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Hacking Suburbia: An Architect's Reconsideration of the Home

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Hacking Suburbia: An Architect's Reconsideration of the Home

Abstract
Beginning with the development of pattern books and their popularization in the 19th century, architects have struggled to determine their role in the homebuilding industry and contributing to a tension between architects, homebuilders and consumers. During the rise of pattern books, architects originally marketed themselves as ‘tastemakers’, but through the provision of patterns they became further circumscribed from the mass-produced housing market. Taste was no longer something that could be exclusively bought from an architect and in the last decade of the 20th century, mass-produced suburbs transitioned to being designed via online design tools offered by large homebuilder companies. Hacking Suburbia purports that if, as architects, we want to take the question of homebuilding and mass-produced houses seriously, we must critically engage the contemporary design tools provided by the homebuilding industry and intervene in them through ironic critique. The current online home design tools consider historic styles and elements to be arbitrary and instead sell essences of ‘hominess’ and the American Dream. Given this, how can architects ‘glitch’ existing online design tools and exacerbate these existing logics and essences. This is a meditation on the history of mass-produced and mass-consumed domesticity and the system through which it is currently produced – the result being 4 houses which exemplify the ways in which this ‘hacking’ can play out.

Keywords
Pattern Book, Postmodern, Taste, Homebuilder, House

Disciplines
Historic Preservation and Conservation

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My grandmother Dorothy with my grandfather’s siblings and parents, Antonina and Leonardo, at their home in Detroit, Michigan. c. 1940. Source: Personal Photograph.

My mother (bottom right) with her sisters and parents at my great-aunt’s home in Roseville, Michigan. 1965. Source: Personal Photograph.
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ABSTRACT

Since at least the mid-nineteenth century, the production of American domestic architecture gave rise to a contentious relationship between what is conventionally understood today as the distinct roles of architects, homebuilders, and consumers. Over almost two centuries this tension, which still exists at present, was shaped by the bureaucratization of the homebuilding industry, the rise of the consumer-driven market, and the professionalization of the architect. These processes circumscribed architects’ agency in the homebuilding industry, resulting in the cookie-cutter American suburban homes built in plastic and pressboard and sold for exorbitant prices. By drawing on literature on the American suburbs, this thesis probes how this landscape came into being and how architects have both historically, and presently been engaged in this industry.

One of the most important developments in tracing the history of architects and the American domestic landscape was the proliferation of pattern books throughout the nineteenth century. Pattern books commodified and mediated architect’s role as tasteful house designers by the provision of graphic manuals that inscribed styles according to status and class (See Fig. 2). Design catalogs created by lumber companies and homebuilding conglomerates eventually eclipsed architect designed pattern books. By the mid-twentieth century, the creation of the Federal Housing Administration (FHA) mortgages opened the housing market to middle-class Americans.¹ This new class of potential homeowners expanded the housing market and catalyzed an increasing demand for mass-produced housing. The growth of the homebuilding industry came nearly a century after architects begin their quest for professionalization. The desire to be perceived as professionals rather than artisans trained in the master-pupil system contributed to the limited role architects played in the homebuilding industry from the twentieth century on. The architects’ quest for professionalization relied on potential clients to buy into a distinction between

¹ Federal Housing Administration. Created because of the National Housing Act of 1934, the FHA is the largest mortgage insurer on single family and multifamily homes. The FHA is a primary reason for the sudden accessibility of single family homes to middle-class America in the twentieth century.
inherent and cultivated taste. Architects of the mid-eighteenth century asserted that “the general population would learn to appreciate the architect's taste as well as to utilize his skills; the architect was the person most capable of providing everyone with a tasteful house, well built, at the least price.” The architect's role as a tastemaker relied on clients to buy into distinctions in taste and the ability to buy taste from an architect. Inherent and cultivated taste did not compel those except the well-to-do in the nineteenth century, and it further lost hold with the emergence of a large middle-class in the twentieth century. Catalogs and advertisements used taste as a sales mechanism – the middle-class was persuaded that taste was not inherent, but could be bought for the right price. With the explosion of the homebuilding industry and the consumerization of taste, architects now play an increasingly small role in the housing industry. As urban historian Dell Upton states in “Pattern Books and Professionalism,” “if no exclusive place was made for architects, a limited place was.”

Academic architectural discourse has historically rejected the vernacular, arguably until the late 1960s when designers Robert Venturi and Denise Scott Brown defended the 'every day' architecture of the suburbs. As architecture reflects on the postmodernist movement, there is an opportunity to reconsider the enormous landscape of domestic architecture constructed by the home building industry. In this thesis, I purport that the role of the architect today if it is not of a tastemaker, is to react to the condition of suburban housing and to critically interrogate the mass-produced single-family dwelling. Through critical irony and what I call “critical speculations” new potentials for suburban housing can emerge and provide new speculations on the future of this everyday landscape.

As a joint preservation and architecture thesis, moreover, I provide a researched history of

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3 Ibid, 149.
how the homebuilding industry has evolved with relation to architects, builders, and consumers. Further, I highlight how this history acts as the foundation for a design project which employs critical irony to produce new typologies from an existing catalog of logics. The methodology of the design project is inspired by postmodern ideology and channels Venturi who, in *Complexity and Contradiction in Architecture*, states

> The architect who would accept this role as combiner of significant old clichés – valid banalities – in new contexts as his condition within a society that directs its best efforts, its big money, and its elegant technologies elsewhere, can ironically express in this indirect way a true concern for society’s inverted scale of values.

Critical irony, as employed in postmodernism and now in the age of neo-postmodernism, could allow architects to take on a new role within the homebuilding industry, distinct from their role as tastemakers in the nineteenth century. Two primary questions guide my work as an architect and a preservationist: if the age of mass production and consumption has diluted taste to ‘mass taste,’ how can we respond to ‘mass taste’ in domestic architecture? And if the interactive design tools offered by homebuilders today are the descendants of pattern books and catalog homes, can this tool be used as a site to study and critically interrogate suburban housing? I will answer these questions through a brief history of the homebuilding industry which fuels a design project that is a critical reframing of today’s suburban houses and the market they operate within.

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Fig. 2. An early 1850's pattern book.
The origins of the prevailing relationship between architects, builders, and consumers in America are traceable to the mid-nineteenth century. Trained in the master and apprentice format, architects and builders coexisted as artisans until architects began their quest for professionalization. Henry Latrobe was the first architect to claim this professional title—one distinct from artisans and master craftsmen. A desire to control and protect a market for architectural services distinct from that of builders and to attach elite social status with the professional status drove professionalization. Professionalization splintered artisans into builders, practical architects, and professionals which effectively created a more competitive market rather than the protected and controlled one that architects intended to create. While the American Institute of Architects (AIA) was not incorporated until 1857, architects began to distinguish their skillsets from those of artisans in the decades before. Part of forging this distinction were the sales of early pattern books meant to advertise the architect’s abilities as masters of style and taste.

Late nineteenth-century pattern books were sold directly to builders who took liberty to improvise on the provided plans. Architects inadvertently contributed to the additive and subtractive process of design in vernacular architecture. While pattern-book writers conceived of each house design as a cohesive whole, vernacular builders “reduced the integrated designs of the pattern-book writers to distinctive essences, abstracting from them key architectural elements

5 Building artisans were the first architects along the East coast and eventually competed with gentlemen with no craft training, called master builders, in the second half of the eighteenth century. Mary Woods further clarifies the distinction stating “some master carpenters were also builders. Called ‘undertakers’ for most of the colonial period, they were entrepreneurs as well as craftsmen. These men were the general contractors of their day, acquiring material and labor and then directing work on the site. If they drafted basic architectural drawings and supervised, they were known as arhitects.” (Mary Woods, From Craft to Profession, 12). For clarity, those practicing before the formal professionalization of the field will be called artisans in this text.


