology with modernizing, cement-based alterations. This process of cross-cultural – Spanish, Mexican, Native American – appropriation of Los Angeles’ local adobe traditions and the subsequent modernizations appear to have allowed an acknowledgement and embrace of adobe’s environmental suitability and beneficial material properties for the modern, transplanted Anglo-American family.

The advocating for ecological qualities is particularly curious for this period, a time of massive growth and prosperity for the region with correlating deleterious environmental impacts. While oil extraction, real estate subdivision of agricultural land, and an increasing tourist economy tolled the local environment, Angelenos’ embrace of the car as the dominant mode of transportation in the 1920s was arguably the most detrimental, with resounding ecological impact for the decades ahead. Thus in this period, the Adobe Revival takes greater significance as it simultaneously championed the growth of the metropolis, while embracing a more ecologically suitable means to building in the Los Angeles environment than the more familiar, imported wood frame; adobe was recognized as naturally derived, thermally insulating, fire resistant, wind resistant, affordable (for the period), and altogether perceived more permanent than wood.

Despite adobe’s benefits being long acknowledged by traditional builders and the more native residents, the Californios, of the region, the embrace of its ecological properties and the sustaining of the tradition were ultimately decided by Anglo-American newcomers, who appropriated, adopted, and altered the building technology, along with

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many other aspects of the previous cultures. In this sense, the Adobe Revival offers an opportunity to explore deeper discussions concerning racial relations, identity formation, and placemaking in Los Angeles during this time. Lastly, concerning the history of building technology the Adobe Revival is significant in its revealing of a detour from a traditional, linear notion of capitalistic “progress” following industrialization, as a halting is evidenced by the revival, materials questioned and an interest in permanence and integration with local resources and features expressed.

Adobe Defined

Raw or unfired earth, dried by solar heat, constitutes one of the earliest building materials recorded. In their comprehensive survey of earthen architecture, Houben and Guillaud wrote in 1994 that while various methods of constructing in earth have evolved worldwide, seven have been identified as nearly universal: adobe, rammed earth, straw-clay, wattle and daub, direct shaping, compressed earth blocks, and cob. They defined adobe as follows:

Sun-baked earth brick is more commonly known as adobe or adobe brick, and is made using a thick malleable mud to which straw is often added. Traditionally adobes were shaped by hand, in wood or metal moulds, but nowadays the use of machines is widespread.

Adobe is a form of load-bearing masonry that consists of units of sun-dried brick mortared together to create a wall system, much like kiln-fired brick construction. The word adobe is believed to derive from the Arabic “atob” meaning “sticky paste or

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muck.”¹⁵ In the United States, it has held several meanings which include: a building of adobe brick construction, the adobe brick itself, a type of clay soil, or an earthen plaster.¹⁶

A traditional adobe brick’s soil composition consisted of sand, silt, and clay, and small inclusions of gravel. Water was added to give the soil a plastic form that allowed the composition to “be cast into the desired form, used as mortar between stone or adobe brick, or used as a plaster.”¹⁷ The addition of straw was commonly added to prevent cracking. In their 1978 report on adobe’s material properties, Brown and Clifton noted: “Certain types of soils produce more durable adobe building materials than do others. In many cases, the performance of an adobe soil is largely dependent on its particle size distribution.”¹⁸ As clay, the main binder, expands or contracts in the presence or absence of moisture, its proper portions are essential for the dimensional stability of the adobe brick.¹⁹ Moisture is perhaps the greatest threat to an adobe wall; as Brown and Clifton explain:

The deterioration of structures built of adobe and similar materials has been largely attributed to shrinkage cracks, erosion, spalling at the base, and loss of mechanical properties. In most cases, these deterioration processes are directly or indirectly related to the presence of excess moisture.²⁰

Design serves an integral role in mitigating moisture sources away from the walls, especially in areas where rain or snow are prevalent; the protection of walls from

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¹⁶ McHenry, Adobe and Rammed Earth, viii. Here the meaning “mud-brick” will be used for the term adobe, though the other meanings may be inferred when used in quotation.
¹⁹ Brown and Clifton, “Adobe I,” 139-140.
moisture is evidenced by well-designed foundations, plaster coatings, and roof details.\textsuperscript{21}

The strength and stability of adobe brick vary, depending on the composition, as well as the method of fabrication. Tensile and flexural strength are typically low for adobe, which has contributed to concerns for building in seismic zones. Today, evolving practices in design – brickmaking, admixtures, and retrofitting – have worked to assist or rectify these weaker properties.\textsuperscript{22}

Adobe has long been implemented and retained in cultures throughout the world, in part due to its ability to successfully provide shelter to occupants of its environ. While adobe is perhaps best known for its thermal capabilities – keeping spaces cool in the heat and warm in the cold – and well suited for hot, arid climates, it offers numerous other benefits. As with other forms of earthen architecture, adobe provides an ecologically conscious construction that is thermally insulating, fire-resistant, recyclable, economical (depending on location, labor, and code requirements), abundant, cleanly extracted, and energy saving in several regards.\textsuperscript{23}

Renewed interest in earthen architecture in Europe and the United States in the twentieth century has in part grown from what E.F. Schumacher defined as the theory of


“appropriate technology.”\textsuperscript{24} Schumacher’s conception aimed to develop a framework for an “intermediate” technology, between indigenous practices and modern industry, that was rural-based, labor intensive, straightforward, and local.\textsuperscript{25} Today appropriate technology has expanded to encompass an environmental aspect, offering climate-conscious solutions to problems introduced by modernity and industrialization. In their 1981 catalogue on appropriate building materials, Stulz and Mukerji engaged the concept of appropriate technology in order to present options for housing in developing countries. They presented the following list of questions to determine the “appropriateness” of a material for its usage in a proposed locale:

- Is the material produced locally, or is it partially or entirely imported?
- Is it cheap, abundantly available, and/or easily renewable?
- Has it been produced in a factory far away (transportation costs!); does it require special machines and equipment, or can it be produced at lower cost on the building site? (Good quality and durability are often more important than low procurement costs).
- Does its production and use require a high energy input, and cause wastage and pollution? Is there an acceptable alternative material which eliminates these problems?
- Is the material and construction technique climatically acceptable?
- Does the material and construction technique provide sufficient safety against common natural hazards (eg fire, biological agents, heavy rain, hurricanes, earthquakes)?
- Can the material and technology be used and understood by the local workers, or are special skills and experience required?
- Are repairs and replacements possible with local means?
- Is the material socially acceptable? Is it considered low standard, or does it offend religious belief? Does it match with the materials and constructions of nearby buildings?\textsuperscript{26}

\textsuperscript{24} Dethier, \textit{Down to Earth}, 13.
Stulz and Mukerji’s list presents questions that clarify the concept of appropriate technology and elucidate adobe and earthen architecture’s place within that framework.27

A Brief History of Adobe in the United States

Native Americans within the southwestern United States long held a tradition of adobe building prior to Spanish occupation, constructing with hand-molded adobe and clay lump or puddled earth. In the Rio Grande Valley, for example, walls constructed of hand-molded turtle-backs have been discovered.28 Mesoamerica too had a rich history of adobe construction prior to Spanish arrival; as Houben and Guillaud note, “The use of sun-baked brick appeared between 500-600 AD, depending on the degree of complexity and hierarchy of the society.”29 Thus by the time the Spanish introduced mold-formed adobe bricks to the southwestern United States, in approximately 1590, the adobe tradition was already locally familiar even if wood formwork was novel.30 The Spanish use of adobe too had grown from a deep tradition that had developed in the Middle East, spread throughout Europe by way of Rome, and was later brought to Spain during the Muslim-Arab conquest.31

27 Several examples in the book furthermore detail earthen architecture examples. An adobe brick house, with seismic resistant improvements, for instance offers one catalogue entry. See Stulz & Mukerji, Appropriate Building Materials, 301.
29 Houben and Guillaud, Earth Construction, 14.
30 As Mileto and Vegas point out, general consensus is that the Spanish introduced the wood mold to the United States. See section 2.2.2 of Mileto and Vegas, “Earthen Heritage in the USA.” It should also be noted that adobe was only one form of earthen architecture practice. As McHenry notes the Southwest had “a long history of earth construction.” See McHenry, Adobe and Rammed Earth, 6.
31 McHenry, Adobe and Rammed Earth, 6.
As the Spanish implemented mold-formed adobe in their colonies, regional practices and materials resulted in a cross-cultural process; while Spanish methods were imposed, they were influenced by local adobe building traditions.32 In Los Angeles, by the time of Anglo-Americans arrival in the mid-nineteenth century, adobe could be interpreted as a cross-cultural tradition relating to Spanish, Mexican, and Native American influence and heritage. As the United States rapidly expanded west, settlers adopted and applied adobe construction throughout the western territories in a variety of climates. The extension of the railroads through the Southwest in the 1880s, however, hindered adobe’s usage, due to the transporting of familiar, modern building materials, “milled lumber, window glass, burned brick, and corrugated iron,” from factories in the East and Midwest. Sometimes these materials imitated the very adobe construction they supplanted, as became the case with much of the Spanish Colonial Revival architecture.33 Denigratory cultural associations equally prevented adobe’s adoption by Anglo-Americans as preferred, familiar materials became accessible. In a colonizing manner, westward settling Anglo-Americans diminished indigenous and Hispanic practices; these culture’s evolved regional architectures could be seen erased or covered as Anglo-American’s sought to assert ownership through an imported, identifiably “American” built environment of wood and brick.

32 Mileto and Vegas, “Earthen Heritage in the USA.”
Revivals of adobe construction in the Southwest followed World War I, the Great Depression, and World War II, prompted mostly by its economy and accessibility.\(^{34}\) However interest in adobe post-World War II soon waned with the advent of new material availability, as more culturally preferred, socially accepted mass-produced options proliferated, and by the continued strengthening and standardizing of building codes. Adobe’s application thereafter generally fell into two divergent socioeconomic groups; as earthen builder and author Paul Graham McHenry explained:

> Most construction in this medium was limited to either residential construction of large luxury homes where the owner could afford to indulge the nostalgia of Spanish Colonial styles, or to the very poor who had no other choice and were limited to what they could produce with their own hands. Thus a split image was created, that adobe was for either the very rich or for the very poor, with little acceptance in between.\(^{35}\)

The general populace’s abandonment of adobe, and earthen architecture at large, has been attributed to a “desire for modernity.”\(^{36}\) However, as the climate crisis brings increasing realities of the effects of a consumption-based society, questioning of industrial progress and “modernity” has gained earthen building, including adobe construction, renewed attention and consideration. As fires, droughts, and heat waves increase in occurrence and severity in Southern California, seismically reinforced or retrofitted earthen architecture appears to offer a potential appropriate housing option for the future of the area. However, within Los Angeles it must be asked now who earthen architecture can feasibly shelter as codes remain strict and upgrades costly. The climate disparities reinforced through current policies act to further polarize adobe, removing it another

\(^{34}\) Rammed earth too experienced a revival during this time.


\(^{36}\) Houben and Guillaud, *Earth Construction*, 11.
degree from the Los Angeles community it could serve while perpetuating a colonizing act of the tradition.

Adobe and Scholarship

When earthen architecture in the United States has been addressed by scholars, it has typically been as a region-specific response. Currently a cohesive study of earthen architecture’s construction history within the United States is missing, as is a specific study of adobe in the Southwest region. While many in-depth, localized studies concerning construction practices and conservation efforts exist, historical and cultural accounts detailing the use of earthen architecture in the United States are harder to come by outside of New Mexico, where the tradition has been physically retained to an extent.

The need for an account of past endeavors in earthen building within the United States is necessary in order to counter a historical record that touts a mostly unbridled march towards “progress.” Studies in earthen architecture offer to not only explore past attempts to build ecologically appropriate construction, but further deconstruct notions of colonization and cross-cultural hybridity that can shed much light on placemaking and identity, thus challenging the status quo. Historical analysis further allows an acknowledgement and untangling of earthen architecture from demeaning associations and aids to rectify and neutralize its place as a viable building material. Furthermore, in the recording of past endeavors, a rich history can begin to emerge that can better inform earthen building decisions of the present and hopefully a more ecologically-minded future.
The present research attempts to contribute to the existing body of scholarship concerning earthen building in the United States, adding further variety and knowledge to a collection of existing region-specific historical accounts. It builds upon the work set out by Dominic Calarco, who first tackled the massive undertaking of collating the Adobe Revival in Southern California in his 2008 master’s thesis, with a more pointed, city-specific account. The chapters to follow will examine the beginning of Los Angeles’s Adobe Revival, exploring the shifting relationship of the city with the building material from its outset. While secondary sources provided context for the period, primary sources such as newspaper and journal articles served to substantiate and illustrate the driving factors for the revival. The main body of this thesis consists of four chapters; Chapter 2 and 3 provide background and explanation for the Adobe Revival and Chapter 4 and 5 seek to provide clear illustration of how the revival was implemented as demonstrated by two of its leading figures – Victor Girard and John Byers. This thesis attempts only to introduce the Adobe Revival in Los Angeles and thus presents only a fraction of the material available to tell its story. It is hoped that future research continues to piece together this rich, multi-layered history, making space for a clearer understanding of adobe’s presence in and importance for Los Angeles’ past.

37 Dominic A. Calarco, “Modern Adobe: Preservation of Pre and Post World War II Residential Construction in Southern California” (M.A. in Historic Preservation, Baltimore, MD, Goucher College, 2008). I am grateful to Dominic Calarco for his in-depth study of the revival, which in its providing of a general understanding aided to hon my own research efforts for Los Angeles.
CHAPTER 2: ARCHITECTURAL COLONIALISM IN LOS ANGELES: FROM BRUSH TO ADOBE TO WOOD AND BRICK

The history of adobe usage in the region, the ebb and flow of embrace and rejection, can in part be traced alongside claims to ownership of the land, its people and heritage. As Los Angeles shifted from Tongva, to Spanish, to Mexican, to American ownership, the use and associations of adobe were in constant flux as newly imported residential construction practices and architectural styles confronted earlier forms. A brief developmental history of adobe in the Los Angeles area follows, as an attempt to elucidate the fabricated, shifting biases surrounding earthen architecture in the region, later challenged and complicated by a renewed interest in adobe by the 1920s.

Adobe’s Beginnings in Los Angeles, 1769 to 1850

Adobe construction was never indigenous to the Los Angeles area; rather, it was the first in a series of imported building methods that replaced earlier practices. Beginning at least 12,000 years prior to Spanish contact in 1542, a diverse Native American population called California home. Indigenous groups’ architecture varied throughout the state to meet a wide range of climatic conditions and available natural

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resources. At the time of Spanish contact, architecture between the Santa Barbara and San Diego coastal regions generally consisted of rounded plan, domed brush dwellings, “cooking windbreaks, large ceremonial arbors, and mud-plastered sweat baths.”

![Figure 4. A Tongva house in black and white photograph of painting by Ferdinand Deppe depicting Mission San Gabriel as it looked in 1828, c. 1900-1910. California Historical Society, USC Digital Library.](image)

The Tongva, also known as the Gabrielino, who historian William McCawley purported to be the first Angelenos, represent one group that was constructing dwelling structures in a domed shape, using frames of wooden posts covered with mats of woven brush or rush, and along the coast occasionally whale bone frames covered in sea lion hides. McCawley noted the regionally specific qualities of the Tongva house:

The Gabrielino house was durable, earthquake proof, and easily repaired. The steep pitch of the dome-shaped roof aided runoff and helped keep the interior dry.

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during heavy rains, while the walls of thatch and matting allowed air to circulate and remain fresh. A smoke hole with a removable cover at the apex of the dome also helped keep the interior fresh. A hearth located in the center of the floor provided heat and warmth, and tule mats covered the doorway, which was carefully placed to avoid cold drafts from the north wind.  

The Tongva’s structures represented an architectural form well-suited to the local environment, evolving from its available natural resources and responding to its climatic and topographic conditions. These were building traditions culturally developed and tailored to the region, rather than imported and enforced.

Spain’s occupation of California, or more specifically “Alta California,” began in 1769, the last of Spain’s remote provinces settled in an attempt to secure New Spain from neighboring threats and Catholicize its territories. In the Los Angeles area, the Spanish seized village sites as they established a mission – Mission San Gabriel, a pueblo – later to become downtown Los Angeles – and numerous, surrounding ranchos. By the mid-1800s, the Tongva population had been drastically reduced, the population decimated by Spanish-brought diseases, forced relocation, enslavement, and armed raids. As the Tongva were pushed out of their homeland, so too were the architectural vestiges of their

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7 John Bean Lowell and Charles R. Smith, “Gabrielino,” in Handbook of North American Indians, ed. Robert F. Heizer (Washington, D.C.: Smithsonian Institution, 1978), 8: 541. As Tongva numbers declined in the area, Native Americans of various groups were brought to the mission and to meet the labor demand of the area. The discussion here is brief due to limitations of the thesis, but it is important to note that the populations and cultures of other groups were also impacted by the mission system and settlement in Los Angeles.
presence. Spanish occupation introduced mold-formed adobe construction to the region and “debarred” traditional, indigenous building techniques; domed brush structures with rounded floorplan were eventually replaced by a European preference for “square structures with gabled roofs.”

The decision by the Spanish to build in adobe in Southern California, and elsewhere in the Southwest, has been attributed to be based on environmental familiarity and available natural resources. According to architectural historian Harold Kirker, the Spanish were accustomed to using adobe and rubblestone to construct farmhouses, as had been practiced in both Old and New Spain. Furthermore, the “moderate climate” of Southern California and its environmental systems were found to be similar to that of Spain, Southern California being an environment of complexity and catastrophe with floods, mudslides, fires, droughts, and earthquakes giving form to the landscape. As Mike Davis explained:

The Franciscans and their Spanish military escorts, of course, were intimately familiar with the dramatic landscape metabolism of the Mediterranean region and so were not shocked to discover similar “cataclysmic cycles” at work in Alta California.

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8 Hugo Reid, The Indians of Los Angeles County (Los Angeles: Priv. print, 1926), 67, HathiTrust.
12 Kirker, Architectural Frontier, 4. According to Mike Davis, comparable environments to Southern California include: “the classical Mediterranean, central Chile, and the coastal zones of South Africa’s Cape Province and West and South Australia.” Together these equate to “3 to 5% percent of earth’s land surface” and are “the rarest of major environmental systems”; see Mike Davis, Ecology of Fear: Los Angeles and the Imagination of Disaster, 1st ed (New York: Metropolitan Books, 1998), 12-13.
13 Davis, Ecology of Fear, 13.
Thus, the architectural building techniques used and developed for Spain’s environmental systems, and successfully implemented in its Latin American colonies, would have been deemed applicable and congruous to the relatable Southern California environment. Available materials, plentiful rich soil and a scarcity of timber, further prompted implementation of adobe construction, which limited wood’s use to “door and window frames and roof beams.”

The creation of a built environment of Spanish derivation, achieved with adobe construction, and the simultaneous rejection of indigenous building practices and culture can be read as an act of “architectural colonialism,” as the Spanish sought to establish ownership of the territory. The uniform modules of adobe further supported standardization efforts of colonizers’ imported organizational system, where in adherence to the Laws of the Indies prescribed lot sizes, building dimensions, and labor laws established a distinctly Spanish settlement. Through such processes, Spain, and later Mexico, which gained independence in 1821 and began secularizing the missions in the 1830s, transformed Los Angeles from what was once an indigenous landscape into one of adobe construction as seen in the pueblo and its surrounding ranchos; ranchos literally supplanted former indigenous village sites that had become abandoned with missionization.

