

PIVOTAL CONSTRUCTIONS OF UNSEEN EVENTS: BUILDING THE AMERICAN DREAM

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ABSTRACT

Is important that architecture is the product of more than the aesthetic concerns of the architect and the practical concerns of the client. It straddles two realms: that of the fine arts and that of the highly practical and utilitarian. In its dual nature, architecture is most often cast as a high art; the outcomes of architectural thinking and making are celebrated, analyzed, and documented for their aesthetic significance as art objects. Architecture's impact as a service, being practical and useful, are deemed less worthy by both the discipline and profession. *Pivotal Constructions of Unseen Events* reconstitutes a new reading of American history from 1871-2020, a period marked by tremendous national growth and building, alongside the rise of new shared ideas, practices, and customs that have shaped—and continue to shape—the structures of American society *alongside* the structures of its built environment.

Through the construction of five narratives for five buildings of *architectural origin*, this research examines the social, technological, material, and economic forces that led to their emergence and construction, as well as the outcomes that arose in society afterward. *Pivotal Constructions* demonstrates—through the close reading of buildings—how to understand architecture as historical *event* rather than historical *artifact*. Whereby architecture's historical significance is not

solely as a static object (or artifact), but rather as something that *happened and happens* (an event), transforming and shaping history in unexpected and significant ways. This approach gathers and reassembles evidence of architecture's historical significance, elements hence claimed by other narratives, absorbed by other disciplines, and told by other actors. This method of re-constructing architectural history, is meant to recapture a fuller gamut of architecture's impact on and in society.

For VIBRArch 2022, this author presents one of these narratives: "*Building the American Dream*", the history of how the arrival in 1908 of the Gamble House (Greene and Greene Architects) played a part in the genesis of the *single-family, detached house*, which has become a potent and defining symbol of American values and morals.

KEYWORDS

US Housing; Single-family house; American Dream; Inequity; Event.

1. INTRODUCTION

It is important to understand that architecture is the product of more than the aesthetic concerns of the architect and the practical concerns of the client. It straddles two realms: that of the fine arts and that of the highly

practical and utilitarian. In its dual nature, architecture is most often cast as a high art; the outcomes of architectural thinking and making are celebrated, analyzed, and documented for their aesthetic significance as art objects. *Pivotal Constructions of Unseen Events* is a research project that reconstitutes a new survey of architectural history, examining periods of tremendous growth and building, alongside the rise of new shared ideas, practices, and customs that have shaped—and continue to shape—the structures of society alongside the structures of its built environment. For VIBRArch 2022, this author will present one case study, or chapter, of the five original narratives of the project currently underway. *Pivotal Constructions* identifies and studies these five buildings, as they emerged in the United States during the period from 1871 to 2020 and links them to the outcomes that arose in society afterward. They are: The Gamble House (1908), Pasadena, California, Greene and Greene; The Home Insurance Building (1885, demolished 1931), Chicago, Illinois, William LeBaron Jenny; Ford River Rouge Complex (1917-1928) Detroit, Michigan, Albert Kahn; Supreme Court Building (1932-1935) Washington DC, Cass Gilbert; World Trade Center Site (2001), New York City, including both the 9/11 Memorial (2011), Michael Arad and One World Trade Center (2014), SOM.

The project also endeavors to introduce a new pedagogical approach to the “close reading” of a building—whereby students will understand architecture as historical event rather than as historical artifact. The project posits that architecture’s historical significance is not solely as a static object (or artifact), but rather as something that happened and happens (an event), transforming and shaping history in unexpected and significant ways. This approach gathers and reassembles evidence of architecture’s historical significance, elements hence claimed by other narratives, absorbed by other disciplines, and told by other actors. The long-term goal of this project is in

the realm of public scholarship; the narratives are geared toward a general audience so as to increase the level of architectural literacy at a societal scale.

Please note: Given the constraints of the paper format, the author will not include as much visual material as is currently part of the research. That said, the author’s planned conference presentation will be mostly of images and visual material.

2. BUILDING OF ARCHITECTURAL ORIGIN

2.1. Architecture as Event

Pivotal Constructions begins by setting the distinction between “building of architectural origin” versus a “building.” For architectural scholars and practitioners, this distinction is straightforward and understandable. For other disciplines, not fluent or steeped in examples of the distinction, the difference is far less apparent. For this project, “buildings of architectural origin” are classified as those that emerge out of architectural expertise (from a disciplinary perspective), set apart from those buildings that arise without the direct influence of architecture or architects. Since this process is not homogenous, the author has chosen a case-study-based method to better study the unique idiosyncrasies of individual architectures as events.

