

Brent Hull of Hull Historical
Building Arts Distinguished Lecture Series
Historic Design, Looking Back at the Lost Art of Building

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Brent Hull is one of the country's leading experts on historic millwork, molding and design. He is an author, speaker, master craftsman, and the exclusive millwork provider of the Winterthur Museum. At this lecture, Mr. Hull will discuss the differences between home construction of the 19th century and today, drawing historic examples from structures found at The Heritage Society in Sam Houston Park. Mr. Hull will discuss the process of constructing a home in the 19th century, including the materials used, the training required, the craftsmanship implemented, and the time and manpower needed. He will then contrast that with the general process of constructing homes today

BRENT HULL:

Hi there. How is everyone doing? Tell me who is here. Do we have any architects or builders or homeowners?

Thank you for coming and for having me here. I am excited about this talk tonight and hope that you like it as well. If you have questions just raise your hand and we will talk through it. That is really what I am doing tonight—talking through a bunch of ideas and thoughts about the “new versus old.” Does anyone here live in an old house? Does anyone live in a new house—after 1980s? Well do not throw anything at me if I start making fun of your house. Why old versus new? Can you make this statement: are old houses really better than new houses?

My company is Hull Historical. We do architectural millwork. We have done about 15 of the courthouses around the state of Texas. We do architectural historical things like double hung windows, and we do things for new houses—English, French, Colonial things. I also have another company, Hull Homes, which does new homes as well as remodels in Fort Worth. My millwork company works all over the country.

Tonight we will have a brief historical overview of architectural styles—new versus old—understanding the lost ideals of craftsmanship and the lost quality in building. We are going to talk about classical architecture. We will also look at some of the positive things that are happening with building today and some of the things that are changing.

Here is a quick quiz to start things off. Which one is better designed? How do we have a situation today where design—especially in the things people spend the most money on—is

actually lost? On your left is a 1760s mantel from the Winterthur Museum in Delaware. It is Georgian. On the right is a picture at a lumberyard in Connecticut. How is it that you can give the same directive to the carpenter—to build a mantel—and 250 years ago we get this, and today we get this? On one side, you have craftsmanship that is better conceived, as opposed to the pre-made, pre-paneled issue over here. But why do we have this kind of change and difference?

To start off, we are going to walk through the last 200 years of architectural history in America, starting with Georgian and Colonial, going up through the present day. We will just talk about houses.

This is William Buckland's Georgian house in Virginia. The Georgian style is named after King George, and represents the years 1725-1775. There is a central focus in the design. It is called graduated fenestration, where you have a nine-over-nine window and a six-over-six window, so you get proportion like this building with a heavy base supporting the top. It is a very symmetrical design.

The same thing is true for this house up in New England. Again, the central focus is the five even bays. You see the decoration over the top of the window. The fenestration has changed a little bit, but the balance is still there.

On the interiors, we see the same kind of balance with this mantel and this use of the Classical orders—the five Orders of Architecture—heavily used here. The balance between the cupboards on either side is typical of that Georgian period.

The Federal period had the same classical ideals, central focus, symmetry in design, fenestration change, and use of Palladian windows. Some of the stylistic things changed during the Federal period, which is similar in name to the Federalist Papers. There was a desire to disassociate ourselves from England and a desire to show off our new country. It was from 1775 to roughly 1820.

Here is another Federal house in Salem, Massachusetts. We will begin to see some characteristic details of the Federal style when we go to the interior. You do not have the full-paneled walls. The entablatures have an exaggerated frieze where you see the swags and the urns. You see the same thing in the fireplace mantel. There are some characteristic details that define this style and help us recognize what it is.

The Greek revival period was 1820-1840. Remember that America was a young country at this time. It was an experiment of democracy and was looking like it might work. We had just had

the War of 1812. We were discovering the Greek culture, realizing that they had the very first democracy. So there was a strong association with Greek culture and it defined our architecture.

The Parthenon—the Greek building front—had heavy use of the Architectural Orders. As part of that Greek design, cities renamed themselves Sparta and Troy and Athens. There was a strong association. There was the same kind of symmetry and design. You see the graduated fenestration and heavy use of the Architectural Orders. It is still a little classically designed and symmetrical. Looking at the interiors of a Greek revival house, you see moldings that are very stone-like. It was a strong emulation of the style of the Greek stone temples.

