"*Ornament Then/Ornament Now*"

Documentary Proposed to the Guggenheim Memorial Foundation June 19, 2004
by
Tom Rhoads of Viewfinder Productions
for a
Maryland PBS series
(Never Produced)

"The inspiration for the documentary is Kent Bloomer, Yale University professor of architecture, "sculptor, ornamenter, writer, and arguably the world's foremost ornament scholar."

My interest in ornament began when I was three years old. I was born in 1935. It was still the '30s. I lived near New York; the Chrysler building was the building that people talked about. My father had a car with a hood ornament on it, sort of a driving goddess on the front of it. The buildings that I saw were the buildings that we think of when we think of the '30s. Ceilings were coffered. We had wallpaper and all the rest of it. I was fascinated in that.

I drew a lot. I started drawing when I was about three and I drew the things I saw. I drew faces and began to draw buildings and ornaments. All through grade school I would draw them on whatever piece of paper I had. I remember being very interested in doorways, the split pediments on doors, etcetera. I used to draw ruins and ruined cathedrals. I would look in the encyclopedia. My parents had a large print of a French cathedral with tracery hanging in the hallway and I would stare at that. We had Oriental rugs that were ornamented, so I grew up with ornament. I was very visual, still am. I was immersed in ornament.

Prior to the Second World War this country was heavily ornamented. What we call "modern architecture" hadn't come across the pond yet. We had Frank Lloyd Wright, but if you look at Frank Lloyd Wright, he was very much into ornament right through to the '50s. I think ornament is instinctive to our culture. Just going to Frank Lloyd Wright, he was our great modernist in the years I was growing up and you revisit him, you see how much of his work had what I call "ornament."

I was also very strong in the sciences and it sort of overtook my student work. I applied to MIT for physics and went to MIT for my college life. I started off in physics which is, of

course, a study of the microcosm, of the zillions of small things and the way they interact. I'll perhaps later say why I think that has a lot to do with ornament, but I didn't know it at that time. Nuclear physics at that time was a major science subject so that's what I went to MIT to study. While I was there, I realized that I was the visual person that I had always been and switched majors, or switched emphasis towards architecture. So, I would say that my undergraduate life was physics and architecture. I moved more and more towards trying to understand the world visually, rather than numerically, rather than going into numbers, which are invisible. There's something invisible about physics whereas architecture and ornaments are very visible. At that time, I was also very interested in going and looking at ballet and I was also very interested in jazz. Over the years, I've understood why those interests correspond to my interest in ornament.

Jazz is probably the most ornamented music we have. Jazz has been compared to baroque music in that respect. You go back to Bach to find another level of ornament. That's also true in architecture. You go back to the 18th century and early 19th. Jazz takes very simple tunes, sometimes just three cords, C, F, and G, a very basic metric structure, a very basic cord structure, and then all of the improvisation that is brought into jazz is a process of embellishment. It takes a simple melodic idea and starts putting spirals up and down and doubles and triples the notes. It leaves notes out but it's built on a system of rhythm, of continuity, of repeat. In that repeat it weaves its ideas. It weaves its music. For example, even today, at this point, I lecture on rhythm in the music school at Yale and friends of mine, jazz musicians and concert players like Willie Ruff come and lecture in my course. They lecture on rhythm in music and I lecture on rhythm in architecture. Rhythm is a major ingredient in ornament. I didn't realize that. Of course, ornament was not talked about. Yes, ornament was sort of a "no-no." You didn't talk about ornament. It's curious.

In the school, or even in the world, ornament was not a subject of general discussion. I talk about my interest in jazz and in physics and in looking at ornament, but it was not discussed. It was not a work or a term that was generally used or respected. At that time, curious enough, Victorian architecture was considered ugly - haunted houses. The town I grew up in had wonderful, abandoned Victorian houses that have since been restored. We used to play tag in them. The doors were left open. When a Victorian house was being pejoratively thought of, I don't remember people saying, "I don't like it because of all that ornament." They would use words like "gingerbread" or it was too "busy" or "fussy" or something like that.

By the time I studied architecture, the modernist movement had entered this country in full force. It had come across the Atlantic. Gropius was teaching the Bauhaus at Harvard, the late Bauhaus, white architecture. Modernism was what we were taught, the international style. We did not talk about ornament, although I tried, on certain occasions, to ornament my buildings. In fact, I have some old drawings that show that I was trying to put ornament in these international style buildings. The professors didn't scold for that. They didn't say this was what you should not do. They thought it was curious that I would do that. It was more, "why would you do a thing like putting in these sub-patterns in the building?" "Why not just make it clean?" You know, that word, "clean," which is a funny word.