Many—arguably most—buildings do not have architectural origins. Yet, this project posits the notion that the majority of buildings, the ones that are most in contact with the majority of citizens, can indeed trace their origins to architectural events as major influences. By studying these architectural “events” more closely—what events preceded them and what events came after them—this author hopes to demonstrate how architecture is not rarefied and elite, but rather that it is integrated and integral in shaping a society. The project proposes a pedagogical component as well: to introduce a history course where students

perform their own “close reading” of buildings of architectural origin. While close readings are a common component of architectural history and architectural theory scholarship, this author proposes such study through the addition of social science lenses, including sociology, psychology, economics, and political science, among others. Whereby, a “close reading” is no longer limited to existing discursive boundaries and norms, but expands to include forces and events that brought about the building’s origins, outcomes, and consequences.

In *Pivotal Constructions*, this re-reading yields a potentially deeper understanding of architecture’s significance in contemporary American society. It can reveal architecture’s broader role and influence, fulfilling a desire to find ways of increasing architectural literacy. Especially in the US context, where architecture’s status is at the periphery, the public’s awareness of the benefits of architectural thinking and making remain very limited, with access available to the elite. In contrast, this project repositions architecture as an active event that touches and impacts many, many facets of society. The narratives of Pivotal Constructions refigure architecture-as-object (something inert) into architecture-as-event (something active that happens and is unusual and significant). Here, architecture-events emerge and unfold over time, giving rise to unexpected, surprising, and important changes in society.

For VIBRArch, this author presents *Pivotal Construction’s* first narrative: *Building the American Dream*, the history of how the arrival in 1908 of the Gamble House (Greene and Greene Architects) played a part in the genesis of the single-family, detached house (SFDH). In the US, the SFDH is a defining cultural, economic, political, and psychological symbol, both immaterially and materially. Founded on ideals of equal opportunity, the establishment and proliferation of the SFDH rather manifested as a means of spatializing racism, exclusion, and inequity.

2.2. The Gamble House Sows the American Home

Although the architects (and brothers) Charles Sumner Greene (1868–1957) and Henry Mather Greene (1870–1954) intended for the Gamble House (1908, Pasadena; fig.1) to serve as a new model (in style and in function) of the home, they could not have imagined how their architectural and tectonic ideas and concepts would penetrate and shape American society in the century to come.

In the last quarter of the 19th century in the United States, the Greene brothers built their architectural practice around ideas of the house as a sanctuary against the ills sowed by the Industrial Revolution, a period that marked the US’s tremendous rise as a global power. Originally from the Midwestern United States, the Greenes were drawn to Southern California by way of St. Louis, Missouri, studied architecture at the Massachusetts Institute of Technology (MIT), and then on a visit to see their vacationing parents, decided to settle in Pasadena, California, where they opened an architecture office in 1894. Characteristic of the Greenes’ early style was the use of simple planks and light-wood frame construction, coupled with their version of the California Craftsman Bungalow style. In their early commissions, such as the Bandini Bungalow (1908), the Greenes borrowed elements from the Spanish (“slender posts and exposed rafters”), the Japanese (temples and gardens), the Swiss (overhanging roof), as well as the Indian (the Bengali *bānglā*, or “low house with galleries and porches”), (Lancaster, 1985).

The Greenes lauded simplicity and modesty, as well as called for a native-born, distinctly modern and American architecture through a return to craftsmanship. These ideas were a reaction to the negative social and physical consequences that emerged from industrialization. Jacob Riis in New York City, as well as Upton Sinclair in Chicago, documented and disseminated accounts of the harsh conditions of living and working