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15 Kirker, Architectural Frontier, 4.
While the missions were influential stylistically, the *rancho* and *pueblo* structures of the Spanish-Mexican period later provided reference of a regional practice for the early twentieth-century Adobe Revival in Los Angeles.\(^1\) In her 1928 report, Marion Parks identified 65 extant adobe houses in Los Angeles County, delineating the following four types of structures:

1. the simple rectangular one-story form, with or without *corredores*, and occasionally with a lean-to kitchen,
2. the L-plan adobe, occasionally found without *corredores*, as in some of the *casas de pueblo* or town houses,
3. the U-plan such as Los Cerritos,
4. the rectangular two-story style, with two-story *corredores* on three or four sides.\(^1\)

The earliest adobe houses typically evidence a one-story building, one room, or a series of rooms, rectangular and built with materials local to the region.\(^2\) Walls were made of courses of adobe brick and floors of compacted earth.\(^3\) The soil used for adobe brick composition was that which was available and local, though black loam was purportedly preferred; inclusions of straw were typical, though “inferior strengtheners such as shells, sticks, birds’ nests, tule, and even refuse were frequently resorted to.”\(^4\) In their 1931 book, *Spanish Colonial or Adobe Architecture of California 1800-1850*, Hannaford and

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\(^1\) Both De Long and Kirker do not differentiate the architecture of the *pueblo* and the *rancho*, see De Long, “Introduction,” x and Kirker, *Architectural Frontier*, 10-13. In addition, according to Kirker *presidio* housing was indistinguishable from that of the *pueblo*, see Kirker, *Architectural Frontier*, 9.

\(^2\) Parks, “Vanished Days,” 17. Parks defines *corredores* as “the verandah typical of the Alta California adobe style,” see Parks, “Vanished Days,” 11.


Edwards provided the following description of adobe manufacturing of the period in California as they claimed sourced from “direct descendants of the old Spanish families”:

A large basin about twenty feet in diameter and two feet deep was dug in the ground near the building site; into this was put loam, sand, clay, and straw, tile chips or other binder; then the materials mixed with water to a thick soupy consistency; the mixture then taken out, put into molds, and dried in the sun. This seems to have been the best method, for it is now clear to see that the well made bricks have stood the ravages of time far better than those of loosely packed coarse aggregate.23

According to Hannaford and Edwards, earthen mortars, with inclusions of tile or broken pottery to increase strength, were used for joints roughly one inch thick.24 Parks’ findings demonstrated the use of one, two and three wythes of adobe brick courses in extant adobe houses. She claimed an average between 18 and 24 inches for wall thickness, noting “three-foot walls are found ordinarily only in the older houses.”25 Walls were comprised of mold-formed individual adobe bricks weighing between 20 and 40 pounds with dimensions roughly 16 inches wide by 20 inches long by three to six inches high.26 Adobe walls could be found both exposed and plastered with an earthen render, offering a protection to the adobe brick from water driven surface deterioration. The plaster was applied in a smooth, uniform manner to the interior and exterior and typically finished with a lime whitewash, which tended to be re-applied on an annual basis.27 For the Los

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23 Donald R. Hannaford and Revel Edwards. *Spanish Colonial or Adobe Architecture of California 1800-1850* (1931, repr., Stamford: Architectural Book Publishing Company, Inc., 1990), np. The notion of a largely Spanish influence on the construction practice carried through in several publications of the period, as seen here. While of Spanish derivation, by this time adobe practices were much more nuanced, in large part the practice formed as it was adopted and adapted by Mexican and Native American residents of California.
27 Hannaford and Edwards, *Spanish Colonial*, np; According to Hannaford and Edwards many of these structures were later re-plastered with lime plaster after original coatings had fallen off.
Angeles region, rude kilns in the San Fernando Valley provided a lime source for plaster finishes.\textsuperscript{28}\ Foundations of ranch houses in particular have been identified as being of either mud or stone packed into a trench, which acted to protect the walls from deterioration caused by capillary rise of ground water.\textsuperscript{29}

Wooden elements were used sparingly for door frames, window frames, and roof beams as wood was scarce. Animal hides were used in door and window openings in lieu of glass as glass was not readily available.\textsuperscript{30} Roofs of early adobe structures have been surmised to be flat and thatched or a build-up of tule, earth, and straw or asphalt.\textsuperscript{31} In Los Angeles and other regions, asphalt roofing later became dominant due to local tar pits.\textsuperscript{32} Sarah Bixby Smith recalled the roof construction of her childhood home, an adobe residence in Los Angeles, in her memoir, \textit{Adobe Days}:

Originally the roofs were flat and roofed in the usual Southern California fashion, first a layer of redwood planks, then a covering of sand or gravel over which was poured hot brea (asphaltum) from the open beds beyond Los Angeles. These were the same brea pits in which in recent years the remarkable discoveries of prehistoric animal bones have been made.\textsuperscript{33}

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\item According to Parks, “stucco and rough plasters were unknown” during this time, see Parks, “Vanished Days,” 15.
\item Parks, “Vanished Days,” 15.
\item Kirker, \textit{Architectural Frontier}, 11.
\item Kirker, \textit{Architectural Frontier}, 12. Bancroft claimed tile was an “orthodox” roofing material, but this may not be true. Hubert Howe Bancroft, \textit{The Works of Hubert Howe Bancroft: California Pastoral, 1769-1848, vol. XXXIV} (San Francisco: The History Company, Publishers, 1888), 361, Internet Archive. According to Hitchcock’s research, there appeared to only be four tiled homes in the pueblo of Los Angeles by 1828. Tiles tended only to be made at the missions or looted from them. Hitchcock stated, “None of the extant ranch houses in Los Angeles is known originally to have had a tile roof.” Hitchcock, “Adobe Ranch Houses,” 7-8.
\item In Los Angeles the La Brea Tar Pits served this purpose. Kirker also noted that shingle roofs were not common until introduced through Larkin at Monterey, see Kirker, \textit{Architectural Frontier}, 12.
\item Sarah Bixby Smith, \textit{Adobe Days: Being the Truthful Narrative of the Events in the Life of a California Girl on a Sheep Ranch and in El Pueblo de Nuestra Señora de Los Angeles while it...}
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A pan of coals set upon the floor provided heating for early adobe houses, the walls able to sufficiently retain heat. Fireplaces were not common inside these early residences and cooking typically took place outdoors.  

Early residences tended to be one story, extending in length rather than height, with larger structures continuing rooms in a single row with an exterior porch, on one or both of the longer sides, to connect interior spaces. While less common, more complex floor plans were L-shaped or U-shaped, linking spaces through a central patio or courtyard. The adobe architecture of the Spanish-Mexican period however did not last long as by the middle of the nineteenth century American settlers brought new traditions, ways of living, and building styles as they settled into the region and began to make claim to an identity in that place.

Adobe and the Early Americanization of Los Angeles, 1850 to 1900

Crumbling adobe walls, stark and abandoned, inch by inch giving way before the driving onslaught of winter rains – I used to see them near the highway, melancholy remnants of forgotten households. To me they became symbols of vanished California days, of the Age of Adobe, which like its mud walls, melted away, yielding inch by inch before the bewildering onslaught of the Yankee strangers. Under the red and yellow newness of New England architecture wrought in brick and wood, the adobes lay smothered, forgotten, decaying. Sometimes the fire hose was called into action to eliminate them from the path of progress. It

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was yet a Small and Humble Town; Together with an Account of how Three Young Men from Maine in Eighteen Hundred and Fifty-Three Drove Sheep and Cattle Across the Plains, Mountains and Deserts from Illinois to the Pacific Coast; and the Strange Prophecy of Admiral Thatcher about San Pedro Harbor, rev. ed. (Grand Rapids: The Torch Press, 1926), 93-94, HathiTrust.  
34 Kirker, Architectural Frontier, 12-13. By 1928, Marion Parks had found that one third of the 65 adobes surveyed did not have interior fireplaces, see Parks, “Vanished Days,” 13.  
seemed as though none could escape the combined ravages of enterprise and carelessness.\textsuperscript{36}

In 1928, Parks opened her report identifying the extant examples of adobe houses, with the above statement. She followed with an acknowledgement of the recent societal embrace of the Spanish past, “as romantic tales of the ‘Dons’ caught the modern fancy,” however claimed the extant adobe houses had been largely passed over:

Even the current enthusiasm for the Spanish in architecture has largely leapfrogged back to Spanish and Mexican-Colonial prototypes, ignoring much that is charming and usable in the simple, sturdy forms devised by the first Spanish builders of California.\textsuperscript{37}

Her opening demonstrated how by 1928, the adobe structures of the \textit{rancho} and \textit{pueblo} had been “smothered, forgotten, decaying” in the built environment and collective memory as Los Angeles was developed into an American city. This process of adobe’s erasure began with Americanization.

The United States initiated California’s annexation in the 1840s, the Mexican period coming to a close with the end of the Mexican American War in 1848.\textsuperscript{38} California subsequently gained statehood in 1850. At first, American settlers responded to California’s adobe construction and its present Mexican culture with disregard and degradation. By the early 1800s, denigratory characterizations regarding Mexicans and Mexican culture by Anglo-Americans began to surface. Historian William Deverell attributed this to colonizing intentions, claiming: “Once imperial designs upon Mexico had been put into motion…, it became an act of patriotism to refer to Mexicans in

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\ \textsuperscript{36}Parks, “Vanished Days,” 7.
\textsuperscript{37}Parks, “Vanished Days,” 7.
\textsuperscript{38}De Long, “Introduction,” xi.
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explicitly racist terms.”39 Just as others before, American settlers found the Los Angeles region to have great potential. However, as Deverell claimed, the Mexican presence and its past, made visible in the remaining adobe structures, was seen an obstruction to achieving an Anglo-American ideal.40 American news accounts of the 1870s and 1880s regularly described Mexican Los Angeles as “sleepy,” which Deverell has equated to meaning “pre-capitalist, pre-modern, lazy, primitive, [and] Catholic.”41

As Anglo-Americans relocated to the city, first as farmers and followed by health-seekers, they brought with them architectural ideals for creating a progressive, Anglo-American city, equating to East Coast styles of wood and fired brick construction. A 1908 article on adobe construction by Constance Austin in Overland Monthly and Out West Magazine, one of the earliest detailing American Southern California’s use of the material, relayed Anglo-Americans’ primary reactions to the adobe structures of the region as follows:

The first Americans to settle and develop California did not come here with a view of studying, much less adopting, Spanish customs. They saw the damaged walls and felt the dampness resulting from badly made foundations, and the native way of building seemed an altogether evil thing, to be replaced by frame construction, preferably in pepper-box French chateau style, at the earliest possible moment.42

As Americans migrated west, they set up American towns, importing American practices and exercising American cultural norms.

40 For a more thorough analysis of the history of Anglo-American and Mexican relations in Los Angeles see Deverell, Whitewashed Adobe.  
41 Deverell, Whitewashed Adobe, 36.  
These American transplants saw adobe as an unfamiliar and non-industrial practice, exercised by an unfamiliar cultural group. Deverell explicitly described “the ways newcomers to Los Angeles saw transitions between building materials as synonymous and simultaneous with transitions in racial realities” as he professed:

Brick meant progress. Using brick as a building material also meant pushing the past away while beckoning the future. Brick also meant Anglo America…Adobe, on the other hand, that ubiquitous building material of water, clay, and straw or weeds, stood for the past, a dark-skinned past at that, even a different epoch…Never mind that adobe made for the ideal construction material in the Southwest. Never mind that it kept buildings cool in the summer, never mind that it was relatively easy to work with and inexpensive. Never mind that adobe itself stood for home itself, as in “the Avila Adobe,” the “Andres Pico Adobe,” or the “Lugo Adobe.” Maybe that was the point after all, at least at some deep cultural level. Adobe meant home, but California was less and less a home to Mexicans as the nineteenth century drew to a close…Adobe meant backwardness to American arrivals; adobe was Catholic, adobe was the missions, adobe was the unusable past.43

Despite its appropriateness for the region’s climate and natural resources, adobe was rejected by Anglo-American transplants to the city, who brought and applied familiar Eastern styles in an attempt to establish an American claim, identity, and future in the place. Architectural and city historian Sam Kaplan explained the architecture of the Americanizing town stating:

The public buildings were of brick and Romanesque, forming solid reproductions of midwestern main streets, while the fashionable private houses were styled, not after the indigenous adobes, or the early missions, but instead mimicked the Italianate, Queen Anne, and Eastlake look then favored by the eastern-educated gentry.44

The population boom of the 1880s, engendered by expanding rail lines, resulted in rapid real estate development and as a result Eastern styles proliferated.

43 Deverell, Whitewashed Adobe, 121.
44 Sam Hall Kaplan, LA Lost & Found: An Architectural History of Los Angeles (Santa Monica, CA: Hennessey + Ingalls, 2000): 37.
Whereas adobe construction utilized the natural environment – using local materials, thermally responding to the climate, and offering fire protection – the imported Eastern methods generally failed. Their heavy reliance on imported wood and need for brick kilns necessitated transportation of materials to the site. Furthermore, just as wood was incongruous to a wildfire region, unreinforced brick walls were ill-suited to seismic conditions. Cataclysms aside, the architectural styles applied were designed to provide comfort in a very disparate climate:

…with high steep roofs to shed the snow that did not fall, with dark interiors that contrasted nightmarishly with the bright out-of-doors, and with deep cellars built for needless furnaces."45

This new environment varied drastically from the eastern United States, a more temperate zone which was comparable to northwestern Europe.46 Historian Mike Davis described the eastern United States’ environment in a discussion differentiating it from Southern California:

In these temperate and forested lands, energy flows through the environment in a seasonal pattern that varies little from year to year. Geology is generally quiescent, and its easy to perceive natural powers as orderly and incremental, rarely catastrophic. Frequent rainfall of low and moderate intensity is the principal geomorphic agency, and the landscape seems generally in equilibrium with the vector of the forces acting upon it.47

The architecture of the eastern United States was thus suited and had evolved to meet these particular environmental conditions. Like the Spanish coming to Southern California, the adjustment between Europe and the American colonies presented a

familiar environmental system in which to erect regionally appropriate and responsive architecture. As historian Carey McWilliams pointed out:

"European cultural practices imported to the Atlantic states could be adjusted to the new environment with comparative ease. A Dutch farmhouse was not only practical in Pennsylvania; it was fairly well adapted to the environment."48

As Anglo-Americans slowly progressed westward, they had aptly adapted their architecture to changing, though not drastically differing, topographies and climates. However, the move to Southern California, a rapid, distanced move to the region made increasingly accessible by rail travel, presented an altogether foreign environmental system for Midwestern and Eastern transplants. For Los Angeles, the drastically unfamiliar climate paired with quick development efforts precluded a slow adaptation for the architecture of American settlement.

**The Stucco Sticks: Appropriating the Adobe, 1890s to early 1930s**

With time, it soon became apparent that the imported styles were incongruous to the environment; as McWilliams stated, “The old practice had to be radically modified or altogether abandoned, for this environment differed in kind and was furthermore, highly paradoxical.”49 Beginning in the late 1880s, an Americanizing Southern California began to explore a new vocabulary for the built environment, grasping at remnants of an imagined Spanish past for inspiration. An analysis of Los Angeles’ architecture at the turn-of-the-century offers a microcosmic study of a selective shaping of a regional design that came to define and exemplify Southern California’s residential architecture at large.

48 McWilliams, *Southern California Country*, 351.
49 McWilliams, *Southern California Country*, 351.
and contributed to an adoption of adobe as an acceptable and popular building mode by the early 1920s. Looking to extant adobe structures of the mission, rancho, and pueblo, turn-of-the-century tastemakers – architects, historians, boosters – selected, mythicized, and embellished a Spanish heritage and lineage as they established a “Californian” architecture. By the 1920s, the Spanish Colonial Revival style was widely applied in the region, and a “‘rash of stucco’…swept over Southern California.”

In his seminal 1967 essay on the style, Gebhard explained the Spanish Colonial Revival to be two phased, its first phase, the Mission Revival style (c. 1890 to 1920), and its second phase, the Mediterranean style (c. 1910 to early 1930s). In breaking with imported Eastern styles, the Mission Revival style first attempted a distinct architectural vocabulary for California, evocative of a fabricated regional identity, a bucolic vision of early California that was decidedly Spanish and largely negated the violent ramifications of colonization on Mexicans and Native Americans and their cultures. Extant adobe structures in this Spanish fantasy were assigned new associations – picturesque and romantic, and offered a seemingly paradigmatic regional form.

Adobe construction however was largely allocated a role as a nostalgic, picturesque style, a symbol of the Spanish past to be emulated and borrowed, nullified of any practical, imitable qualities for new, “modern” construction. Adobe sustained associations of a non-progressive and inefficient means of building for the turn-of-the-

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50 McWilliams, *Southern California Country*, 358.
century American, who was living in a period of building innovation, with developments in “new industrial machinery, milled lumber, nails, and glass.”

A secular architecture adopted for non-secular structures, the Mission Revival style borrowed historical forms from the extant adobes, which were freely applied to a wide range of building typologies.

In residential design, John Knapp’s design for a Mission Revival style house, in stucco and wood frame, was illustrated in the May 1899 issue of California Architect and Building News, allegedly providing a model for “the typical mission bungalow.”

The Mission Revival style, as Gebhard posited, “illustrate[d] the near-hopeless entanglement of fact and image.” Materials used were those of industrial technology mimicking forms of an earthen quality, thus perpetuating a fabricated illusion as Gebhard explained:

To be successful, a building in the mission style should convey the feel of masonry architecture (of adobe or rough fieldstone held together by lime mortar). While a few adobe structures have been built in California in the twentieth century, most mission revival buildings were not adobe. Instead, the revival had recourse to modern technology: a wood stud frame, hollow terra-cotta tile, or concrete was covered over with stucco, symbolically suggesting a relationship to the historical forms.

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55 Kirker, Architectural Frontier, 125. Kirker further surmised Knapp’s design to “may well be the genesis of the stucco bungalow that was so much a part of American architecture in the first quarter of the twentieth century.”
56 Gebhard, “Wood Studs,” 142.
57 Gebhard, “Wood Studs,” 142.
Figure 5. Design for a Mission Revival style house in stucco and wood frame, John Knapp, c. 1899. Clipping from *California Architect and Building News* 20, no. 5 (May 1899): 53.