7 The professional association for architects in the United States.

8 Upton, “Pattern Books and Professionalism,” 120.
that could be grafted onto their own buildings.”9 The advent of mail-order catalogs and kit houses in the twentieth century as a result of an enlarged consumer market gave more autonomy to the vernacular builder and the consumer. The architects’ role became more circumscribed as consumers played a more significant role in house design and non-architects gained agency through consumer culture.

Between the turn of the twentieth century and the 1930s, however, another tension emerged, when the process of land subdivision in rural America gave rise to the creation of developers and large corporations as homebuilders. As one of the most famous examples, by 1911, Sears Modern Homes catalogs included customer testimonials on the ease of assembly and the affordability of the houses.10 In addition, the dedication of large swathes of subdivided land for single-family housing fostered the creation of the real estate developer, who acted as distributors of vacant and speculative lots.11 Until the mid-twentieth century, it was still novel for “urban land subdivision [to be] considered ‘residential’ at the time the land was still being platted.”12 The creation of the Federal Housing Administration (FHA) in 1934, though, turned developers into homebuilders. With federally funded mortgages available, more middle-class Americans could afford single-family houses. Real estate developers previously selling empty lots begin to build entire developments of single-family houses – designed in bulk and marketed for this new class of homeowners.

Beginning in the 1930s, professional and avant-garde architects began to regard domestic architecture for the mass market as unsuitable for their attention. Consequently, developers gladly

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9 Ibid, 141.
11 Ibid, 156.
became homebuilders to satisfy the market. Experts estimate that builders constructed 90% of houses without the aid of architects in the first half of the twentieth century. Developments in urban planning and the bureaucratization of the housing market allowed for the rise of the homebuilder in place of the architect. When builders did hire an architect to design their basic models, architectural journals “endorsed these collaborations, proudly declaring that the influence of professional architects would be the salvation of mass building.” Despite the rare intervening of professional architects, the growth of the housing market post-depression, in combination with speculative land development practices, meant that builders constructed houses without a specific client in mind.

While pattern books of the nineteenth century advertised taste, the catalog houses of the early twentieth century advertised economy, efficiency, and the accessibility of the “American Dream” to the middle-class. Homebuilders and catalog companies marketed houses as personalized despite their speculative origins. Gwendolyn Wright states that “the majority of moderate-cost suburban houses were built on speculation, not for a particular family; yet the ideal of personalized expression was a principle selling point.” With catalog companies using personalized expression as a sales mechanism and not an actuality, the architect’s role as tastemaker grew more limited. Sears Modern Homes, published by Sears, Roebuck and Company from 1908 until 1940, appealed to the new middle-class homebuyer through their affordability and built-in payment plans. As early as 1911, Sears Modern Homes catalogs included customer testimonials on the ease of assembly and the affordability of the houses. Taste became obfuscated by efficiency and affordability in the consumer-driven landscape of the twentieth century (See Fig. 3).

14 Ibid.
16 Wright, Building the Dream, 100.
17 Stevenson and Jahndl, Houses by Mail.
Fig. 3. Mass-production of a Lustron Home. Source: Kendall, 2011.

Fig. 4. Signs of Life Exhibit. Source: venturiscottbrown.org
Houses today are clad in plastic – vinyl siding coats almost all suburban houses. Stylistically, most of today’s consumers are not interested in the avant-garde experiments in plastic, as many Americans were in the 1950s and 1960s. Instead, homebuilders harness historical building elements to convey ‘tradition,’ ‘homeness’ and the ever-desirable notion of the “American Dream.” The homebuilding industry has developed as a successful marketing and production machine as well – which does not necessarily require the help of architects (See Fig. 5). To be competitive in a mass-produced and consumer-driven economy, I argue architects must look critically to the homebuilding industry and learn from it. Billion-dollar companies such as Toll Brothers, D.R. Horton, and PulteGroup have succeeded The Levitt Brothers. Today the housing industry is effectively controlled by the top six homebuilder corporations. Between 1990 and 2005, the homebuilding industry in America built over 1.5 million new units per year, with over three quarters being single-family homes.18 Toll Brothers alone controlled nearly 50,000 home sites in the 2017 fiscal year while D.R. Horton controlled 125,000 lots in the 2018 fiscal year.19 Despite a slowdown in production following the housing bubble burst, builders are still constructing single-family homes at rapid rates. If anything, the fact that homebuilders erected the bulk of these houses at the tail end of the twentieth century means that these houses will soon require new investment.20 An aging stock of suburban housing indicates a dire need for preservationists and architects to take a stance on the single-family suburban home and its future.

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20 Landis and Reina, ”Eleven Ways Demographic and Economic Change is Reframing American Housing Policy.”
It is, therefore, my intention to dissect the aesthetic logic of today’s homebuilder companies, specifically their interactive design tools which mimic early pattern book logic. Through a comprehensive study of the methods guiding homebuilder designed domestic architecture, I can exaggerate current suburban house design methods to the point of absurdity. This continues a legacy of suburban critique by architects and non-architects from Venturi and Scott Brown to Buster Keaton and Tim Burton (See Fig. 6). While Venturi and Scott Brown’s critique was a self-reflective critique of the architectural profession, this is a critique of the market which has fostered reduced capacity of architects in homebuilding and has contributed to the aesthetics of contemporary tract houses. The design project functions as an ironic take on interactive design tools – mimicking the format and way in which today’s homeowners interact with houses online. The players in this circumstance, though, are architects, not potential homebuyers. This project acts as a conduit for a critical reframing of suburban houses presented to architects.

The development of the American suburb has warranted a vast amount of scholarly attention, and I have been fortunate to consult both primary and secondary literature for this thesis. Analyzing nineteenth-century pattern books including Samuel Sloan’s *The Model Architect* and A.J. Downing’s *Cottage Architecture* allows for a direct understanding of the content and format of early American pattern books through primary sources. The transition from architect designed pattern books to catalog houses is also well documented by primary sources, specifically the Sears, Roebuck & Co. *Modern Homes* catalogs, the Aladdin Company houses, Wardway *Homes* by Montgomery Ward, and Harris Brother houses. The accessibility of these early and mid-twentieth century catalogs allow for a better understanding of the transition from pattern books to catalog houses.

The secondary texts which have formed the backbone of my historical research include Upton’s 1984 *Winterthur Portfolio* article “Pattern Books and Professionalism.” Upton is arguably one of the only historians to dissect the intersection of pattern books, the budding homebuilding industry, and the professionalization of the architecture in the 19th century. “Pattern Book and Professionalism” brings light to how architects used pattern books to distinguish “architectural design as an endeavor distinct from, and superior to, building construction.” Further, this work explicitly defines how architects in the nineteenth-century viewed taste and taste-making as compared to their contemporaries. Architectural historian Mary Woods 1999 book *From Craft to Profession* extends and corroborates much of Upton’s work. While Upton situates the professionalization of the architect strictly within the early development of pattern books, Woods work extends the story of professionalization to early specialized organizations, schools of

architecture, and contributes to situating the tension between architects and builders. Gwendolyn Wright's 1981 book *Building the Dream* speaks less explicitly to the role of the architect in housing but provides a chronological history of housing in America from seventeenth-century puritans to the late twentieth century. John Archer's *Architecture and Suburbia* covers a broader period and takes us to contemporaneity allowing a connection between early pattern books and the subdivisions of today. While Archer's study primarily traces the relationship between notions of selfhood and the home from the 1600s to the 2000s, the text paves the way for the ultimate connection between pattern books and the mass-produced houses of Toll Brothers and PulteGroup. Urban historians Dolores Hayden and Dianne Harris both analyze who has benefited and who has suffered at the hand of the homebuilding industry. Hayden argues through her 2003 book *Building Suburbia: Green Fields and Urban Growth, 1820-2000* for the preservation of existing suburbs and the curbing of suburban growth. She dissects the players involved in the homebuilding industry including developers, consumers, and the federal government. Harris' 2013 book *Little White Houses: How the Postwar Home Constructed Race in America* unpacks the racial politics and class stratification that was exacerbated by the mass housing market, specifically through twentieth-century advertisements. These secondary sources, in concert, allow for a clear outlining of the relationship of architects, builders, and consumers – the three players of homebuilding – from the nineteenth-century through today.
Fig. 5. Pulte’s Interactive Tools for Design. Source: PulteGroup.com.