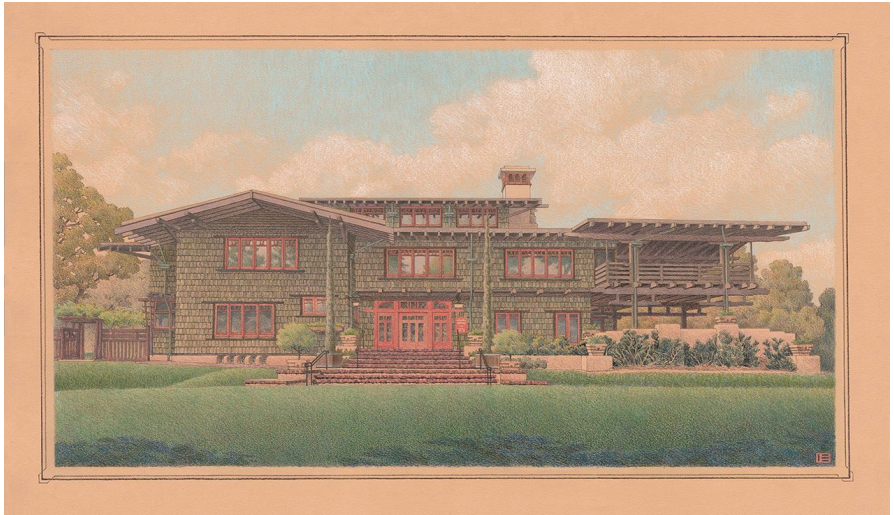


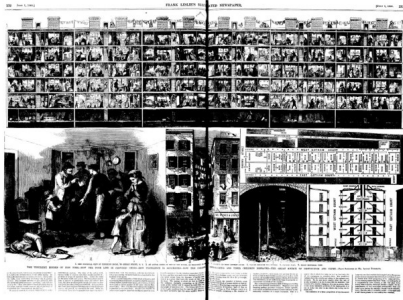
Figure 1. Gamble House Front Facade, Perspective Drawing. Source: (Ian Espinoza)

in the slums, tenements, and factories of America's industrializing urban centers. Hastily built and neglected tenements, which became a symbol of the ills of industrialization, were cheap, nasty, and unsafe, wholly lacking light or ventilation. Many considered them the, "evil offspring of public neglect and private greed." (Riis, 1895) Progressive citizens, especially those in the owner and professional class, saw tenement buildings and slum developments as having the power to literally corrupt the residents inside through occupation alone. Riis describes the process:

Here "By far the largest part—eighty per cent. at least—of the crimes against property and against the person are perpetrated by individuals who have either lost connection with home life, or never had any, or whose *homes had ceased to be sufficiently separate, decent, and desirable to afford what are regarded as ordinary wholesome influences of home and family...*" (Riis, 1895)

Tenements were a contagion and corrupting force. They crammed individuals to live together in unnatural and unhealthy ways. Conversely, the house with light, air, and nature was seen to be "sufficiently separate," providing proper environment for a healthy and prosperous life. (Figs. 2-3)

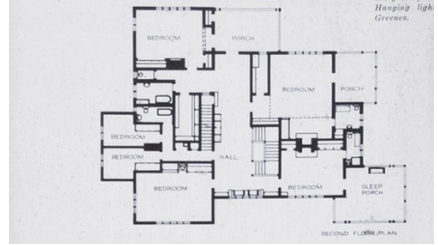
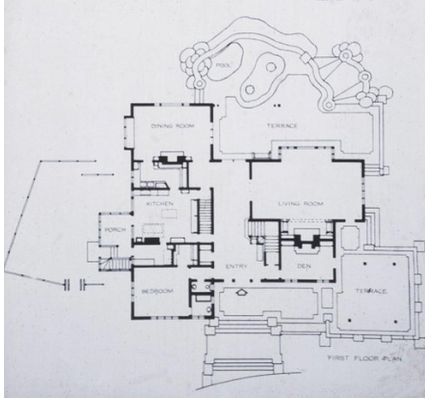
The Greene brothers' vision for the Gamble House (a vision common to their many California Craftsman style bungalow houses) was first designed for a growing population of wealthy families from established east coast and midwestern urbanized and industrialized centers. These families, such as the Gambles, sought summer residences the newly developing state of California, a vast contrast to the dirty and crowded environments where they had made their fortunes. In the late 1890's, the incredible climate of a still undeveloped Pasadena had turned it into a primary vacation destination. The Gambles, like many of these families, eventually commissioned houses of their own, to be used for passing the winter season in fresh air and a pleasing landscape.



Figures 2 and 3. Period photo of 19th century New York City Tenements (1912, Lewis Wickes Hine, Library of Congress); Illustration from Frank Leslie's Illustrated Newspaper (1865)

David Gamble, the family patriarch, was one son of industrialist James Gamble, who with William Proctor built one of the largest enterprises in the United States. Like the lore of Proctor & Gamble's Ivory soap, "a product so clean and pure that "it floats!", the architecture of the Greene brothers was seen to provide all the health-bringing elements of morally correct living. Through the architecture of the Gamble House, it could be said that the Greene brothers offered an act of benevolence, a house whose design brought forth a life that was wholesome and morally correct. Their wealthy clients embraced the progressive ideals of the Greene brothers architecture: modern, *efficient* construction methods like the platform frame; *healthy* plan layouts that included new architectural elements such as sleeping terraces and open porches to bring in air; multiple bathrooms for bodily cleanliness and individuality; and modern kitchens with labor-saving appliances for a household that could function *without* servants. The house offered a set of nested sanctuaries: the home itself settled in protective garden away from industrialized noise and filth; the individual bedrooms and bathrooms forming suites as sanctuaries for each member of the family. Another touted characteristic of the Gamble House, was its "simplicity." Its original meaning, "coming from Bengali" became associated with