The adoption of an ecclesiastical, mission vocabulary for residential design was questioned in its time by Charles Lummis and Charles Keeler.⁵⁸ In his 1904 book, *The Simple Home*, Keeler explored the development of vernacular domestic design in California “toward a simpler, a truer, a more vital art expression,” denouncing the mission style house which he claimed “an unmitigated sham…unworthy as the home of any honest man.”⁵⁹ By the 1910s the Mission Revival style began to wane, in part attributed to architects and critics demanding historical grounding in architectural design,

propelled by an “archaeological approach” that had reemerged in the 1890s and an increase in travel by architects and their clients.60

Although lacking clear delineation, the Mission Revival style eventually gave way to the Mediterranean Revival style as historical influences surpassed mission sources, widening to the architecture of Mexico and Spain, as well as other parts of the Mediterranean, such as Italy and North Africa. The 1915 Panama California International Exposition in San Diego, whose designers had been led by architect Bertram Goodhue, helped to promote and popularize the style, a prominent example of which was the California Building.61 The elaborate Churrigueresque mode implemented at the California Building demonstrated one of many variations of the Mediterranean Revival style. In discussing the emergence of the Spanish Colonial Revival style, architectural critic Reyner Banham aptly described the style’s breadth as he stated:

Spanish Colonial Revival is as protean in its variability as it is pervasive in its distribution; its presence is ultimately as easy to sense as its characteristics are initially difficult to define.”62

Following the 1915 fair, the style permeated the local architecture scene in a number of expressions, and by the end of the 1920s “all Southern California ‘went Spanish.’”63 As architectural and city historian, Sam Kaplan summed up, “By 1920 the design motif was being referred to not as Spanish Revival, Spanish Baroque, or Moorish, but simply the California style.”64

63 McWilliams, Southern California, 358; Gebhard, “Spanish Colonial Revival,” 131.
64 Kaplan, L.A. Lost & Found, 57.
Figure 6. The California State Building at the 1915 Panama-California Exposition, Bertram Grosvenor Goodhue, 1915. Photograph by Harold A. Taylor, c. 1915. Andrew Dickson White Architectural Photograph Collection, Cornell University Library, Artstor.
CHAPTER 3: THE BEGINNING OF THE ADOBE REVIVAL IN LOS ANGELES

Despite the transformation of the built environment into one of stuccoed imitation-adobe residences by the 1920s, real adobe construction persevered. Older structures were adapted, and new construction continued, however at an ever-decreasing rate.¹ Austin noted how the tradition of adobe was recognized in the Santa Barbara area: “A few, however, who had the leisure and sympathy to investigate these old dwellings became aware that much was to be said for the Spanish style of building and living.”² These individuals allegedly noted the benefits of early adobe structures which had incorporated waterproofing features, stone foundations to heed rising damp and wide eaves to protect the walls. By the time of her 1908 article, Austin claimed:

Our tourist will scarcely guess, and few will be able to tell him, that “adobe” buildings are still being put up actually by Americans. If he enquire carefully, however, he will discover some experiments in this direction which are sufficiently interesting to be worthy of notice.³

Her article, the first of two on recent adobe construction, aimed to demonstrate the benefits of adobe as a viable building material for present day – offering an available, regionally sourced material with insulating and wind-resistant abilities, permanence, and a picturesque construction, though modern in plan. Her article had followed an earlier piece, published in 1897, in Overland Monthly and Out West Magazine that had reported from Monterey on the benefits and method of adobe construction, though intended more

¹ Calarco, “Modern Adobe,” 28-30. Further research is needed in this direction in order to more wholly encapsulate the Adobe Revival in Los Angeles. It would be interesting to see how the tradition of adobe building was specifically retained, by who and for whom. Parks and Hitchcock’s research offers an excellent starting point for this; see Parks, “Vanished Days” and Hitchcock, “Adobe Ranch Houses.”
² Austin, “Modern Adobes – I,” 326.
³ Austin, “Modern Adobes – I,” 325.
so for “practical uses,” such as for a storehouse, and lacked mention of a picturesque quality.  

Accounts such as these existed at the turn-of-the-century, though piecemeal and limited in number. By the early 1920s, a surge of publications emerged announcing local adobe undertakings and promoting the building technology to homeowners of what appeared to be a wide range of socio-economic class. The attention adobe gained during this time appears to be in part stimulated by its affordability during and after World War I, as lumber costs soared and supplies were limited. Concurrently considerations of style, tradition, and appropriate technology sanctioned and engendered usage, however altered and adapted for an Anglo-American usage.

An Earthen Opportunity: Adobe and the Post World War I Building Economy

In July 1917, the San Pedro News Pilot reported, “Modernized Adobe Houses are Proposed: Walls of Adobe Can be Built Cheaper and Better Than Wood.” The article reported on the economic situation and resulting consideration for adobe:

The increase in the price of building materials, which [will] probably continue for several years, may result on a new style of adobe construction modernized after the plan of the old adobe houses in California many of which are still standing and in use after nearly half a century.

4 Alfred V. La Motte, “Adobe Houses for Practical Uses,” Overland Monthly and Out West Magazine 30, no. 177 (September 1897): 239.
5 See also Charles Lummis, “Something About the Adobe,” The Land of Sunshine 2, no. 3 (February 1895): 48-50, HathiTrust; and Charles Lummis, “The Lesson of the Adobe,” The Land of Sunshine 2, No. 4 (March 1895): 65-67, HathiTrust; and Sumner P. Hunt, “The Adobe in Architecture,” The Land of Sunshine 1, no. 2 (July 1894): 25, HathiTrust. The extent to which homebuilders engaged adobe practices during this time is currently unknown and remains to be studied.
As it continued, Los Angeles’ present housing demand was acknowledged, as was the opportunity for adobe to supply a solution:

The wave of prosperity that hit the harbor section has created such a demand for new dwellings and store rooms that many plans have been proposed to induce owners of vacant property held for years by speculators without returns, to improve their property and add to the increase…The latest plan that is being investigated is that of Spanish courts of adobe with modern improvements. It is said that modern bungalow courts can now be built with adobe walls, on account of the increasing cost of building material, for less than the same class of houses can be built of wood. These houses are much cooler than wooden cottages and with modern floors, plastering and conveniences it is believed they will be popular. Experienced Mexican labor skilled in making adobe bricks is scarce, however, and may prevent general adoption of the plan.7

Between 1900 and 1910, Los Angeles grew from roughly 102,000 to 319,000 in the city and from 170,000 to 504,000 in the county; between 1910 and 1920, from 319,000 to 577,000 in the city and from 504,000 to 936,000 in the county; and between 1920 and 1930, from 577,000 to 1,238,000 in the city and from 936,000 to 2,208,000 in the county.8 In addition to oil and agricultural opportunities, such extraordinary growth has been attributed to the movie industry, which began burgeoning in the city by the mid-1910s.9 Rampant advertising further encouraged people west as California boosters “depicted a warm, dry climate, a varied, even exotic landscape, and a familiar suburban environment.”10 California was promoted as a new way of living; as historian Robert

7 “Modernized Adobe,” San Pedro News Pilot. Further research is needed to address how labor contributed to an adobe revival and the cultural abuse that was incurred in this regard. An adobe revival appears to have been an Anglo-American revival of a Hispanic-Native American practice, both culturally exploitive and appropriating, yet in a sense retentive of tradition. If labor was largely carried out by Mexican workers, as suggested, this is a deeper layer that adds to the complexity of the revival and socio-cultural history of Los Angeles.
10 Fogelson, Fragmented Metropolis, 72.
Fogelson explained: “Instead of promoting prospective immigrants material prosperity, southern California’s promoters offered them an easier, more varied, less complicated, and well-rounded life.”\textsuperscript{11} The rush of people to the city was encouraged and met by expanding resources of transportation, water, and real estate. Agricultural lands were subdivided, and single-family houses erected to accommodate the influx of transplants drawn to the area, most of whom were white.\textsuperscript{12} By 1920, the majority, roughly ninety-five percent, of Los Angeles’ population was Anglo-American. Furthermore, the population was largely transplanted; census data from 1920 shows roughly seventy-four percent of residents were born outside of Los Angeles, coming except for one percent from throughout the United States – mainly the East North-central region followed by the West North-central region.\textsuperscript{13}

Following World War I, a demand for houses increased as newcomers inundated the city. The city’s building permits recorded extensive construction for the period; their annual sum practically doubled each subsequent year, with a recorded $28,000,000 in 1919, $60,000,000 in 1920, $121,000,000 in 1922, and $200,000,000 in 1923.\textsuperscript{14} California historian, W.W. Robinson recalled the real estate boom being a predominately residential affair, as he stated:

\begin{quote}
Between 1920 and 1924 at least one hundred thousand people a year poured into Los Angeles alone… The newcomers were home-seekers, hence the abnormal demand for real estate… In two years fourteen hundred new tracts were opened in
\end{quote}

\begin{footnotes}
\item[14] W.W. Robinson, “The Southern California Real Estate Boom of the Twenties,” \textit{The Quarterly: Historical Society of Southern California} 24, no. 1 (March 1942): 25, JSTOR. According to Robinson, the record for 1923 was “exceeded only by the permits of New York and Chicago.”
\end{footnotes}
Los Angeles County and the real-estate-broker and civil-engineer elements numbered themselves in the thousands.\(^\text{15}\)

In 1920, single-family houses greatly exceeded all other types of residential construction in Los Angeles; new construction permits from the year recorded 8,850 single family houses were built for 8,850 families, 550 two-family houses for 1,100 families, and 205 multi-family apartment buildings for 1,036 families. The predominant material used for new construction, commercial and residential, in Los Angeles at this time was wood; statistics from the year concerning new construction accounted for 18,066 buildings to be wood, 508 to be brick or hollow tile, 108 to be concrete, three to be steel skeleton, and 385 to be miscellaneous.\(^\text{16}\)

The unprecedented demand for building following the war seemingly contributed to a rise in cost and a shortage of lumber; in October 1920, *Los Angeles Times* reported:

> The significant fact that while in 1912 the output of all kinds of lumber to supply the American market was approximately 45,000,000,000 feet, in 1919 it fell to around 33,000,000,000 feet, is pointed out as the primary reason for the upward trend of prices following the signing of the armistice and the demand which came with the resumption of building all over the world.\(^\text{17}\)

Thus, restrictive economic factors for the predominant residential building material, wood, allowed for interest and consideration of alternative options that could meet the housing demand. Adobe, evidenced in the extant houses that remained throughout the Southern California landscape, gained renewed reassessment as a viable building material.

\(^\text{15}\) W.W. Robinson, “Real Estate Boom,” 25.


\(^\text{17}\) “Lumber Output Below Normal: Smaller Production Cause of Price Advance, Shortage of Four Billion Feet This Year, Market Here Has Declined in Recent Months,” *Los Angeles Times*, October 17, 1920, Newspapers.com.
material, affordable and available. An article in *The National Builder*, which detailed the recent erecting of a tract of adobe houses outside of downtown Los Angeles in Walnut Park by developer Victor Girard, discussed the present economy of adobe construction and an opportunity for its application:

> From a standpoint of economy such material as adobe is almost ideal, as where the conditions are favorable, the earth taken from the excavations may be utilized in building the walls. In times such as the present when prices have reached an alarming level that is holding down the building of homes that are sorely needed throughout the country, there is a magnificent interest in any material or method that will serve to cut down building costs.\(^\text{18}\)

An *American Builder* article drew attention to the method as a means to economic residential construction as well:

> Today, because of the prevailing high cost of building material and labor, many people in California have reverted to the methods used by the old fathers and ancient Indians, and are building homes of ‘adobe’ brick, as it is called.\(^\text{19}\)

In 1920, *Sunset* too had published an article on the modern adobe, in which it linked economic factors surrounding lumber to an interest in adobe, claiming such conditions had “given impetus to building science” leading to experiments in adobe construction.\(^\text{20}\)

While an economic shift had prodded reconsideration of adobe as a building material, evolving socio-cultural associations and considerations cohesively instituted a re-envisioning and regenerating of what had been at large a negated and stigmatized form of building; predominately notions of style, tradition, and regional appropriateness engendered an embrace by many of the material, when perceived fittingly adapted for an

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\(^\text{18}\) “Modernized Adobe,” *The National Builder* 63, no. 8 (August 1920): 60, ProQuest. See Chapter 4 for a full discussion of Walnut Park.


Anglo-American context. By the turn of the century, a move to establish a residential architecture congruous to the environment was taking root in Los Angeles. While first experimented with in the Mission Revival style and the wooden California bungalow style, by the 1920s the Spanish Colonial Revival style was widely adopted as the predominant style for residential architecture. Stucco clad exteriors and plastered interiors of the style permitted various forms of wall construction, which provided an opportunity to utilize adobe as a purportedly more authentic means to conveying the style. Furthermore, the appropriateness of adobe in place of wood for the climate and ecology was simultaneously gaining recognition as Easterners engaged the new climate.

Towards an “Authentic” California Architecture: Adobe Revival and Style

Adobe, when utilized to achieve the Spanish Colonial Revival style, in part came to be argued as an honest expression of and means to the style. As early as 1908, Austin’s articles in Overland Monthly and Out West encouraged adobe’s application for stylistic purposes, presenting: “An architecture that is purely Californian, the old adobe construction of the Mission Fathers, as adapted to modern use and needs.” Its application further aligned with the Arts and Crafts movement, engaging “a revived interest in those aesthetic qualities inherent in local building techniques.” A craftsman approach, such as seen in the adobe designs of architect John Byers in the early 1920s,

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stressed the material’s usage for these intentions; Byers relayed his affinity for the material as he stated:

The long low simple lines, the play of light and shadow on the walls, the soft colorful texture of the roofs, the sincerity of design and composition of primitive adobe structure are almost impossible to improve upon architecturally, or otherwise.”

In a 1929 article in the *Architect & Engineer* titled, “Ancient Adobe for Modern Homes,” journalist Marc N. Goodnow touted adobe construction as a means to a Spanish style and its perceived aesthetic qualities:

In the hands of a trained craftsman, this type of building material lends itself to picturesque effects of traditional and historic beauty. Because of the character of the bricks themselves, it is, of course, less prim and precise; but there is an easy plasticity about it that makes it particularly suitable to the Spanish type of architecture.

However, a purportedly honest engagement of the material to express style and a craftsman approach mostly concerned an elite, privileged clientele. Such authenticity also only went so far, its implementation rather selective by this class. While adobe bricks were traditionally utilized, other elements such as tamped earthen floors, small windows, and earthen plaster were replaced by modern comforts.

The style’s claim alone failed to justify a revival as application of adobe spanned several social classes. Social acceptance of adobe walls, especially when style was imitable with modern materials hidden behind a stucco coating, required further incentivizing, coaxing, and convincing for application for the average, modern Anglo-American house. After praising the early adobes for their forms and climatic suitability,

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24 Byers, “At Home,” 17. Byers use of material in this vein is further explored in Chapter 5.
art and architectural critic Everett Maxwell claimed in a 1911 article for *Fine Arts Journal*:

> Of course much of the present style is a replica of these homes… Tile roofs are much used in all parts of the state, and steel laths and plaster, or better still, solid concrete, serves admirably to reproduce the exact character of the adobe walls.\(^{26}\)

It would take serious edits to the traditional construction technique paired with economic incentive in order to transform adobe to a perceived acceptable American standard for building and living. Once these had been achieved, an imagined authenticity could be considered an additional feature, but not the predominant reason for building in adobe.

**An Adapted Vernacular: Adobe Revival and Tradition**

Ascribed as regionally derived and therefore appropriate, accounts of adobe’s revival claimed the material as a traditional mode of building. In 1924, Clara Fassett in an article for *Pacific Coast Architect* attributed an adobe revival in California, and the Southwest at large, to have been derived from a local architecture which was Spanish in origin, modified by Native American construction practices and available resources:

> In New Mexico and Arizona, southern California and southwestern Texas, is a revival of ‘adobe’ building, of Indian construction, based on a purely native architecture found upon the Spanish model built in a simpler way with materials at hand, after the manner of the Indian builders. A few of these old buildings have been reclaimed, of which the Spanish Missions and the ‘Adobe Flores’ of Southern California are famous examples, and serve as models and sources of inspiration for modern builders to study.\(^{27}\)

Restoration efforts, which began in the late 1880s, worked to establish the extant examples as an accepted regional practice. From the late 1880s and through the 1890s,

\(^{26}\) Everett C. Maxwell, “California Homes and Their Environments,” *Fine Arts Journal* 25, no. 4 (October 1911): 250, JSTOR.
campaigns to preserve the missions were underway. In 1895, Charles Lummis founded the Landmarks Club, which sought to bring awareness to the deterioration of the missions in an attempt to generate funds for preservation efforts. These restoration actions aided in perpetuating and solidifying a fabricated, romanticized Spanish past for the region’s transplanted Anglo-American population and, as historian Gail Ostergren argued, “helped foster the growth and development of Southern California’s cities through the process of creating and promoting a sense of place.” Through local restoration projects, adobe was transformed from being denigrated to celebrated, as Ostergren further explained:

As the Anglo population grew, they brought American building styles and materials with them. Adobe was largely abandoned and in its place the newcomers turned to wood, brick, and stone. The resulting cityscape was a stylistic hodgepodge that linked Los Angeles more closely to any number of emerging Western towns than to its Hispanic beginnings…The areas of town that were dominated by old adobe buildings were generally inhabited by the Mexican American and poor immigrant portions of the population who occupied the lowest rung on the socioeconomic ladder, although within several decades some of these deteriorating spaces – Los Angeles’ Ávila Adobe and Olvera Street… – would become the targets of image-defining preservation efforts and would be reconceived as tourist attractions.

Changing associations for adobe resulted in Anglo-American newcomers deeming it an integral tradition for Southern California’s mythicized Spanish past. As this group

29 Gail Ann Ostergren, “Angels and Saints: Making and Promoting Place in Los Angeles and Southern California, 1890-1932” (PhD diss., Los Angeles, University of California, Los Angeles, 2005), 1, ProQuest.
determined adobe’s place in the region’s history and identity, they imbued it with romantic connotations that disregarded a dark, colonizing heritage.

With newly ascribed picturesque associations, the presence of extant adobes was increasingly sanctioned for the developing Anglo-American, “Hispanicizing” city. However, utilization of adobe construction for modern houses seemingly demanded further edits or perceived improvements to deem them habitable for the Anglo-American owner’s predilections. As an adobe revival began, traditional adobe brickmaking practices and compositions appeared to be generally honored and further romanticized through use. As early as 1908, Austin’s article noted a romanticized, traditional process of adobe brickmaking; Austin opened her second of two articles on modern adobe houses professing:

If there were no other reason for building an ‘adobe,’ it would be a temptation to the artist on account of the quaint and picturesque scenes entailed by its construction. The tools and mechanical appliances of modern life all disappear in this prehistoric process. He would be a poor creature who had entirely missed the pure tradition of the grand style who would mix ‘adobe’ in a box with a hoe like common mortar.31

Adobe brickmaking practices appear to have remained relatively consistent through the 1920s, extracting soil from the basement or foundation area, adding a binder of straw or manure, wetting, mixing by foot and/or a hoe, placing into a wooden mold, removing the mold, allowing to harden, turning on side, further hardening, and ultimately stacking until used for construction. A typical, individual adobe brick size allegedly measured 4 by 12 by 18 inches, however adobe bricks were found in a variety of sizes.32

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32 J.D. Long, Adobe Construction (Berkeley: University of California Berkeley, College of Agriculture, Agricultural Experiment Station, 1929): 10-11, HathiTrust.
Aside from the actual adobe brick, modernized applications seemingly demanded an alteration of much of the remaining process in an attempt to better waterproof the structure and provide ventilation. Taking note of extant adobe construction, architects and builders of adobe attributed deterioration and failures to moisture issues, finding an opportunity for improvement and prevention with modern building materials and methods. As stated in a 1920 article for *The National Builder*:

> The method is essentially that which was used in the construction of many of the buildings erected by the early Spanish settlers, but it has been brought up to date by utilizing modern materials and types of construction. Many of the old adobe missions and so forth are yet standing, thus testifying to the durability of the material when climatic conditions are favorable. Their durability also has largely depended on the care that has been expended in their upkeep, such as the prompt repair of surfaces where the exterior plaster has broken off, exposing the adobe walls to the weather. 33

Waterproofing began with the foundation. Austin noted the foundation to be the “‘crux’ of an adobe house” as she pushed stone foundations, which she noted present in some of the earlier, better constructed adobe houses. 34 By the 1920s, concrete foundations as well as cement stucco were increasingly common for adobe houses. Girard’s tract in Walnut Park claimed to be the first instance of adobe construction with these purported improvements, which he labelled “modernized adobe.” 35 *The National Builder* reported on the technique, claiming the developer had “perfected” adobe construction, making it “highly durable and practically free from upkeep costs”; the article particularly praised the exterior plaster stating, “By utilizing cement stucco the exterior walls are rendered highly resistant to the action of time and the elements.” 36 It continued to allege that such

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33 “Modernized Adobe,” *The National Builder*, 60
changes earned the construction methodology “a wider geographic application than might be suggested at first thought.” The applicability of modified, “waterproofed” adobe reverberated beyond city suburbs to more rural settings surrounding Los Angeles. A Los Angeles Times article from 1925 reported that in Kern County, “farm houses and small homes” of adobe were being built due to the economy and durability of adobe. The article advocated here too for “a few modern improvements,” walls of “waterproof cement and sand plaster” and concrete foundations, with a layer of tar paper between the foundation and adobe brick. The waterproofing foundation served an added advantage: “It also protects the wall from the ravages of rodents and cockroaches which otherwise might burrow into it and make a home there.” Other aspects of the construction wavered between traditional and modern processes and materials. Mortars of mud, lime, and cement were interchangeably used, argued for various reasons, as were lintels composed of concrete or wood. Typically early on a wooden plate, apparently redwood, was used at the top of the walls for wall bracing and roof support.

