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Introducing the LiQUiD house

by

Alex K. O'Briant

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

Master of Architecture

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ABSTRACT

Introducing the LiQUiD house

by

Alex K. O’Briant

This thesis searches for a new understanding of domestic space by dividing the house into two concepts—Liquid and Solid. As the Solid House has evolved reluctantly over the past century, the Liquid House has experienced revolution after revolution. Defined by market economies, construction standards, pop culture, etc., the Liquid House is an amorphous, constantly shifting figure that overshadows its Solid counterpart. The rise in prominence of the Liquid House is marked by astonishing statistics: The average single-family house has doubled in size in fifty years as lots have grown 25% smaller and households have decreased 15%. As per capita expenditures have tripled and credit card debt has more than doubled, average closet space has increased seven-fold. This thesis explores the ways in which the Liquid House, perpetuated by these statistics, has come to dominate, giving rise to contradictions and paradoxes that simultaneously define and confuse the very essence of domestic life.

April 2001
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April 2001
Introducing the LiQUiD house
Introducing the LiQUID house

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82% of 1999 home buyers bought a single-family detached house. (in 1978: 71%) in 1990, 64% of the population owned its own home. 5.27 million
existing homes changed hands in 1999 | 444,00 new homes were purchased in 1999 | Last year, nearly 10% of the 1.3 million single-family home starts
Paper Covers Rock

I live in two houses. One has two bedrooms, one bath, a kitchen, a living room, a deck on the rear, and a porch in front. It is wooden with vinyl siding, perched atop brick piers. In the winter, the floor is cold. In the summer, the door frames shift and the drywall cracks. Out each of nineteen windows I see my property and a neighbor's. It is the SOLID house.

The other house I live in has a television and a stereo, a painting by a friend, about half of the IKEA catalog, a computer, fine china still in boxes, several hundred books and CDs. I send a little piece of it out every month to two different banks, and another big piece out at the end of the year to the county tax assessor. Some parts of it I strap on my back every morning and cart across the city. Others I have not laid eyes on in years, although I know they are there. This house, the LIQUID house, I will take with me when I move away from Houston. The SOLID house will stay.

LIQUID house is found on the pages of magazines, in a letter from a friend. Its “houseness” is about complex financial formulations and real estate deals. It is about standard construction processes and spontaneous deviations from these standards. It is formulated by our spending habits and our predilections for things. The LIQUID house is mobile. It is stuffed in our pockets, strapped to the roofs of our cars, mailed to our families, forwarded to new addresses. It is the sum of its parts.

These parts, that comprise the LIQUID house, are dispersed across the metropolis. They are lightning-fast, responsive to market forces and fickle attitudes, increasing demand, resource shortages, political crises. Vast amount of capital, labor, time, and energy go into their assembly. More parts flow at faster rates year after year, bringing change upon change to our houses, both LIQUID and SOLID.
It is the process by which the LIQUID house is thought, built, and lived, that is radical and radically changing with each passing day. The LIQUID house flows at such a rapid rate that it doesn’t evolve—it mutates. It is pushed along by the speed of progress, marking time with bullet trains, specialized freeways, DNA sequencing, the latest multi-gigahertz processor. The LIQUID house is caught up in what Manfredo Tafuri referred to as the “uncontrollable acceleration of time.” Form seems always sluggish in the face of rapid change, and thus, as the LIQUID house has mutated, the SOLID house seems to have barely evolved. Material technologies have infiltrated it, and stylistic alterations have updated it, yet it remains relatively static.

The primacy of process over form in the face of Tafuri’s accelerated time has reshaped the domestic landscape in important ways. The house is no longer tethered to its site with such fixity; new media such as the credit card change the way we shape domestic space; economies of scale challenge spatial relationships and test our capacity to push the domestic envelope ever outward and upward. Essentially, the SOLID house has given way to the LIQUID house, giving rise to contradictions and paradoxes that simultaneously define and confuse the very essence of domestic life.
Paradox 1: Here & Elsewhere

The LIQUID house is both here and elsewhere. Its interior has been given over to global surfaces of communication and exchange, making it reliant more on its relationship to styles, trends, global market forces, etc. than to its site. As technologies and behaviors minimize the importance of physical context, the house becomes an object—temporary, mutable. As an object, it can accessorize, update, unload, reload. For its identity, it relies on the pages of the latest style magazines, on the hippest of new television shows, on the displays at Target or Pottery Barn. It has found a place within the market, and thanks to this, it enjoys a relative placelessness where it rests, precariously, temporarily. It is the LIQUID house’s ability to assimilate urban activities, to respond to market forces, to accommodate constantly changing projections of life style, and to broadcast itself in thousands of fragments across the globe that make it an ever-changing entity that is always somewhere, just beyond.

The television, found in 98% of American homes, is one of the many factors that serves to tie the LIQUID house to global networks and sever its relationship to its immediate surroundings. Email, the telephone, etc. have allowed us to develop “communities without proximities” that free the LIQUID house to float across boundaries, exercising its relative formlessness in a constant undermining of HERE in favor of ELSEWHERE.
The LIQUID house is both HERE and ELSEWHERE. Its interior has been given over to global surfaces of communication and exchange, making it reliant more on its relationship to styles, trends, and market forces than to its site.
Telecommunications have dislocated us from our own geography. A phone number, formerly designating a place, now designates an individual, unplugged but connected, off the grid but more in touch than ever. Left: Cellular tower. Because it is an amassing of gear, a process of negotiation, a fluidity of finance, the LIQUID house is resilient, assuming similar forms in ever-changing locations, leaving only a trace of itself behind.