a type of building during the English colonial period in India when these low-rise structures, flanked with open-air porches, were used by British imperialists as useful and temporary housing that could easily be constructed in sites and locations to support basic needs of shelter and inhabitation. Featured in the 1893 World's Columbian Exposition in Chicago, the bungalow, alongside examples of global architectures as far as Japan, entered the disciplinary language of turn of the 20th century American architects. Architects like the Greene brothers combined the open layouts from Japanese architecture, with the priorities of homes set in a natural, healthy landscape, and the coziness and modesty of an unpretentious building type (Lancaster, 1958). As the case today, these many architectural innovations were primarily the privilege of America's most wealthy families. Throughout the Gamble House, the Greenes introduced a series of architectural ideas that were symbiotic with the social and economic events of their time. And, over time, these rarefied architectural spread through wealthy enclaves: the preference of single-family detached dwelling over that of multi-family housing; houses set in plots of land; the reliance on wood frame construction; the multiplication and individualization of programmatic elements such as bedrooms and bathrooms (fig. 4-5).



Figures 4 and 5. Gamble House, Second Floor plan, (Archinform) showing the multiplication of domestic spaces, where bedrooms are paired with individual bathrooms to promote healthy living. (Original floor plans to be found at Avery Library, Columbia University and also the Library of Congress)



Figure 6. Toll Brothers "Milton" model, first and second floors plan; Located adjacent to an individual bedroom, the ensuite bathroom is arguably the precursor to the value and desires that have guided the internal formal and programmatic character of the single-family dwelling in the United States. In figures 4-6, the architectural proposal set in motion by the Gamble House, continues in the plans and construction of dwellings of non-architectural origins, as seen in the Toll Brother's house plan. The plan shows how millions of homes have been and continue to be constructed adhering to not only a planimetric and programmatic concept, but also reflects the values held by Americans today regarding their homes.

At the time of its construction, the Gamble House was a unique luxury, inaccessible to most Americans. Yet, its construction and acclaim cast an originating archetype of what the ideal American home should and would be: the wood frame, single-family detached house, sitting within a plot of grassed lawns and gardens, a haven every family. (Ellickson, 2021; Hirt 2015). That image endures through today: In 2020, 89 percent of US homebuyers still most prefer a single-family detached house over any other type of housing. In the United States, the single family detached house represents over 60 percent of homes, a figure that has not budged since at least 1940. In comparison, attached, single-family homes, like a townhouse or rowhouse, represent only ~5.6 percent of homes. Apartments and other types of multifamily housing constituted 17 percent of the housing stock in 2000, rising slightly to ~25 percent in 2018. While the actual numbers have varied small amounts over time, most US citizens have and continue to overwhelmingly prefer to be homeowners over renters (over 60 percent own their homes) and to live in single-family detached houses over multifamily dwellings (Fig. 6). This has not only shaped the physical character of the entire US residential landscape in the image of the Gamble House, but it has also shaped the moral and economic attitudes of the American people when it comes to houses and home.

“Housing tenure—whether a home is owned or rented by its occupant—is as much a social experience as a financial one. In nations dominated by home ownership, renting is a marginalized form of housing tenure and therefore considered far less desirable. Housing scholars have tied tenure prejudice to issues of race and class, as rental housing is disproportionately occupied by low-income earners and racialized minorities. One dimension of tenure prejudice concerns perceptions of crime.

Research suggests that affordable housing projects are perceived to bring higher levels of crime and violence to the neighbourhood. These perceptions exist in the face of research suggesting that there is little effect of public housing on the actual rate of crime in a neighbourhood.” (Rollwagan 2015, p. 2)

How did the elite architecture of the Gamble house serve as an event in US history? How did a rarefied house, conceived as a one-of-a-kind art object influence and impact the development of how Americans live today? One part of the narrative looks back to early in the 19th century, to the development of the US timber industry.

2.3. The Development of the US Timber Industry

“Civilized man lives in houses, and as the house that does not contain wood in some form is practically unknown, the lumber industry accompanies civilized man in all his migrations and progress. It was, in fact, a condition of his migration and advancement until the railroad brought forest and prairie together and made habitable the barren places of the earth. A treeless world might not be uninhabitable, but it is a historical fact that migration, racial progress and growth of population have been guided by the forest distribution of the world—modified, of course, by other conditions, but having these as one of their chief controlling influences.” (Defenbaugh, 1909)