"Beauty" was not used. It was somehow back-burnered in the jargon of architectural academics and also in art schools. "Beauty" is somewhat coming back right now, into the common vocabulary of design, but it was taken out and what you mainly talked about in those days was "function." How do you get from A to B efficiently? As far as the designing of things is concerned, simplicity was valorized. A very simple, direct solution to a problem was given the highest praise in the academic studio. As I think about it, ornament had not become a bad thing. It was on the way to not becoming anything. By the late '60s, ornament did become a negative attribute.

I actually became an advocate of ornament *per se* in 1975. I can almost date it. I remember the day, practically. I had just finished a book. It's in eight languages, *Body, Memory, and Architecture*. It was an academic best seller. It's still in circulation. It focused on the body as the organizer of space and how the body tells us how we orient ourselves to front, back, left, right, up, middle, down, inside, outside. It was a very fundamental argument about the importance of the body in three-dimensional perception and how that informs the designs of buildings, starting with houses out to larger organizations of space. I co-authored it with Charles Moore. I was the principal author but he was a major player in that book.

It became apparent to me that yes, the body is as important as we said it was, but it's certainly not the whole story. At the end, it occurred to me that space is not the whole story. The word that became the battle cry of architecture, and still is to some extent, was "space." This was not true when I was a student. In the mid-50s the word "space" was not that much used in the discussion of architecture. If you go back to the 19th century, for example, if you read the great classic, *The Seven Lamps of Architecture* by Ruskin, you do not find the word "space" at all. It's

a mid-20th-century word that gained a lot of momentum in the late ‘60s and is still a big buzz word in architectural thought and jargon. The body was about space. It was not about information or other levels of cognition that take place in architecture or take place in the world-at-large. Our minds are gathering a lot of material into us from the outside and projecting it back. Space is a vessel. It’s a place, if you wish, in which that information travels and is deposited. But space by itself is nothing. Space is emptiness. It’s curious that the word in itself means something between things. You can’t have a space unless you have things causing the space to be, something on either side of the space. If you think of it by itself, it’s just something that floats through the universe. It doesn’t have any edges so you contain it. You put walls around it and you enter it and. you have entrances so that you can go from inside a space to outside it. There are these very deep fundamentals, but those fundamentals in themselves are just that. They are fundamentals. They don’t begin to tap the wealth of visual experience and visual information that we’re actually engaging in our lives,

When I finished that book, it was apparent to me that the next project was ornament. It seemed to me, and I still believe this, that ornament was one of the largest carriers of intentional information in design. By “intentional” I mean not *ad hoc*. If you’re in an empty street there is a lot of information, dogs running around, birds, cars coming by, etcetera, but if you want to organize the activity of the world and package it, not only the activities of the world, but to some extent the activities of the mind, I find it best packaged, most beautifully packaged, in ornament. So that’s what got me going. I started a seminar on the subject and I’m still teaching it. I’m starting it next week. That will be 32 years later. When I started the small seminar at Yale, two problems immediately surfaced.

One was that we didn’t know what we were talking about. I had an idea about ornament, but since the subject, and this is very important, the subject of ornament had been effectively removed from the curriculums of the architecture schools and art schools since the Second World War, we really didn’t know how to talk about it. It was discussed in art history, but it was not a topic of discussion in design schools. You learn how to talk about things by discussing them, by reading about them in a design school, by designing. But if we’re not designing ornament, if people in the lecture hall are not talking about it, we’re left in a kind of illiterate relationship to what is ornament. What is ornament? Right.

In this seminar we went immediately to the works of people like Louis Sullivan who are recognized as great ornamenters. There is this word, "ornamenter," that is not used either. It was a commonly known word in the 19th century. There were people called "ornamenters." In the Italian language there are "artistas," "architettos," and "ornatistas." These are your artists, architects, and ornamenters. In French it would be "ornamentist"; in English an "ornamenter." When I mention the word "ornatista" to people in the design world, they like it. It's a neat-sounding word. They're surprised they never heard it before; didn't know it existed. I found it. I found the word when I was doing my research on ornament and was reading through the *Encyclopedia Italiana* in the Reference Room at Sterling Library.