Paradox 2: Mobile & Stabile

The LIQUID house is mobile, and this mobility shifts its emphasis from the realities of its geography to the possibility of an infinite set of futures. True, it does not (usually) float about, and the images of mobility in housing projected in the 30s and 40s have never quite come to fruition: Fuller’s Dymaxion house is nowhere to be found. These experiments exercised the desire to make the SOLID house move. Instead, the SOLID house has remained where it lay, only occasionally being hoisted rather awkwardly onto a truck to find its way to a new site. The LIQUID house, on the other hand, is constantly moved about in fragments, disassembled, packed up, shifted around, relocated, and reassembled. It travels with its owners, who are increasingly likely to move out within six years of moving in. Because it is an amassing of gear, a process of negotiation, a fluidity of finance, the LIQUID house is resilient, assuming similar forms in ever-changing locations, leaving only a trace of itself behind. It is a process of relocation—a certain cultural lightness that gives its inhabitants ultimate freedom to move about the metropolis.
Single-Family House: 1950 median square feet per person: 303. 1995 median square feet per person: 694. 1999 median square feet per person: 865.
Paradox 3: Density & Dispersion

The LIQUID house is dense with activities previously associated with public space. Increasing levels of disposable income have facilitated its assimilation of elements of the city such as the office, the library, the swimming pool, or the gym, allowing it to achieve a programmatic density. This is evidenced both in the gear of the house (software) and the spatial configuration (hardware). As the envelope of the house has expanded outward, larger amounts of space have generated a more complex system of public and private zones. The "retreat" spaces found in new builder homes recognize a desire, at least in name, to be able to achieve "escape" from one's own private domestic world within its very confines.⁸

Concurrent with this densification is the dispersion of the LIQUID house across an array of media networks and channels. The surface of the house is projected upon the city, available in the aisles of Wal-Mart and in internet chat rooms, reassembled in coffee shops and in sophisticated automobiles. Our most private realm can be pieced together, in all its intimacies, by collecting the fragments that we spread across a multitude of public media. The simultaneous density and dispersion of the LIQUID house blurs the edges of "houseness" and allows houses to act like small cities and cities to act like large houses,⁹ attenuating domesticity and atomizing the public realm.

1999 average closet space per person: 122, 1950 average closet space per person: 17, 1999 retail space per person: 19, 1999 self-storage space per
Right: The LIQUID house appropriates the street, an infinite loop in the living room. Below: Ford and Maytag team up to produce the Windstar Concept Van, which comes standard with microwave, refrigerator, washing machine.

Paradox 4: Container & Contained

The LIQUID house upends the static relationship between house (CONTAINER) and goods (CONTAINED). Traditionally, we have conceived of the house, specifically the SOLID house, as a container for the goods that we accumulate. The LIQUID house calls into question the hierarchy of domestic space over its contents, elevating the status of the contents and diminishing the importance of the container. The concept of the liquid house dissolves the traditional distinction between container and contained by revealing the relationship between the two—the goods within are not contained by but are constituent of the modern house, the LIQUID house. A key element of dissolving the boundary between container and contained is credit. Our purchases achieve the same status as the space they occupy through our willingness to mortgage our future on them.

As the SOLID house has become an increasingly-large repository for burgeoning amounts of stuff, the LIQUID house has, itself, become contained by the very forces that enable us to amass so many things. The LIQUID house takes on the form of its container, succumbing to dominating market forces, economic trends, stylistic change.
The LIQUID house calls into question the hierarchy of domestic space over its contents, elevating the status of the contents and diminishing the importance of the container.
self-storage SF: over 1 billion | Self storage is a $10 billion/year industry | Total # self-storage facilities: around 35,000 | 1999 Average Price per SF: $68.80
Interiority Complex
1950
42.6 people per square mile
303 square feet per person

1990
70 people per square mile
864 square feet per person

SF of living space, spends $21 per SF of living space, owes $4.37 per SF of living space to credit card companies, nets $0.63 per SF of
Domestic square footage per person has almost tripled over the past 50 years while population density per square mile has increased one and a half times. The result? A density of interiors.


**Interiority Complex**

The paradoxes at play in the LIQUID house have elevated the status of its interior. Ambiguous relationships between local and global, hardware and software, have destabilized its form, and it is within the context of the vast network of exchange—of money, of information, of ideas—that it regains this form, from the inside out.

The LIQUID house is not concerned with external factors like wind or sun. Heating, air conditioning, and insulation have easily compensated for these factors. The *envelope* of the SOLID house is shaped to accommodate the *equipment* of the LIQUID house, sealing out the elements and becoming ever more attuned to its own internal workings. Its unresponsiveness to immediate externalities like weather patterns is balanced by an acute sensitivity to changes in style, market fluctuations, energy costs. Media technologies within the home serve to relocate the notion of community to distant scapes that form the locus of the LIQUID house. The manner in which the house is bought and sold, the mechanisms that allow it to serve as a surface of exchange, the factors affecting stylistic change, and even value exchange media such as the credit card all facilitate the interiorization of the LIQUID house.
The paradoxes at play in the LIQUID house have elevated the status of its interior. Ambiguous relationships between local and global, hardware and software, have destabilized its form, and it is within the context of the vast network of exchange—of money, of information, of ideas—that it regains its form, from the inside out.
Surface Tensions

Infiltrated by new technologies, shaped by stylistic momentum, defined by market forces, the house has become a flexible arrangement of surfaces that respond to and reflect public exchange and communication. A coat of paint, a layer of veneer, the changing light of the television screen—so thin, so ephemeral, so imminently changeable. These are the surfaces of style, and upon these surfaces we project our contemporary domestic existence. A magazine ad, tossed carelessly onto the coffee table, mirrors the very space it occupies. In fact, one is barely certain which one is more housetlike, the ad, or the house. A culture of ever-changing desire demands a domestic space that can respond to these changes. Instead of forms, the LIQUID house is built out of paper-thin surfaces that readily accept the projection of the metropolis. Images of a hundred cities find their way into the color of the walls, the arrangement of the furniture, the contents of the closet. The house is the trading floor of the 'global image economy' and its surfaces are easily replaced by new ones reflecting the ever changing images that formulate a life style.

There is a certain virtue to this thinness of existence. The LIQUID house, through its utter mutability, is a laboratory for living. Its surfaces are petri dishes for experiments of all kinds. These experiments take the house beyond its existence on the block, its orientation on the compass or the city grid. They allow the domestic landscape to be immediately responsive to the rapid-fire forces that constantly press upon us as dwellers in an accelerated time. Through the emphasis on surface, all energies are poured into the primacy of the image. The surface is merely a transient host of a multitude of possible life styles.
The average American views 5,000 marketing images a day.
Left: Halftoned Tide® logo. Print media, advertising, etc. both influence the shaping of space and represent it. Below left: Televisions, for sale and selling. The global is projected onto the domestic.