While adaptation of the traditional construction methodology appeared lenient at the beginning of the revival, likely aiding adobe’s adoption and economy, the results of the Long Beach earthquake in 1933 led to a strengthening of building code requirements.

\[\text{footnotes}\]

37 “Modernized Adobe,” The National Builder, 60.
40 Taylor, “Adobe Construction.”
41 Taylor, “Adobe Construction.”
for unreinforced masonry in the Los Angeles area. The first Uniform Building Code (UBC), which had been authored and released in 1927, following the 1925 Santa Barbara earthquake, set a number of requirements for new construction of unreinforced masonry structures; however, Los Angeles, and other major cities had been slow to adopt the measures.\(^4^4\) The 1933 Long Beach earthquake, which had a similar magnitude to the Santa Barbara earthquake but affected a higher population and building density, resulted in 115 deaths and a nominal $60 million dollars in damage (adjusted for real dollars today for a rough equivalent of $1.2 billion dollars) in the Long Beach and South Los Angeles region. In the months after the earthquake, California responded by passing the Field Act, concerning school construction, and the Riley Act, for all buildings.

The Riley Act required all new construction to resist horizontal forces. These new regulations would greatly impact the use of traditional, unreinforced masonry, which particularly lacks resistance to seismic stresses. This included unreinforced earthen construction, where vulnerability to seismic forces derives from “a poor bond between its various elements and the weakness of the bearing walls.”\(^4^5\) Local governments including Los Angeles, Long Beach, Santa Monica, Beverly Hills, and Pasadena soon adopted ordinances to meet the new legislation. In a 2004 presentation on the Riley Act, Fred Turner, Structural Engineer for the California Seismic Safety Commission, explained the


\(^{45}\) Houben and Guillaud, *Earth Construction*, 307, 312.
significance of the Riley Act in determining the future of building material usage in the area:

The Long Beach Earthquake and the Riley Act prompted the building industry in California to eventually stop constructing unreinforced masonry buildings (URM’s) because they could not be designed to comply with the act…Building codes allow the continued use of existing buildings that don’t conform to requirements for new construction provided there are no major alterations and the actual uses by occupants are no more risky than the buildings’ original uses…With the decline of new unreinforced masonry, other building systems such as reinforced concrete, reinforced masonry, and structural steel gained market share in fire-resistive construction. Their increased use gradually improved the earthquake resistance of the overall building stock, but in some cases also introduced new earthquake vulnerabilities.46

As the Riley Act impeded unreinforced masonry construction, especially the more unfamiliar adobe, it ushered in the use of newer materials that while offering better earthquake protection failed to offer a regional appropriateness in many other ways. The increasing adoption of reinforced concrete by the construction industry in Los Angeles and elsewhere around this time, eventually led to a societal reliance on the building material that has resulted in massively harmful effects for the climate today.47

While the Riley Act did not end adobe’s usage, it impeded traditional adobe brickmaking practices as new regulations soon required modifications that drove costs up and encouraged the use of modern replacements.48 As Calarco noted in his 2008 thesis on modern adobe construction:

Total building costs were a major issue that contributed to the initial choice of whether or not to build with adobe, and in some cases limited new construction to only those that possessed the means to afford it.\footnote{Calarco, “Modern Adobe,” 73. For a fuller discussion of these changes for Southern California see Calarco, “Modern Adobe.” Calarco addresses adobe brick stabilization and waterproofing efforts, i.e. those of the American Bitumuls Company, that began to be implemented after the Long Beach earthquake, as well as the Federal Housing Authority’s loan requirements for adobe construction beginning in 1936.}

With restrictive use and resulting escalated costs, adobe associations would soon transform once again in the region, the material becoming solely attainable by a wealthy, middle- and upper-class homeowner.

**Cool in the Summer, Warm in the Winter: Adobe Revival and Appropriate Technology**

Early on in the Adobe Revival, advocates for adobe contrasted its benefits for the region against those of imported wooden house construction, which had since morphed to a more locally tuned version with the California bungalow style at the turn-of-the-century.\footnote{McWilliams, *Southern California Country*, 357-8.} Most notably the argument for adobe’s environmental appropriateness when contrasted with wood began in 1908 with Austin’s article for *Overland Monthly and Out West Magazine*. Austin opened her article with a critique of modern society as epitomized in the wooden bungalow. Claiming the bungalow an impermanent, temporary structure fit to shelter an unsettled, hurried existence, she stated:

The “bungalow” at its best is a most comfortable and picturesque expression of our genius of Unrest. The most temporary of buildings, manifestly intended as a charming resting place in a perpetual life of migration; hardly a nest, merely a leafy perch from which to wing one’s flight at the beckon of the first caprice.
She juxtaposed this lifestyle to that of which she imagined the adobe to represent, admiring the communities, “these people whom we so greatly fail to appreciate,” that inhabited the adobes for being family-oriented, slow-paced, and exuding permanence. Of adobe houses she expressed:

But there is something permanent in the way the “adobe” squares out its great elbows, and settles down heavily to protect the hearthstone which in this land is dedicated to Phoebus instead of Pluto, and is expressed in the warm “patio” where young and old gather as around the fireplace of the north…

Austin weaved a comparison of wood and adobe throughout her two articles as she elaborated on the suitability of adobe to the region for the, likely, unfamiliar reader. Of the climatic performance of adobe, she stated, “It is, of course, cooler in the summer and warmer in winter than wood, and is also a peaceful refuge in the windy weather, which is to the last extent exasperating in a rocking, creaking frame house.” She ended the second article with an acknowledgement of adobe’s potential benefit for ecological sustainability:

It is to be hoped that the fashion will take solid root, as the “adobe” is as certainly the normal thing for a dry and treeless land as frame buildings are in the forests of the north. It is true that California is struggling to restore its forest growth of her mountains, but the native timber never was suitable for building purposes, and the roofs of the old houses were generally constructed with thin poles interwove with mud and tules, and crowned with tiles.

52 Austin, “Modern Adobes – I,” 326.
Adobe’s suitability for the region especially when contrasted to wood, as Austin early elucidated, continued to be detailed in articles on the construction methodology that followed. In 1917, the San Pedro News Pilot had not only claimed adobe’s economy for the time, but further stated that with modernizing edits adobe houses could “make better houses than the wooden one being cooler in summer and warmer in winter.”\textsuperscript{54} Even where modern materials were called to replicate and replace adobe walls, adobe was noted as seemingly appropriate for the region’s climate, seismic conditions, and topography as a 1911 article in Fine Arts Journal illustrated:

These houses were perfectly suited to the climatic conditions, for the adobe is always warm in winter and cool in summer. They were built low and broad to withstand earthquakes, and the lines of the buildings fitted the landscape as no modern adaptation can hope to do.\textsuperscript{55}

\textsuperscript{54} “Modernized Adobe,” San Pedro News Pilot.  
\textsuperscript{55} Maxwell, “California Homes,” 250.
In the first quarter of the twentieth century, renewed interest in the style, Spanish Colonial Revival, that adobe gave form to, followed by the supply and price of lumber following World War I encouraged Anglo-Americans engaging residential architecture to analyze adobe against the more familiar wood for house construction. This comparison generated an increasing awareness of adobe’s beneficial properties and suitability for the Southern California environment.

While many of adobe’s properties were recognized in articles detailing the construction, writers of the Adobe Revival period almost unanimously made mention of its thermal capabilities, this feature promoted more than any other. In an article for *Country Life*, author Boardman Pickett spoke of the adjustment to climate for Eastern newcomers and the benefit of thick walls for passive solar heating:

> It frequently happens that those who have just come to California equip their houses with furnaces which they seldom use after they have learned to adapt themselves to the climate. Cold nights and warm days present a problem which can be met during a large part of the year by using breakfast and sun rooms early in the morning, thus allowing the sun time to heat the rest of the house. If the walls are thick the heat absorbed during the day can be conserved until far into the evening.\(^56\)

While Pickett did not specifically reference adobe, the acknowledgement of wall thickness, or a general massiveness, for climate control established another element that aimed to ground the practice regionally.

Adobe’s thermal factor was linked to a masonry tradition of massiveness and permanence, another concept mentioned repeatedly in articles advocating for adobe, that furthered a notion of a Mediterranean lineage. In his discussion of environmental

management, Banham detailed the tradition of massive building in the Mediterranean region:

In the Mediterranean tradition, from which most Western architecture is directly descended, the need to render society’s shelter-investment permanent – or at least, perdurable – was normally answered by making it massive. Thick and weighty structures are less easily overthrown by storm or earthquake, less maimed by fire or flood. But such constructions bring with them environmental advantages…The outstanding advantages are acoustic and thermal. A thick weighty structure offers better sound-insulation, better thermal insulation and – equally important – better heat storage capacity.57

Banham identified the solar heating and cooling system of thick mass walls as a

“‘Conservative’ mode of environmental management,” noting this system also illustrated by the Southwest’s indigenous adobe architecture.58 He continued to detail the evolution of environmental management in describing how Anglo-Americans broke with such “structural solutions” to control comfort in a reliance on “power-operated solutions” to heat lightweight timber structures, forming a new tradition which he labelled the

“Regenerative mode of applied energy.”59

Banham’s analysis aids to elucidate the importance of the Adobe Revival for this moment in Los Angeles’ history. As transplanted Anglo-Americans of a regenerative tradition recognized the benefits and abilities of the contradictory conservative mode for the California environment, questions of cultural predilections for climate control arose. For Anglo-Angelenos, an interest in adobe for this aspect was aided not so much by connections to a Native American tradition of earthen construction, but more so by connections to a Mediterranean origin, deepening a constructed heritage in this regard. As

architects acknowledged and utilized the passive heating and cooling abilities of the adobe house, they however slightly disrupted a sole reliance on the regenerative tradition, which was increasingly evolving with technological developments of the period.

An appropriate technology offering use of available natural resources, fire-resistance, wind-resistance, and insulation abilities, adobe served a wide range of socioeconomic classes, especially given its capacity for self-build approaches with materials at hand. When waterproofing was insured, these features were argued to provide a better quality of house, more livable, comfortable, and permanent in the Southern California environment when compared to wooden construction. The recognition of these properties and the economic advantage of adobe further encouraged a liberating of adobe’s association with a sole style and in doing so began a process of exploring its place as a viable building material. Although adobe had not been divorced from the Spanish Colonial Revival style, a number of articles pointed to its suitability for a variety of styles, as referenced in articles for *The National Builder, The American Architect,* and *Sunset.* The *National Builder,* even depicted a non-Spanish styled house with the caption: “Modernized adobe is adaptable to almost every style of building.”

The factors that encouraged an adobe revival in the early 1920s – economy, style, tradition, and appropriate technology – were engaged to different degrees dependent on the project. The following chapters present two prominent users of adobe construction in Los Angeles beginning around 1920 – Victor Girard and John Byers – to demonstrate the

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61 “Modernized Adobe,” *The National Builder,* 61. This building was also portrayed in Brownfield’s article, see Brownfield, “Modernizing the Adobe, 68. It was perhaps built at Girard’s tract. Unfortunately, nothing more is known about it.
varying reasons for and ways of engaging the revival in Los Angeles during this time. For Girard, a developer who appeared to briefly construct in adobe for mostly a middle-class buyer in a time of great demand, but limited resources, adobe provided an economic opportunity and means to developing a Los Angeles suburban tract during a material shortage. While he engaged adobe primarily for its economy and style, he also promoted its regionally appropriate properties. Architect and builder, Byers, who reportedly had “done more to revive adobe construction in California than any other architect,” engaged adobe for a middle- and upper-class buyer through a craftsman approach. His projects evidence a shift in reasoning for adobe, as he primarily argued the material as a traditional, appropriate technology with which to execute an alleged California-based style, the Spanish Colonial Revival style. The aim of these chapters is to better elucidate the role of adobe architecture in Los Angeles during the 1920s as practiced by two of its leading players, both of who aided to reintroduce adobe to the area.

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CHAPTER 4: VICTOR GIRARD MODERNIZES THE ADOBE

On January 25, 1920, Los Angeles Times reported: “Model Home is Unique Exhibit: House of True Spanish Type Shown at Walnut Park.”¹ The article detailed the opening of a new style of model home at the Cudahy Walnut Land Company’s subdivision in Walnut Park, “one of the notably attractive residential subdivisions suburban to Los Angeles,” adjacent to Huntington Park and approximately six miles south of Downtown Los Angeles.² The article noted “especial interest” of the wall construction, “real adobe bricks” made on site by “expert Mexican brick makers.”³ According to the subdivision’s engineering team, experiments conducted demonstrated the adobe structure to be “absolutely impervious to fire and moisture,” giving it a “virtually unlimited” lifespan.⁴ The decision to build in adobe by the subdivision’s founder and developer, Victor Girard, was explained as follows:

In constructing this model home, Mr. Girard’s purpose is to show the manifest advantages of better construction for smaller dwellings and the adaptability of the architecture of the old California days to the present period.”⁵

The interior decoration furthered the exterior’s Spanish motif, with furniture in the “Spanish pattern made by Barker Bros.”⁶ The house soon attracted an audience; by April

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¹ “Model Home Is Unique Exhibit,” Los Angeles Times, January 25, 1920, ProQuest Historical Newspapers.
² “Model Home,” Los Angeles Times. The article states the model home to be located at Long Beach Boulevard and California Street. Further research would need to be conducted to identify the location of this house and others of the subdivision in order to evaluate if any “Modernized Adobes” remain in existence today and to determine how many were initially built.
³ “Model Home,” Los Angeles Times.
⁴ “Model Home,” Los Angeles Times.
⁵ “Model Home,” Los Angeles Times.
⁶ “Model Home,” Los Angeles Times. The Barker Bros. also were responsible for outfitting the Adobe Electrical House. See “‘Adobe Home’ Model of House Furniture,” Women’s Wear, January 29, 1921, 48, ProQuest.
1920, *Los Angeles Times* declared, “Viewed by a Tourist Army,” as it stated that 35,000 people from throughout the United States had visited the house since its opening.7

The Walnut Park subdivision originated from a 1500-acre parcel of land, a walnut orchard, that was purchased by Victor Girard and his associates in 1912.8 Girard was a transplant to Los Angeles, from Kentucky, who made his way in the city as a “land huckster with big dreams.”9 By late 1918, his Walnut Park subdivision advertised frame constructed “Colonial Bungalows” for sale in a wide variety of architectural styles and prices.10 This was followed in 1920 with a new mode of construction for the subdivision, the “Modernized Adobe,” first implemented in the model home and soon after in additional structures for sale.11

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7 “Viewed by Tourist Army,” *Los Angeles Times*, April 4, 1920, V2, ProQuest Historical Newspapers.
10 Victor Girard and F.H. Edwards, “RIGHT NOW Is the Time to Buy Your Home,” newspaper advertisement, *Los Angeles Times*, November 8, 1918, ProQuest Historical Newspapers; Victor Girard, “Prices Advance on Walnut Park Lots!,” newspaper advertisement, *Los Angeles Times*, September 26, 1919, ProQuest Historical Newspapers; Other examples include: Victor Girard, “1 of the 6,” newspaper advertisement, *Los Angeles Times*, May 3, 1919, ProQuest Historical Newspapers; Victor Girard, “A beautiful Colonial bungalow of the type pictured above, has just been completed at Walnut Park – Open today for inspection. The price is only $3,750,” newspaper advertisement, *Los Angeles Times*, May 30, 1919, ProQuest Historical Newspapers; and Victor Girard, “Activity Increases Values in Walnut Park,” newspaper advertisement, *Los Angeles Times*, October 18, 1919, ProQuest Historical Newspapers. The “Colonial Bungalow” had been advertised a year prior to the adobe model with a model home exhibit, allegedly inspired by the San Diego Exhibition’s model-farm exhibit; see, “Model Home,” *Los Angeles Times*.
11“Spanish Type of Home,” *Los Angeles Times*, February 21, 1920, II8, ProQuest Historical Newspapers. The first use of the term “Modernized Adobe” appears here, where image, floorplan, and description of the model home are provided. “Lecture on Adobe,” *Los Angeles Times*, February 28, 1920, II7, ProQuest Historical Newspapers. Reference made to “a number of modernized adobe homes of the Spanish type” being built at Walnut Park.
The use of adobe was not completely novel for the time; *Los Angeles Times* noted in its description of the model home: “This type of construction is gaining in popularity.” However, the construction that made the adobe “modernized” at Walnut Park was of a newer mode attributed to Santa Barbara architect, John William Chard, and possibly first implemented in design at Walnut Park by the organization’s architect and construction lead, A.H. McCulloh. In an article for *Sunset Magazine*, “Modernizing the Adobe,” *Los Angeles Times*.
Adobe,” Marion Brownfield attributed recent developments in adobe construction to Chard:

The man who perfected the adobe brick, making possible a new type of construction, is a Spaniard, John William Chard, an architect of Santa Barbara, California. Living in an adobe the greater part of his life he not only made a study of Spanish architecture in all its aspects but experimented with the adobe in the belief that it could be made a practical and economical building material.\textsuperscript{14}

With the onset of a lumber shortage and related inflation, Chard promoted his method as an alternative for residential construction that would “considerably cut the cost of building” by using a limited amount of lumber.\textsuperscript{15} According to a 1920 \textit{Los Angeles Times} article, Chard’s interest in reviving adobe’s use occurred several years prior, when he launched a study of local extant adobe construction. His analysis included experiments that examined adobe’s temperature fluctuation and compressive strength. In regard to temperature, he claimed adobe to be the most stable building material, noting a fluctuation that did not exceed a “‘six degree difference between February cold and extreme September heat.’”\textsuperscript{16} Compressive strength results, measuring “‘as high as 400 pounds to the square inch,’”\textsuperscript{17} led him to deduct that walls could be made thinner than those of the past. Of the extant adobes of “old days” he stated:

“These houses stand today, together with the California missions, as the most picturesque buildings of California; and in spite of their poor construction, lack of


\textsuperscript{16} “Would Revive Use,” \textit{Los Angeles Times}.

\textsuperscript{17} “Would Revive Use,” \textit{Los Angeles Times}. 
modern conveniences and insufficiency of light, the old-timer prefers their comfort and soundness to the flimsy bungalow offered him today.”

Acknowledging the benefits of adobe, Chard asserted what he perceived as critical faults in past modes of construction, claiming traditional adobe to be “damp and insanitary, owing to lack of proper ventilation and foundation.”

Chard’s modernizing technique attempted to correct these ascribed shortcomings “by introducing water-proof foundations of proper ventilation” and “the proper plaster protection,” thus enacting an updated form of adobe construction that would not only be acceptable, but moreover an ideal for the modern Anglo-American homeowner building in the region. His technique for brickmaking was somewhat consistent with traditional practices. Made with soil, water, and straw, the composition was mixed either by pug mill or traditional means of kneading by foot. The mixture was then placed in molds and sun-dried for several days. Chard’s brick size is inferred to have measured 12 inches wide by 18 inches long by 4 inches thick. For Walnut Park’s model home, the bricks were reported to be made “on the ground…by expert Mexican brick makers,” which suggests traditional brickmaking, by foot, mold-formed and sun-dried. Chard’s technique next suggested adobe bricks being placed on a “waterproof foundation”; set within a wooden, “skeletonized frame”; covered with a cement stucco “anchored into the walls and treated with an all-mineral water-proofing compound”; and covered with a tile roof.