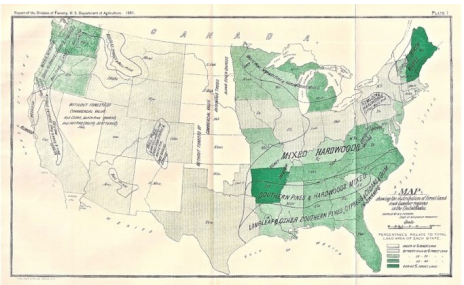
In his 1909, two-volume, over 1000-page history of the lumber industry, James Elliot Defenbaugh, editor of the periodical “American Lumberman,” writes that of the “total land surface of the continental United States, excluding Alaska, is 2,972,594 square miles.” Of that nearly 3 million square miles, “it can be asserted with confidence that the original

forested area of the present United States was at least 1,400,000 square miles, or nearly one-half of the entire land area.” (Defenbaugh, 1909). In the years since colonization and the time Defenbaugh published his work in the early 20th century, nearly 400,000 square miles of forest had been consumed, either through the lumbering industry, or through settlement and agricultural development. (Figs. 7-8)

Two things are clear from Defenbaugh’s introduction to *The History of The Lumber Industry in America*: 1) wood was a vast and mostly free resource; 2) civilization is dependent on wood houses. Untouched for millennia, the forests in the United States had become entire ecosystems, with mature growth trees as old as the Egyptian pyramids. Unlike the same forests in Europe, North American forests had not been harvested and replanted over many centuries. In fact, as late as the early 20th century, redwoods felled by timberman in the Pacific states were as large as 30 feet in diameter and 300 feet tall, cut down and turned into planks exceeding 60,000 cubic feet of lumber from a single tree. “From a lumberman’s viewpoint, the huge trees were unsurpassed in the quality of their lumber. The trunks rose 150 feet

before even the first branch, thus producing incredibly straight and clear-grained lumber.” (Gordon, 2010) These vast, virgin forests, which covered half of the country, were a consistent and frictionless resource that not only helped settle and establish the United States as a young country, but also helped to first kickstart the country’s rapid era of industrialization and to then sustain the massive proliferation of wood-framed, single-family, detached housing in post-war America.

The same industrialization that enabled the rapid conversion of virgin forests into dimensional lumber, was further impacted by the development of more and more efficient, unskilled labor construction methods. Combined, the abundance of natural resources, cheap and vastly available land, and low-cost, unskilled labor, merged in the first half of the 20th century to provide Americans with a seemingly endless capacity to produce new single-family, detached dwellings on acres and acres of individual plots. What had begun as a rarefied luxury for a small group of wealthy elites, a new vision of the “home” would convert the Greenes’ architecture into a cheap, affordable, and accessible commodity for all Americans.



Figures 7 and 8. Woodland density map (circa 1873) produced by William H. Brewer for the “Statistical Atlas of the United States...” based on results from the ninth census (Walker 1874), Library of Congress; Map Showing the Distribution of forest land and lumber regions in the United States (Division of Forestry, US Department of Agriculture, 1893)

2.4. Spread of Wood Light-Frame Construction

In 2020, the National Association of Home Builders reported that 91 percent of new single-family houses constructed in the United States were wood framed. While this was slightly down from 2015 when 93 percent of new single-family houses were wood framed, the absolute number of new wood framed homes in 2020 was 831,000, or some 226,000 thousand more. Brought to North America by British carpenters, *efficiently braced frame construction*, which depended on wood joinery and hand-hewn wood timbers, took hold during the first 200 years of colonization and settlement. In the time before industrialization, these timber members were made by hand, and very costly (in terms of time and energy) to produce. During industrialization, the use of water-powered saws and then steam-powered saws initiated a shift from expensive and laborious hand-hewn timbers to the abundant and far cheaper machine-sawn timbers. Next, skilled-labor intensive joinery was supplanted by machine-made nails. Like the machine-sawn timbers, these factory-made nails were much cheaper and abundant than the earlier hand-forged nails (Allen and Iano, 2009). Railroads then created new supply chains that vastly increased the access to cheap, plentiful machined lumber. Finally, the realization that the smaller framing elements, between larger timber members, were themselves enough for constructing a sufficiently strong structure, led to the development of the balloon frame construction method in the United States. In 1865, G.E. Woodward would write,

“A man and boy can now attain the same results, with ease, that twenty men could on an old-fashioned frame... the Balloon Frame could be put up for forty percent less money than the mortise and tenon frame.” (Allen & Iano, 2009)