When you get into the Victorian period (1820-1840), we begin to see a difference. These architectural periods we are talking about are definable. With each period, you see a difference in elements and details. The Victorian period began after the Industrial Revolution. The Industrial Revolution enabled us to have technology that improved so much that we could do things with wood that we could never do before. The style of architecture was actually driven by technology and what we were able to do with wood—not necessarily what we should have done, but what we could do.

When you walk into a Victorian house, you see an explosion of millwork in the rooms. It was an explosion of showing off that technology-driven design, as opposed to Georgian or Federal, where there was more of a change in taste. We did not want to be associated with Great Britain and King George anymore and we wanted our own style and taste.

In the 1890s, when the Industrial Revolution first started, people were impressed with what the machines enabled us to do. Think about putting flooring down. It was a hard wood, but it was a very difficult wood to hand-plane. It was a very tough and knotty wood. The Industrial Revolution came along, and you had steam-planing mills that could take a piece of wood, run it through the other end, and have a perfectly smooth three-quarter inch board that is the same width, tongue-and-grooved, and all went together easily. It changed the way people thought about putting together a house. They thought it was great.

Fast forward 70 years to 1890, and people began to feel like they were losing their craftsmanship—or their souls—to the machine. So there was the Arts and Crafts era, with Gustav Stickley, William Morris, and John Ruskin talking about the fact that we have to get back to the handmade. We have to get back to things that are not machine-made.

The Arts and Crafts period (1890-1920) was a complete rejection of everything Victorian. Instead of everything being ornamented, as was the case in Victorian homes, everything was

honest. There was no fake ornamentation. Function became the decoration, as seen by these brackets. Think about Arts and Crafts furniture—the mortise and tenon, the pegs, and showing off the detail. It was very honest and functionally-focused.

Everything changed. The paint colors became muted earth-tones. They did not want to paint the wood. They wanted the natural beauty of the wood to show through, so they stained everything. Everything changed on this style of house. The architecture grew up from the ground. Rocks and boulders grew into brick, and houses appeared to be rising up out the earth. It was all part of that ideal.

From 1920 to 1940 we had the Pure Revival. Architects and designers looked around and said, “Where is the great architecture—the stuff we love?” They decided it was in Europe, so they went back to the Mediterranean styles and looked at the English houses and cottages. They would say, “This is where the real architecture was.”

Today, we have this. This is not driven by anything other than curb appeal. It is driven by price per square foot. It is driven by how cheap we can build it. There was an effort on this builder’s part, but the way the brick and stone are thrown on there is just confusing. The way houses are built, we have forgotten what all of these elements are for, such as the Palladian Window. If we want an English house, we had better put a turret on.

We have forgotten how to use the elements and pull together houses. We have kind of lost it. When you compare these houses and the difference in how a Palladian Window was used then versus now, you begin to wonder what is going on. When you look at a traditional house, there are two or three types of windows on the whole house. When you look at newer houses though, there will be 15 different window types—ovals, Palladian, arch-top. It is an effort to make big show. You have houses that are brick on the front and siding on the back—wood windows in the front and metal in back. What is taking place here?

There is road to ruin. There is a path to how we got there. I talked about the Industrial Revolution and how it was exciting when it first started. Think about how you hang a door. In 1800, the craftsman came, designed your door, built the door by hand, cut the wall open, hung the door, and put the hardware on. In 1900, the craftsman picked the door up from a factory, but he still had to hinge it, hang it, put the hardware on, and put it in the opening. Today, you can get a pre-hung, pre-finished, pre-hardware door, complete with a threshold that you just screw into an opening. We have gone from craftsmanship to installation. We assume that it is kind of the same thing. The Industrial Revolution was the start of this.

With each generation, a piece of craftsmanship and design gets stripped away. In 1800, the craftsman was the door designer. By the turn of the century, the manufacturer was the designer. They provided the molding trims and shapes and everything else that ends up in the hardware store. There was a complete change. The middle class was rising, the cities were growing, and there was a building boom. A lot of people were trying to build—and do it fast. It changed the ease of building, which is still the case today. There are the big boxes and do-it-yourself and products like tile floor that snaps into place. It is kind of crazy that everything is being made for ease of installation. Timber framing was the way houses and buildings were built up until the 1850s, then they started stick framing. They called stick framing “balloon framing” because it looked like a balloon that was going to float away. The 2x4 studs looked frail and cheap. Building changed because you no longer needed the skilled craftsman to cut the mortise and tenon and peg it together. That skill was not required to nail two boards together. So there is the ease of building that is going forward, even today.