Fig. 6. Still from Buster Keaton, See “One Week.”
STRUCTURE AND ORGANIZATION

_Hacking Suburbia_ is a two-part endeavor; it aims to unravel the relationship between architect, consumer, and builder in the development of suburbia and critically comments on the state of the single-family dwelling as it exists and is produced today. Given this, I am informed by historical precedents relating to the development of the single-family suburb, the historic paper trail of consumerism (pattern books, catalog houses, and kit houses), and contemporary design case studies which informed this critical reframing.

The overall argument is structured around three main chapters titled “Players,” “Tools,” and “Speculations.” Chapter one, “Players,” will return to the complicated relationship between consumers, homebuilders, and architects tracing their relationship into the present. Highlighting the mechanisms by which suburban homes are constructed, chapter two, “Tools,” analyzes the ways players have empowered themselves through processes of bureaucratization, taste, and the dissemination of pattern books and online design tools. Finally, in chapter three, “Speculations,” I propose critical irony and misbehavior as strategies to intervene and comment on these historically fraught relationships. Each of these chapters, and in some cases subchapters, moreover, will be introduced by short narratives corresponding to relevant case studies or precedents. These case studies and precedents ground the overarching narrative in both a broader history and within a contemporary discourse of irony and critique.
Fig. 7. Levittown, Pennsylvania in 1951.

CHAPTER TWO
PLAYERS
Levittown, Pennsylvania

The subdivision of Levittown, Pennsylvania is perhaps the most known and studied of twentieth-century suburbs. Built by Levitt and Sons in 1951, the community consists of six repeating house types. Bill and Alfred Levitt built the houses without architects on staff and modeled the workflow on Taylorist production methods. The Levitt brothers created a 26-step building process resulting in an assembly line process that produced one house every 16 minutes.

Levittown exemplified how a kit of repeating building elements could provide hominess and comfort for American consumers - as one Levittowner wrote when he entered a neighbor’s house, “Once inside, I knew immediately where I was--I was home but I was in someone else’s house.”23 The creation of this cookie cutter suburb was possible due to advancements in homebuilding and bureaucratic backing. The 26-step building process and the support from the Federal Housing Administration allowed for the sale of over 17,000 cookie-cutter houses produced from just six model types.

Radburn, New Jersey typified a planned community ruled by a strict set of rules and ordinances. The Radburn Association was, and is, governed by a Declaration of Restrictions giving insight to how the communities and their aesthetics were regulated after the homebuilder is no longer involved with the site. The Declaration of Restrictions have continuously guided Radburn since its founding by Clarence Stein. Most recently, in 2006 a group of Radburn residents filed a lawsuit stating that the governance by the Radburn Association was against New Jersey law. While the Radburn Association also provided community amenities and facilities to the neighborhood, it mainly worked to create a consistent and unchanging ‘look’ to the community. Added decoration or changes to the facades of the houses required approval from the Radburn Association.

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CONSUMER

The rise of the homebuilder coincided with an explosion of demand for housing in the mid-twentieth century. The creation of the FHA in 1934 created a mortgage industry which opened up the housing market to the previously excluded middle-class. Further, twentieth-century government policy contributed to the conflation of the “American Dream” with that of the “dream house.” These factors caused housing demand to surge and gave rise to mass-production housing and large homebuilder corporations. Mass demand and mass production gave increasing power to homebuilders allowing for “consumption to be manipulated by producers” as Henri Lefebvre states.

Before the 1930s the mass housing market was primarily only available to the independently wealthy, the regulation of banks after the Great Depression opened up the housing market to many more consumers. Before the Great Depression,

mortgages typically became due, depending on the type of lender, after two to 11 years, necessitating refinance or repayment. Most lenders were willing to cover no more than 60% of a property’s value, requiring most borrowers to obtain a second or third mortgage. The difficulty of financing home purchases limited homeownership to the more affluent segments of the population and helped make rental housing the dominant form of tenure.

The solution to the Great Depression revolved around expanding the housing market and providing insurance to banks for them to take on mortgages with more significant risks. A

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25 John Archer, *Architecture and Suburbia: From English Villa to American Dream House, 1690-2000* (Minneapolis: University of Minnesota, 2008), xvii; While the “American Dream” did not emerge in the twentieth century it was commodified then. From its early origins, the “American Dream” had religious, moral, and ‘family value’ associations. These early associations with piousness and morality of the nineteenth century were often rewritten as happiness by homebuilders in the 1900s. The commodification of the “American Dream” ascribed it with happiness to reach a broader, secular group of consumers. Advertisements depicting the suburban house in heaven or among the clouds competed with secular, ‘happy’ imagery in the twentieth century. Hayden argues that the “American Dream” is actually a triple dream, one of house, land, and community that has been a key sales tool for homebuilders (Hayden 2004, 6).


The major outcome of the Depression was the fixed-rate, long-term, self-amortizing, low down-payment mortgage made possible and normalized by the creation of the 1933 Home Owner’s Loan Act. The housing market expanded and became enveloped within the consumer culture of the twentieth century by providing mortgage products for a broader swath of the American population.

The consumerization of the homebuilding industry enticed more companies to get involved in the business of housing. Lumber companies, electric companies, and department stores are just a few of the entities who sold their goods through the housing industry (See Fig. 12 and 15). With the ability to choose from kit houses, catalog houses, or speculative developments, consumers relied less on the guidance of architects and more on competing advertisements and media related to mass housing. Twentieth century advertisements marketed and commodified taste and style. The NBC show “Home” (1954) was a daytime television program targeted to female homemakers. Beyond advertising domestic consumer products, the show presented homes and collaborated with the National Association of Home Builders (NAHB) in a program called the “House that Home Built.” This was a consumer-friendly take on the avant-garde architect designed Case Study Houses in which builders would present houses designed for mass-consumption on the NBC show’s revolving stage. The distinction between architecture designed houses, increasingly seen as out of reach for the majority of Americans, and the house designed for mass-consumption further separated architects from home consumers.

By the late 1960s, large homebuilder companies began to dominate the home industry. Compounded by the internet boom of the late twentieth century, groups like Toll Brothers, D.R. Horton, and PulteGroup communicate with potential consumers with online tools.

28 Ibid, 71.
29 Dianne Harris, Little White Houses: How the Postwar Home Constructed Race in America (Minneapolis: University of Minnesota Press, 2012), 247.
Fig. 12. American Gas Association advertisement. Source: Al Muenchen, Modern Graphics History Library at Washington University.

Fig. 13. Suburban sprawl as a result of American consumerism. Source: Alex MacLean, Landslides.
Fig. 14. Family moving to Levittown, PA. Source: Urban Archives, Temple University.

Fig. 15. General Electric promotes homeownership. Source: Chicago Tribune, 1947.
Founded by Bill Pulte in 1950, Pulte Homes is now a publicly traded company with revenue approaching $8 billion. Founded in Detroit, Michigan, the company is now headquartered in Atlanta, Georgia and operates in over 20 states nationally.30

Pulte incorporates modern domestic conveniences including ‘smart home’ features into traditional forms. While not kit houses or genuine prefabricated houses, the communities are rapidly and efficiently built using the cheapest materials available. This method expedites the building process and maximizes profit for the Pulte Group.