Below & Right: The set of Seinfeld. The ambiguous relationship between stage set and living room is further convoluted by the projection of its image into other living rooms.
All energies are poured into the projection of the image. Surfaces are merely transient hosts of a multitude of possible life styles.
The LIQUID house is the trading floor of the 'global image economy.' Its interior is a series of surfaces of projection that reflect infinite possibility—a blank slate on which to project a world.
TOTAL PACKAGE (HOMEshopping)

Shopping for a mass-market home is nothing new. In the 40s and 50s, people came out in droves to see model homes, often waiting in line for hours just to get in and take a peek. If anything, the mass market home seems to have taken a step backward, bragging less about its mass appeal and its state-of-the-art technology and more about its 'custom' quality. Mass market houses today are, in reality, more like cars, offering certain makes and models with a limited set of expandable options. To this end, they are not that different than their mid-century counterparts until you examine how they are marketed—as spaces of distinction designed especially with you in mind. And while the modest 1950s tract house was intended to encourage enjoyment of a small but adequate piece of nature (your lot) and interaction with a host of other like-minded individuals (your neighbors), contemporary mass-market neighborhoods have shifted toward a more insular style of growth, promising maximized square footage, security, proximity to high-end amenities, and privacy. Meanwhile, the process of purchasing a mass-market home has been pushed further into the realm of shopping, with home centers cropping up in centralized locations that allow builders to service wide swaths of a city.

These home centers are an integral part of what could be called 'Total Package' home shopping. The Total Package wraps the entire home planning, buying, and building process into one big bundle, aligning itself with more normative shopping modes and bolstering the notion that the house is more commodity than building. By offering Total Package homes, builders or real estate companies can cut their costs at the same time that they offer increasingly large homes with maximum amenities. This aligns them with
Now everything you need to make your dreams come true is under one roof.
modern retailers such as Wal-Mart/Sam’s Club and with the automotive industry.

The one-stop shopping concept, traditionally foreign to home buyers, is utilized in order to turn potential buyers into actual buyers as quickly as possible, since complications in the home buying process are a prime reason that many potential buyers back away from a sale. Services include neighborhood selection, lot acquisition, house plan selection and alteration, building permits acquisition, financing, construction management, selection of finishes and appliances, and closing, among other things. The object itself, the house, is only a small part of this package, and many of the ‘products’ offered in the Total Package are meant not to improve the quality of the house, but to improve the quality of the acquisition of the house. The edifice is actually eroded in favor of a process which defines the evolution of new domestic space. Certainly a physical product emerges from this process; however, its marketability as a manifestation of the American Dream is predicated not on its sophisticated materiality, or its relationship to the landscape, but on its simulation of these elements.

The heightened specificity of the Total Package program represents the interiorization of the domestic realm. Located within an increasingly large envelope, the house is a world in and of itself, with a significant gradient of public and private. Programmatic density complicates the relationship of house to city as the house takes on elements such as the home office, the exercise room, or the private pool. The relationship is no longer house=private, city=public. Instead, the house contains the program of the city and is, in itself, an entity of public and private moments. Meanwhile, the generation of gated communities, security systems, and other devices of the Total Package serve to cut the house off from the very world it emulates, further shifting the emphasis to the interior.
"We include the Sprinkler System, a garden tub with therapeutic jets, Moen chrome and brass fixtures, rounded Sheetrock corners, ceramic tile in all the baths and in the kitchen/breakfast area. The list goes on and on."

—LaDon Sisuts, Lenmar Homes
offers the Total Package.
WHEN YOU, THE CUSTOMER, walk into David Weekley's New Home Center, you are greeted by pleasing music, drifting smells of coffee and peanuts, and the smiling face of the most friendly ‘New Home Specialist’ you have ever met. This employee is at your disposal to guide you gently through all the phases of home acquisition. “Perhaps you would like to see a map of all the neighborhoods you can choose from? Would you like to take a look at our special Build-On-Your-Lot area? If you'd like to talk financing, we can sit down with one of our financial specialists. Yes, she is that accommodating. And once you have found your bearings and adjusted to the dim, soothing light, you see before you the Total Package.

Here's how it works: Pick a neighborhood. Maybe you have one in mind based on your office location. Maybe you are interested in getting as far away from the city as possible. Maybe you are looking in a particular school district. Or, perhaps you already own property and want to build a home on your lot. Well, they can do that, too. So you have picked a neighborhood and decided that you are definitely going to buy a property and build a home and that you are definitely going to use David Weekley. Before you go any further, your new home specialist will want to get some financial information from you so the loan approval process can begin. David Weekley is 50% owner of American Priority Mortgage, so they can offer you their services and guarantee that, as long as your credit checks out, financing your home will be a breeze.

While your credit is being checked, you will apply for the necessary work and building permits and pick out a property in the neighborhood you’ve selected. Since David Weekley is not a developer (although they are planning on breaking into the market soon), they don’t actually own any of the property you want to acquire. They compete with a large number of other builders for the right to certain lots, so you may have to settle for the closest lot to the one you want. When you have decided on a lot, David Weekley Homes will claim an option on that lot and the developer will determine whether or not you get it.

There is no need to pause the process by waiting for final word on your lot. Leaf through volumes of books featuring
hundreds of plans and elevations to select the home that is as close to your dream as possible. Home builders call the home you are selecting a custom home. It is not, however, a ground-up design experience. You are selecting from a limited number of models, with a limited palette of building materials and finishes. You are customizing your new home in the same way that you customize a new car, or a new computer.

By now, you have selected your lot, you have selected your home plans, you have been approved for a loan. Now your New Home Specialist will set you up with a Personal Builder who will manage your project and be your primary liaison as your home is built. This personal builder will translate all the options you selected into a workable set of plans and will coordinate with other personal builders to make sure there aren’t scheduling problems with work crews. The majority of the laborers that will build your house are employed directly by David Weekley Homes—they maintain their own crews for quality control and time management.

Now that everything is set in motion, you can browse through the Decorating Center. There you’ll find choices in interior finishes, appliances, hardware, etc. An in-store decorator will help you with your selections if you like, or you can choose from a number of predetermine schemes. These are the final decisions necessary to purchase your new home. Provided there are no glitches with permits or financing, you’re guaranteed to be able to move into your home in less than three months. Closing on the home is the final obstacle. When your home is finished and all work has been approved by David Weekley, you will get back together with you New Home Specialist and sign the papers, the final step in attaining the TOTAL PACKAGE.
CARS

TELEVISIONS

REFRIGERATORS

STEREOS

WASHING MACHINES

MICROWAVES

VCRs
The sum of its parts: 98% of U.S. houses have a television.
BUY House (homeSHOPPING)

The Montgomery Ward Catalog first made its way into homes in 1872. Other catalogs such as Sears and Roebuck emerged soon after, followed by layaway plans, store credit, credit cards, toll-free numbers, express-delivery infrastructures, and computer networks. In 1986, one hundred years after Sears and Roebuck got their start, QVC broadcast its home-shopping program across cable television. Less than a decade later, amazon.com booted up its servers. The confluence of such events has enabled the house to become a primary locus of exchange—an active venue not only for the use and storage of goods, but also for their acquisition and delivery. As a locus of exchange, it is destabilized by the volatility of the market. Shopping in the comfort of one’s own home, one effectively collapses an entire retail landscape into a few square feet. The space of the city is collected on the computer screen or the mail-order catalog. The house becomes a monitor for price fluctuations, surpluses and shortages, etc., introducing a new programmatic possibility that aligns domestic space with spaces of acquisition.