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22 Brownfield, “Modernizing the Adobe,” 69.
23 “Model Home,” Los Angeles Times.
Chard’s revised adobe building technique appears to be adopted and perhaps first fully developed at Walnut Park, as suggested by Girard’s claim to “originator of the ‘Modernized Adobe’” in an article detailing the construction.25 Published in the Los Angeles Examiner in 1921, Girard framed his explicit description of the implemented technology as a social purpose, stating he provided information gleaned from his own experience “in view of the increasing vogue of this material for both city and country dwellings.”26 However, this tell-all was perhaps more so intended to introduce, familiarize, and convince eligible Anglo-American buyers of this new construction technology, quelling and reframing preconceived notions of traditional adobe construction’s performance and associations. The paragraphs below are extracted from Girard’s article and provide a detailed description of the modernization efforts used for the “Modernized Adobes” at Walnut Park:

The initial stage of this process is the heavy concrete foundation which is put in place under all walls. This has a step for 2x4-inch underpinning, on the top sill of which rest the wooden floor joists.

Inside, the joists are carried on beams supported by concrete piers and posts, in the usual manner of house construction. The joists are then covered with the rough sub-flooring and the interior stud partitions set up on same.

The ceiling joist and rafters are then put in place and carried at the wall line by temporary struts. When built into the wall they rest on a 2x6 inch Redwood plate mopped with asphaltum.

The window and door frames are then set up in their proper places at the right heights and, where the adobe walls are to be constructed, they are blocked up and braced in place.

At each corner and angle of the house, a batter board is erected, plumbed true and lines-marked horizontally at 12 inch intervals for the guidance of the brick layers.

“Modernizing the Adobe,” 69. While cited sources suggest the technique to first be Chard’s, the division of credit between McCulloh, Girard, and Chard remains unclear.
26 Girard, “Build of Adobe.”
The top of the concrete foundation is then thoroughly mopped with a heavy coat of asphaltum waterproofing and the job is ready for the mason work. The brick is laid to lines stretched from the batter boards, by common labor, under the supervision of a competent foreman. It is laid up in a clay mixture of the same consistency as the brick.

Concrete lintels are cast either in place or on the ground for the openings, and a 4-inch concrete coping is cast on the parapet, where the flat roof form of construction is used.

The composition roofing is carried up the parapet under this and the waterproof plastering is carried back over the joint, making a tight waterproof job. The house is then ready for the exterior plastering.

Nails are driven into the adobe brick so that the header project about three-eighths of an inch. A thin dash coat of cement plaster is then sprayed on the wall. This forms a key for the rough or brown coat, which is not less than one inch thick in any spot.

The finish coat of silica sand and white hydrated cement is then put on with the character of finish specified and the whole waterproofed with a coat of transparent, standard waterproofing compound.

The interior of the house is plastered and finished in the usual manner. The matter of interior wood trim is optional.  

While the actual bricks and clay mortar mimicked traditional practices, all else had been edited in an attempt to keep the adobe wall dry. For instance, adobe or rubble foundations were replaced with concrete, tamped earthen floors substituted by raised wooden floors, and exterior earthen coatings swapped for cement-laden stucco. Such modifications and combinations were claimed to have “perfected this material in combination with others” and removed “any possible objections.”

27 Girard, “Build of Adobe.”
28 Girard, “Build of Adobe.” Later conservation efforts have come to find the deleterious effects associated with cement stucco coatings, which with cracking and seepage allow moisture in, trapping it and preventing drying. As early as 1930, cement capping had been identified as “destructive” by those working in New Mexico. See Kate Chapman and Dorothy N. Stewart, Adobe Notes, or, How to Keep the Weather Out with Just Plain Mud (Taos: Laughing Horse Press, 1930).
Figure 9. Cartoon accommodating Girard’s article detailing the “Modernized Adobe” method, cartoon by “Hal,” c. 1921. Clipping from Victor Girard, “How to Build of Adobe: Girard Tells Method,” Los Angeles Examiner, January 9, 1921, IV4, microfiche, UCLA Library.
However others working with adobe, such as John Byers expressed disapproval of the construction methodology. In a 1937 article, Byers publicly, though indirectly, criticized the construction technique:

In one of our outlying districts a whole tract was developed using that form of construction, but in a sort of ‘name only’ fashion. The adobes there were laid in between the wooden studs of ordinary construction serving only as filler walls. If used at all adobe should be used sincerely – walls at least 20” thick and structural attempts to modernize it by the use of cornice moulds, slicked up surfaces, pendant details or appendages of any sort only distract from its simple charm.\(^\text{29}\)

While a Spanish style was mentioned and emphasized to a degree, it was not the sole focus for Chard or Girard, who claimed adobe’s viability as a building material. This is illustrated in Girard’s statement concerning the creation of a “modernized” adobe construction:

Our purpose was to prove its merits under modern conditions and to give this admirable material its entitled place in the construction of that picturesque type of home commonly known as the modified style of Spanish architecture.\(^\text{30}\)

While clearly deviating from traditional construction to convey style, Girard, McCulloh, and/or Chard’s methodology holds significance in its attempt to revive adobe for its material benefits, recognizing the construction methodology as an appropriate technology. This is further attested to in the material’s mention as applicable to a “variety of architectural styles.”\(^\text{31}\)

As Chard had acknowledged a renewed interest in adobe as an appropriate technology for the current economic period, so too did Girard, claiming in his article, “It

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\(^{30}\) Girard, “Build of Adobe.”

\(^{31}\) “Tells Method of Building Adobe Homes,” *Los Angeles Times*, November 21, 1920, V2, ProQuest Historical Newspapers. On reference of adobe and various styles, see also Marion Brownfield, “Modernizing the Adobe,” 69; and Girard, “Build of Adobe.”
is not entirely a coincidence that conditions arising from the shortage of building materials resulting from the European war made the use of adobe a practical necessity in Southern California.” Girard accentuated the economic advantages of adobe as he criticized wood, which was becoming less accessible and less affordable. Of wood, he further stated:

Wood – a vastly inferior building material to either sun-dried or kiln-dried brick – has enjoyed a lengthy vogue in America largely because so easily and quickly worked into building forms as to have become a habit rather than an economic choice – one, by the way, which has long been fostered and supported by attractive sales and advertising propaganda. Girard advocated for adobe as a material superior to all others for the Southern California climate, “subject to a wide range of temperatures,” as he stated, “The clay walls are a perfect insulation against heat and cold. No trouble arises from sweating walls.” He recognized the material’s passive heating and cooling capabilities: “Moreover, these houses are dry and warm in the winter and cool and comfortable in summer when the heat rays are severe.” Girard’s numerous newspaper advertisements for the “Modernized Adobes” continually emphasized the inherent insulating feature of adobe.

32 Girard, “Build of Adobe.”
33 Girard, “Build of Adobe.” It should also be noted that Girard was still selling and promoting frame construction as “Colonial Bungalows” in his tract alongside the “Modernized Adobes.”
34 Girard, “Build of Adobe.”
35 Girard, “Build of Adobe.”
36 For advertisements promoting adobe’s insulation abilities, see Victor Girard, “You Will Find Real Pleasure in an Inspection of These ‘Modernized Adobe’ Homes in Walnut Park!,” newspaper advertisement, Los Angeles Times, December 4, 1920, ProQuest Historical Newspapers; “Adobe – In Its ‘Modernized’ Form This Traditional California Building Material Makes Homes That are Comfortable, Beautiful, Practical and Economical,” newspaper advertisement, Riverside Daily Press (Riverside, CA), April 6, 1921, California Digital Newspaper Collection; and Victor Girard, “It’s Not a Genuine ‘Modernized Adobe’ Unless It’s in Walnut Park,” newspaper advertisement, Los Angeles Evening Herald, August 27, 1921, California Digital Newspaper Collection.
Adobe, he further touted was as substantial and lasting as other forms of masonry, though attainable in price; concerning masonry, he stated:

Homes of ‘Modernized Adobe’ are as permanent and enduring as those of brick or tile, and they cost less than half as much…The heavy walls impress one with a beauty, dignity and strength not obtainable except at great expense in any other form of construction.”

He furthermore promoted the material for its fire-resistant abilities, supposedly proven by his team through testing. As these advantages were highlighted, so too were the modifications and edits. The “modernizing” factor allegedly improved adobe’s usability by adapting, and simultaneously appropriating, the construction technology in an attempt to create an ideal, modern Californian suburban home. The qualities which had been labelled primitive, adobe’s so-called shortcomings, were deemed fixed, eradicated as modern cement attempted to hide, contain, and purportedly correct traditional modes. A seemingly clean, revised version was ultimately promoted and presented as purportedly fit for the modern Anglo-American family.

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37 Girard, “Build of Adobe.”
38 “Tells Method,” Los Angeles Times; “Spanish Type,” Los Angeles Times.
You Will Find Real Pleasure in an Inspection of These

"Modernized Adobe" Homes

in Walnut Park!

—they last just as long as houses of brick or tile and they cost less than half as much! They show almost no depreciation—they are economical, practical and comfortable. They are warm in winter, cool in summer. They embody the, most modern improvements and conveniences. They are typically Californian in design and arrangement—they are unusually wonderful home-values! Beautifully situated among the shady trees, brilliant flowers and green lawns of picturesque Walnut Park—the Home of Homes—where you get all city conveniences but don’t pay city taxes—where homesites may be had for as little as $500, on liberal terms.

Come with us to see this beautiful tract. Bus leaves 5:22½ S. Hill St. next Monday, 10:30 a.m. (First door north of B. & M. Cafeteria, opposite Pershing Square.) Free luncheon specially prepared. Delicious home cooking. Other excursions Tuesday, Wednesday, Thursday and Friday. If you can’t accompany us, drive south to Slauson Ave., east to Long Beach Blvd., then south to the tract, or take Huntington Park car (5¢ fare) going east on Seventh St.

Victor Girard
205-207 H. W. Hellman Bldg.
10521 Fourth and Spring Main 9122

Figure 10. Advertisement for "Modernized Adobe" Homes noting thermal properties, December 4, 1920. Clipping from Victor Girard, "You Will Find Real Pleasure in an Inspection of These 'Modernized Adobe' Homes in Walnut Park!" Newspaper advertisement, Los Angeles Times, December 4, 1920. ProQuest Historical Newspapers.
Girard appeared to have assigned the term “Modernized” to his adobe typology in an attempt to create distance from associations with traditional adobe construction. At this time, the Southern California built environment still held extant examples of adobe houses, though many had been demolished. To Anglo-American transplants, these structures would have been most obvious in a derelict or ruinous state. This viewer would have likely allocated adobe a role, at best, as an aesthetic association related to the imagined Spanish past; cultural predilections would further act to deter an idea that adobe could potentially be livable, especially when an adobe-imitated house in the Spanish Colonial Revival style of the more familiar wood and stucco was attainable and common. Thus, Girard strategically used “modern” terminology as a means to rebrand adobe for his potential clientele in an attempt to encourage the desirability of adobe as a viable construction material.

While the term “modernized” served to rework notions concerning adobe’s societal acceptance, Girard implemented it to sell other features of the housing type. The subdivision, for instance, had stated in a promotional claim, “no modern convenience overlooked.”39 However, this was questioned when it came to one of the most current technology developments – electricity within the home. In November 1921, a little over a year and a half after the “Modernized Adobe” model home first opened and ten months after the Adobe Electrical Home debuted, Journal of Electricity and Western Industry criticized the subdivision for the insufficiency of electrical utilities in the adobe houses. Despite “favourable situations,” Los Angeles having a “tremendous building program”

39 Victor Girard, “There Are a Few ‘Modernized Adobe’ Homes in Walnut Park Now Ready for Occupancy!,” newspaper advertisement, Los Angeles Times, February 26, 1921, ProQuest Historical Newspapers.
and its “Home Electrical…the most complete exhibit in this regard that has thus far been accomplished,” the author accused the subdivision of failing to grasp “the commercial value of the electrical idea in the home.” The author laments the electrical shortcomings of the Walnut Park tract stating:

> Here you will find the modernized adobe home, beautiful, artistic and complete, yet the inspection of one of these model homes reveals the surprising fact in the dining room may be found the upturned globe reflector type of center illuminating unit with no baseboard receptacle installed wherewith to attach the electric toaster displayed on the table. In the kitchen may be seen the electric range, and the electric dish washer is found near by, but diligent search fails to reveal any place where the electric washer may be attached, and search as you may throughout the many rooms of this wonderful and beautiful home, you can find no electric convenience outlets to lighten the labor of the housefire. This instance is given in detail because it represents one of the most powerful firms engaged in home building in the West.

Whether an additional cost not advertised or simply lacking in the model home the author appears to have visited, the extent to which electricity was included within the “Modernized Adobes” is largely unknown. However, electricity is not specifically mentioned in the advertisements for the houses; the advertisements show attention placed instead on emphasizing the material combinations and alterations made to traditional adobe construction, an attempt to change associations with adobe for the potential Anglo-American buyer. First and foremost, Girard’s buyer had to be convinced that adobe was a viable and desirable building material.

Girard’s Walnut Park adobe houses were advertised aggressively between 1920 and 1921 in Los Angeles Times and Los Angeles Evening Herald. Within the

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advertisements adobe’s material capabilities, affordable price, and “Spanish type” or “typically Californian” design were repeatedly promoted. One of the earliest advertisements dedicated to the marketing of these houses exhibits the selected focal selling points, declaring the following under its slogan:

In its modernized form, adobe is by far the most practical and economical building material available. It is practically impervious to time, is immune to changing weather conditions and is splendidly adapted to California’s climate and traditions.

The following headlines illustrate the breadth of marketing campaigns surrounding the “Modernized Adobes”: “Homes Built of Adobe Are Permanent – Attractive – Comfortable and are the Most Economical in the Long Run.”; “Adobe: the Building Material That Endures – as Permanent as Brick or Tile and Costs Less Than Half as Much”; “Adobe – In Its ‘Modernized’ Form this Traditional California Building Material Makes Homes That Are Comfortable, Beautiful, Practical and Economical!”; “Homes Like This in Beautiful Walnut Park for as Little as $10,000”; “Adobe – California’s Traditional Building Material Thoroughly Modernized”; “This Thoroughly Modern Home of Old Spanish Design is Beautifully Situated Among the Friendly Trees and Fragrant Flowers of Walnut Park”; and “Homes in the Quaint Spanish Type $6500.”

42 Victor Girard, “Homes in the Quaint Spanish Type $6,500,” newspaper advertisement, Los Angeles Times, May 14, 1921, ProQuest Historical Newspapers. Girard, “Pleasure in an Inspection.”
44 Victor Girard, “Homes Built of Adobe Are Permanent – Attractive – Comfortable and are the Most Economical in the Long Run,” newspaper advertisement, Los Angeles Evening Herald, July 23, 1920, California Digital Newspaper Collection; Girard, “Material That Endures”; Victor Girard, “Adobe – In Its ‘Modernized’ Form this Traditional California Building Material Makes Homes That Are Comfortable, Beautiful, Practical and Economical!,” newspaper advertisement, Los Angeles Times, October 9, 1920, ProQuest Historical Newspapers; Victor Girard, “Homes Like This in Beautiful Walnut Park for as Little as $10,000,” newspaper advertisement, Los Angeles Times, May 14, 1921, ProQuest Historical Newspapers.
Girard’s advertisements further encouraged a visit to the site – “Go out to Walnut Park – see these adobes with your own eyes.”45 He offered daily bus excursions to his subdivisions, where guests would be taken on a “delightful outing,” a “21 mile scenic ride” from “the Mountains to the Sea,” and provided a free a hot lunch.46 Girard posited that these types of subdivision tours were taken by “a great majority of the thousands of tourists who annually visit[ed] Los Angeles,” as they provided “a real diversion” and “an unusual chance to obtain a comprehensive picture of the community.”47 He spoke to the power of these tours as a sales device:

Newspaper advertising is, of course, a big factor in promoting these sales, but the main prop of this important business is the excursion bus, which, when properly utilized is a tremendously useful agency in advancing community development.48 He claimed that 52 percent of people that took these tours ended up buying, and that “a larger percentage of these buyers finally become home owners,” many of whom were Eastern “newcomers.”49 Girard also purported the excursions to be an educational tool that would encourage home ownership and ultimately advance Los Angeles as a city. An advertisement from August 1922 stated:

Angeles Times, November 6, 1920, ProQuest Historical Newspapers; Victor Girard, “‘Adobe’ – California’s Traditional Building Material Thoroughly Modernized,” newspaper advertisement, Los Angeles Times, November 20, 1920, ProQuest Historical Newspapers; Victor Girard, “This Thoroughly Modern Home of Old Spanish Design Is Beautifully Situated Among the Friendly Trees and Fragrant Flowers of Walnut Park,” newspaper advertisement, Los Angeles Evening Herald, March 5, 1921, California Digital Newspaper Collection; Girard, “Quaint Spanish.”

45 Girard, “Material That Endures.”
48 Girard, “Subdivision Excursions.”
49 Victor Girard, “Subdivision Excursions.”
Just as a chain is no stronger than its links, no city can be developed to its greatest possible extent until its environs are fully built up – and we are helping to build them up by educating the public to their advantages and potentialities.\(^50\)

Girard aimed to turn renters to buyers, targeting this group with advertisements promoting the suburban qualities of the subdivision and benefits of home ownership. A February 1921 article in the *Los Angeles Examiner* read, “Since the Cudahy Walnut Land Company…was formed, several hundred homes have been built and the road to home ownership opened to many.”\(^51\) Payment terms were advertised to be similar to rent, plus an added bonus – they offered an opportunity to profit from the acquired property’s walnut trees:

> It is a place of green lawns, flowers, shrubs, thousands of big shade trees (full-bearing walnut trees on every homesite) wide boulevards and scores of homey homes. Large homesites with full-bearing income-producing walnut trees for $800. Easiest Terms. Homes of frame or “modernized adobe” on monthly terms like rent.\(^52\)

A “quaint Spanish type,” “Modernized Adobe” house advertised for $6,500 required “a small first payment and terms that are less than rent!”\(^53\) The “less-than-rent” phrase was used in many of the advertisements, where the “Modernized Adobe” or “Colonial Bungalow” homes were promoted at a “very moderate price.”\(^54\) The idea of home and

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\(^{50}\) Victor Girard, “–the Only Way,” newspaper advertisement, *Los Angeles Examiner*, August 6, 1922. These sentiments were also expressed in an article the year prior, which discussed Girard’s opinion on community development, see “To Encourage Home Builders,” *Los Angeles Times*, March 20, 1921, V2, ProQuest Historical Newspapers.

\(^{51}\) “Walnut Park Development,” *Los Angeles Examiner*, February 6, 1921.

\(^{52}\) Victor Girard, “This Cozy Home on More Than A Quarter Acre,” newspaper advertisement, *Los Angeles Times*, June 18, 1920, ProQuest Historical Newspapers.

\(^{53}\) Victor Girard, “Quaint Spanish.”

rent were further scrutinized to encourage a suburban ideal. An advertisement posted in *Los Angeles Times* in September 1921 promoted the idea of homeownership and the suburb:

That word ‘home’ is muchly abused. Some folks call a hot, cramped apartment or flat ‘home.’ They’re all wrong. There’s only one kind of real home – a house of your very own – a place where you’ve got plenty of ‘elbow room’ where your kiddies have plenty of romping-room – where you’re the ‘big boss’ – landlord and owner all in one. That’s why so many folks turn to Walnut Park when they’re in search of a real home – they like its beautiful ‘Modernized Adobes,’ its cozy little Colonial bungalows, its miles of green lawns, its many flower beds and shady trees. They like its wide, paved boulevards – the fact that they get all city conveniences without having to pay city taxes. You can get a real home there – on less-than-rent terms.55

The subdivision was marketed to the middle class with a variety of sizes and prices for sale. As automobiles were coming within reach of this income bracket, so too was the suburb, reported Roger Babson, “the famous statistical authority” in a 1922 article in the *Los Angeles Examiner*. Babson exclaimed:

THE REASON FOR SUBURBAN EXPANSION HOWEVER IS NOT ALONE THE ATTRACTION OF A COUNTRY HOME. IN THE CITIES CONGESTION OF DWELLING HOUSE SPACE AND HIGH RENTS LONG HAVE BEEN BREWING DISCONTENT. FOR MORE THAN FIVE YEARS NOW THESE CONDITIONS HAVE EXISTED. REBELLION ON THE PART OF THE RENT PAYER IS REACHING THE POINT OF EXPLOSION.56

Girard’s suburban development efforts sought to capitalize on these conditions as he enticed dissatisfied renters to his available holdings with his novel “Modernized Adobes.”