The rise of Modernism is a stripping away of everything Classical. The Modern style, when you think of the Bauhaus movement in Germany in the 1940s was a rejection of columns, beams, and entablatures. There was a rejection of ornamentation and details. There was a change in how buildings were designed. It was really at this point that the architect moved away from residential design. Ninety-five percent of Frank Lloyd Wright’s buildings were residential buildings. The same superstar architect of today—maybe Frank Gehry—builds two percent residential. There was an emphasis and focus on residential design.

During the Great Depression and World War II, we had production building. We had changes that were stripping away craftsmanship and design. In the 1930s we had William Levitt. There was an interesting study in 1930. In 1926 a million houses were built in America. By 1931, about 100,000 houses were built in a year, so there was a 90% drop of the number of houses that were built. The government was looking around because they had the same problem after World War II. They were afraid we would have a housing crisis and wanted to figure out how to build houses differently, so they commissioned a study—called the Twentieth Century Fund—on American housing. They sent out researchers to find out what was going on in the home building industry in 1930. What they found was that most builders built between one and four houses a year. A big builder in 1930 built 300-400 houses in a year.

Compare that to Levitt who was building in the thousands, and you realize that the level of production building pre-1930 was very low. They were regionally localized, so they basically did not move from their towns. They were undercapitalized. As a business, this Fund went to these builders and said, “This is a crazy business. You have all of these local guys; there is no national

player here.” The biggest problem that they discovered about home building was that people were crafting houses rather than building them like a production line.

There was a complete change in how things were built. William Levitt came along. He learned how to build houses building defense housing for the government. In 1930 he was building the barracks, leading up to World War II. He came back to New York and decided he was going to build houses completely differently. The average home size in 1930 was about 1200 square feet. Instead, Levitt was building 500-600 square foot houses with slabs instead of basements, not pier and beam. He completely changed the way houses were built.

People thought Levitt was crazy and was going to go under, but his houses sold like crazy. Typically, when you hired a builder to build your house, you would have a carpenter come in and frame the house, roof the house, sheet the house, trim the house, and put the doors in. He changed all of that. Instead, he had hired workers and crews who just did one of those tasks. He was breaking the unions and the skill level. He was breaking down the craft of building homes like a factory. He became the Henry Ford of home building because he broke down all of these crafts. Instead of crafting the car, where one guy builds the entire car, there is a line where one guy only puts screws in. Levitt changed the way houses were built, the way windows were built, and the way plumbing trees were put into the job.

In the 1950s the GIs came back and the housing boom went crazy. It was the biggest building boom in American history. For the next 30 years, everyone learned to build the William Levitt way—speed and production. The architecture moved out of the design of this process, so the builder became the designer. We had a complete change in home building, and it was really the biggest change to ever happen to home building.

The problem today is that building a house is too easy. This was especially true before the recession we have had. The builder assumes that because his house sells, it is well designed. The homeowner assumes that because somebody built it, somebody must have designed it. Neither one of those things are true. We know, because those houses are not selling right now, that it was a supply and demand thing. It was not because they were well-designed. The builder wonders why he would need to hire a designer if the houses are selling fine. The homeowner says, “Wow, look at this house. Someone must have designed it.” And that is not true either.

Houses today are assembled for the most part. If you go to a custom builder today, he will say, “What do you want?” You will tell him what you want, and there is really no talk of style. The house is designed from the inside out, focusing on function, not how it should look. On the other hand, in the Victorian era you would have windows inside of closets because they were more

focused on what the outside looked like. In fact, if you read the pattern book authors of the 1850s and 1870s, they talk about the integrity of a house and that it helped establish the character of a neighborhood and community. It was not just a simple thing. You were talking about the character of a community when you built a house, so integrity and design were very important.

The way a house gets built today, the builder tells you to go pick your windows, hardware, doors, and cabinets. They basically take all of these different parts that the homeowner brings back, and they assemble a house. There is no design. They are assembling, so home building is too easy.

There was no production building pre-1940s, which was also the cutoff for when everything began to fall apart. There was no big builder then. The production builder came in the 1950s and later, yet he controls so much of the design today. These guys are big business guys. It is a very sophisticated business, where they hedge their futures on lumber and land. They lobby the government like a big business.

Design is an annoyance and something they have to get around. They do not understand that if they really design something well, it could actually lower costs. It is not a core value and it costs too much. Builders control design, but they do not like it. What an ironic thing.