Pulte offers ‘flexible floor plans’ through its user-friendly design tools online. The interactive design tool combines offered features to create new types of the domestic - mismatching existing architectural styles and features to suit the user’s needs and wants. Despite the ability to customize the floor plans, the communities appear jarringly homogenous - just as in 1950s Levittown.

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Toll Brothers

Toll Brothers was founded by Robert and Bruce Toll in 1967 and have a net revenue of almost $6 billion. The company, like Pulte, is an all-inclusive business for selling suburban houses - Toll Brothers designs, sells, and arranges financing and mortgage plans for its ‘luxury’ houses.

Toll Brothers and similar building companies devote incredible resources to cultivating not only a built aesthetic but a lifestyle. ‘Toll Talks’ and ‘Toll Lifestyle TV’ are two resources aiming to create a consistent and homogenous lifestyle throughout its many communities. Despite branches of the company including ‘Toll Brothers City Living,’ the projects lack site specificity and are designed to perpetuate the Toll Lifestyle across various sites nationwide.
By the early twentieth century processes of land development changed, and it was no longer uncommon for developers to zone land as ‘residential’ before structures were built on it. Advancements in speculative land development effectively turned developers into homebuilders – purchasing large swaths of land and building entire communities on it (See Fig. 20). The transition from platting future lots to building homes on them in the 1920s “resulted in subdivisions of three or four hundred almost identical tract houses.” 31 Once developers took on the role of a homebuilder, they could take design liberties – using mass produced elements to create an aura of hominess attractive to consumers. Homebuilder designed houses, increasingly of larger sizes, exemplify how homebuilders have “imitated form without understanding the meaning.” Dianne Harris states “using a system of signs or representational techniques to create an atmosphere of desirable domesticity, architectural renderers produced drawings for publication that allowed the American Dream to be captured or encapsulated using a series of simple ideograms and graphic formulas.” 32 Simplified and schematic forms of historic building elements alluded to “a more complex stylistic totality.” 33 The essence of domesticity was the design goal of homebuilders and the desire of consumers. Pure styles were never a goal of homebuilders, nor should it have been, as the communication of hominess and the “American Dream” do not require pure styles.

Perhaps the most absurd product of homebuilder designed architecture is the McMansion. The McMansion, which has been popularized through sites like Kate Wagner’s *McMansion Hell* blog or the 2012 film *Queen of Versailles* produced by Lauren Greenfeld. The size and amenities of the single-family house boasted more amenities over time – likely in response to the secondary mortgage market which allowed aspiring homeowners to acquire houses far beyond their means. Between 1973 and 2011 the median size of single-family owner-occupied homes increased from

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33 Loeb, *Entrepreneurial Vernacular*, 189.
1,535 to 2,480 square feet, representing a 61 percent increase in square footage.\textsuperscript{34} Despite non-family households and families without children starting to outnumber family households, the size of the house is growing. Further, 88% of houses are equipped with air conditioning, and 93% have two or more full bathrooms. This is a significant shift from the mid-twentieth century when less than 50% of houses had these features.\textsuperscript{35}

Fundamental changes in the housing finance system and the explosion of the secondary mortgage market spurred the popularization of McMansions (See Fig. 21). McMansions have been the punchline of architectural critiques of the suburb since the 1990s due to their proliferation across the American landscape and their prevalence in contemporary culture. While the coining of the term McMansion stems from the 1980s and 1990s, the exorbitantly large mass produced house is not a new construction. Art historian Denise Costanzo’s article “The Medici McMansion” traces the McMansion to the Italian Renaissance, specifically the Medici villas. Wright also describes the mimicry and simplification of exorbitant residences in nineteenth-century America.\textsuperscript{36} The McMansion is prolific today because it was fueled by capitalism and a risky mortgage market in the 1980s and 1990s and now saturates much of suburban America.

Consumers needs are satisfied with homebuilders’ McMansion-like products and the essence of wealth, tradition, and hominess that they exude. The housing market operates without significant input from architects today, and homebuilder companies staff CAD drafters rather than architectural designers. Instead of posting listings for professional architects, homebuilder companies advertise job titles including “Residential Drafter” or “CAD Systems Manager.”\textsuperscript{37}

\textsuperscript{34} Schwartz, \textit{Housing Policy in the United States}, 20.
\textsuperscript{35} Ibid.
\textsuperscript{36} “New Yorkers took special pride in Colonnade Row, also called Lafayette Terrace, a four-story expanse of marble front and continuous colonnade, where each finished unit sold for an astounding $25,000-$32,000. The idea proved so popular that smaller versions of the monumental terrace appeared in other neighborhoods, where builders replaced the marble, brick, or stone with less expensive wooden colonnades” (Wright 1981, 33).
On the career site for PulteGroup, searching for Architect yields 0 results. Developments in the homebuilding industry, the satisfaction of consumers, and the architects’ insistence on intellectual superiority have programmed the removal of architects from the majority of suburban house design.  

The lack of avant-garde or intellectual architects in the homebuilding industry is not a contemporary construct; in fact, it has been evolving in this direction since the professionalization of the architect. After the success of the first Levittown development, the Levitt brothers considered hiring a team of architects to revamp the house designs. “In the initial planning phase, Levitt considered a complete revision of the basic house types and asked two world-famous architects to submit sketch plans. When their houses turned out to cost about $50,000, they had to be dropped, and the firm’s own small architectural department, with assistance from Levitt executives, was given the job of revamping the designs used in Levittown, PA.”  

Cost, evolving definitions of taste, and the architect’s desire for superiority led to the lack of architects in homebuilding today.

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38 One of the goals of professionalization for architects was to have dominance over the domestic architecture market and to prove intellectual superiority over artisans, practical architects, and master builders. While nineteenth century architects projected intellectual superiority over homebuilders, today architects function as CAD drafters for homebuilding companies. The differentiation between the CAD drafter (one designing for economic necessity) and the intellectual architect (one designing for symbolic renown) is clarified by Stevens in his book *The Favored Circle*. “Those at the summit of the field that design structures of power and taste for people of power and taste have little in common with those who toil at CAD workstations detailing supermarkets” (Stevens 1998, 222).

Fig. 20. Typical homebuilder site. Source: Business Insider.

Fig. 21. The Queen of Versailles documents America’s largest McMansion. Source: The Japan Times.
Fig. 22. The architect depicted as beholding superior intellect to the builder. Source: Edward Shaw, *The Modern Architect*, 1854.

Fig. 23. 1922 Sears Catalog. Source: searshomes.org.
Atlas of Another America, Keith Krumwiede

Architect Keith Krumwiede’s 2016 book *Atlas of Another America* is a satirical take on the American single-family home. It used satire to exploit the relationship between the single-family home and the market-driven capitalist economy. Each home design is unrealistically large, satirizing today’s McMansions. Further, the book was presented in the form of a historical treatise, grounding the satire within history. The book presented the argument that the American dream is in crisis – a victim to the Global economy and the aftermath of the recession.

Krumwiede’s satirical tract developments, Freedomland, gain most of their humor in the sheer scale of the houses. The satire is dependent upon the relationship between capitalism and the McMansion – not necessarily satirizing or exploiting the myriad of other absurdities found in today’s single-family home.
Then House Series, Clark Thenhaus

Then House No. 2 considers how drawing historically salient features or elements intentionally ‘wrong’ might pervert entrenched aesthetic codes, or how manipulating conventional drawing techniques can frustrate the legibility of an architectural form. Then House No. 2 begins as a re-drawing the SF Heritage Haas-Lilienthal House, a Queen Anne style Heritage House. However, it is not a copy, but rather incorporates alternative meanings of ‘drawing codes’ by imposing and manipulating current San Francisco planning or preservation codes onto the Haas Lilienthal House.40

This project imbibed the notion of how codes, documents, and bureaucratic instruments affected and can affect the aesthetics of houses. Thenhaus bases his “Then House Series” on San Francisco based sites and codes, but misreading and misbehaving with homebuilder logics can also happen without site specificity. The “Then Houses” are manipulated to produce new types and new living conditions by reinterpreting existing codes.