As the marketplace becomes embedded more deeply in the house, the interior plays an increasingly important role in consumer activities previously dedicated solely to the public realm. Even though shopping at home over the internet still only accounts for one percent of all retail sales, the average internet purchase is over one and a half times greater than the “brick and mortar” purchase. The interface between the house and established delivery mechanisms is increasingly important as goods bypass traditional pathways and are delivered directly from warehouse to living room. The emphasis of the LIQUID house is increasingly on acquisition and flow of goods, rendering spaces of exchange and consumption indistinguishable from each other, offering no escape from the consumer landscape and no limit to the private domain.
As a locus of exchange, the LIQUID house is destabilized by the volatility of the market. Shopping in the comfort of one’s own home, one effectively collapses an entire retail landscape into a few square feet.
The New Plasticity

The spatio-temporal fluidity generated by the credit card has affected the way we acquire, the way we move about the city, the way we shape our spaces. The house, formerly a static object rooted in landscape, becomes dynamic as the fluidity of credit enables a more constant flow of goods and services. Impulsivity, the mark of the credit card medium, is grafted into the DNA of today’s house. Pauses that formerly marked the buying process no longer exist now that the credit card eliminates the necessity of saving up for a big purchase. As our spending becomes more plastic (literally and figuratively), the SOLID house dissipates. The space of the LIQUID house is not what it is, but what it could be. It is formulated through a constant exploration of potentials that yields a constantly changing set of configurations.

The average American adult has 3.5 credit cards.25 720 million cards in a nation of just over 281 million people, with numbers climbing every year. People have experienced debt for centuries, but it is only in the last half-century that the convenient debt of the credit card has enabled us to move and spend so fluidly within the metropolis. Credit cards provide perpetual and instant loans, amortized over indefinite periods of time with variable interest rates. They allow us to float just beyond ourselves, anticipating the future, demanding it. Our new buying medium of PLASTIC is exactly that—fluid, easily molded, constantly changing. It has marked us as a society of indeterminate immediacy as we prolong the exchange of value in favor of immediate acquisition of the object. The credit card is a slim, lightweight manifestation of infinite possibility. It is a new medium of exchange that extends our capabilities to buy and to own, contributing greatly to the

$4.2 trillion on personal consumption of goods and services. I Houses make up 70% of consumer debt. I Consumer debt is 85% of personal income. I Middle-
Visa and MasterCard accounted for 70% of all 1999 consumer purchases.
proliferation of ‘stuff’ that is rapidly reshaping our very notions of domesticity.

The credit card exchange is a substitution resulting in a delay of actual exchange of value. The digital world allows for instantaneity of acquisition while an uncertainty remains in the transaction as it travels through intermediaries. It is not until the payment is transferred to the credit card company from the cardholder’s bank account that any given transaction is fully complete. The process is fluid and attenuated.

Fluidity hates permanence. The more fluid our exchange of goods, the less permanent our houses. As the house mutates from a static object of HERE (SOLID house) to a dynamic entity of ELSEWHERE (LIQUID house), its physical presence is transmogrified. It is no longer a signifier of stability and permanence, but of capital and style. As such, it is necessary that it be as transient as the forces that shape it. As credit card debt increases and credit limits climb, the LIQUID house drifts beyond its corporeal being, moving from city to city as its empty shell, the SOLID house, is abandoned. Already, the expected life span of new homes in major metropolitan areas is often shorter than the life span of the mortgage. An increasingly mobile and wealthy populace has served to actually lower the expectations of the SOLID house, as poorly-constructed new houses begin to deteriorate after only a couple of years.
The paradox of the credit card medium is that, while it lends an immediacy to the process of acquisition (no loan approval, no 'saving up'), the exchange of value is attenuated through a complex series of events. Although digital technology makes the transaction approval process practically instantaneous, policies such a grace periods and revolving credit create a series of data-loops that make the moment of actual exchange difficult to determine.
As our spending becomes more fluid (literally and figuratively), the house as entity dissipates. The space of the house is no longer what it is, but what it could be. It is formulated through a constant exploration of potentials that yields a constantly changing set of configurations and reconfigurations. Pauses that formerly marked the buying process no longer exist now that the credit card eliminates the necessity of saving up for a big purchase. Impulsivity, the mark of the credit card medium, is grafted into the DNA of today's house.
Payment Methods:

<table>
<thead>
<tr>
<th>Year</th>
<th>Payment Cards</th>
<th>Cash</th>
<th>Checks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>22%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>26%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

26 cents out of every U.S. consumer dollar spent is put on plastic.
Privacy & Identity

The house has traditionally been the locus for personal (and thus personalized) space. The possibility for customization introduced by the credit card convolutes traditional relationships of public and private as the potential for personalization spreads beyond the domestic. Credit spending and other forms of electronic funds transfer open up a whole world of exchange never possible with cold hard cash. In order to participate, consumers must give up a certain amount of privacy. Visa is bold enough to tell you upfront that they are Everywhere You Want to Be. Anonymity within the marketplace is not possible with payment cards due to their sophisticated system of information storage and exchange. The electronic nature of transactions has enabled multiple institutions to track an astounding amount of data about consumer spending trends, habits, predilections. National credit bureaus stockpile information about every consumer’s credit card activity, stores rack up data about product selection and average sales, card issuers collect data on spending patterns, average debt, and so on. All of this information, some directly attached to a cardholder’s name and account, some dispersed among general statistics, is of great value to the marketplace, and thus cardholders possess something of value beyond just the cash amount of any given exchange. They hold information that can help give businesses an edge, reduce risk for lending institutions, or allow retailers to tailor their product or service to every individual’s needs. Already, we see the capabilities: “Welcome, Jill Johnson! If You’re Not Jill Johnson, Please Click Here.” Entire surfaces of exchange can now be customized to every individual’s predilections, spending habits, desires. As a result, the already-ambiguous relationship between public and

$4,400 | Americans in 1996 spent $4.2 trillion on personal consumption of goods and services. | Unused lines of credit in 1997: $1.5 trillion | 1928:
Charge Plates introduced in department stores. 1950: Diner's Club introduced in Manhattan, first multi-establishment card. 1958: American Express
private enjoyed by the LIQUID house is further muddled by the conundrum of “customization,” in which the consumer is asked to give up privacy in order to achieve new levels of comfort and pleasure.