There is a great quote from Andrew Stone, who is a new urbanist architect. He says, "There are four types of homeowners in America today." There are patrons, who are the super-wealthy, building \$10 million and up houses. Money really is not an object for them. There are clients, who are the \$1-10 million custom home people. There is the customer, who is doing the \$300,000-2 million house. Then there is the victim. The person who is buying the production house is the victim because they do not have a choice. They are given this house and they really do not have a choice about design and quality.

What has happened to craftsmanship? You can literally take a 30 minute class at Home Depot and learn how to install tile. That is how easy home building has become. In 30 minutes you can become a contractor. The only things you need to become a contractor today are a dog and a pickup truck. There is no barrier entry. There is no testing in order to become a contractor. People falsely attribute installation with craftsmanship. They will say, "Look what he did!" when all he did was screw a door into an opening. There was no craftsmanship there. We have kind of lost it.

It has been pointed out that the highest quality buildings were built during times of the lowest levels of technology. If you think of the Greek and Roman temples and Gothic architecture, they

used very little technology. What that means for us today is that with very high levels of technology, I do not know how long our buildings are going to be around. Some people will say that the houses being built today will be gone in ten years, just because they will not last. The materials that are being put into houses are shameful. You have manufacturers building products to last through the two-year warranty period.

I heard a fascinating talk by a Classical architect from England who built a house in Dallas. The architect introduced the architect and said, "We are very proud of this house. It should last 250 years." The architect stood up and said, "No, that is not true. This house will last 450 years." The way that they built it, the materials, craftsmanship, and construction were made to last 450 years without major maintenance. We have products like insulated glass, meant to last five or ten years, and we are putting that in our houses. What a juxtaposition we have going on.

I do consulting for manufacturers. The biggest problem they have is installation. I worked with a company in California who had to put together an installation guide because people put it in upside down. It was shocking to me—even products like Hardie. The cement board does not rot or fall apart. Their biggest problem is still installation. How do you screw that up?

We have gotten to a point where today's products are things like Azek—plastic woods. The reason we are coming up with plastic woods is because we have forgotten how to pitch a window sill so it sheds water. We have forgotten how to do things so that they do not rot. We are making products that are supposed to be fool-proof. What they are finding is that water still gets behind the house, and they still have the same problems, but now there is a product on the face of it that does not rot. Everything else behind it is rotting, but the face is not.

It takes 10,000 hours to be proficient at something. Based on a number of studies looking at surgeons, computer programmers, or anybody with any kind of a skill, it takes 10,000 hours. That is at least five years of doing something before you can be proficient at it. It is not a 30 minute class at Home Depot.

The biggest problem today is that we have a profit-driven product versus a philosophy-driven product. The Arts and Crafts period had the craftsman-style house. Everything in this house is designed around a philosophy. When I talk to my clients, I ask them what they want the house to be and what story it is going to tell. Once you decide that, it defines everything. You put together products based on what they want the house to be. The trim and the molding in this house are flat and plain, designed around a philosophy, versus this house which is based upon curb appeal and profit. That is why the front of this thing looks like it does not know what it wants to be. It has so many different things that you do not know where the focus should be.

Now that I have told you everything that is wrong, let us talk about some positive things that are going right. We need to start with Classicism. I talked about the Institute of Classical Architecture (ICA), which is a new group formed within the last 15 years. There is a Texas chapter and it is a great group.

What is Classicism? What is this building? Why are these columns here? What is all of this that is going on? Essentially, Classicism is a set of rules that define the order and proportion on a building—the inside and outside. They define the scale and proportion. The Greeks and Romans put it together. There was the golden rectangle—when the Greeks and the Romans were designing their buildings, they needed to determine what they would design them around and what the ideal would be. They began to look in nature and at the human body. They realized that there is a proportioning system in the human body. They found the ratio of three-to-five, which is what this is. That ratio divided by itself is 1.618. It is an irrational number; there is no end to it. When you divide it by itself or multiply it by itself, it becomes itself. That means that if we break this up and put a square in here, we create another golden rectangle. We do that a few times, and if we draw a line around the edge, we come up with a nautilus shell.

Essentially, they looked at nature, man, trees, and leaves and realized that there is the same proportioning system—God’s fingerprint—on all of this stuff. I was at a beach in Galveston and I picked this seashell up. There is that same thing—how things grow. The human body is a perfect example of this proportion system. Your index finger to your whole hand, your hand to your forearm, how high up your belly button is—three-fifths of the way. The Greeks and Romans discovered that the human body is a proportional study.