So, first of all, we had to figure out what is ornament. Our first approach to that, which I think is sort of the 'case-study' approach, was to look at the work of great designers such as Louis Sullivan. We didn't look very much at Frank Lloyd Wright at that time. Then we went back into the 19th century and before and found a cast of characters who clearly were identified with ornament. We would look at their work and try to decode it. What was it doing? How is it conceived? What were the design operations? The geometric operations? The symmetries, etcetera that could allow those people to make this ornament? That was the enterprise that we followed in the seminar for about ten years. And we read theories. There were theories about ornament.

Sullivan was a great theorist in ornament and still is a very important point of reference. We're extraordinarily lucky in the United States because he is recognized world-wide as the premier ornamenter of the early 20th century and he's one of ours, of our own culture. He's inside our culture and he's totally understandable from the standpoint of being in this culture now. You can read Sullivan and understand what he's talking about. You have to focus on it a little bit. You can't just read it quickly. But still, I found out that it was not enough to focus on Sullivan and the students felt that way too. Yes, Sullivan had to be there, but can Sullivan explain it? Is it just this one curious person, born probably in the middle of the 19th century, died in 1922. What happened before Sullivan and around Sullivan? The students and I had to go fairly far afield to begin to find out what I believe ornament is.

I almost have to fast forward. I'll have to take a different tact now. I was talking about the seminar and the hurdles we had which is not getting down to what is ornament. Let me see if I can jump into that. "Ornament" is a Latin word. It comes from "ornare" that means "to equip"

something with something that the object does not have. That's not a very good definition of ornament, but that's the root word, the provision of equipment of some sort. That's an archaic use of the word.

I would say virtually every respectable theorist on ornament goes back to the beginning, moves to archeology, to find out what ornament is. It's a Latin word; it doesn't exist in the Greek language. It doesn't exist in the Chinese language. It's a western word. I tried to teach ornament in China and in Taiwan. I can't go over there and use a word that they don't even have in their dictionary. So, what I do is what all the great scholars on ornament in my reading of the subject do: try to find out when and how ornament entered into the history of western ideas and western art, if you wish.

I focused on three great cultures: the western culture and its origins in Egypt and Greece, the Greco-Roman excursus in the Mediterranean; the Chinese culture with the Shang and Zhou dynasties; and the Mesoamerican, the native-American culture which is the Mexican, if you go all the way back with its flowering in the Mayan culture and the Incas, and so on. If you go back to the classical moments of those three great cultures, we called them "super-cultures" in the seminar to differentiated them from smaller or less clearly identified ones, if you go back to the classical periods, what is curious is that they were all doing almost the same thing.

What is ornament? This is the question that I have been working on for a quarter-of-a-century. So, let me try to say what I believe ornament is. I base this on a variety of sources and on my own practice where I've had to, in a sense, prove the point to myself.

Let me say what I don't think it is, for starters. There is a distinction between "ornament" and "decoration." Decoration is societal. It comes from the word, "décor" and "decorum." It represents good manners, good taste. In a country like ours, where there are many persuasions, you may have many different versions of what is good taste. Decoration is an arrangement of a lot of elements of design. If you decorate for a birthday party, you decorate the table, the room; you put things around in different places. If you decorate for a coronation, you do the same thing. If you decorate your house, it has to do with all the furnishings, the rugs, the colors, etcetera. So, think of decoration as an arrangement, an all-encompassing composition of parts. Ornament, on the other hand, is a detail. Ornament can be considered a part of decoration, an element of decoration, but taken in its own way. It is a detail that is found usually on borders, on thresholds and places inside the larger scheme of decoration.

Ornament has specific motifs that it almost always distributes through repetition. We could say that it is a detail incorporating a motif in a state of repetition in one dimension, possibly two dimensions, that is usually located on a particular site of an object. Now, let's talk about objects. Ornament cannot exist without having an object to be ornamented. This is critical in understanding ornament. It's so critical that it's precisely the way you distinguish ornament from what is now popularly called "fine art." Fine art can be self-sustaining. You have a composition inside a picture frame. You have a sculpture, etcetera.

Those objects, like a poem, a work of literature, or a play, can be understood as having a beginning, a middle, and an end of their own. They are autonomous and portable. You can take a painting and move it from a gallery to a home, to a school, to a storage bin. You can do this with all of the autonomous fine arts.