The relinquishing of privacy involves a re-negotiation of your identity within the marketplace. “Membership Has Its Privileges” American Express said, asserting that one’s identity is somehow incomplete without a credit card. Within the market, this is increasingly true. It is almost impossible to rent a car or reserve a hotel room without a credit card. Your name is stamped directly onto the card, a proof of identity bolstered by your PIN code and your mother’s maiden name. Your very identity has been inscribed upon an entire medium of exchange. Every transaction, every deposit, every swipe registers your participation in the global market. More than ever before, your identity is caught up in the flow of surplus. To use your credit card is to assert your presence within the market and to more closely associate your identity with how you spend, what you buy, who you owe. As a result, your identity (i.e. your tastes, predilections, etc.) becomes increasingly important to a highly competitive market. As a consumer, your buying power is augmented by the information you wield about who you are and what you want.

This buying power enables an infiltration of greater quantities of goods into the house, and domestic space bends under the weight of this change. Through the credit card, our very negotiations within the metropolis are both accelerated and attenuated, affecting the way we think about spending and saving. This, in turn, influences our decisions to buy domestic space. Perhaps it means we spring for a slightly bigger house, knowing that we can afford to fill it thanks to the flexibility of credit. Perhaps it means we are able to qualify for a loan because we’ve developed a strong credit rating through day-to-day purchases. Or perhaps we’re simply conditioned to take on larger debt due to the nature of plastic.

emerges along with several other cards. First general purpose charge card. I The credit card industry sends out 2.5 billion solicitations annually. (Estimate: 1
Introducing the Juniper Platinum MasterCard

Alex K Obriant
1210 Wiliard St
Houston, TX 77006-1110

The credit card industry sends out 3 billion solicitations annually. This equals 3.946 million miles of envelopes! Ahead of the holiday shopping season, American consumers added $7.4 billion in revolving
What we owe towards our stuff exceeds what we spend on our houses. The buying power afforded by revolving credit and high spending limits enables an infiltration of greater quantities of goods into the house.

*consumer credit during October. One year ago consumers racked up $5.5 billion in revolving consumer debt between September and October. Overall debt
Annual Credit Card Debt

Annual Rent/Mortgage Payments

card use is growing 35% annually. Over the Internet, debit card use is growing more than 100%. During the second quarter of 2000 nearly one billion card
solicitations were mailed in the U.S. The second quarter's mail volume represents the highest quarterly amount ever mailed with 79% of all households in
Towards a Cultural Bulimia
Buying BULK

Economies of scale are evident across the entire scope of today’s consumer landscape. Buying bulk allows us to acquire more (and often larger) things at lower prices. From eggs at the grocery store to automobiles and, of course, houses, incentives for buying larger quantities have affected our spending habits. The result? We’re growing. Larger homes for more things. Bigger stores. Bigger bills. Longer distances. Larger portions. Bigger waistlines.

Americans have more stuff than ever before. Consumer spending is on a 50-year spike, with households spending 2.8 times more per year than in 1960. Storage space in and out of the house is growing at rapid rates, and technologies that facilitate increased levels of consumption are emerging almost daily. The LIQUID house is deflecting under the weight of the stuff that we are acquiring, becoming an agent of acquisition, delivery, negotiation, storage, utilization, disposal.

Since a consumer economy such as ours is destined to fail when markets reach their saturation point, systems of planned obsolescence have been implemented to maintain the cycle of production and consumption. Goods and houses are made to last only for short periods of time, and we have altered our expectations for these things accordingly. Stylistic change, one of the most “powerful engines of planned obsolescence,” is clearly at play in our daily lives. Planned obsolescence supports the cycle of binge/purge by constantly prompting the LIQUID house to rid itself of old goods in favor of new ones. Changing styles have it fluctuating from the minimal to the garish in just a few months, straining an already-interiorized and mortgaged domesticity. This mechanism of “freshness dating” is the mark of the LIQUID house. It is ambiguous, giving equal deference to waste and change, increasing both at an ever-accelerating pace.

2% of 1999 home buyers bought a single-family detached house. (in 1978: 71%) In 1990, 64% of the population owned its own home. 5.27 million
ALL RETURNS ARE FOR STORE CREDIT ONLY
ALL SALE ITEMS ARE FINAL SALES
The average American consumes twice as much as in 1950.
Even furniture can go bad. If it's time to update your

IKEA advertisement. The immediate impact of planned obsolescence on the home is clear.

actually occupy the mathematical middle. The mathematical middle is mainly white, has a 1787 SF house with a porch or deck, and a garage. The household
home, IKEA has all the inspiration you need.

Freshness Dating

works 41.2 hours a week and its heads have at least a high school degree. Their average monthly housing cost is $634, with $71 spent on electricity and
BIG House

The average American household consumes twice as much as in 1950. The effect of this increase in consumption on the single family house has been remarkable. 73% of last year's home buyers indicated that getting the most square footage for their money was essential when purchasing a home. Despite a thirty-year decline in the size of the American family, the single-family house continues to grow. Just after WWII it measured around 1000 square feet. At the beginning of the 1970s it was, on average, 1500 square feet. As of last year, the average single family detached dwelling is 2250 square feet. Since fewer people are occupying this space, the average square footage per person in the United States is increasing. Over the past five years it has gone from around 690 square feet per person to almost 900. The rapid increase in disposable income, particularly among the middle class, has helped generate a building environment in which the smaller houses of earlier generations are slowly (and sometimes not-so-slowly) replaced by extremely large houses that test the limits of neighborhood restrictions. According to the National Association of Home Builders, nearly 10% of the 1.3 million single-family homes built nationwide last year were begun on lots recently cleared of existing houses. The Zero-Lot-Line house pushes its way to the edge of the property in every allowable direction, minimizing the amount of yard and the amount of shared neighborhood space.