As previously established, the nineteenth century coincided with a professional-mindedness among architects and a proliferation of architectural guide books targeted toward builders and artisans. Architect Asher Benjamin’s *Country Builder’s Assistant*, published in 1797, is the first American builder’s handbook and paved the way for a continued dialogue between architects and builders. While Benjamin and his contemporaries published materials to educate builders on American residential building construction, “the first professional American architects were explicitly attempting to define architectural design as an endeavor distinct from, and superior to, building construction.”

Upton describes the difference between architects and building contractors or engineers. Upton writes that “the new architects were part of the growth of what sociologist Magali Sarfatti Larson has labeled the ‘market professions,’ those early nineteenth-century occupational groups who depended upon selling their time and intangible skills, rather than clearly defined products, to their clients; her own examples are physicians and attorneys.”

As a market profession, architects worked to distinguish themselves as cultivated gentlemen and as skilled men – as tastemakers. Despite advancements in the profession and education of architects in the nineteenth century, architects rarely found the authority and control over builders and consumers that they sought.

For the majority of the nineteenth-century architects offered themselves as intermediaries between clients and builders – experts to protect clients and offer taste. Pattern and plan books evolved and eventually were marketed for clients instead of for builders. While initially these books contained information on classical geometries and orders, plan books evolved to offer plates of house designs which consumers could choose from and present to a builder for construction; albeit often with a reminder on the necessity of the architect’s services. Architects marketed themselves as tastemakers who could be employed to ensure that the style of the home was

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42 Ibid, 112.
43 Woods, *From Craft to Profession*, 166.
appropriate to the client. Pattern book publications aimed “not to replace an architect’s services, but only to disguise their absence.”44 Up until the twentieth century, Americans believed taste to be inherent in architects – rendering their services necessary. The commodification of taste and the lack of popular belief in architects as those with inherent taste in the twentieth century caused a lack of necessity for architects in the homebuilding process.

The advent of mass-production, bureaucratic pressures to fill American soil with single-family homes, and the loss of the role of a tastemaker in the homebuilding process contributed to the homebuilding industry as we see it today. Architects did and continue to engage with the single-family house but rarely on the scale of homebuilders like Toll Brothers or PulteGroup. The homebuilding industry replicated the automobile industry and appealed to the consumer in ways that a professional architect did not.

While homebuilding giants such as the Levitt Brothers successfully sold thousands of low-cost houses in the 1950s, avant-garde architects engaged in speculative practices. The Case Study House program by Art and Architecture magazine, the construction of Buckminster Fuller’s Dymaxion House, and Disney’s Monsanto House of the Future were all futuristic conjectures on housing by architects. The driving mission of the Case Study houses was to “infuse good design at a good value into the American housing market.”45 These projects differ entirely from the traditional housing stock that consumers desired. Instead of capitalizing on the homey aura that homebuilders were using to sell houses, architects projected into the future. Architects envisioned a world in plastic, but this future did not realize itself as architects imagined.

44 Ibid, 122.
Fig. 28. Signs of Life. Source: venturiscottbrown.org.

Fig. 29. A critique of the McMansion. Source: Keith Krumwiede, *Atlas of Another America*. 
Fig. 30. The “American Dream” Source: Greg Hise, Magnetic Los Angeles.
The Ford Homes Historic District consists of approximately 250 houses built between 1919 and 1920 by Dearborn Realty and Construction Co. – a company created by Henry Ford himself. This district epitomizes the novelty of mass-produced housing in the early twentieth century as well as the connection between housing and bureaucratic powers.

Ford devised the Ford Homes neighborhood to solve the lack of housing for his workers in Dearborn, Michigan. He applied his innovative Taylorist methodologies to the creation of the neighborhood. Historian Joseph Oldenburg explains this stating that “each crew had its own specialty reminiscent of Ford’s development of the assembly line to produce cars faster.46

“The homes reflect seven styles. Like Ford’s cars, each style was given a letter, A through G. They all share similar features, such as distinctive door pediments and a porch. The houses are solid, but not overly ornate.” This community exemplified the relationship between new industrialized techniques and the traditional styles they were composed of.

The Sims, EA Games

*The Sims*, released in 2000 by EA Games, is a fictitious version of many of the design tools that large building companies provide to their consumers. Just as Toll Brother’s prospective buyers can use their design software to modify ‘customize’ their prospective homes, so can users in *The Sims*. The computer game provides insight into what the American domestic landscape could become with total user control and a lack of codification. Somewhat shockingly, the houses generated by gamers often still look vaguely Colonial, Victorian or Craftsman.

*The Sims* inventor Will Wright is well aware of his games parallel American suburbia. He has admitted that *The Sims* was meant to satirize American consumer culture and inspiration Wright drew influence from Alexander’s 1977 pattern book *A Pattern Language*. 
Bureaucracy and government intervention have long been an instrument in shaping the American domestic landscape. While architects sold plan houses and catalog homes in the mid-twentieth century, home finance and the mortgage market formed at the same. The Oxford Provident Building Association in Philadelphia, established in 1831, is considered the first building and loan company. Building and Loans were primarily created to promote homeownership, a common thread in the bureaucratic initiatives in the housing industry. Building and Loans (B&L) companies preached homeownership. “B&L’s argued they could help attain stable homeownership and better living conditions for the ‘classes above the lowest.’” Besides B&Ls, which later became known as savings and loans; mutual savings banks, life insurance, and mortgage companies were created to provide mortgages and promote homeownership.

Nineteenth-century advancements in the American economy allowed for the expansion of the housing market and, in turn, the homebuilding industry.

The government became a major advocate for homeownership in the early twentieth century, despite their still limited role in the housing market. Under Warren Harding’s administration, Herbert Hoover became Secretary of Commerce in 1921, and thus took charge of the federal government’s role in housing policy. During Hoover’s tenure, he launched both the Own-Your-Own Home brochure series as well as the Better Homes in America movement and the Architect’s Small House Service Bureau. These federal initiatives did not only affect the relationship between consumer and architect by promoting ‘good taste’ and ‘good design’ in suburban houses, but they also influenced the aesthetics of the single-family house. Hoover’s Better Homes in America Movement is attributed as one of the first national movements to advocate for homeownership and spurred the colonial revival style in a plea for increased

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patriotism and a return to our colonial roots in the post-World War I environment. Revival styles came into popularity not only because of Hoover’s encouragement for patriotic aesthetics but also because of FHA lending practices.

The government’s involvement with housing escalated with the creation of the FHA in 1934. The FHA was created to insure mortgages to reinvigorate the housing industry. FHA-insured mortgages alleviated risk from the lending institution as the FHA would cover defaulted loans and not fall on the lender. To qualify for this form of mortgage insurance, properties and borrowers must meet specific qualifications. The FHA not only determined who could buy a single-family home but what the home would look like aesthetically. In her 2015 book, *Little White Houses*, architectural historian Dianne Harris stated, in fact, that the FHA made it “difficult or impossible to receive home loans for houses that were non-traditional in form and appearance.”

Bureaucratic initiatives continued to shape the homebuilding industry with the creation of Veteran’s Administration (VA)-insured mortgages in 1944 and interventions on subprime and risky mortgages during the 2008 financial crisis.