Ornament must remain connected and in combination with the object being ornamented. You might say, "well, what kind of objects?" In antiquity, which is a very important site for the study of ornament and for even defining it, you would be looking at pots, amphoras, wine jugs, because you don't have very much clothing or buildings you can look at from several thousand years ago. You have tombs. You have copperware, stone, some stonewalls. You find the ornament always in relation to those particular objects. As time goes on, we can include vestments that are still intact. You can ornament a hat. You must think of ornament in relationship to its object. It's a combinational phenomenon. The ornament and the object of ornament work together to create a meaning. If you take the object away, you don't have ornament, you have an artifact, a fragment. You can go to museums. The Chicago Institute has a huge collection of Chicago ornament taken off buildings. Those are not performing as ornament. The ornament has been removed from its function which is to embellish, to bring, to import something into an object and make more of the object than that object would be if it did not have the ornament. That observation is important both to understand what is ornament and what is architectural ornament.

Architecture, like some of the other arts, is often presented as a self-contained idea. There is the work of architecture. Well, what's that? Can you say there is the work of a pot? Or there is the work of clothing? Architecture is about buildings. That's the core. That's what you study in architecture school. It's, if you wish, the art of designing buildings.

"Architecture" is a fuzzy word. Many of my colleagues would disagree with me furiously on what I'm about to say, but "architecture" is, I think, a fuzzy word. It's a bit of a fuzzy word

because it implies, especially the way it is presented in magazines and books, that it is some kind of an object-thing. There is the building in the city on the street and somehow that becomes what we call architecture. It's a profession with very definite guidelines, but more than anything, it's about buildings, about building-making and the art of building-making and the things that go on inside buildings. So, the building, not the architecture, becomes the object of ornament. Architecture is too broad a term. The object of ornament is the building, or a column, or an entryway, or a mantle, or a part of a façade.

If you define architecture as including ornament, which is the way architecture is traditionally defined, then when you use the word, "architecture," ornament is in there, but when the term "ornament" was removed from the academy, the word is not in there. Very often when you talk of architecture, when I talk to students about architecture today, they immediately assume you are talking about the building or some conventional element of the building. Ornament is not automatically in there in the modern academy. The important thing to always keep in mind is that ornament is a "thing." An important theorist of the 19th century said by super-adding ornament, "super-adding" is an interesting word, you bestow an amount of beauty, power, memory, etcetera, on the object that the object, left alone to its own utilitarian identity, would not possess.

So, another way of defining a building is to say it's a utility. It's something we go into, keeps us out of the rain. We define a spoon as something that enables us to put something in our mouth. We define a wine bottle as something that contains wine. That's its utilitarian function. If, however, you "super-add" the ornament to the building, to the spoon, to the wine bottle, you add something that the utilitarian object does not possess. So, with ornament there is more incorporated into the work than there would be without it.

Opponents to ornament would say, "no, the ornament is there but it's abstract, or it's synthesized into the object." I think that's blarney. You cannot synthesize something like ornament into the object.

The silliest argument ever is that ornament distracts. It does exactly the opposite. If you go into a great cathedral and you look at the marvelous tracery on top of the great clerestory, or if you go to the Parthenon and you look at the capitals and metopes, it's perfectly clear that those draw attention to the magnificence of the building and give more to the building. Just remove them, blow them away. I've had this exercise in the class where we got ornamented buildings

and we take the ornaments off and what you have is a naked building that is by no means visible. In fact, one of the great theorists in the Renaissance, Alberti, even argued that it was precisely the ornament that made the building visible. Without the ornament it would be mere rubble.

In classical architecture, the great canons of architecture, to make the building visible you included ornament. That was precisely the term used by Alberti. I think the distraction thing is silly. An example I remember from school was that a person was more attractive if they were in a white box than they would be in an ornamented elevator box, let's say. Well, fashion designers know better than that. If they're trying to make a figure stand out, they generally background it with other elements. They don't put it in boxes, in white surrounds. White is very aggressive, a very vacuous space for the presentation of objects themselves.

One of the problems I ran into in teaching the subject of ornament was why, for example, can't just painting the wall red be ornament? And why is it that making the wall shiny isn't ornament?

I've tried to emphasize that ornament is a detail. It's a specific element that exists inside a composition. But what kind of detail? The answer to that question that I have satisfied myself with has been gained by looking into the past, into the origin of ornament.