Builders are more than happy to oblige the consumer demand for larger houses. Economies of scale make larger homes, built in mass quantities across the city, much more cost effective. Cost incentives to build at such a scale help to create a dominant force in the housing market as more and more builders increase the

$1,248 paid in property taxes. In 1999, 50% of Orange County, California's new homes had a 3-car garage or bigger. In the last 10 years, the number
of floor plans submitted to cities that include 3-car garages has doubled. (4 or more? Quadrupled?) Homeowner car ownership: 67% >1; or more 67% >2
scale of their operations to take advantage of these economies. At some point, it becomes unclear whether builders build large homes because consumers want them, or consumers buy large homes because builders build them. Regardless of which is actually the case, neighborhoods continue to 'bulk up' with single family homes that are closer together but afford greater amounts of interior space per person. This method of development generates a quasi-density in which open spaces, outdoor areas, shared spaces are overtaken by the primacy of the interior.
Successive reduction of lot size from 1850 to present (from Roger Sherman)

1850

1900

1950/1990

The Average Lot is Shrinking

1950: 3.1 People Per Household

1990: 2.6 People Per Household

The Average Household is Shrinking

The average single-family house is twice as big as it was fifty years ago. Its growth has occurred in conjunction with decreasing lot sizes and smaller families.
Average Lot Size
Average House Size
Average Closet Space
Combine a decreasing LOT size with an expanding HOUSE. Add CLOSET space that's increasing at twice the rate of the house. The capability of the single family house type to sustain its manifested growth is called into question.
BIG Box

The BIG Box and the house are intertwined. The BIG Box, like the BIG house, is spliced into the landscape, relying on massive infrastructures and global surfaces to tie it to the modern metropolis. The specific spatial requirements of the BIG Box reinforce trajectories of suburban growth. To this end, the single family house is the reason that the BIG Box even exists. After all, the success of suburbia hinges on the single family house, and the BIG Box store is tailored to suburban growth. Both are designed to project a world of possibility: to own the latest gadget, to see the latest music video, to travel to the limits of the imagination. The BIG Box must expand ever-outward to accommodate so many different imaginations, just as the house must expand its interior world, eventually zero-ing out its lot lines, in order to contain an increasingly expansive list of products and programs. Both realms are about maximization—of profit, of pleasure, of experience.

The Box is big for distinct reasons directly related to the way we consume. Through sheer scale, big-box prices are ever lower, its goods more accessible to widening groups of people. The accelerated pace of daily living has made us on-the-fly consumers—middle-income families with children work 1.5 full-time weeks more per year than 20 years ago—and the vast inventory of the ‘super center’ addresses the opportunity cost of time through its expanding ability to meet a broad palette of needs.

Wal-Mart, the reigning king of retail, has more employees than the U.S. Postal Service. Its total occupied space is 45 square miles, roughly the size of Washington, DC. 1997 sales equaled the GNP of Norway, and this year, it will make more money than General Motors. It sells 19 million pairs of women’s jeans a year, and an average of 19.634 pairs of shoes an hour. Wal-Mart executives hope eventually to locate a Wal-Mart store every ten miles across the American metropolitan landscape, and every 30 miles in rural areas. Such is the scale of the BIG BOX.
storage space per person: 7


Self-storage generates the
The single family house is the reason that the Big Box exists. After all, the success of suburbia hinges on the single family house, and the Big Box is built off of the single family house. The huge new house, like the gigantic Big Box, is spliced into the landscape, relying on massive infrastructures and global surfaces to tie it to the modern metropolis. Both are designed to project a world of possibility: to own the latest gadget, to see the latest music video, to travel to the limits of your imagination.
Average Store Square Footage:

- 1985: 63,000 SF
- 1980: 47,000 SF
- 1962: 16,000 SF

Walmart Supercenter
30 acre site, 200,000 square feet,
800 shopping carts, 953 parking spaces, 32 checkout registers,
72,000 customers/week, 500 employees, 362 stores nationwide

...
Where To Stick It

There is seven times more closet space per person in the American single family house than there was fifty years ago. Over the course of the 20th century, domestic closet space in America has increased at roughly two and a half times the rate of other interior space. Clearly, architecture is bending under the forces of consumer activity as consumer/dwellers literally yield the floor to their stuff. In the 19th Century, the wardrobe, relatively compact, was the primary means of storage within the house. It was a piece of furniture with a clear figural relationship to the room. Eventually it gave way to the closet—not an object, but a void. Objects are dropped into this ever-widening void, slipping just beyond consciousness and inevitably beginning their trajectory toward the landfill. The closet, out of sight, out of mind, is the gray space between binge and purge.

Most new builder homes consist of master closets that compete with spare bedrooms for prominence. And advice columns recommend turning spare rooms in older houses into storage closets. Unfinished attic and basement spaces and spaces outside the envelope of the house are often not included in the calculation of property taxes, providing incentives for storing as much as possible in these spaces. This is one of the factors that has driven the increase in garage size. Three- and four-car garages have become increasingly popular for good reason. Not only can they accommodate the rising number of cars per household, but they provide perfect tax-free spillover space for stuff.

Increasing closet square footage gradually squeezes out other interior space.

1999 estimated self-storage SF: over 1 billion | Self storage is a $10 billion/year industry | Total # self-storage facilities: around 35,000 | 1999 Average
Closet space per person

Space per person within the house has grown dramatically in the 20th century, but not as dramatically as closet space.
1. Objects
2. Enclosure
3. Enclosure Plus
4. Room Takeover

living space: 1995 median monthly housing cost: $593 (22% of median income) | 20.4 million people changed residences in 1999 (1.4% of the population)
19th Century

1997—36.6% of all households have a computer. Today, the average American consumes twice as much as in 1950. Total annual retail spending in
America, excluding automobiles and boats, is roughly $2.3 trillion. Wal-Mart’s domestic sales for the fiscal year ended in January were $1.42 billion, or 6.2%
of the total. Wal-Mart sells 19 million pairs of women’s jeans a year. Wal-Mart sells an average of 19,634 pairs of shoes an hour. Wal-Mart is America’s
While home sizes are increasing, so is the percentage of space given over to closet storage. Closet space takes up more than three times as much space within homes as in the first half of the century. Just about every new home plan includes a sizeable walk-in closet off the bedroom. This page: Closet space within new builder homes is compared to earlier examples.
3-car garage with private pool. Bellaire, TX. So much to say here. Let's leave it at "Wow."

As the garage has moved around relative to the house, it has also grown in size and prominence.

Self-storage generates the same income as medium-priced apartments in the market area at 1/2 the construction cost and 1/2 the operating cost. Above: U-Stor takes on a domestic typology.