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50 Harris, *Little White Houses*, 139.
Historically, architects maintained that their services were necessary because they were the beacons and beholders of taste-making. As early as the nineteenth-century, Upton points out that A.J. Downing used taste to distinguish between classes. Downing distinguished between ‘refined taste’ (See Fig. 36) and ‘mass taste’ (See Fig. 37) – using mass taste to describe the taste appropriate to the working class. Homebuilders used ‘mass taste’ as an excuse to simplify forms and dilute styles through mass-production. The proliferation of ‘mass taste’ has led to the repetitive and predictable traditional forms in suburban communities.

By the mid-twentieth century, the idea of taste as a form of class stratification became exploited with consumer culture and the rise of the middle class. Companies used taste as a mechanism to shame the newly formed middle class into buying more expensive goods under the pretense of being sold a key to the upper class. A 1949 Life Magazine advertisement titled “Everyday Tastes from High Brow to Low Brow” is just one example of how consumer products was ascribed to specific classes of people (See Fig. 41). Housing was not exempt from this classism. Taste became an advertising tool rather than an ability inherent to an intellectually-superior architect.

In the early nineteenth-century, architects and consumers operated under the assumption that the design and ornament of the home should express the character of its occupants. S.B. Reed writes in House-Plans for Everybody, published from 1878 to 1898, that “one's dwelling is an index of one's character. Any effort at building expresses the owner's ability, taste, and purpose.”51 The relationship between architecture and individuality of expression allowed architects to better market themselves as superior to builders or practical architects. Without an able architect, one's selfhood could not be adequately reflected in the design of one's home.

With mass-production, the blossoming of national banks, and the availability of credit,

51  Archer, Architecture and Suburbia, 195.
American consumers perceived good taste as the ability to acquire goods. Mass consumption and the growth of suburbs as a product of a booming post-war economy changed the definition of taste.

While the “American Dream” was often associated with individuation and believed to be attainable in the suburbs, this was also the landscape where homebuilders were constructing homogenous houses. Archer speaks to this misalignment in the early and mid-twentieth century. He writes about Hubbard Cobb’s 1950 book *Your Dream Home: How to Build it for Less than $3500*.

On one hand, Cobb still seemed to be appealing to individualistic tastes by providing “Tudor,” “Costswald,” “Ranch,” and other stylistic variations. But on the other hand, he also counseled his readers to build whatever type they might select only on a site where similar houses were adjacent...Still, Cobb anticipated one of the most trenchant problematics surrounding the American dream house for the rest of the century, its unequivocal role as a sometime instrument of individuation, and a sometime instrument of conformity.

Stylistic variations like those seen in Cobb’s 1950 plan book appeared less toward the latter end of the twentieth century. Mass-production and economic efficiency begged for simplified forms which could be modified across many house models. Taste became measured by the acquisition of material goods and the square footage of the house rather than the style it exuded.

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52 For more on the development of the U.S. mortgage market and the increased liquidity of the American economy in the twentieth century, see Dan Immergluck’s *Foreclosed: High Risk Lending, Deregulation, and the Undermining of America’s Mortgage Market*. *Foreclosed* expands on the relationship between the regulation and expansion of banks in the post-Depression years and the deregulation of banks in the 1970-1990’s with the boom and collapse of the housing market.

Fig. 35. Taste as represented in *Life Magazine*, 1949. Source: Dianne Harris, *Little White Houses.*
Pattern books held enormous power in the nineteenth century by shaping a hierarchy of architects, builders, then consumers. These pattern books can be considered a tool used to empower architects in the homebuilding industry. Early pattern books marketed to builders allowed architects to elevate themselves as professionals and gentlemen, distinct from builders. Twentieth-century pattern books and the emergence of catalog homes contributed to the shift from the architect as a tastemaker to taste as a marketing strategy and mode of class stratification. Catalog homes and kit house streamlined the homebuilding process, further pushed the architect from domestic architecture, and contributed to the suburban boom of the early twentieth century. More modern day pattern books such as Christopher Alexander’s 1977 *A Pattern Language* use permutations and computations to mechanize further and dehumanize the process of domestic design. These publications have shaped the homebuilding industry and the relationship between architects, builders, and consumers.

Early nineteenth-century pattern books and builder’s manuals coincided with the rise of the Greek Revival. Many of these pattern books and manuals included not just house plans but accompanying details and Vitruvian methods of proportion. Historian Daniel Reiff speaks to the proliferation of detailing in Greek Revival building manuals. Quoting from Benjamin’s second manual, *The Practical House Carpenter: Being a Complete Development of Grecian Orders of Architecture* and building upon it, he states

‘[S]ince my last publication, the Roman school of architecture [i.e., the Federal style] has been entirely changed for the Grecian,’ He included two different Greek Doric models, Greek Ionic, and details in the Greek mode for doorways, lintels, dormers, fireplaces, frieze detailing, and so on. There were no house designs or elevations.’

These early pattern books and builder’s manuals were less about the selling of products and

instead aimed to educate builder’s on style and building principles. It is not until the last half of the nineteenth century that these books began to sell products rather than design principles.

Architects such as A.J. Downing, E.C. Hussey, and A.J. Bicknell all combined details and house designs in single plates by the late 1800s. Speaking to E.C. Hussey’s 1875 pattern book Home Building, Reiff states “again we have a case of an architect popularizing his designs by a pattern book and advertising working plans and specifications available by mail.”55 Instead of architects distributing manuals to builders, these books began to be distributed directly to the hands of potential paying consumers.

The turn of the twentieth century brought an improvement in mass-production technologies and an expansion of the wholesale lumber industry. With this, plan books transitioned from mostly selling plans to selling entire mail-order houses. Further, catalog and lumber companies produced home catalogs themselves. Examples of these early mail-order home companies include Sears, Roebuck and Company and the Aladdin Company.

Founded in 1906, The Aladdin Company, from Bay City, Michigan, is arguably the first company to offer pre-cut kit houses - a precedent for the Sears Modern Homes catalog. Aladdin Houses provided kits with pre-cut lumber and easy to assemble components. The company sold over 75,000 houses until its discontinuation in 1981. Aladdin Houses exemplified the close relationship between mail-order houses and the lumber industry as the brothers’ father had been in the lumber business since 1870. The Aladdin Company advertised their products in newspapers and magazines and, when delivered, included an order form for easy purchasing. By 1910 the company changed its name to Aladdin Readi-Cut Houses, alluding to its use of pre-cut lumber and by 1915 the catalog included 101 houses for sale.56

Perhaps the most well-known of the mail-order house companies, Sears Modern Homes

55  Ibid, 95.
56  Ibid, 196.
sold over 70,000 houses between 1908 and 1940. While the earliest catalogs sold only plan
drawings, by 1911 Sears was sold mail-order houses. Initially, orders did not include pre-cut
lumber and customers would have to employ a local carpenter to cut the lumber to fit the plan
drawings but shortly after the company took note from Aladdin Houses and offered pre-cut and
numbered lumber. The houses were typically delivered via railways in ready-to-assemble parts.
Sears, Roebuck and Company, using methods developed by The Aladdin Company, delivered pre-
cut lumber and employed the balloon frame construction type allowing for houses to be easily
assembled by homeowners and local carpenters.

Mail-order houses exacerbated the simplification of styles and effectively communicated
the homey essence that consumers desired. Sears offered “The Magnolia” beginning in 1918 and
not only was it the largest and most grand home offered by Sears, it was also the most “historically
allusive.” The simplified forms and styles used in mail-order houses carried over to the tract houses
developed by homebuilding companies such as Toll Brothers or D.R. Horton. Houses in the latter
half of the twentieth century were not mail-ordered but continued the tradition of using simplified
mass-produced pieces and exuding essences rather than pure styles. American architectural
historian Thomas Hubka speaks to the lack of pure style and nomenclature for vernacular
houses in the late twentieth century. In his 2013 book Houses Without Names, he states “most
twentieth-century common houses, however, clad only in partial, irregular, and non-orthodox
interpretations of historical styles have received minimum or inadequate interpretation.”57 The lack
of a distinct style is one of the primary characteristics of suburban houses and while this is not a
new phenomenon consumer-oriented design tools have further exacerbated it.