Given the lightness and ease of handling the smaller, machine-saw timber members, and the “lightning rapidity” of only one person securing hundreds of joints with “two or three nails,” the skilled knowledge and labor required in heavy-timber post-and-beam construction evaporated in deference to light-timber-frame construction. (Jackson, 1987; Allen & Iano, 2009) In 1830’s Chicago, regional builders and architects popularized balloon-frame construction. Spreading eastward, the new “Chicago Construction” took advantage of the excessive, seemingly endless supply of lumber flowing from the industrialized timber center in the east such as those in Maine, as well as those in Baltimore, to the south, and Chicago in the Midwest. (Jackson, 1987; Curtis, 2018). As old-growth forests were consumed by the timber industry, the industry was left with more and more smaller “sticks” to sell. In comparison to the heavy timber, sturdy joinery of braced, heavy-timber construction, the balloon frame seemed impossibly flimsy and light. How could thin studs, only 2x4 inches in dimension, support the stresses (load and weather) that a house would regularly experience? Yet, as the balloon-frame construction method spread, it proved itself sufficiently sturdy, over and over again. As full-length timber further dwindled to extinction, the balloon frame (multi-storey members) type of wood light construction evolved into the platform frame (single-floor-height studs).

The onset of the platform frame brought the possibility of the private house within the reach of a much, much wider swath of the population. Not only did platform framing make use of the cheapest and most plentiful type of industrial lumber, it also was incredibly easy and simple to master and execute.

“The plane surface—the flat wall of wood, brick, or stone—has always been a basic element in American architecture. In part this has been due to the simplicity which a scarcity of skilled labor enforced; in

part it directly continues late eighteenth-century tendencies...wooden houses have kept to traditions established by the first settlers...The brick wall, to be cheap, must be kept flat and simple. All openings are cut very cleanly into the flat surface of the brick wall. (Giedion, 1941)

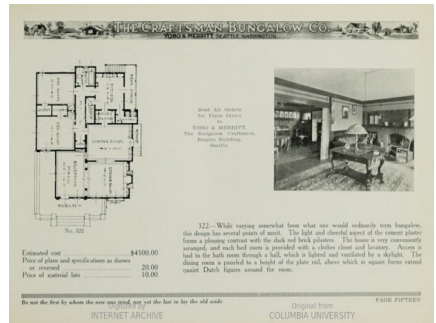
2.5. Publishing A Pattern: Cottages And Bungalows

House pattern books of the late 19th century first helped to spread the concept of the single-family house through the expanding populations and territories that were spilling out from urban centers. These pattern books, such as *Practical Bungalows*, published by the Los Angeles Investment Company, sold an entire set of architect's drawings, along with a full cost estimate of materials, for \$5.00 in 1912. Often, pattern-book authors were architects hoping to promote their work and to secure future commissions. On the contrary, pattern books served to cast architects as unnecessary middleman, and to "reinforce the suspicion that an architect's fee was an unnecessary and luxurious item in a building budget" (Wood, 1983). From the start of the 20th century, companies such as Aladdin, Gordon Van Tine, and Sears Roebuck

established kit-house companies that provided design patterns for the customer's house, along with all materials. From nails, to lumber (all studs and beams), to the plaster and lath, to the finish paint. The house-kit, branded as "ready-cut" or "readi-cut," provided everything a homeowner would need to construct a house in as fast as one day, without special tools, expert knowledge, or extra help. In their 1917 catalog of kit-houses, Aladdin attests,

"Remember, you can erect your own Aladdin home and save the cost of skilled labor. Hundreds of Aladdin customers have erected their Leota homes from the complete instructions for erection that are sent with every order." (Aladdin, 1917)

The catalog's description of "The Leota," as a "most interesting bungalow" featuring a "Craftsman front door, casement windows grouped in pairs and side walls shingled," demonstrates how extensively the impact of California Craftsman ideas and values (amplified, elaborated, and refined by the Greene brothers) had permeated into the popular imagination (Aladdin, 1917) and the market economy. (Figs. 9-10)



Figures 9 and 10. *Practical Bungalows*, Los Angeles Investment Company, cover (1912), Model 322 by Craftsman Bungalows, Yoho & Merritt, Empire Building Company, Seattle, 1922

Pattern books and kit-house catalogs quite exclusively focused on single-family, detached houses, often promoting designs and variations on the "California bungalow." This focus was built on patriotic pride and populism. By the 1930's, "bungalow" was synonymous with the modest, everyman's American home (Lancaster, 1958). Only four years after the completion of the Gamble house, the 1912 Bungalow Company introduced their collection of XX houses with "A Word About Bungalows:"

"The bungalow, as it is known today, practically originated in Southern California and was almost unknown elsewhere until recently. Its characteristics are straight lines, wide projecting roofs, numerous low windows, plain woodwork, rough timbers, and usually rough siding or shingles. In fact, the bungalow is a combination of log cabin, Spanish architecture, and a few Oriental ideas which the inventive mind of the American has combined with some ideas of his own to make a style of architecture really new. It allows the use of almost any building materials and in such combinations that it is easily adapted to any locality. The interior arrangement is usually quite simple and designed to save steps for the housekeeper, everything being on one floor. The parlor has given way to the living-room which is all that the word implies." (The Bungalow Company, Seattle, 1912)

2.6. Bungalow Courts

Builders, architects, and the general public of Southern California found the new style of the California Craftsman Bungalow, pioneered by the Greenes, incredibly attractive and desirable. The Gamble House combined modern technologies with progressive values, in a uniquely American way, one that also employed traditional building methods.