Self-storage is an extension of the domestic realm.

From the closet to the attic to the garage to the self-storage unit.

Depot square footage: 100 million. The average Home Depot store is 130,000 sf and houses 40,000–50,000 products. Average weekly sales per Home Depot: $1 million.
Curious Loops

Waste. Trash. Flotsam. Jetsam. Junk. The underbelly of a consumer society, within these lie the poetics of stuff. The junk shop, the antique store, the pawn shop are places that seek to squeeze remaining value out of our cultural effluvium. On them is inscribed not only our consumer activity, but our history of dwelling. Just when it appears that an object is going to meet its demise, it finds another life, decontextualized and reborn with the world of junk. It is a curious loop.

The garage sale is another curious loop where the emerging ambiguities of the LIQUID house and SOLID house are wholly evident. To instigate the loop, the detritus of domestic existence is emptied onto the lawn, private elements offered up for public scrutiny. The house is physically inverted, reversing its flow of goods—purging. eBay®, the online auction house, is a revolutionary amplification of this loop. It is one of the greatest storage systems ever invented, even though it doesn’t actually store a single item it sells. Instead, it is an organizational matrix that allows the potential treasures of a million attics, basements, closets, garages to be neatly arranged, cataloged, cross-referenced. The most well-stocked junk shop that ever existed is available for everyone who has a computer and an internet connection. eBay®, like the more localized junk shop or garage sale, provides a cultural sieve to collect items otherwise on their linear path to the landfill and filter them more slowly across the metropolis. The LIQUID house participates in this filtering process, offering pieces of itself for redistribution and reuse, looping itself in infinite directions.

The practice of buying and selling houses is itself a curious loop. Not often thought of as a ‘recycled’ object, the SOLID house is an
Wal-Mart sells 19 million pairs of women's jeans a year.
amazingly resilient item in the consumer landscape. With 14% of the population relocating every year, the SOLID house enables the mobility of the LIQUID house. As the LIQUID house has gained in prominence, however, the potential for the SOLID house to sustain the loop is diminished by an ever-shortening life span.

For every BINGE, there is a PURGE. The massive and ever-accelerating proliferation of stuff generates a system of loops that exploit this inextricable relationship between consumption and waste. The LIQUID house is a product of this proliferation of stuff and of the resultant loops. Its fluctuating, ephemeral existence is the essence of modern life. Studying and theorizing the LIQUID house is a perpetual project because, like the elusive styles it projects, just when we think we've gotten our hands around it, it's gone again.
all its retail property. Walmart has over 1 million employees. Walmart average store SF by year: 1962: 16,000 SF, 1980: 47,000 SF, 1985: 63,000
Coda

The juggling of a few different statistics yields the following:

Annually, the average American household:
- earns $26 per square foot of living space
- spends $21 per square foot of living space
- nets $5 per square foot of living space

Subtract the average American household credit card debt from this figure, and the numbers say that today’s house “earns” 63¢ per square foot. 12

Statistics cannot possibly account for every way that things are valued or appreciated. They cannot include every factor that goes into defining something as complex as the house. Nonetheless, string enough of them together, and you are bound to uncover a few things.

It was never my goal to present a financial report for the Late-20th Century House. On the contrary, the end of this book is a marker for the beginning of my exploration—my own curious loop. In the initial stages of the project I found myself drifting in and out of junk shops and thrift stores across Houston with nothing more than a hunch and a camera. Six months and countless rolls of film later, my determination to photograph “junk” evolved into a preoccupation with my own materialism.

This preoccupation led to an attempt to better understand the vast consumer landscape and my love/hate relationship with it. To discover why my scorn for “consumerism” was coupled with a love for certain “things” or why my concern for the environment was tempered by my own wastefulness. Perhaps the best conclusion I can draw is that contradictions such as these are inevitable. The
house is both here and elsewhere. Both mobile and stable. Both dense and dispersed. Both container and contained. The richness is within the contradictions, not in spite of them. It is with this in mind that I offer the complex paradox that is the LIQUID house.

Out of all the facets of the consumer world, why the house? Firstly, it is something everyone can relate to—to some degree, we are all experts at dwelling. Everyone is invested in his or her own domesticity. Secondly, the house registers in many clear ways the often nebulous forces of the economic world. To this end, I use it here as a filter for understanding how we relate to this world, and how it shapes us as individuals and as a people.

It is my hope that bringing the vast topic of 'consumption' to bear on the single-family house might shed some light on the palpable ways that these contradictions affect us as individuals—the way they respond to our wants and needs at the same time that they fuel them, and the way we formulate our own domesticity in response.

—Alex K. O'Brient January, 2001
Rice School of Architecture
Notes


2. U.S. Census Bureau <http://www.census.gov>


5. Lars Lerup quoting Melvin Webber

6. Initial thinking on this issue stems from J.B. Jackson’s *The Movable Dwelling and How it Came to America* from *Discovering the Vernacular Landscape* (Westford, MA: Yale University Press, 1984.) Jackson is fixated on the ephemeral quality of the American dwelling.


8. This phenomenon is quite prevalent in industry literature and building practices. Regardless whether the space of the house has actually changed, it is being represented entirely differently—as an insular world large enough to make possible a retreat from itself.

9. Subsequent to writing this passage, I learned that I was actually sampling Aldo Van Eyck, who quipped ‘a city is not a city unless it is also a huge house / a house is a house only if it is also a tiny city.’ This poem can be found, among other places, on page 45 of Herman Hertzberger’s *Aldo van Eyck: Hubertushuis* (Amsterdam: Stichting Wonen/Van Loghum Slaterus, 1982).

10. Compiled from U.S. Census Bureau data

11. The Woodlands® and Sugarland lie immediately outside Houston, to the North and South, respectively. They are interesting case studies that support the arguments made here while hinting at a rich set of issues surrounding planned communities, community associations, gated communities, etc. Although untouched in this thesis, further study would include a closer look at these communities.


15. The word “custom” is currently thrown about with such reckless abandon that I, for one, am not longer certain what it actually means. In most instances in the homebuilding industry, it seems to refer primarily to finishes and amenities, not to actual spatial decisions (with the exception of an extra bedroom or a larger garage). Ironically, builders remove all spacemaking decisions from the buyer and then gloss over that fact with a revised definition of “custom.”


18. According to the Texas Real Estate Center <http://recenter.tamu.edu>, In 1998, 64% of polled real estate firms provided some type on in-house mortgage loan service.