Pattern books waned in popularity in the latter half of the twentieth century. Alexander’s
A Pattern Language was one of the few notable pattern books published in the last half-century. A

57 Thomas Hubka, Houses Without Names: Architectural Nomenclature and the Classification of
America’s Common Houses (Knoxville: The University of Tennessee Press, 2013), 18.
*Pattern Language* was based on different permutations of patterns rather than offering complete designs. It existed on a magnitude of scales from towns to buildings. Alexander suggested that by aggregating the 253 patterns in the book together in different combinations, new design solutions could arise. Together, these patterns create a design language. Breaking a building down into parts, or patterns, speaks to the desire for mass-customization seen toward the end of the 1900s as well as in the rise of the digital consumer-driven design programs. *A Pattern Language* was, after all, renowned for being the book which inspired Will Wright to create The Sims, which is perhaps the ultimate example of a design process created for mass-consumption. 58 These latter-day pattern books created a base for understanding how today’s homebuilders designed interactive design tools – with seemingly customizable elements that a consumer can permutate to arrive at a finite number of house designs.

Fig. 36. An example of refined taste. Source: Asher Benjamin, *American Builder's Companion*, 1827.

Fig. 37. An example of mass taste. Source: Toll Brothers.com.
Fig. 38. Typical early plan house. Source: A.J. Downing, *The Architecture of Country Houses*, 1850.

Fig. 39. Pulte's Interactive Elevation Tool. Source: Pulte Homes Design Center.
INTERACTIVE DESIGN TOOLS

The homebuilding industry has created a direct relationship with consumers through the guise of mass-customization. At the crux of this industry are interactive design tools that act as contemporary pattern books or catalogs. Branded as ‘Design Centers’ or ‘Interactive Design Tools,’ these online platforms act as the intermediary between potential consumers and homebuilders (See Fig. 39).

These tools often exist as distinct plan and elevation manipulators. These two orthographic methods have been divorced and act independently of each other in most of the contemporary software - such as software by PulteGroup and Toll Brothers. Unlike pattern books or catalog houses, the sites operate under the premise of mass-customization. Typical options include adding a bay to the garage, enlarging the living room, or changing the exterior color palette. Options rarely have spatial consequences and result in built houses which still have striking similarities. These houses are mass-produced, and the available options are a thin veil concealing the consumer from the actual homebuilding process. I am basing the design speculations in the following chapter on these online design tools. I intend to “glitch” and exaggerate the process of the design tool – designing 4 model homes resulting from exploited principles and logics inherent to the tool and using it as a platform for critical commentary.
Fig. 40. A speculation on the near future of suburban houses.
CRITICAL IRONY AND ‘MISBEHAVIOR’ AS METHOD

The architect who would accept this role as combiner of significant old clichés – valid banalities – in new contexts as his condition within a society that directs its best efforts, its big money, and its elegant technologies elsewhere, can ironically express in this indirect way a true concern for society’s inverted scale of values.59

Postmodern theorists and architects purported that critical irony and subversive design were the best way to react to the death of modernism and, as Venturi stated, society’s inverted scale of values. While modernists rejected ornament in favor of expressed structure and program, the postmodernists advocated for semiotic ornament. Postmodern architects used semiotics and the reuse of historical styles to comment and critique the failings of modernism. Applying the idea of a critique through the use of semiotics best allows for ‘mass taste’ to be exaggerated. How homebuilders have succeeded in communicating an essence or aura of hominess, tradition, and domesticity through domestic architecture can be questioned and probed with postmodern ideology.

Scott Brown and Venturi distinguished between ‘heroic and original’ and ‘ugly and ordinary’ in their 1972 book Learning from Las Vegas. The ugly and ordinary structures, the decorated sheds, appear cheap and convey “old words with new meanings” combining both high and low art.60 Venturi and Scott Brown used semiotic critique and ironically engaged in the methods of decorated sheds in their designs for Guild House and Mother’s House in Philadelphia, Pennsylvania. Besides the duo’s 1970 Learning from Levittown studio at Yale University, little of their work engaged explicitly with the suburban house. Instead, Venturi and Scott Brown mostly engaged with the roadside stands, gas stations, and non-domestic aspects of suburban and rural life. While postmodernists largely overlooked the suburban house in the late twentieth century,

59 Venturi, Complexity and Contradiction in Architecture.
now is an opportunity to apply postmodern ideology to a critique of the suburban house. This is timely given the recent postmodern revival within academia, giving validity to re-employ postmodern ideology.

Using critical irony to generate dialogue and a critical reframing is also derived from the works of filmmaker Tim Burton and comic actors Charlie Chaplin and Buster Keaton. Tim Burton's heightened the sameness and absurdity of suburbia in his 1990 film *Edward Scissorhands*. Director Bo Welch spoke to how a typical suburban landscape was altered to heighten its inherent strangeness. The set was “a kind of generic, plain-wrap suburb, which we made even more characterless by painting all the houses in faded pastels and reducing the window sizes to make it look a little more paranoid.”61 (See Fig. 41) Finding and exaggerating absurdity in the mundane or the average is what allowed Tim Burton to employ critical irony in his films.

Almost a century earlier, Buster Keaton directed “One Week,” a silent film which followed a newlywed couple assembling a kit house (See Fig. 43). The parts had been improperly labeled and were thus assembled upside-down, incorrectly and haphazardly. The result was an absurd, fantastical product from mundane and predictable parts. Keaton’s exacerbation of homebuilding is the quality I aim to capture through a methodology of misbehavior and critical irony.

While Venturi and Scott Brown critiqued the architectural profession, *Hacking Suburbia* also comments on the market by which suburban houses are produced. The result is a series of ironic model homes which result from the hacked logics of homebuilder design tools. By ‘misbehaving’ with the way these online tools work, I am speculating on how architectural elements can merge and hybridize to exaggerate the essence of hominess and domesticity that homebuilders currently convey in their designs. These speculations contribute to an existing conversation about domestic architecture and suburbia and encourage architects to think critically.

about the state of domestic architecture, how homebuilders design in today’s market, and what the architect’s role is moving forward.

For the final iteration of this design work and a more complete explanation of the constructed relationship between neo-postmodernism, critical irony and interactive design tools, please see Appendix A. This appendix serves as a cumulative portfolio displaying the design work completed as a result of this methodology.
Fig. 41. Still from Tim Burton. See *Edward Scissorhands*.

Fig. 42. Example of Toll Brother’s typical limited plan options. Source: Toll Brothers Design Your Own Home.
Fig. 43. Still from Buster Keaton, see “One Week.”

Fig. 44. Author designed building elements based on key historical styles.
Fig. 45. Example of postmodern revival representation. Source: Adam Nathaniel Furman, Nakano Twins, 2019.