For many new residents flooding into an exploding Los Angeles, the need for new

housing was unassailable. The bungalow provided a vision of a comfortable and wealthy lifestyle, accessible to many, instead of the few. First via architectural and lifestyle press, the California bungalow became the preferred type of housing for the populace, especially those wanting "respectability." At the national level, policymakers, clergy, reformers, architects, and learned experts united in their disdain of multi-family housing types, associating such denser housing with the squalid slums and tenements of New York and other urbanized centers. Instead, they promoted and elevated single-family, detached houses and homeownership, while marginalizing and shunning multi-family rental housing (Gish, 2010). Southern California's abundance of empty, undeveloped parcels, its pleasing and temperate, steady climate, enticed residents who clamored for their own single-family, detached dwellings. Such homes were transformative; a way to prove respectability and disprove being backwards (e.g., poor or immigrant, and morally lacking).

As the bungalow grew evermore popular, builders and speculators invested in a new type of development real-estate speculation. Composed of single-family, detached houses, the "bungalow court" drew on the architectural language of the Greenes' architectural style and innovations and multiplied it to take advantage of economies of scale. (Figs 11-12) As the bungalow court model swept across developing suburban regions of the United States, architects, like the Greenes, remained critical and skeptical of the new phenomenon. They chose to distance themselves from its successes and to diminish its architectural influences:

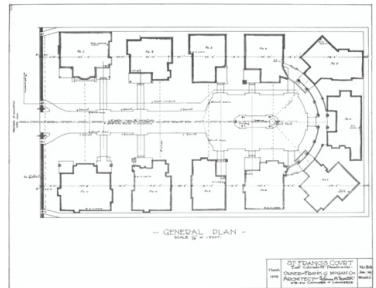
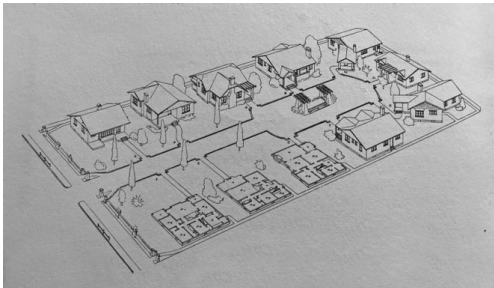
"No less an authority than Charles Sumner Greene wrote, "The bungalow court idea is to be regretted. Born of the ever persistent speculator, it not only has the tendency to increase the cost of the land, but it never admits of home building." Of the Bowen Court, the arch-individualist

Greene remarked, "In this bungalow court, the speculator and designer seem to have been of the same mind or the same person. It would seem to have no other reason for being than that of making money for the investor. The style and design of each unit is uniform, making for the monotony and dreariness of a factory district. Added to this, the buildings are hopelessly crowded." And he ended with unwanted didacticism: "This is a good example of what not to do." (Winter, 1980)

In the same way that industrialization transformed house building from a "specialized craft" into an unskilled industry, so did the proliferation of the Craftsman bungalow transform a highly nuanced and layered architecture into a mass cultural

phenomenon, which has seeded the near entirety of the American residential landscape as single-family detached dwellings, supporting the "wholesome" lifestyle of individual families above the interests of a cohesive community. For the architect, the bungalow had become the antithesis of its original progressive ambitions: it was no more valuable than a bar of soap and cast of the same predatory impulses that had brought about the ills of industry (Figs. 13-15).

The spirit, if not the fact, of these bungalows was that they were a non-professional, do-it-yourself product. The hundreds of small builders' bungalows which came to line the streets of Los Angeles, Pasadena and elsewhere throughout California suggested that any



Figures 11 and 12. St. Francis Bungalow Court, Sylvanus Marston, drawing by Clay Lancaster; St. Francis Court, plan, 1909 (Pasadena Museum of History), Gish, 2010



Figure 13, 14 and 15. Gamble House (Richard M. Bravo); Lexington Floor Plan, Pittsburgh, Wayne Homes; Split Level Ranch (architecturestyle)

middle-class citizen who knew one end of a hammer from the other could put the whole thing together and furthermore could build the furniture needed within and plan and plant the gardens, which surrounded the dwelling...these houses were not for the elite but rather for the middle and artisan classes of American society. Traditionally, architectural imagery had had its inception at the top of the social ladder and then slowly percolated down to the middle and lower classes. The California bungalow seemed to imply that this natural God-given process had been reversed. Put in the terms of the time, the popular California bungalow was too "democratic." It suggested far too much egalitarianism. (Gebhard foreword, Winter, 1980)

2.7. Homeownership and the American Ideal

Although this era in American history deserves more in-depth attention, for the purpose of the VIBRArch conference, this author will provide a summary of the federal government's role in establishing the fabric of residential housing in the United States.