Going back to the Greek Parthenon, if we overlay this golden ratio we are talking about, we see that it begins to define all of the elements in this building: the height of the entablature, the slip between the architrave and the frieze, the height of the pediment, the space in between columns, and the height of the columns—everything is defined there. It is no wonder we look at this building and study it and try to figure it out, because it is proportional study.

Essentially, the Greeks and Romans designed their buildings this way. The Greeks and Romans only had three architectural orders: Doric, Ionic, and Corinthian. The Doric order—the lowest—was based on the male body. It is based on one width—the diameter of the column at the base—to height. So it is one to seven. My foot is eleven inches long, and I am 76 inches tall. I am nearly perfect. The female body is one to eight. The young girl or maiden, which is the Corinthian order, is one to nine. Those things get played with a little bit, but if you go into a building designed around these proportions, there is a reason why you feel like you do not know

why, but you like it. The reason is because it is based on a human scale. It does not matter if it is a 12 foot or 20 foot room. If it is based on that proportioning system, you feel comfortable there. You naturally feel comfortable in those spaces, which is a big deal.

In the Renaissance, which was the 1500s, 1600s, and 1700s, they began to play with these things and how they built buildings. They would take these orders and say, "If we need to build an armory, it needs to be masculine, so it will be the Doric order. If we are going to build a palace, it will be in the Corinthian order, with more feminine details and ornamentation. If you talked to a builder in the 1760s and said you wanted a church in the Ionic order, he would know what that means, as well as the orientation, size, and scale. This is how people would communicate.

Delving further, it is these moldings and details that help us put together rooms. There is the order. You have the pedestal, the column, and the entablature. That defines all of the moldings in a room. The chair rail is always the height of the pedestal, which is almost never three feet. People will think that the chair rail should always be set at three feet, but that is wrong. We have forgotten these Classical ideals that make things proportionate.

There is your chair rail, based on the pedestal. There is the height of the crown and the picture mold. In bungalow houses, you will see the picture mold dropped down from the ceiling. Why would they do that? It is establishing the corners to the frieze. The picture mold was always the top of the architrave. The proportion study helps you figure out how the room looks.

If you dial down even further, you see studies called punctuation and differentiation. They are arrhythmic ratios. If you get into music, these same ratios end up making pretty chords, which is why architecture and music are tied so closely together. If you look at the punctuation and differentiation in this room, it actually defines the height of the door and where the moldings come together. Punctuation established the height of the chair rail and the size of the door casings. If you go to Home Depot today and try to find a door casing over four inches, you will not be able to. A three-foot opening should have a six-inch molding. I only point that out because I think the Greek revival house (Nichols-Rice-Cherry House) has pretty wide moldings, based on these Classical orders. It shows how far we have fallen away from the size and how to punctuate an important opening.

Dialing down ever farther, when you look at this cornice detail, even the height of the cornice and the size of the dental moldings are all established and based on this differentiation and punctuation. We talked about the Parthenon being a perfect study. When a building is well-proportioned, even down to the size of the molding, that is the reason why you like them so much and they feel so good.

What is Classicism? If you talk to the architects who are involved in the ICA, you see that the ICA was started in a closet at New York University in 1995 with one employee. Today there are about 20 employees, 14 chapters around the country, and thousands of members. If you talk to the leading architects in the movement, they talk about how they had to relearn how to build a building. That is kind of where we are right now. The lowest point in our architecture was 1970. That was the worst time for residential architecture. We are now rebuilding and growing out of that and learning how to build again. We need to relearn this. The loss of the beam and the size of the column and the proportion and the scale all have become symbols. It is time to relearn the lost art of building.

There are a couple of other positive things that have happened in the last 50 years. We talked about the rise of production builders and William Levitt, up to the 1970s, the low point of residential design.

Has anyone here been to Seaside? It is a great place and a new urbanist ideal. The book *Suburban Nation* was written by Andres Duany and his group after they did Seaside. What they found in the last 30 years is new traditional development with traditional ideals, simple designs, front porches, sidewalks, garages hidden in the back of the house. If you go to Seaside you will not see people driving. They are all walking or riding bikes. There just are not cars. They looked at neighborhoods like Georgetown and other areas, because what has happened today is you have the gated communities where everybody lives, you have a shopping mall where everybody shops, you have the industrial center where everyone works, you have the downtown without the mixed-use. So you have all of these areas you have to drive to. They thought it was a bad ideal and wanted to go back to a time where rich and poor streets were right together, where you had a corner grocery store, where you had a banker, and you did not have to get in your car to go anywhere. It is a new ideal.