All major subjects have origins. Physics has an origin; chemistry has an origin; the idea of architecture has an origin. If you go back far enough in time, there is no such thing as architecture. Architecture came about as a civilized act and as an idea. So, I've tried to go back in time and see if there was a point in which what we generally call "ornament" began to manifest itself.

In trying to research ornament to find out what it is in the words of others covering the material a couple of curious things came up. One is, the subject of ornament as we know it today was really established in the 19th century. Even though there has always been ornament, it was not a clear subject, until then. In the Renaissance or the great ages of ornament, the Middle Ages, the Greek period, ornament was a generally understood phenomenon. People just seemed to know what it was by virtue of a continuity of culture. When that continuity was broken, it became a subject of inquiry. In the 19th century it was broken for the following reasons: prior to the 19th century, in western culture, architecture was thought to have a simple origin. It was thought to have come from the Greek temple, if you wish.

Almost all architecture as taught, as considered to be properly known as architecture, was descended from, for example, the Parthenon. I'm simplifying it, but there was what you call a single academy. It had a single origin. In the 19th century, however, scholars around the world, particularly in the West again, found out that there were different kinds of architecture. The Chinese was very different from the West; the Mexican was different; the ancient Egyptian even was different from what became known as architecture. The pyramids were different from Greek temples. Wigwams, that was a word that was used way back in the beginning, was a very peculiar form of architecture, coming from the American Indians. At that point, it was, for the first time in the Western academy, considered that architecture had multiple origins. That led, in some respects, to a sort of battle of styles.

The admission into the Academy, the understanding of the history of architecture as having many origins as a multicultural phenomenon, also led to the flourishing of multiple styles in the 19th century. You had this throughout the 19th century. You had, just in the West, a classical building, you have a gothic revival, you have a Spanish or French provincial, etcetera.

What happened then was a confusion – a confusion of tongues, if you wish. Ornament in the classical tradition had a very clear trajectory. There were certain things that were called ornaments. The acanthus leaves, the acanthus scroll, the Corinthian capital, etcetera, were ornaments that you put on a Greek temple or a classical building. Today, schools that teach classical architecture don't even use ornament. It's curious. They just list those elements. But if you are a student looking at a classical building, a Gothic building, and a Chinese building, there is something in all three of those buildings that begins to be unique. So it was, in the 19th century, that the question of what is ornament really got heated up among the great scholars in the 19th century. I'll start with Owen Jones.

Owen Jones, writing around 1850, wrote the classical encyclopedia of ornament, *The Grammar of Ornament*. Everybody who followed him, Racinet, Dolmetsch, Alois Riegl, Focillon, the great writers on the subject, always started at the beginning. When they published a book on ornament, they would start with antiquity. They would go back to where a culture first introduced ornament. It was an archeological investigation. They would go to ancient Greece, of course, but they would also, in China let's say, go to the Shang or Zhou dynasties which were the seminal dynasties in the origin of Chinese art. If they were studying the Americas they would go

to the classical Mayan period or the Inca and they would search for something they thought was ornament and they would find it.

They found there was a peculiar form of figuration that was different from other forms of figuration. They found there was something they called “ornament” that was not the same as hieroglyphics. Hieroglyphics is a form of language, a written language, partly visual, partly phonetic. It’s like writing. Writing is not ornament. They found picture language in which they would describe a story with figures acting it out, warriors fighting or a coronation event in which they could put figures, but they always found there was something else going on, usually at the perimeter of those images that was very distinct. The scholars would look at something like the Thebes tombs of Egypt, around 1300 BC, and they would notice on the walls there was hieroglyphic language, there was picture language, but there was also something at the border that was different from all of those which was sort of a bud and blossom motif.

The same in the ancient Mexican. They would find the picture language. They would find the glyphs which are like words. A glyph is like a word or an emblem with a clear meaning, an autonomous meaning. They would find symbols. Those symbols were different from the repeating geometry that appeared in an orderly way around the perimeter of these ancient buildings and these ancient tombs.