20. From Texas Real Estate Center <http://recenter.tamu.edu> Publication 1348


27. Originally derived from a quote from Ralph Nader (source unknown), this information is confirmed by an article on Cardweb.com <http://www.cardweb.com/cardtrak/pastissues/nov00.html> entitled *Getting Online Inlirc* that indicates over $1 billion
in industry expenditures on solicitations in the second quarter of 2000 alone. During that period, 79% of all households in America received at least one solicitation.


29. U.S. Census Bureau <http://www.census.gov>


33. U.S. Census Bureau <http://www.census.gov>

34. U.S. Census Bureau <http://www.census.gov>


37. U.S. Census Bureau <http://www.census.gov>

38. U.S. Census Bureau <http://www.census.gov>

39. Compiled from U.S. Census Bureau statistics and personal estimates. Little or no data seems to exist on storage space. To estimate, I calculated the square footage of closet space in various house plans dating from the turn of the century and compared those to plans from current home builders. The resultant data is extremely rough, but is only meant to get a general idea. Clearly, a more exhaustive analysis is required, but for the scope of this thesis, the rough numbers work nicely. The projection into future years in this graph is a straight linear projection of the data found in the graph and is thus statistically unwieldy. The graph is designed to show how drastically the spatial relationships depicted might change in the future, not to project exactly where they are headed. Apologies to my statistician friends.

40. Thought surrounding this issue sources Peter Rowe’s Making a Middle Landscape (Cambridge, MA: MIT Press, 1991). Rowe’s relentless investigation of the nature of suburbia hinges on the house. I usurped this strategy for my

Expenditures: $23.3 billion: 1967: First Super Bowl. Watched by 100 million Americans (1 billion worldwide), the Super Bowl generates advertising revenues
own purposes and ended up with a document that could serve as a modest follow-up to the work that Rowe presents.


42. Distilled from the e-comments of economist/friend, Kathleen Thomas


45. <http://www.walmartstores.com>

46. As mentioned in note 39, this figure is based on a limited set of data using no statistical model whatsoever. All models of closet space seen in this document, although independently accurate, do not reflect enough data to get a truly reliable number. Instead, I use the numbers and the models to indicate the broadest discrepancy in early- and late-twentieth century storage space. Missing from this analysis is the changing way in which “storage space” is described verbally. For instance, the garage has expanded over the course of the century to include multiple programs, including storage for non-automotive items. Garage space, however, is not included in my storage estimates because it is not considered “closet space” or “living area.” So it is possible that an even larger discrepancy between 1900 and 2000 storage numbers could be established. But not, of course, without an in-depth study.


48. U.S. Census Bureau <http://www.census.gov> & personal storage estimates (see notes 39 & 46)

49. From An Introduction to Self-Storage by the Self Storage Association <http://www.selfstorage.org>


51. U.S. Census Bureau <http://www.census.gov>

52. Compiled data based on U.S. Census Bureau and Bureau of Labor Statistics.

of $1 million/minute. i The average Starbucks customer visits a store 18 times per month. i 10% of Starbucks customers visit a store twice a day. i
Bibliography


Solise, LaDon. *Quotation from Online Contact*. 27 November, 2000. Personal e-mail.


gifts this Christmas. 1999 total circulation of top 100 magazines: 248,189,608 | 1999 magazine advertising revenue: $15.5 billion | 1999 magazine
Statistical Sources

Bureau of Economic Analysis, U.S. Department of Commerce. Fall, 2000
<http://www.bea.doc.gov>

<http://www.bls.gov>

Economic Policy Institute. Fall 2000
<http://www.epinstitute.org>

<http://woodrow.mpls.frb.fed.us/banking/payments/cbol.html>


Federal Reserve. Fall 2000
<http://www.federalreserve.gov/mnd.htm>

Fedstats
<http://www.fedstats.gov>

<http://www.cardweb.com/cardtrak/pastissues/nov00.html>

<http://www.homedepot.com>

Magazine Publishers of America
<http://www.magazine.org>

National Association of Home Builders
<http://www.nahb.org>

Perry Homes. Fall 2000
<http://www.perryhomes.com/>

Rhode, Steve. The History of Credit and Debt. MyVesta.org. Fall 2000
<http://www.myvesta.org/history/history_index.htm>

<http://www.selfstorage.org>
<http://www.starbucks.com>

Texas Real Estate Center. Jan. 2001
<http://recenter.tamu.edu>

U.S. Census Bureau, U.S. Department of Commerce. Fall 2000
<http://www.census.gov>

Corporate Information, Visa International Service Association. Fall 2000
<http://www.visa.com/av/main.html>


History, 1999 Annual Report, Wal Mart. Fall 2000
<http://www.walmartstores.com>


average advertising to editorial ratio: 49.4%-50.6% | Consumer spending makes up 2/3 of the economy | Consumer debt is 85% of personal income | 1997
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20th Century Fox (Fight Club, 2000); 48 bottom
Tomas del Amo/Index Stock; 55
Associated Press; 22 bottom
Black Box/Index Stock; 84 bottom right
Charlie Borland/Index Stock; 2nd row middle
California Closets Company; top middle, 3rd row
Castle Rock Entertainment, Inc.; 35 right, 36
CBS (The Price is Right!); 97
John Coletti/Index Stock; 35 left
David DaPonte; 84 top left
David Weekley Homes; 39, 40, 88
Dema s.p.a.; 37
Andrew Jackson Downing (1850); 84 top right, 87
eBay, Inc.; 93
Robert Houser/Index Stock; 22 top
IKEA; 48 top, 69
Ed Lallo/Index Stock; 17
Lennar Homes; 41
Alex S. Maclean; 32 right, 80
Alex O'Brian; 14, 24, 28, 30, 31, 32 left, 71, 73, 74.
84 2nd row left & right, bottom left, 91, 92, "afterimage"
Proctor & Gamble (Tide®); 34
Daniel Proctor/Dwell Magazine; 45
Roger Sherman; 74 top (diagram)
Frank Siteman/Index Stock; 20
Barbel Schmidt/New York Times Magazine; 67
Laura Wilson/New York Times Magazine; 94
Uncredited from Gausa, Manuel & Jaime Salazar. Single Family
Universal Studios (The Jerk, 1979); 98
Wal-Mart Stores, Inc.; 81
Wimpey Homes, PLC; 43
on personal consumption of goods and services. Houses make up 70% of consumer debt. Consumer debt is 85% of personal income.
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