According to a 1921 article in the *Los Angeles Examiner*, the growth of the subdivision had been consistent since its opening approximately seven years prior and business continued throughout World War I with “a continuous advertising campaign…at a time when real estate was practically at a standstill.”\(^{57}\) By 1922, Walnut Park was reported to have added 262 residences, 214 by private parties and 48 by the Cudahy Walnut Land company, which was noted to be a 35 percent increase from the year prior.\(^{58}\) While it is unclear how many adobe houses were actually constructed, media accounts state that they brought widespread attention to the subdivision and encouraged “Modernized Adobe” construction elsewhere. In June 1920, Girard’s homes were reported to be praised during a visit by T.E. Lacayo, the Nicaraguan consul. Lacayo found Girard to “‘have succeeded admirably in reducing the large Spanish hacienda to conform to the needs of the American people of the present day’” and stated an intention to share his findings with his government.\(^{59}\) Approximately a year later, the famed American editor and real estate investor Arthur Brisbane toured the subdivision. The *Los Angeles Evening Herald* reported on the visit:

> Mr. Brisbane was particularly impressed with the number of fine homes constructed of adobe in Los Angeles and vicinity, and believes home builders throughout the country would take up adobe construction once its advantages are more generally appreciated.\(^{60}\)

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\(^{57}\) “Plan New Development Work at Walnut Park,” *Los Angeles Examiner*, January 20, 1921.

\(^{58}\) “Claim Record for Community Growth: Walnut Park Said to Have Made High Mark For Development,” *Los Angeles Times*, January 21, 1923, V2, ProQuest Historical Newspaper.


\(^{60}\) “Build of Adobe Advice of Editor,” *Los Angeles Evening Herald*, August 20, 1921, California Digital Newspaper Collection.
The same article further reported on the impact and influence of the “Modernized Adobes”:

Since the completion of the first of a number of adobe homes by Victor Girard two years ago, they have attracted wide attention and other builders have erected them in various parts of Southern California.61

Girard had also included an exhibit of a “Modernized Adobe” at a “Own Your Home” exhibit in New York City in 1921, organized by Robert H. Sexton for the intention of informing the public of the “rudiments of home building.”62 Los Angeles Times reported:

According to Mr. Sexton, these unique homes attracted wide attention at the New York show because they represented distinctive type of Southern California small homes. They were given a conspicuous place, and were viewed by thousands of visitors.63

While the outcome of the experiment in “Modernized Adobe” at Walnut Park and its reach elsewhere remains to be explored, it demonstrates a rising and renewed interest in adobe to meet a variety of needs.

Girard’s attempt to modernize a historically appropriate technology and perpetuate an imagined Spanish style attributed to Californian identity, primarily appears a sales effort – a means to enticing and convincing buyers during a period of shortages and surging prices of lumber. However, while the tradition of adobe was appreciated for its environmental appropriateness, Girard’s efforts also worked to usurp and edit this tradition to meet the standards and expectations of modern Anglo-American users. His adoption of a traditional mode of adobe and alterations that allegedly modernized it inferred that extant adobes and traditional practice were problematic, inferior, and

62 “May Hold Own Your Own Home Exhibit Here,” Los Angeles Times, May 15, 1921, V4, ProQuest Historical Newspapers.
63 “Home Exhibit Here,” Los Angeles Times.
moreover unfit for a progressive, modern society. This worked to add further complexity to past stigmatizations of the material, engendering a gap between traditional, or so-called primitive, construction and this new mode of adobe building.
CHAPTER 5: “MUD! NOW THAT IS INTERESTING”: JOHN BYERS AND THE ADOBE HOUSE

California architect and writer Irving Morrow opened his article on adobe’s revival in *The Architect and Engineer* in 1922 as follows:

Adobe is identified in the popular mind with the Spanish Missions in California, and is regarded as a primitive form of construction, highly perishable, definitely outmoded, and justified where it occurs only by undeveloped industrial conditions which allowed no alternative. With the primitiveness of the method, using the word to connote simplicity and antiquity, there can be no question; documents as old as the early books of the Old Testament record the difficulties of the Israelites in making bricks without straw in Egypt; and to this day there are primitive communities, Oriental, Spanish, Mexican, where adobe is extensively used. But it will probably surprise most people to learn that, in the midst of our highly developed industrial culture, surrounded on all sides by cement, brick, terra-cotta, and stone, there is a movement deliberately to revive adobe construction; and that this movement, far from being an isolated and transient fad, is quiet, reasoned, and widely dispersed in area.

Morrow’s statement summarized a general middle- and upper-class Anglo-American consensus regarding buildings of adobe as emblematic of perceived inferior communities—primitive, unprogressive, and non-white. However, in the article that followed he attempted to demonstrate how adobe construction could provide a viable building method for modern, middle- and upper-class Anglo-Americans through modifications, or as he

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1 Irving F. Morrow, “George F. Babbitt Looks at California Houses,” *The Architect and Engineer* 89, no. 2 (May 1927): 41, https://usmodernist.org/AECA/AECA-1927-04-09.pdf. In this article, Morrow stages a meeting with novelist Sinclair Lewis’ character George Babbitt, the average middle-class American businessman hailing from a typical midwestern town, i.e. the typical American. Here, Morrow introduces Babbitt to Californian architecture of the moment. The above quote is taken from Babbitt’s fictitious response upon seeing Byers’ adobe architecture.

2 Irving F. Morrow, “A Revival of Adobe Buildings,” *The Architect and Engineer* 69, no. 1 (April 1922): 47. Later, in 1924, Morrow stated at the time of this article he questioned Byers’ adobe construction, but since was beginning to come around: “So I admit I may be wrong. It is possible that the popularizing of economical construction in a heavy, fireproof, insulating, and esthetically attractive material way may be a public service of great moment.” See Irving F. Morrow, “Folk Song,” *The Architect and Engineer* 79, no. 3 (December 1924): 75, HathiTrust.
stated “improvements.” Claiming “a number of architects…specialize in the designing and building of adobe houses,” the architect who Morrow highlighted was John Winford Byers, working in the Los Angeles area.

By 1922, Byers’ work in residential adobe construction was well underway, subsequently aided by Morrow’s public endorsement. Byers eventually came to be known as a preeminent designer and builder of the Spanish Colonial Revival style and of residential adobe construction. While he wasn’t the first to use and modernize adobe, he

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4 Morrow, “Revival of Adobe,” 47.
became a leading connoisseur of and spokesman for adobe with, as Morrow stated, an “enthusiasm [which was] infectious.”

Building in adobe at roughly the same time Victor Girard’s “Modernized Adobes” debuted, Byers too implemented the material as an expression of the popular Spanish Colonial Revival style. Whereas Girard appeared to have adopted and advocated for adobe primarily as a sales tool and for a seemingly temporary duration, Byers approached the construction type as a craftsman or master builder and sustained a committed interest in the material – its functional abilities and aesthetic qualities – throughout his career. Byers’ craftsman approach came to attract a more elite clientele with many of his adobe houses in the increasingly affluent Los Angeles Westside, helping to solidify his representation of the Adobe Revival and later historical designations.

Byers’ training as an architect however was by no means traditional. Born in Grand Rapids, Michigan in 1875, Byers received an undergraduate degree in electrical engineering from the University of Michigan in 1898, followed by a year of graduate study at Harvard University. Byers was employed for approximately two years, from 1900 to 1901, as an electrical engineer for the U.S. Commission at the Paris Exposition.

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7 Andree, “John Byers,” 22-23; Morrow, “Folk Song,” 75. Byers collaboration on the Torrey Pines Lodge Building, illustrates one example where he was brought in as an adobe expert. Dr. Kenneth Breisch brought this to my attention in a phone call in December 2019. See Alexander D. Bevil, “Torrey Pines Lodge,” National Register of Historic Places Inventory Nomination Form (San Diego: California State DPR/San Diego Coast District, January 5, 1998). Another instance is illustrated by a 1929 article in The Architect and Engineer, where the author, a building inspector in Beverly Hills, proposed seismic resisting adobe construction. The journal requested Byers’ opinion and stated of his credibility the following: “After reading Mr. Forbes’ article, the Editor submitted the manuscript to John Byers, than whom there is no better authority in California on adobe construction.” See Frederick B. Forbes, “Earthquake Resisting Adobe Construction,” The Architect and Engineer 99, no. 2 (November 1929): 49.

8 It is assumed that Byers’ graduate work was in electrical engineering, however this was not found to be made explicitly clear in any of the sources concerning his background.
By the end of 1901, he relocated from Europe to Montevideo, Uruguay where he taught linguistics at the North American Academy for approximately two years. Byers next returned to the United States for a teaching position at the Hitchcock Military Academy in San Rafael, Marin County, California. In 1910, he moved to Santa Monica, California to take a position as the head of the Modern Language Department at Santa Monica High School, where he remained for the next twelve years. In 1916 and while teaching, Byers, who was allegedly a self-taught architect, took his first residential commission for W.F. Barnum, principal of Santa Monica High School. By 1917, he had also designed and built his own house at 547 7th Street, Santa Monica.

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10 According to Andree, he was also part owner of the school. Andree, “John Byers,” 4.
12 “Master Architect,” Santa Monica Conservancy. While Byers has been acknowledged to be self-taught, how he gained the experience to undertake these early projects appears to be largely unknown. Historic Resources Group, “547 7th Street, Santa Monica,” Historic Resource Assessment, June 5, 2018, https://www.smgov.net/departments/pcd/agendas/Landmarks-Commission/2018/20180611/s20180611-11-AB.pdf.
Figure 12. John Byers’ first house, Santa Monica, California, c. 1917. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.
Figure 13. John Byers’ first house, Santa Monica, California, c. 1917. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.
Byers came to adobe through a surprising combination of language and construction skills, likely introduced to the building method during his time in Uruguay.\(^{13}\) The year 1919 was pivotal for Byers, as it was in this year that he began working professionally with adobe construction, a decision that redirected his career towards architecture.\(^{14}\) The project request came from Harry Johnson, cousin to Byers’ wife, who had wanted to build an adobe house in Brentwood, a neighborhood of the Westside which at that time still had large plots of empty land available, after witnessing the construction of an adobe church in Ojai, California by a group of Mexican craftsmen.\(^{15}\) Johnson approached and hired these men to construct his home in Brentwood, however communication issues arose as construction began due to Johnson’s lack of Spanish language skills. Johnson enlisted Byers, who had acquired some construction experience by this time and spoke Spanish fluently, to oversee the construction.\(^{16}\) Although the time

\(^{13}\) Andree, “John Byers,” 4. Byers early European experience immediately proceeded by immersion in Uruguay’s landscape of vernacular earthen traditions would have impressed a juxtaposition of varying vernacular construction practices on the young engineer. The Santa Monica Conservancy has noted, “It is thought that during his time in Latin America he became enamored with the architectural vernacular he called, ‘Latin Houses’”; see “John Byers: Master Architect + Adobe Builder Tour,” Santa Monica Conservancy, n.d., https://www.smconservancy.org/event/john-byers-master-architect-adobe-builder-2/.


\(^{15}\) Andree, “John Byers,” 5-6. According to Andree, Johnson was a geologist who was brought to the Ojai region while doing “oil exploratory work” in 1918. In the footnote Andree states of the builders, without citation, “The reason why these bands existed in some quantity is a mystery, but they were similar to gypsy groups in that the families of the men traveled with them. They probably were Mexican Nationals who came into this country as farm workers or construction workers, but their backgrounds are not clear.”

at which Byers became involved in the building process is unclear, he came to be attributed as its architect.¹⁷

Johnson’s interest in constructing in adobe was still a largely novel concept, though growing in popularity with a niche following, in part encouraged by a wood shortage and price surge following World War I. By 1920, the widely popular Spanish Colonial Revival architecture still largely relied upon modern imitation materials to execute its style. The Anglo-American populace flocking to Los Angeles at this time, creating a real estate boom, furthermore were coming from a progress-driven, industrial culture; despite a claim of adobe’s place within an imagined Spanish past, this demographic would have likely considered the material as inferior to newer modes of building, such as stuccoed concrete block, and the more familiar wood framed house – both of which could accomplish the Spanish Colonial Revival style. With the onset of a lumber shortage, the Johnson house experience positioned Byers to learn a construction typology that was growing in demand and propelled his career change.

The Johnson house was featured in an article in The National Builder in 1921 with a focus on its “low cost” of $14,000, which included “three bathrooms… and an expensive type of roof.”¹⁸ The economy of the house was attributed to the use of wall construction material derived from the site, “thereby eliminating heavy freight and drayage charges”; “native Mexican labor”; and a traditional lime coating, costing about “half as much” as a “modern hard plaster.”¹⁹ The author of the article, John Anson Ford,

¹⁷ John Anson Ford, “Adobe Residence at Low Cost,” The National Builder 64, no. 12 (December 1, 1921): 60, ProQuest. Designer builder was perhaps the more accurate title however as it wasn’t until 1926 that Byers received his architectural license. See Marino, “Byers Papers.”
provided comparison to other types of wall material to further demonstrate adobe’s economy: “Had other building materials been used in the walls instead of adobe it is estimated the lowest cost at which the house could have been constructed would have been $20,000.”

The walls were claimed to be 16 inches thick with adobe bricks measuring 4 by 14 by 20 inches long. The adobe bricks were stated to be “laid with ‘rajuela’ – bits of broken tile or brick inserted between the adobes to make a bond for the plaster,” which was applied to the exterior and interior of the walls. Photographs of the construction illustrate an exterior wall one wythe in depth. Further evidenced in early photographs is the use of concrete foundations and wooden floor joists, which would have aimed to assist with waterproofing and ventilation. Of the finished product, Ford noted:

The house is constructed in the primitive Mexican way, with eucalyptus rafters exposed in the living room. The finish is rough plaster inside and out, the coating following the irregularities of the adobes and thereby affording a suggestion of the solidity of the walls.

The project illustrates Byers’ first known encounter with adobe construction. The construction practices implemented here were next seen carried through and modified in Byers and his crew’s ensuing adobe residences.

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Figure 16. Foundation and adobe wall construction, Johnson house, Brentwood, California, c. 1919. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.
Figure 17. Raised floor and adobe wall construction, Johnson house, Brentwood, California, c. 1919. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.
Figure 18. Adobe construction prior to plaster coating, Johnson house, Brentwood, California, c. 1919. Photograph taken at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.

Figure 19. Main façade, Johnson house, Brentwood, California, c. 1919. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.
Figure 20. Main façade, Johnson house, Brentwood, California, c. 1919. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.
Figure 21. View of back of house from rear courtyard, Johnson house, Brentwood, California, c. 1919. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.
Figure 22. Living room, Johnson house, Brentwood, California, c. 1919. Photograph by Chas Roberts. Photograph taken at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.
Figure 23. Interior showing fireplace and what appears to be hand-painted walls, Johnson house, Brentwood, California, c. 1919. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.
Upon the completion of the Johnson house in May 1919, Byers requested a leave of absence from his job at the high school to focus on designing and building with adobe, hiring the crew of craftsmen from the Johnson house in order to do so. As Andree noted, “He … realized, no doubt, that there was demand by the public for anything Spanish and by a segment of that public for adobe houses.”22 In the spring of 1922, Byers officially quit his position at the high school, legitimizing a career change as the John Byers Organization for Design and Building of Latin Homes.23 The adobe structures that followed gained Byers a leading role as a designer of the Spanish Colonial Revival style in Los Angeles and helped to engender adobe’s usage as a building material in the area.24

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Figure 24. Stevenson house, Hollywood, California, c. 1922. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.

Figure 25. Arthur Rosson house, Beverly Hills, California, c. 1923. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.
Figure 26. MacBennell house, Santa Monica, California, c. 1922. John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.
Contemporary architectural critics lauded Byers for his craftsmanship abilities and rudimentary approach, which was often attributed to a lack of the traditional Beaux Arts training.²⁵ Rexford Newcomb praised Byers’ skills in this regard as he stated:

In glancing through a collection of such works the designer instinctively asks himself, “Wherein lies the secret by which such success is attained?” Perhaps it lies just here: in Mr. Byers’ splendid appreciation of materials and his artistic manipulation of them. He did not receive the average long technical training accorded most designers. He came his work rather from the ranks of the craftsmen and like many a craftsman of old he views his materials with the seasoned philosophy that comes with the actual handling of the “stuff” itself. Therefore, there is nothing of the superficial, nothing of the quality of “paper architecture”

which, as every reader knows, is all too prevalent in present day work. No, these essays in a genuinely dignified and sincere manner are a delight to those who appreciate the good, the true, the beautiful, and prove their author not only a master-craftsman but a master-architect as well.26

Byers’ craftsman reputation ultimately appeared to excuse his lack of traditional academic training, as he received praise from critics for his adobe design’s ability to engage a perceived authentic quality of California’s Spanish past. The words simple, honest, romantic, and picturesque quickly became synonymous with Byers’ adobe constructions. Considering the mythicized notion of California’s romanticized Spanish heritage, his architecture though really did not do much to rectify a so-called authenticity or honesty for the style, but instead added another approach to a plethora of imaginings. However, his approach and striving for this perceived honesty of a specific imagined image appealed greatly to a wealthy clientele who were increasingly well-traveled and in part attracted to Los Angeles for its exoticism.27 Thus, his marketed simple vision of California’s Spanish past and his design abilities, made manifest in the adobe, aided in gaining him an attention that solidified a voice within this exclusive circle of tastemakers.

Byers’ decision to engage the tradition of adobe construction appeared to be first and foremost attributed to the reasoning of style, as he strove for a perceived honest or accurate expression of the popular Spanish Colonial Revival. Newcomb claimed Byers sought to express the “spirit of the picturesque and romantic California of the old Spanish

27 In 1908, Austin defined the Californian as she noted the items within a typical adobe house: “A most comfortable home enriched, moreover, with many interesting heirlooms, and the spoils of travels the Californian being generally a much traveled person, and as likely to be familiar with the ‘Far East’ as with the East.” See Austin, “Modern Adobes – I,” 327. Gebhard had also asserted the Spanish Colonial Revival’s Mediterranean phase to emerge in a demand for a perceived exactitude as a result of an increase in travel by clients and architects. See Gebhard, “Spanish Colonial Revival,” 136.
days” through an implementation of adobe construction, “returning to the materials and building methods of the padres and conquistadores of Old Spain.”

Byers’ own statements too reflected an affinity for the material in its ability to align with the romantic and picturesque. In a 1931 article for Los Angeles Times, he proclaimed:

> While every permanent material of which houses are built may have written its own romance down through the ages, it is doubtful if any can lay claim to a more interesting past than this very simple, sun-baked mud brick…Buildings of adobe are replete with a delicate and elusive charm and there is an easy plasticity about the material that makes it particularly suitable to the Spanish, or California, type of architecture.

Byers continued to evidence stylistic inclinations for adobe throughout his career, such sentiments expressed in publications featuring him and by him.

> Byers especially revered application of that which he deemed a “simple” or “primitive” quality, which he noted in several of his articles concerning the Adobe Revival.