In the years after the 1917 Russian Revolution, president Woodrow Wilson and his administration acted to counteract the invasion of communist ideology on many fronts. In the domestic sphere, the government began with a strategy to promote homeownership to the American public. In doing so, each homeowner would have a vested interest in the capitalist system of individual property. Aligned with the Puritan beliefs of hard work and determination, families received a message from the federal government that hard work and thrift would lead to a straightforward path to owning one's own home.

In his book *The Color of Law*, Richard Rothstein describes the federal government's role in shaping US metropolitan areas. During the first quarter of the 20th century, early mortgages had exorbitantly high interest rates and 50

percent down payment requirements, making homeownership a difficult goal to realize for most Americans. By the time of the Great Depression, the federal government had expanded the administrative state through many new organizations. The Home Owners' Loan Corporation (HOLC) was created in 1933 to provide long-term, amortized mortgages with much lower interest rates. For the first time, low-interest mortgages gave those borrowers who consistently paid their payment, the option to own their homes at the close of their loan. A year later, the federal government created the Federal Housing Administration (FHA), which provided federally backed mortgages to middle-class families, who had been unable to secure such loans in the past. This new system that subsidized homeownership in the name of national strength meant that the number of Americans who could and did own their homes, vastly increased.

The process of assessing and issuing mortgages entailed that the FHA would conduct their own appraisals: as the HOLC conducted appraisals of property values, the FHA conducted appraisals of potential borrowers. The survey and creation of color-coded risk maps was fundamental to the HOLC appraisal process. Neighborhoods that were deemed a good, safe investment, were colored green. Other neighborhoods, those that were close or adjacent to industrialized areas, or those which had much denser, rental housing, were colored red for "high risk." In these "redlined" areas, investment and development were highly discouraged. Predominantly poor and Black, these areas and their residents were unable to benefit from FHA and HOLC subsidies and low-interest mortgages. Additionally, the FHA's appraisals explicitly encouraged the establishment and preservation of racially homogenous neighborhoods, and specifically stating that "no loans will be given to colored developments," even when the potential borrowers were solidly middle-class with good credit ratings (Rothstein, 2010).

For three decades afterward, the federal government escalated its support of housing development in post-war America to meet the exploding need for housing veterans and baby booming families. (Jacobs, 2015) That support, which greatly benefitted communities like Levittown, was completely contingent on the inclusion of racial covenants that prohibited non-whites from owning, leasing, or renting properties. The FHA went as far as to deny and stop the sale of properties by white homeowners to Blacks. In effect, the morals of the FHA became solidified into the suburban and urban geographies of the United States. These exclusionary and racist views were first sown and hewn by the federal government, then fully infected by private development, public opinion, market demand, and politics. These events have enshrined the detached, single-family house into the physical, legal, economic, and social fabric of the United States. Today, the US, a country with a huge landmass, abundance of natural resources, and tremendous wealth (as measured by GDP), is locked into a wasteful, inefficient land use policy that remains wholly dominated by the detached, single-family dwelling. Even as the country's needs change, its capacity to house its people remain "straightjacketed" (Ellickson, 2021).

The houses that were built during the post-war era became the backbone of American suburban housing, with the inherited architectural legacy of the Gamble House. Born out of a philosophy and values that sought to create a modern, distinctly American type of housing architecture, the Gamble House, a Greene and Greene Craftsman bungalow, was an event in history that occurred because of and in response to industrialization. Once the Gamble House happened, its architecture seeded the tectonic and symbolic values of the distinctly American ideology of the single-family, detached house as the defining element and symbol of a patriotic, respectable, and honorable American life. Yet, as subsequent events occurred—the rise of Communism, the Great Depression, the world wars, the rise of

the corporation, the accessibility of print media, mass production, the entry of the federal government into housing development—the effect of the Gamble House's emergence rippled through the built and psychological fabric of America. Had it not been for the Gamble House's enactment of the values of bungalow living, or its proving/celebration of the wood frame construction and the lure of its respectable way of living, the current landscape of American housing would not be as it is today.

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