The new urbanists are doing some really exciting things in architecture, one of which is when Katrina came through, they redesigned the FEMA trailer. What they found out was that, traditionally, when a tornado came through they would provide these FEMA trailers to families. They found that the house project was too big and people ended up living in the FEMA trailers. Ten years later, the house was falling down and they were still living in FEMA trailers, and the problem was worse. The new urbanists came along and decided to design a pretty FEMA trailer. You will see that this is cut off in the back so that they can add on later. This could be the start for them.

Exciting things are happening in architecture. Good design leads to better craftsmanship and better quality, because when good design happens, better craftsmanship happens. When an architect shows a builder what he wants him to build and he has to figure out how to build it, that is a good thing.

Finally, old houses tell us the story of who we are. I was driving to the Cotswolds and took a picture of this house. It tells a story—the thatched roof, the chimney pots, the leaded glass windows, the stone construction, the garden gates. We could construct a story about this house, such as who lives here and how they live. That is what old houses do. This is an exaggeration because this house is 300 years old and is in England, but we have the same thing today with some of your houses.

You can look at any architectural style and basically know what time it is. Everything dates itself and tells a story. When I was in school, we would take moldings off the wall and see if it was a wire nail (1890 or later) or a cut nail or a hand-forged nail because it told us a story. We would also look at the saw marks, the smoked mirrors, the conversation pits, and the hand-scraped floors like people make today. Everything dates itself and tells us a story about who we are and how we live. It tells us about our skills and craftsmanship. It tells us about what we knew, what we care about, and what our ideals are. The fact that we have a Greek Revival house tells that we care about democracy or how people live and change.

Old houses tell us a story. If our lives ended and someone came in later, what ideals would they say we care about? If they looked at some of those ugly houses, what would they say the communities cared about? Not good stuff. We care more about price per square foot than quality. We care more about being shown the front than what is happening in the back. Those are not good characteristics and ideals, yet historical houses tell us about who we are. That is what architecture does. In all of these pictures, we can craft stories about these houses because the details tell us what life was like. So old houses really are better than new houses, right?

Are there any questions?

Q1: Where is Seaside?

BH: It is in Florida, south of Destin. There are actually three developments right there. Because Seaside did so well, they did two more: Rosemary Beach and Alys Beach. They are fantastic new urban developments. They have great design and great quality buildings. If you are in Florida, you must go by those three developments.

Q2: I am a commercial developer here. Most of what you talked about sounds like it was mostly driven by cost and money. It is great to go back and try to recreate. A town like Houston has no zoning, beautiful neighborhoods with great colleges—great old neighborhoods. But what is happening is that values have gone up so people have started tearing down these colleges to build who knows what. So people here, for example, were not forced to try to recreate what was once great because of zoning in the neighborhood. If they would just face that they could redo what was there, that probably would have resulted in more people having to go back to those older ones—

BH: There are a number of things I have touched on, but we did not dial very deep into. To answer your question, I do not think we have ever been in a time where the customer is so uneducated. The customer just does not have a clue. Builders can sell their houses and the homeowner thinks it is a good design because they think someone designed it. They are completely uneducated. So there are a couple of problems.

The architect—the designer—has been pulled out of the process. There is only one school in America that teaches classical design. It is Notre Dame, and they have been teaching it for 10 or 15 years now. That means that if you want something classically designed, there is not anyone around who knows how to do it. How are you going to do something that is Traditional when there is not a designer, and the developer is designing what he builds based on his pocketbook and what he can afford?

There is a reason Sarah Susanka's book, *The Not So Big House*, was number one on Amazon. It blew *Harry Potter* away for a number of weeks. That ideal struck a nerve with a lot of people. The ideal was to not build a big mansion, which is just a tactic for more square footage. It is not better designed. The greatest tragedy happening in houses today is that a person spends a million or two million dollars on a house and still has a piece of junk.