In a 1929 article for California Arts & Architecture, Byers contrasted a favored, “primitive,” vernacular adobe construction to modern imitations of stuccoed frame construction:

> The charm of the very primitive and early Mexican, New Mexican and Pueblo adobe structures was in the direct and simple method of attack. The projecting vigas extended unevenly because it was difficult and laborious to cut them off evenly. They were spaced unevenly because the builders had no rulers. The plastering, if any, was a coating of lime or clay, whitewashed, and merely a method of covering the adobes for protection, the result being delightful because the finish coat followed the undulating surface beneath in a natural fashion. Contrast this with some of the violent efforts to get an original and interesting texture which have resulted from the imaginations of the modern plasterers working over stud and lath – in the firm belief that anything different is necessarily good… In Beverly Hills there are plaster surfaces that are no less than ludicrous. One house suggests the possibility that thousands of bananas were

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29 “Romance Seen in Adobe Brick,” Los Angeles Times, May 17, 1931, ProQuest.
nailed on the lath and plastered over, without actually having any one of them; another, that innumerable slices of toast were entombed in the same way; another, and this seems to be quite a favorite, shows little squares close together with many square pores or indentations, resembling nothing so much as a waffle.31

Byers’ attention and engagement with the so-called primitive qualities of early adobe construction was a means to enacting a specific style, implemented in an attempt “‘to reproduce the effect and spirit of the old Spanish adobes’’” and, allegedly, “‘yielding only a point here and there in favor of a modern chimney, flue or bath tub.’”32 This nostalgic approach relied heavily on a mythicized, romanticized Spanish past for the region, one that selected picturesque and romantic characteristics of the material and negated the painstaking labor, cultural desecration, and racial inequality associated with adobe construction of early California. In his 1946 article, entitled “Adobe Houses,” he described the allure of an adobe house and how to properly approach its creation:

The appeal of adobe would be for those people who really want a house in the simple picturesque feeling of the early California adobes, such as are seen in the towns of Monterey and Santa Barbara, and generally scattered about California. This type of house can only be arrived at successfully if one builds them much in the manner of the old days one hundred years or so ago. The adobes should be made by hand, and laid up preferably by Mexican labor. The tiles, both on the floor and on the roof should be really hand made and not machine extruded. They can only be done economically if the adobe bricks are made right at the building site with the soil at hand.33

Byers repeatedly stressed the use of adobe in this sense, as a means to stylistic expression.

Whether suggesting early Californian, Native American, Mexican, Spanish or a Mediterranean influence, Byers relied upon a romanticized and mythicized vision of

California’s history and environment, as had been imbued in the extant architecture of the region, in order to claim applicability. As a period revivalist architect, Byers created imagined designs that sought to transport an audience to another time and to evoke a specific feeling. Creating an aura, thoughtfully integrated to its setting with handmade details, was the work of a craftsman, and these services were expensive and thus exclusive. Byers was not targeting a discontented renter with a more or less generic “Modernized Adobe” like Girard, but a higher status of client that could afford more detailed, tailored work. As such, while he expressed respect for the trade, he simultaneously worked to revive adobe in a very polarized way.

To arrive at an alleged authentic and curated quality, Byers relied heavily on the inherited and mastered traditional building skills of his crew of Mexican craftsmen. Perhaps more accurately, his success with adobe construction and the Spanish Colonial Revival style was indebted to the talents of and collaboration with these men, rather than solely a lack of traditional training. As Andree indicated, with reference to the Irvine house section and floor plans:

Byers did have a certain lack of knowledge concerning house design, specifically the drawing of plans and construction methods, but during this phase of his career most of the designs were relatively simple and only the sketchiest of plans were required by building departments (especially from builders), and the actual construction was carried on by his crew.34

Byers himself acknowledged his crew’s expertise with adobe construction as quoted in Morrow’s 1922 article:

“My men have been with me since I began three years ago. They have built adobes some three and four stories high in Mexico; they have worked on the restoration of the old Missions in Southern California, and have built and lived in adobes practically all their lives…They go about everything they do in a very primitive and direct fashion; they muck or mix the mud with their bare legs.”

Byers retained these craftsmen after the Johnson house for additional adobe projects, as well as to establish a kiln and work yard, John Byers Mexican Handmade Tile Company, began in late 1919. Byers allegedly founded the company as a result of “not finding the thing he consider[ed] suitable in a commercial product.” The company fabricated traditional floor and roof tiles, iron, and woodwork to be used in their projects, such materials deemed by Byers necessary to exude the spirit intended. Byers articulated with specificity the type of roofing required to create an “authentic” adobe: “The true adobe should have either a split shake roof or a hand-made tile roof…the tile is a much more practical and attractive roof. These tiles, to be in character, should definitely be hand made.”

38 Marino, “Byers Papers.”
Figure 28. West elevation, Jean Irvine house, Santa Monica, California, c. 1921. Photograph taken of plan at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.
Figure 29. Elevation, Jean Irvine house, Santa Monica, California, c. 1921. Photograph taken of plan at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.
Figure 30. Section, Jean Irvine house, Santa Monica, California, c. 1921. Photograph taken of plan at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.
Figure 31. First floor, Jean Irvine house, Santa Monica, California, c. 1921. Photograph taken of plan at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.
Byers’ interest in adobe construction however expanded beyond an aesthetic expression of the Spanish Colonial Revival style, as substantiated by a drive for functionality in design elements. Byers seemingly maintained a belief in a practical implementation of material throughout the period in which he used adobe. In 1922, he claimed of his construction:

“Nothing is faked – if a timber end shows in an elevation the timber runs back and is a supporting member of some sort. No box beams, no hollow walls – the result is a solid building, wind proof, sound proof, and water proof.”

This sentiment was repeated over twenty years later in 1946, as he stated the following concerning adobe construction:

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The best result, and particularly in this material, is to go about it directly, no false roofs, no false chimneys, every rafter, every timber doing its work and nothing more; no curlacies, no funny little mouldings, just straight walls surrounding squares or rectangular spaces, good and thick, with shutters inside or out to shut off the light, and wide terrace roofs supported on simple wooden posts or adobe columns.  

Byer’s claim elicited a purposed selection of material that exceeded style as it demanded function.

Byer’s direct, functional approach relied on traditional practices to execute his adobe houses. Using soil derived directly from the site, bricks were made on site. Byers’ description of the adobe brickmaking process utilized reveals a striving to emulate traditional modes. In his 1936 article on adobe construction, featuring images of the Kemper Campbell Ranch, approximately 80 miles outside of Los Angeles in Victorville, Byers explained his method:

The making of adobe is quite simple. A mound of the dirt is made with a crater-like depression at the top, which is filled with water. On the following morning one side of the crater is broken down and the water runs down on a lower level terrace. On this level has been spread a layer of fine manure. The Mexicans, with their trousers rolled up to their hips, tramp around in this mixture until it is thoroughly worked.

After the mud was mixed, Byers detailed how it was carried on a “stretcher” to a levelled ground location where molds were ready to be filled. He continued, adding in Spanish terminology to describe the brickmaking process:

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42 Byers, “Home on the Desert,” 16. His account in 1922 of adobe brickmaking varies only in its mention of a use of straw in place of manure. Byers states, “If they cannot find straw or manure to put in the bricks, they pull up the grass growing nearby and throw that in. Usually I provide bales of clean straw, though they prefer manure. This, I think, is because in old Mexico it was the nearest thing at hand; though it may be that there is some chemical virtue in the ammonia.” Morrow, “Revival of Adobe,” 52. In 1946, he claimed a straw binder was preferred “and sometimes a few loads of clay … required to give the mixture the proper consistency.” Byers, “Adobe Houses,” 17.
The mud is dumped into the moulds, kneaded down by hand and slicked up with a dash of water. The frame is then lifted from about the mud, which is left on the ground to dry. The frame in which the adobe is moulded is an *adobera*. The stretcher on which the mud is carried is called a *parihuela*. Adobes should be ready for laying in the walls about two weeks after being made, weather permitting. The third day after making they are ready to be turned up on edge, *cantear*, as the Mexicans call it.\(^{43}\)

After seven to ten days of drying, Byers explained the adobes to be ricked, stacked on their edge, as, he claimed, “the adobe has very little tensile strength and will break under very little weight, even when dry, if not fully supported over its entire area.”\(^{44}\)

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\(^{44}\) Byers, “Home on the Desert,” 16.
In 1922, the adobe bricks Byers claimed to use measured 4 inches in height by 14 inches in width by 20 inches in length for exterior walls and 4 inches in height by 10 inches in width by 20 inches in length for interior, non-bearing walls. Earth was derived from the site; as Byers explained, “An ordinary excavation of two feet beneath the floor joists furnishes enough dirt to build the house.” Byers appeared to have utilized traditional modes of brickmaking throughout his adobe projects, however he also claimed to support the inclusion of additives, such as asphaltum when introduced and required by code. Thus while Byers exhibited a practice and retention of traditional brickmaking, he simultaneously looked to endorse that which appeared to make the best version of the adobe brick for its setting, ensuring functionality, reliability, and performance. Accepting such changes allowed a continued ability for others to use adobe in practice rather than a complete eradication of the building technology.

Byers sustained advocation for adobe, in part, appeared to lie in his understanding and appreciation of its performance abilities. He genuinely appeared committed to adobe as a construction typology, as seen in his oeuvre and publications that claimed its manifest abilities; during a career that spanned many other forms of period revival architecture and used various materials, his publications were largely committed to promoting adobe, with three of the four articles he penned dedicated to the subject.

47 By 1946, while he seemingly had not used the American Bitumals Company’s asphaltum admixture, he claimed to support its inclusion as an additive in the adobe brick’s composition. See Byers, “Adobe Houses,” 20.
48 In this sense too, Byers perhaps recognized that this endorsement may have been the only way to keep the tradition alive as codes strengthened.
49 The articles on adobe by Byers included: “The Influence of Adobe” in California Arts and Architecture (1929); “Home on the Desert” in California Arts and Architecture (1937); and
could also be seen in articles on his work and in which he was interviewed. In a 1931 *Los Angeles Times* article, he succinctly claimed the benefits of adobe:

““The incentives for its use in modern times are cheapness of construction, stability and insulation, and it is adapted to different styles of architecture, possessing the added advantage of permitting deep reveals at the doors and windows which are not possible with the ordinary construction.””

Byers early on had asserted adobe to be a comparable masonry form, usable outside of prescribed stylistic associations; in 1922, Morrow quoted Byers stating:

““The adobe brick can be used in any structure, just as any ordinary fire-baked brick, and the building, when completed cannot be distinguished from one made of lath and plaster, brick, or hollow tile, which is the so-called modernized adobe.””

While Byers’ own application of adobe appears to have remained true to styles where the material’s use could be perceived authentic, his acknowledgement of adobe’s versatility worked to disassociate it from a particular style and engender it a viable building material.

Adobe’s material properties and functionality were a focus in many of Byers’ articles and in articles detailing his method. As a masonry wall, adobe’s insulating properties were repeatedly promoted by Byers, mentioned in both articles he wrote and those that referred to his work. In his 1937 article on adobe for *California Arts &

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50 “Romance Seen in Adobe Brick,” *Los Angeles Times.*

51 Morrow, “Revival of Adobe,” 48-49. Note Byers’ description of the phrase modernized adobe. This directly contrasted Girard’s usage of the phrase, which inferred a modified mode of construction that used adobe bricks.

Architectural, Byers esteemed adobe, and earthen architecture in general, for its heating and cooling properties in past and future applications stating:

Adobe construction has a romantic and historical past as well as a useful future. The Old Testament tells of the troubles of the Israelites trying to make bricks without straw. Egypt, the Orient, North Africa, Ireland, France with its pisé de terre, and even Kansas with its sod huts record the use of mud as a building material. “Cool in the summer and warm in the winter” is the hackneyed way of expressing its virtues…

Byers also praised adobe for its permanence in several of his articles. He worked to dispel notions of a perceived ephemeral quality and to encourage understanding of its susceptibility to water and seismic forces, claiming such alleged faults could be rectified with proper construction. A large section of his 1946 article, “Adobe Houses,” was dedicated to addressing seismic impact and stricter code requirements, as he addressed fears of building in adobe and provided guidance for adobe construction. Byers ended this segment as he stated:

The fundamental consideration in the design and erection of any building is that it act as a unit, so that its horizontal bracing system will be effective in distributing lateral forces. This is particularly important in the case of adobe construction, but fortunately may be achieved by the usual methods of good construction practice.

Byers continued to stress proper construction practice in articles addressing preconceived notions of the material’s performance. In this sense, he attempted to break established criticizing associations and rectify adobe’s place in residential construction for the region. However, as he was reviving adobe’s use in the area, he was doing so for a middle- and upper-class Anglo-American user for which it was more so a new construction to be adopted and claimed. The adobe construction that he was promoting would become

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increasingly polarized as stricter building codes helped to relegate ownership of the tradition to those who could afford to fund required reinforcements after the 1925 Santa Barbara earthquake and the 1933 Long Beach earthquake.

Byers’ claim to adobe as an economical building material appears to have shifted with changes in costs of materials, intricacy of projects, and code requirements. For Byers, early on the use of adobe was argued for its economy, as demonstrated by the Johnson house. Later though in 1936, Byers stated economy to be an inaccurate claim – “erroneous because if plastered as required by the building ordinance, stud and stucco for the same thickness of walls is cheaper.”\(^56\) Byers work too had become less simple and larger, as Harris Allen noted in his 1926 article in *The Pacific Coast Architect*:

> All of this work remains true to type, indigenous to the soil, although the size and cost of these buildings has increased vastly from the days of the first experiments. Many of them are no longer simple in form; but the treatment is still unaffected and the detail for the most part still simple and vigorous.\(^57\)

By 1946, Byers addressed the economy of adobe for present usage in an article that addressed a second “renaissance of interest in adobe construction,” supposedly brought about by a “difficulty of getting lumber, and the high cost of building in general”; he stated:

> There is a common belief that adobe is a cheap method of construction, as cheap as dirt in fact. This is a fallacy, as the engineering costs, the steel, the bond beam, and the extra heavy footing and foundation walls increase the cost over that of ordinary stud and stucco very considerably.\(^58\)

Byers though too had clarified stuccoed frame and adobe construction to not be truly comparable, defending the material as one of permanence as he stated: “It is not fair,

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\(^{56}\) Byers, “At Home,” 17.
\(^{58}\) Byers, “Adobe Houses,” 12.
however to compare, in costs, an 18” adobe wall with a 6” stud and stucco wall.”

Byers’ shifting opinion on adobe as an economic construction form paralleled larger shifting economic and societal factors related to improved safety regulations that deterred adobe’s implementation. As he claimed superiority of building with adobe in comparison to a wood frame house, he likewise acknowledged a socially exclusive accessibility resulting from economic factors.

Like Girard, Byers too made modifications to the construction to appease his clients. However, Byers changes to traditional practice were in part substantiated by a alleged functional claim and a continued seemingly earnest attempt to create a stronger, safer construction. Aside from the manufacturing process, much else of his traditional adobe construction was increasingly altered for a modern, Anglo-American middle or upper-class homeowner and developing building codes. Morrow described Byers’ adaptations stating, “He employs the old methods, with such improvements of detail as the more highly developed industrial conditions of the day render expedient and accessible.” In regard to adobe wall construction, Byers’ modifications appear geared towards improving water resistance, ventilation, and permanence. As at the Johnson house, Byers continued to employ concrete foundations for his adobe houses; Byers explained his waterproofing practice stating: “Tar is melted and put on the concrete foundation before any adobes are laid, and waterproofing is either put in the plaster mix

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60 This is not to say that all of his suggestions illustrated best practice of adobe, many of these illustrate incompatibilities of material. However, this was the early period of an Adobe Revival and adobe’s use was being newly explored and experimented with. Future years would introduce new adobe connoisseurs who would continue to explore best practice through experimentation.
before it is laid on, or applied over the finished job.” In 1922, Byers claimed to continue the rajuela method of plaster adhesion used at the Johnson house, though mentioned the addition of “a very little cement” to the lime and sand plaster coating. By 1925, Byers’ plastering technique was noted to transition to a hard cement mixture and wire application that went against traditional practice:

The plastering of adobe walls is an important matter. The Mexicans advise the use of lime plaster because it is more easily worked and applied; it does not set rapidly and looks well for a day. The best results are obtained by using a cement plaster of a 1:3 mixture. Before plastering the outside surfaces they should be covered with a twenty gauge “hog wire” mesh, nailed to the adobe with 8d nails spaced about 18” on centers. These nails have an astonishing hold to the adobe. All openings are trimmed with a 6” strip of lath. Two coats of the cement mortar are applied and set for ten days or two weeks when a coat of so-called California stucco is then applied.

The inside plastering of the 1:3 mixture is applied directly to the adobe in one coat. It is finished with a second coat of the usual hard wall plaster...

Additional wall details further illustrate Byers’ attempt to improve the adobe construction method with cement-based alterations. In 1922, Byers explained his use of an earthen mortar between adobe brick courses:

64 “Adobe Construction,” The American Architect (May 1925): 472, John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara. A note in pencil on the archive’s copy at this section reads: “Ask me about rajuela.” While it is not clear at what point Byers transitioned away from traditional lime plaster, in 1922, Byers stated issues with hard cement coatings and questions the method of adhesion stating, “The hard stucco plasters do not adhere to adobe walls. Some builders, however, use it over chicken wire fastened to adobe by means of wire ends laid in the courses as the walls go up. Others use 8d. nails, three to a brick and projecting about one-half inch. The Mexicans claim this only makes a good plaster curtain hanging in front – that there is no actual contact.” See Morrow, “Revival of Adobe,” 53. Fassett first makes mention of his use of “chicken or hog wire … as a reinforcing for the cement plaster.” See Fassett, “Revival of Adobe,” 37. The Bradbury house also appears to have implemented a wire adhesion for the plaster. See Christopher Hall, “Toledo, California: Shoring Up an Adobe Classic in the Aftermath of an Earthquake,” Preservation: The Magazine of the National Trust for Historic Preservation 58, No. 3 (May-June 2006): 75.
“The courses, as I do it, are laid in mud only – a mortar mix would be better but more expensive. The mortar then would be squeezed out from between the bricks and form a rough ridge to hold the plaster and the rajuela could be omitted.”

By 1925, Byers claimed to use lime mortar, the “bonding effect…increased by gauging the mortar with cement,” which he found to better secure the bond of the wall to the plaster than earthen mortar alone, and had seemingly done away with the rajuela technique. At the concrete foundation wall, Byers claimed to use floor joists supported by a redwood sill, which would offer an accepted alternative to traditional tamped earthen floors. If a second floor was implemented, a concrete girder offered support to the second story walls and floor joists. In an article in The Architect and Engineer from 1931, the author, Marc N. Goodnow suggested reinforcement for adobe structures however made note of Byers’ disregard of this measure: “Types of two-story houses designed by John Byers have no reinforcing except for a reinforced concrete girder laid all around the building at the second story line.” In an earlier article, dated 1929, Goodnow had stated of Byers’ method: “This type of construction is sturdy and has never yet given trouble.”

In addition to second-story girder, Byers claimed reinforced concrete a viable option for lintels, along with railroad ties and redwood. The use of concrete in cases of support and openings could be seen to replace wooden elements of earlier practice.