Fig. 46. Pastel pastiche of postmodern revival projects. Source: Colossal Cacti, Studio Kovacs, 2019.
EARLY DESIGN ITERATIONS

Fig. 47. Early Design Your Own Home iterations, Iteration 01.
Fig. 48. Early Design Your Own Home iterations, Iteration 01.
Fig. 49. Early Design Your Own Home iterations, Iteration 01.
Fig. 50. Early Design Your Own Home iterations, Iteration 01.
Fig. 51. Early Design Your Own Home iterations, Iteration 02.
Fig. 52. Early Design Your Own Home iterations, Iteration 02.
Fig. 53. Early Design Your Own Home iterations, Iteration 02.
Fig. 54. Early Design Your Own Home iterations, Iteration 03.
Fig. 55. Early Design Your Own Home iterations, Iteration 03.
Fig. 55. Early Design Your Own Home iterations, Iteration 03.
Fig. 56. Early Design Your Own Home iterations, Iteration 03.
Fig. 57. Early Design Your Own Home iterations, Iteration 04.
Fig. 58. Early Design Your Own Home iterations, Iteration 04.
Fig. 59. The ‘Taj Mansion’ rendered within René Magritte’s La Belle Captive.
CONCLUSION

This joint effort between preservation and architecture stemmed from two primary questions: how can we respond to the ‘mass taste’ of domestic architecture and if the interactive design tools offered by homebuilder’s today are the descendents of pattern books and catalog homes, can this tool be used as a site to study and critically interrogate suburban housing? Through the completion of a research history connecting nineteenth-century builder’s manuals to contemporary suburban tract housing, I traced a clear linkage between today’s interactive design tools and early pattern books. By asserting this connection, speculations and critique were generated not on suburbia’s current condition as a contemporary invention but as one with a storied history.

The critical and ironic project was born from late 1960’s postmodern ideologies and in resurrecting it and pairing it with neo-postmodern aesthetics (which are primarily visual and devoid of the meaning associated with postmodernism) a statement on the ideological hollowness of neo-postmodernism can exist within the project (See Fig. 45 and 46). By creating a ‘millennial pink’ design tool with hyper-saturated visuals but with a carefully produced methodology this design project aimed to exaggerate the disjunction between postmodernism and neo-postmodernism – one with strong ideology and one devoid.

The four model homes which emerged from ‘hacking’ the processes and logic of the interactive design tool were not created to be conclusive – but instead to exaggerate and accelerate the absurdity of today’s suburban homes. While nineteenth-century pattern books and today’s homebuilder’s name houses after specific styles, stylistic purity was never the goal of domestic architecture – nor should it be. Instead, homebuilders found success through communicating the “American Dream” and ideas of hominess and tradition with more simplified forms and cheaper materials than professional architects did. Hacking Suburbia encourages architects to engage with homebuilder design methods and to reconsider their merits. Avant-garde architects’ dismissal of
mass domestic architecture requires a reconsideration. We cannot dismiss suburban houses which have been able to provide quality lives for much of America in the past two centuries. The concept of tastemaker was never successful, nor should it have been as inherent or cultivated taste is not required to satisfy American consumers. It is likely that houses will continue to be mass-produced with cheap materials so Hacking Suburbia speculates on what these houses could look like in the near future if the design processes were exaggerated and accelerated by architects.
Pattern Books (Rare Manuscripts and Original Documents)


Pattern Book and Catalog House History


The Rise of Suburbia


Doubleday Publishing Group, 2009.


**Sociological History**


**Bureaucratic Organization**


Weiss, Marc Allan. “The Rise of the Community Builders: The American Real Estate Industry and

**Contemporary Suburbia**


**Postmodernism and the American Domestic Landscape**


**Other**


Fig. 60. The ‘Pseudo Colonial’ in elevation.
The following speculations exemplify what could emerge from an ironic critique of domestic architecture and consumer-driven online tools. It aims to show four homes which are generated from a method of ‘hacking’ a speculative design tool. For example, should a consumer place a Doric column adjacent to a Serliana window, how could the hypothetical software ‘glitch’ and misfigure the two elements, thus producing new forms. By combining and misfiguring elements in plan and elevation, I aim to lose the differentiation between façade and building element – creating homes which can no longer be broken down into individual components.

Each of the four homes was generated from the input of a plan or elevation offered by Toll Brothers or PulteGroup. The essence or theme of these houses is amplified by introducing new elements and hybridizing them with the existing elements on the base elevations. Hybridization and blending of elements further exacerbate how today’s architects, homebuilders, and consumers do not concern themselves with the purity of styles.

The representational rationale behind the ‘millennial pink’ aesthetic for the tool is rooted in a relationship to postmodern revivalism. Neo-postmodernism has given rise to endless projects rendered in pastel colors but with little method or ideology contained within it. In 2015, the journal Dezeen wrote “earlier this year, one of the Postmodernism’s early champions, Alessandro Mendini, told Dezeen that there was no more ideology in design. Certainly, the postmodern revival is more interested in looks than grand ideas.”62 This project is rooted in critical irony as developed by Venturi and Scott Brown as part of the postmodern movement. I aim to situate this postmodern critique within a hollow neo-postmodern representational style in order to highlight the jarring differences between the ideologically heavy works of postmodernism and the representational projects of neo-postmodernism. If today’s suburban house is thinly veiled mass-produced plastic, then today’s neo-postmodernism is representation dressed up as an ideology.

62 Anna Winston, “Postmodernism is Back: Introducing Dezeen’s Pomo Summer,” Dezeen, July
The final iteration of the four speculative houses was represented within oil paintings by artists Magritte, Hopper, Wyeth. The choice to render these houses as paintings and not as photorealistic renders derive from a desire to reinforce the speculative and ironic nature of the project. These homes exist not as realistic proposals, but as academic speculations aimed to generate critique. By situating the homes within oil paintings, the absurdity of their qualities is amplified, and the speculative nature is reinforced. Further, the paintings invoke the question of how suburban houses of the near future will be represented and documented. The hope is that the following portfolio is the beginning of a generative project and a continued critique of the suburban home through design.

Fig. 61. Author curated domestic and non-domestic building elements.
Fig. 62. Design process of the 'Pseudo Colonial.'
Fig. 63. Design process of the 'Pseudo Colonial.'
Fig. 64. Design process of the 'Pseudo Colonial.'
Fig. 65. Design process of the 'Pseudo Colonial.'
Fig. 66. Design process of the 'Pseudo Colonial.'
Fig. 67. Design process of the 'Pseudo Colonial.'
Fig. 68. Design process of the 'Pseudo Colonial.'
Fig. 69. The 'Pseudo Colonial' in elevation.
Fig. 70. The ‘Pseudo Colonial’ depicted within Edward Hopper’s The Bootleggers.
Fig. 71. Design process of ‘The Stucco House’
Fig. 72. Design process of 'The Stucco House.'
Fig. 73. Design process of ‘The Stucco House’
Fig. 74. Design process of ‘The Stucco House.’
Fig. 75. Design process of 'The Stucco House'
Fig. 76. Design process of 'The Stucco House.'
Fig. 77. ‘The Stucco House’ in elevation.
Fig. 78. ‘The Stucco House’ depicted within Andrew Wyeth’s Christina’s World.
Fig. 79. Design process of ‘The Taj Mansion.’
Fig. 80. Design process of ‘The Taj Mansion.’
Fig. 81. Design process of ‘The Taj Mansion.’
Fig. 82. Design process of ‘The Taj Mansion.’
Fig. 83. Design process of ‘The Taj Mansion.’
Fig. 84. Design process of ‘The Taj Mansion.’
Fig. 85. ‘The Taj Mansion’ in elevation.
Fig. 86. 'The Taj Mansion' depicted in René Magritte’s La Belle Captive.
Fig. 87. Design process of ‘The McGothic.’
Fig. 88. Design process of 'The McGothic.'
Fig. 89. Design process of ‘The McGothic.’
Fig. 90. Design process of "The McGothic."
Fig. 91. Design process of 'The McGothic.'
Fig. 92. Design process of 'The McGothic.'
Fig. 93. Design process of ‘The McGothic.’
Fig. 94. ‘The McGothic’ depicted within Edward Hopper’s Haskell’s House.
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Fig. 95. Image of author at the construction site of her home, a Toll Brothers’ house, in Michigan. 1997. Source: Personal Photograph.