The reason we have gotten to that point is because design has been taken away. The architects left residential design years ago and feel they cannot make money in residential design, which is partly true. But if you consider the fact that the great guys from the 1920s—Stickley, Greene and Greene, and Frank Lloyd Wright—were involved in residential design, there was a trickle-down effect. They designed the Prairie movement with the bungalows and the craftsman-style houses, and the builders copied. The builders have nothing to copy now; they only have each other to copy. The built environment is a

powerful tool. Builders wonder why they would spend money on something when something else cheaper is selling.

To answer your question, it is probably the fact that design is gone and that the customer is uneducated. I would argue that if you had a well-designed building, it should cost less instead of more. Most developers, builders, and people think that if they hire an architect, it is going to cost more. Really that should not be true. Part of the problem is architects themselves and the schools. Those guys are not training their architects to make good decisions in the field. As a developer, if you care about a return on your investment, you are going to talk to a builder, not an architect. You are not going to talk to an architect because they are artists. They have their own issues and problems.

So there is not an easy solution, but some newer things are taking place. If you drive the panhandle coast of Florida and see the changes happening there, that is an example of what design does. Seaside has blown up and the crap around it is not selling because the people want what is at Seaside. You can literally see the houses falling apart because the builder saw something and thought he could copy it. We are in the very early stages of change. Remember that 1970 was the low point, and we are pulling out of that now. It could be 50 years before true change and a revolution happen, but it has started happening.

Q3: I was born in 1982 and I am almost 30. I was in art school and many of my artist friends were trying to get back into the Neoclassicism—the ideal of actually working with Neoclassical architecture. Many of the generation of Frank Lloyd Wright went to Europe and saw these huge estates where they were building these beautiful places in the middle of the wide country. It was not just the architecture. They started with the land, and they wanted to do as little as possible to the land. So that is why the muted colors came in and why they wanted to bring the indoors out—and the outdoors in. What happened in the 1980s is that you could not find an actual construction worker that had proper training. You could find architects, but you had to have the money to do so. It is tragic, but it is still the case. A lot of the times, artists and contractors are not hiring these architects because they are asking for the high funds or the mass-producer's side of everything. They are asking for more.

BH: You and I could spend 30 minutes talking, because I do not think that is true.

Q3: —I walk everywhere so I had to find a house. Unfortunately, I cannot spend \$2.5 million on something, but the few interesting neighborhoods I found where young people were

starting to move back to are the communities you talked about, where the homes we reproduced and made well. Maybe they were not the most expensive build, but they were kind of the average custom homes.

BH: Thank you. I appreciate that.

Q4: What do you think of the retro-fit?

BH: What do you mean by retro-fit?

Q4: —homes that incorporate more of this modern building or it goes back to quality. Where do you see the retro-fit?

BH: When you say retro-fit do you mean remodeling?

Q4: Remodeling to environmental.

BH: I think the hardest houses to work on are post-1950s houses because they are not anything. The decisions and materials put in there have no ideal or philosophy directing them. I live in a ranch-style home now and we do not know what to do with it. We could go Traditional, Modern, mid-century Modern. It is difficult to do. In my opinion, most remodels are messed up because people lose those ideals. When you see the shows where they remodeled old houses and something that was really wrong, the reason those are so obvious is because those houses had something. If you tried to put a modern addition onto it, it would stick out like a sore thumb. The materials and the scale and the proportion do not work.

Q4: So you view the retro-fit remodel as a positive?

BH: Not really. It is the same problem. There is lack of design and craftsmanship that has to be redone. The same thing that is happening in new building is happening in remodeling as well. I do not think there is a difference.

Q5: How do you get around the lack of good quality materials to build houses? We do not have first-growth lumber anymore. You have got custom millwork and—

BH: Here is what is happening: In 10 years, I think Azek will be out of business because they are coming up with ways to treat wood and overcome wood's lack-of-first-growth quality

with technology. They can be impregnated with things that do not rot. They have just come up with a new technique for heating a piece of wood up to 220 degrees, which changes the molecular structure, and it is no longer food for bacteria, termites, and insects—it will not rot. So we will not have a need to Azek, because wood will overcome that. We are in an empty zone, where you cannot yet do that. To my point though, if people knew how to pitch a window sill and saw that it could shed water, we would overcome a lot of those problems as well.

Q5: Also, making paints work.

BH: Well that is hard too, but if you look at acrylic and latex paints over the last 15 to 20 years, they have improved tremendously. There have been studies showing that the new acrylic paints outlast the old oils. The reason they do is because the oils have gone bad.

Thank you for coming. I appreciate it.