Whereas the Johnson house illustrates Byers’ introduction to adobe, the Bradbury house offers an example of Byers’ adobe residential construction as it developed. Built between 1922 and 1923 on the bluffs in Santa Monica, it was Byers’ “first major commission” and, according to prominent Californian architectural historians David Gebhard and Robert Winter, “establishe[d] his reputation as a Spanish Colonial Revivalist.”70 The house first and foremost illustrates the status of client that Byers was designing for, wealthy and well-traveled. The Spanish Colonial Revival home was built for Lewis Bradbury Jr., son of a wealthy Los Angeles real estate and mining tycoon, as a family beach home and modelled after El Greco Museum’s interpreted re-creation of El

Greco’s residence in Toledo.\textsuperscript{71} The courtyard of the El Greco residence provided particular inspiration, emulated “down to the design of the tiles.”\textsuperscript{72} According to architectural historian Teresa Grimes, the inspiration for the house had come about from the Bradburys’ recent travels to Spain, where Lewis had “developed a taste for provincial Spanish architecture,” and upon their return “hired Byers to design a house in the Andalusian style.”\textsuperscript{73} The two-story house was designed in a general u-shaped plan, eight rooms and three baths surrounding the central courtyard. The adobe walls, measuring “21 inches thick on the first floor and 15 inches thick on the second floor,” were constructed atop a concrete foundation and protected by a terra cotta tile roof and plaster wall coatings.\textsuperscript{74} The noted wall measurements infer that Byers had used his typical adobe brick size, with dimensions of 4 by 14 by 20 inches, running widthwise for courses of the first story and lengthwise for courses of the second story. The adjusting of direction for the second story adobe bricks aided to taper the wall thickness with height, reducing thickness and there so weight of the second story walls. The coatings were stated to be of

\footnote{It is interesting to note that this Spanish source was in itself a mythicized recreation. According to Eric Storm, El Greco’s adoption as emblematic of the city’s collective identity was encouraged by foreign scholars and adopted by the city in the early twentieth century with the rise of tourism, the house being built around that time. See Eric Storm, “Nationalism Studies between Methodological Nationalism and Orientalism: An Alternative Approach Illustrated with the Case of El Greco in Toledo, Spain,” \textit{Nations and Nationalism} 21, no. 4 (October 1, 2015): 786–804, Wiley Online Library. It was not until 2011 that “casa” was dropped from the museum’s title in an attempt to clarify the fact that the house was a fabricated recreation. See Christina Carrillo de Albornoz, “Toledo Reclaims El Greco,” \textit{The Art Newspaper} 20, no. 224 (2011): 20, EBSCOhost. The comparison of this recreation with the Bradbury house potentially provides for an interesting study of architecture, romanticism and the creation of collective identity.}


\footnote{Gregory and Dillhofer, \textit{National Register Draft}, 1.}
“metal mesh and stucco on the outside, and gypsum plaster on the inside.” This implies a hard cement stucco was used, as was typical for the wire attachment technique. Exterior facing facades featured “large expanses of stucco punctuated asymmetrically with windows and balconies.”

Figure 36. Bradbury house, Santa Monica, California, c. 1930. Photograph by Miles Berné. Photograph taken at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.

75 Christopher Hall, “Toledo, California: Shoring Up an Adobe Classic in the Aftermath of an Earthquake,” *Preservation: The Magazine of the National Trust for Historic Preservation* 58, No. 3 (May-June 2006): 75. Hall notes how the plaster and its means of attachment were identified during restoration efforts by the owners to repair and strengthen the wall after the 1994 Northridge earthquake. The wire used had suffered visible corrosion and was ultimately replaced, suggesting water entrapment between the wall and coating. Hall further states that Carol Fisher, then co-owner, oversaw the restoration efforts and consulted Ken Ruiz in Santa Barbara “who knew how to make adobe the way it was made in the 1920s.”

76 However confirmation with the conservation team would be necessary or if information not available, subsequent testing.

Figure 37. Gallery of courtyard, Bradbury house, Santa Monica, California, c. 1930. Photograph by Miles Berné. Photograph taken at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.
The off-center door on the main entry façade included a tile surround, and a variety of tile continued to be used throughout the house, particularly in the courtyard. While Byers’ tile company had been producing tile at the time of construction, it is not indicated in the archives if the tile were Byers’ as designs have been noted to be “similar
to those found in a catalog produced by the S & S Tile Company of San Jose, owned by A.L. Solon and F.P. Schemmel.78 It is also not clear if the roof tiles, wood work, and metal work were made by Byers’ company or sourced elsewhere.

Figure 39. Bradbury house, Santa Monica, California, c. 1930. Photograph by Miles Berné. Photograph taken at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.

78 Gregory and Dillhofer, National Register Draft, 7-8.
Figure 40. Variety of tile in courtyard, Bradbury house, Santa Monica, California, c. 1925. Photograph by Margaret Craig. Photograph taken at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.
Figure 41. Entrance hall showing tiled stairs, Bradbury house, Santa Monica, California, c. 1930. Photograph by Margaret Craig. Photograph taken at John Byers papers, Architecture and Design Collection. Art, Design & Architecture Museum; University of California, Santa Barbara.
The house still stands today, and as of its recent sale to private owners in 2017 was noted to be minimally altered. In 1994, it was designated a City of Los Angeles Historic-Cultural Monument and in 2010, it was listed on the National Register of Historic Places, its significance summarized as follows: “The Bradbury house is significant under National Register Criterion C for the fact it was the first substantial adobe house designed by noted architect John W. Byers and was instrumental in establishing his reputation as a progenitor of, and specialist in, the Spanish Colonial Revival style and the modern use of adobe brick.”

The Bradbury house provides a documented and preserved exemplary illustration of Byers’ work with adobe, revealing his and his crew’s craftsmen abilities that helped to solidify his career and continued investment in adobe. In this sense, the house shows the way in which Byers’ work attempted to dispel negative associations concerning adobe brick and contributed to engendering the Adobe Revival. As Byers’ adobe residences generally targeted – a middle- and upper-class Anglo-American demographic typically residing on the Westside, the house also demonstrates how a particular demographic likely envisioned adobe as a means to a nostalgic style. This group’s adoption and adaption of adobe can be assumed to have both aided adobe’s rising popularity, while engendering a gap between who adobe was intended for within the Los Angeles area.

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81 Santa Monica at this time was predominately white and increasingly economically and racially exclusive neighborhood. See Fogelson, Fragmented Metropolis, 200.
82 Many of Byers’ projects were publicized in various architectural journals.
Developing building regulations soon would widen this gap by sequestering the tradition further to an upper class that could afford additional adobe building expenses for code compliance.

In cross-referencing information from Byers’ archive, journal articles, and previous theses, it appears that Byers designed and built approximately 25 adobe residences in the Los Angeles area prior to 1930, with a couple adobe projects continuing thereafter. Of these 25 residences, roughly 22 appear to be constructed during or prior to 1925. From 1923 to 1925, Byers hired additional staff, including a construction manager, and made his secretary, Edla Muir, a draftswoman. Between 1925 and 1926, Byers studied for and earned his architectural license, likely doing so in part to legitimize his role as an architect for an increasingly elite clientele. As a licensed architect, Byers focused his role on design while others assumed building activities. Around this time, he further diversified his design portfolio to include a range of period revival homes, “such as Spanish Colonial Revival, Monterey Colonial, and French Provincial, among others,” which has been attributed to both his own interests and client’s requests. Aside from stylistic changes, his general move away from adobe construction has been attributed to

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83 Further research needs to be conducted to confirm all of these structures were of adobe construction. However, an article in the *Architect and Engineer* claimed Byers to have built at least thirty adobe structures by the year 1929. See Goodnow, “Ancient Adobe,” 38. Sources referenced include: Grimes, “Edla Muir,” 21, 94-103; Andree, “John Byers”; Marino, “Byers Papers”; John Byers papers, Architecture and Design Collection, Art, Design & Architecture Museum, University of California, Santa Barbara; and all other articles referred to within this chapter.

84 Muir had begun as Byers’ secretary in 1919 at the age of thirteen. She continued to grow her profession alongside Byers, eventually becoming Byers’ associate. From 1934 to 1942, Byers and Muir worked together as Byers and Muir Associated Architects. Grimes’ thesis focused on the career of Edla Muir, see Grimes, “Edla Muir.”


issues with waterproofing and stricter building codes which resulted in more densely populated areas, such as Los Angeles, after the Santa Barbara earthquake of 1925 and the Long Beach earthquake of 1933.\textsuperscript{87} As a result, Grimes purported Byers to be “forced to adapt his favored mode to wood frame and stucco construction.”\textsuperscript{88} However, despite code changes, Byers continued to work, although in a more limited capacity, with adobe and remained a steadfast advocate of the construction typology till the end of his career in the 1950s.\textsuperscript{89}

\textsuperscript{87} Andree, “John Byers,” 33; Grimes, “Edla Muir,” 21. The note regarding waterproofing comes from Grimes, however no mention of this was found in my preliminary research. It is likely however that waterproofing issues would have eventually arose given the use of a hard cement coating.

\textsuperscript{88} Grimes, “Edla Muir,” 21.

CHAPTER 6: CONCLUSION

In considering an Adobe Revival, Victor Girard and John Byers’ work offers two approaches to adobe construction, each claiming its abilities of economy (for a time), comfort, style, regional appropriateness, and tradition to varying degrees. Girard’s implementation of adobe sought to meet the housing demand and foster Los Angeles’ growth, targeting a transplanted, middle-class, first-time home buyer. Whereas Byers’ craftsman approach, seemingly of a more rigorous regional consideration with continued devotion, gained him a reputation as an adobe connoisseur and the attention of an elite clientele who could afford to buy a tailored, Spanish aura.

An analysis of the adobe projects of Girard and Byers, along with the Adobe Electrical Home, serves to show how a group of transplanted Anglo-Americans engaged adobe in the early 1920s as a means to single-family housing for a growing, identity-forming Los Angeles community. The projects specifically illustrate the economic, political, cultural, and environmental forces that supported a reworking of associations that encouraged the Adobe Revival. They further reveal how these prominent tastemakers remade an identity for adobe, one that was allegedly improved to meet modern, industrial standards, to engender usage of the material. As a result, these public-facing initiatives assumedly generated a re-examination of adobe’s appropriateness for the region and stirred interest in the material as a viable mode of building for others building in Los Angeles. In this sense, as they revived and adapted the tradition, they simultaneously retained it, though altered, in the face of rapidly expanding industrialization. The discussed projects however neglect to encapsulate the entirety of the Adobe Revival’s beginnings, which seemed to have also generated interest with a lower-class group, who
implemented the material in do-it-yourself projects. Ideally, it would have been interesting to include a third study, concerning one such example, but unfortunately a case study opportunity has not yet been identified. Lastly, and most importantly, the real nexus connecting traditional modes of adobe building to the Adobe Revival was the people and communities who inhabited and maintained the Los Angeles area’s extant adobes as newcomers arrived in California and threatened the tradition. The architects, developers, and builders who studied, implemented, appropriated, and capitalized on these extant forms that these people inhabited in the early twentieth century are indebted to these communities. A deeper and more pointed study is needed in this area; Park’s 1928 report offers an excellent place to start.¹

The interest that was generated for adobe in Los Angeles, and throughout Southern California, during the early 1920s, introduced its many benefits which spurred studies dedicated to the material; J.D. Long’s 1929 bulletin, Adobe Construction, offers an early example of this.² As building regulations strengthened following the 1925 Santa Barbara earthquake and 1933 Long Beach earthquake, the growing popularity of adobe for the region as engendered by the early years of the Adobe Revival secured continued investment in its use. However, site-based methods of soil extraction and brickmaking appeared to have been largely abandoned in Los Angeles at this time in favor of standardized, pre-manufactured adobe bricks that promised to meet testing requirements that would allow adobe’s use. In the 1930s and 1940s, universities and commercial companies explored and developed options that offered seismic reinforcement, stabilizing

¹ Parks, “Vanished Days.”
² Long, Adobe Construction.
admixtures and mass-production. San Francisco’s American Bitumul Company’s Bitudobe bricks evidence an early attempt to provide a standardized, stabilized brick to offer a seemingly better adobe option.\(^3\) The asphalt stabilized bricks, such as Bitudobe, offered compliance with strengthening building codes and the Federal Housing Administration’s (FHA) lending requirements.\(^4\)

Figure 42. Clipping from pamphlet for Bitudobe showing treated and untreated brick, American Bitumuls Company, n.d. Courtesy of Frank Matero.


\(^4\) For an in-depth explanation of the continuation of the Adobe Revival in California following the 1925 and 1933 earthquakes, see Calarco, “Modern Adobe.”
As production increased following World War II, alternative building materials, such as wood, eventually became cheaper than adobe and increased in popularity. The cost discrepancy between adobe and wood was furthered as building codes strengthened, entailing additional costs for adobe construction. Eventually adobe brick manufacturers
closed their plants in California. Adobe building continued, however, it increasingly became an affair relegated to the elite, with expensive transportation and code required building costs. This in turn has acted to perpetuate ownership of the tradition to a wealthy upper class, barring access to a traditional form of building that was once widely accessible to a range of socio-economic classes. The current and impending climate crisis however demands a renewed questioning of ownership and accessibility to adobe architecture, which offers a traditionally rooted, regionally appropriate, and sustainable building mode for the increasing threats to the area. While earthen architecture’s ecological benefits are manifold, adobe’s offering of a means to passive cooling to address rising temperatures and fire resistance to address increasing wildfires should not be overlooked for the region’s dire projections.

A study of the Adobe Revival helps to elucidate the economic, political, and social factors that have given shape to the current built environment. A historical juxtaposition of the implementation of adobe alongside modern housing materials, primarily wood and concrete, reveals how economic factors have worked to determine adobe, of any iteration, incompatible for Los Angeles’ residential construction. A recognition of the economic factors at work in deciphering the built environment begin to deconstruct seemingly static social norms concerning expectations for housing. This in turn requires us to ask if building patterns which are unsustainable, whose use has originated and perpetuated in a linear economy to meet the demands of a consumer

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culture, are worth sustaining into the current epoch and at what cost. Earthen architecture, of which adobe is just one example, offers a traditional alternative that has largely been ignored as a viable, sustainable building material. It is the hope of this thesis that further research will be done to consider the possibilities for making reinforced modes of adobe construction, or adaptations thereof, available to a wider socio-economic group in Los Angeles. This in turn has the potential to return the tradition to the city at large, in a safe manner, while offering a regionally appropriate, climate conscious practice.

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6 Just outside of Los Angeles, an interesting adapted form of adobe being explored is CalEarth’s SuperAdobe. These structures have passed California’s earthquake code regulations. In 2017, one of these structures erected in Ojai was noted to have survived the Thomas Fire. See “What Is SuperAdobe?,” CalEarth: California Institute of Earth Architecture, accessed September 1, 2020, https://www.calearth.org/intro-superadobe.


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144


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INDEX

1925 Santa Barbara earthquake, 49, 115, 132
1933 Long Beach earthquake, 49, 115, 132
Adobe Electrical Home, 1-5, 70, 131
Adobe Electrical Home, 111
advertising, 67, 71, 72, 73, 74
American Bitumul Company, 133
Andalusian style, 121
appropriate technology, 11, 12, 37, 56, 66, 77
asphalt, 24, 133
automobile, 7, 75
Babbitt, George, 79
Babson, Roger, 75
Banham, Reyner, 34, 55, 137
Bitudobe, 133-134
Bradbury house, 117, 120, 121, 124, 128
Bradbury Jr, Lewis, 120
Brentwood, 85, 88, 89, 90, 91, 92, 93, 94, 95
Brisbane, Arthur, 76
Byers, John, ii, 16, 42, 43, 48, 50, 56, 66, 79-130, 131, 137, 138, 143, 144, 145
CalEarth, 136
California bungalow style, 42, 51, 53
California State Building, 34-35
Californios, 7
cantear, 111
cement, 7, 47, 62, 64, 68, 79, 117, 118, 122, 130
Chard, John, 60, 61, 62, 63, 66
Churriquesque, 34
clay, 8, 9, 12, 23, 28, 64, 67, 101, 110
Colonial Bungalow, 59, 74
concrete, 32, 40, 44, 47, 50, 63, 64, 86, 87, 116, 118, 121, 135, 147
corredores, 22
courtyard, 25, 93, 121, 123, 124, 126
craftsman, 43, 57, 81, 99, 100, 103, 131
Cudahy Walnut Land Company, 58, 74
Downtown Los Angeles, 58
droughts, 14, 20
earthquakes, 11, 20, 53, 133
El Greco residence, 121
electricity, 1-5, 70-71
farmers, 27
Federal Housing Administration (FHA), 133
Field Act, 49
Girard, Victor, 1, 16, 41, 47, 56, 58-78, 81, 103, 113, 116, 131, 138, 140, 141, 142, 145, 147
Goodhue, Bertram, 34
glass, 13, 24, 32
Great Depression, 14
gypsum, 122
hand-molded adobe, 8, 12
health-seekers, 27
Hernandez, Juan, 5
Hitchcock Military Academy, 82
hollow terra-cotta tile, 32
Huntington Park, 58
John Byers Mexican Handmade Tile Company, 104, 109
John Byers Organization for Design and Building of Latin Homes, 96
Johnson, Harry, 85
Johnson house, 86, 88, 89, 90, 91, 92, 93, 94, 95, 96, 104, 115, 116, 120
Keeler, Charles, 33
Kern County, 48
Lacayo, T.E., 76
Landmarks Club, 45
Laws of the Indies, 21, 139
Lewis, Sinclair, 79
Lummis, Charles Fletcher, 33, 37, 45
manure, 46, 110
McCulloh, A.H., 60, 63, 66
Mediterranean, 6, 20, 31, 34, 54, 55, 100, 102, 139
Mediterranean style, 31
Mexican craftsmen, 85, 96, 103, 104, 128
Mexican culture, 7, 13, 23, 26, 27, 28, 31, 38, 79, 87, 101, 102
Mission Revival style, 31, 32, 33, 34, 42
Mission San Gabriel, 18, 19
model home, 1, 58, 59, 60, 62, 70, 71
Modernized Adobe, 1, 37, 38, 41, 47, 48, 53, 56, 59, 60, 63, 65, 67, 68, 69, 70, 74, 76, 77, 103, 141, 142, 145
mold-formed adobe, 8, 12, 13, 20, 23, 46, 62, 110, 111
Montevideo, Uruguay, 82
Morrow, Irving, 79
Muir, Edla, 121, 129, 130, 142
Native American culture, 7, 12, 13, 18, 19, 23, 31, 38, 55, 102
North American Academy, 82
Ojai, 85, 136
Own Your Home exhibit, 77
Panama California International Exposition, 34
parihuela, 111
Paris Exposition, 81
Parks, Marion, 6, 22, 25
patio, 25, 52
plaster, 9, 10, 23, 43, 44, 47, 62, 64, 86, 87, 91, 101, 113, 116, 117, 118, 121, 122
pueblo, 19, 21, 22, 24, 26, 31
rajuela, 87
rancho, 19, 21, 22, 26, 31, 45
real estate boom, 1, 39, 86
rent, 74, 75
Riley Act, 49, 50, 147
Rio Grande Valley, 12
San Fernando Valley, 24
Santa Monica, 28, 49, 82, 83, 84, 85, 98, 99, 105, 106, 107, 108, 120, 122, 123, 124, 125, 126, 127, 128, 143
Santa Monica High School, 82
Schumacher, E.F., 10
single-family home, 3
Smith, Sarah Bixby, 24
Spanish Colonial Revival, 5, 6, 13, 31, 32, 34, 42, 54, 56, 57, 70, 80, 86, 96, 100, 103, 109, 120, 128, 129, 140
straw, 8, 9, 22, 23, 24, 28, 46, 62, 79, 110, 114
stucco, 24, 31, 32, 33, 43, 47, 62, 64, 70, 115, 116, 117, 122, 130
subdivision, 1, 7, 58, 59, 60, 70, 73, 74, 75, 76
suburban, 38, 57, 58, 68, 74, 75
SuperAdobe, 134
tar, 24, 48
Tongva culture, 18-20
Uniform Building Code (UBC), 49
University of Michigan, 81
Walnut Park, 1, 41, 47, 58, 59, 60, 62, 63, 67, 69, 70, 71, 72, 73, 74, 75, 76, 77, 139, 140, 141, 142, 146, 147
Westside, 81, 85, 128
wildfire, 14, 20, 29
Windsor Heights, 1
Woodruff, S.H., 3
World War I, 6, 14, 37, 39, 54, 59, 76, 86
World War II, 14, 16, 134, 138
wythes, 23, 87