The Grammar of Ornament by Owen Jones, which starts in antiquity and attempts to go up to the19th, early 20th century, like all of these great encyclopedias, begins with certain figures that were extremely ancient. You would study those figures and notice that figuration managed to stay inside the ornament for literally thousands of years. It was a code, a key that did not appear in other linguistic systems as in picture language or hieroglyphic language which is based more on speech, or any other languages based on the alphabet or a number system. It was a specific key system of its own. These were very important to the encyclopedias of the 19th century because, for the first time, the 19th century was looking at multiple cultures and looking at how those cultures originated in the world of ornament. It was in that period of comparative cultural research that the modern definition of ornament emerged.

It emerged from the study of antiquities and the brilliance of those studies was that they demonstrated that what began in the classic periods of these great cultures lived on for centuries. As far as Western culture is concerned, it’s still alive. These ancient keys are still being used.

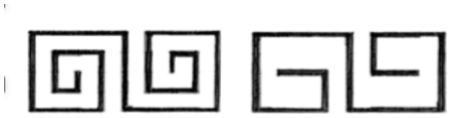
I'm going to start with the Chinese key. It is a spiral that starts and then turns back in on itself, or it's two spirals that come off of a line and curve in towards themselves.

Now, I'm going to the Greek key that is a single spiral that turns around and goes in and then outside itself, or it's a swastika shape. In both cases it's a geometry of rotation.

Then there is the Mesoamerican key. There are two fundamental versions of that. One is a stepping action that goes up and then spirals inward. Another is just a line with a spiral coming off of it.

These are very basic pieces of geometry. Sometimes, in the Mexican case, they call that spiral a hook, but that's just different nomenclature. I'm going to call them spirals and suggest that the spiral is one of the most important figures in ornament.

The next way of understanding these keys is to see what happens to them if you repeat them. In the case of the Chinese, notice that if I repeat this scroll that goes around and comes back on itself, it has to stop and then start again. You have that scrolling action that stops and then you have another version of it that stops, another version of it and it stops. The Chinese have their basic key, but when they want to repeat it, they cut it. It is also known as ying yang. If you look at the Chinese keys you will see two things; one is the basic geometry, the start-stop system the other is the rotor. They rotate to the right and then to the left, to the right and then to the left. That's a key feature of how Chinese ornament repeats itself.



The Greek tends to rotate in one direction. It's a repeating wave action. There are variations on that that use both of these basic keys.

If you go to the Mesoamerican and look at the repeat, it repeats a little bit like the Greek key but it has a stepping action between the rotations. It steps, rotates, recovers; steps, rotates, recovers. Or you can have a straight line with a bunch of rotations coming off the bottom which is another key you often find in Mexico, but also in other Mesoamerican cultures you find the stepping action zigzagging along a line.

I cannot overemphasize the importance of going back to these keys, locating them in ancient objects and acknowledging that it is a system of notation separate from picture language, hieroglyphics, and writing.

There are enormous variations on how these keys mature and develop over time. So much else is incorporated into them over time that sometimes you can't even find them. But let me go to one more discussion of the keys before getting on with some of the variations.

If you look at the Chinese key and begin to smooth it out by first using hard geometry, then making it softer and rolling it into a ball as it were, you'll see the classic shape of the yin-yang which is the further figure on the right.

That says something very important about the Chinese, the way the Chinese are thinking. They are thinking in terms of a cosmos which is made up of opposite components, night and day, strong and weak. You begin to see a Chinese national, philosophical cosmology in their ornament. The ornament is talking about how they believe the universe works, in the most fundamental sense, as made up of things that always turn back in on themselves.

Just as an aside, if you look at a Norwegian medieval church, you'll see figures on the top which are bird-like that look away from each other, out into space. If you look at a Confucian temple in China, you'll see figures that turn around and look at each other; always looking back and returning towards the center. In a curious way, for me this is like physics, like a genetic printout of a system that over and over again reiterates the notion of complements coming in on each other in China.

You will see the Greek key repeating in a straight line and as we soften it, it turns into a wave. What the Greek proposes is something that moves continuously and in the same way. It always is right-handed or left-handed, but is a wave in a strong axial direction. This is different from the Chinese. The Chinese rotates back on itself, stops, rotates back; the Greek flows out.

That is why the subject is so huge. Clearly the Greek key proposes a culture that is more outward. If you think of it in political terms, it would be more of a conquering, exploratory culture, whereas the Chinese tend to continually move back to their center, which is a curious feature, until they have these revolutions where they turn back violently on their past, as Mao did in the cultural revolution. The Western move is more aggressive; the Chinese is more contained. The Chinese put more importance on the center, on things surrounding and returning to the eternal center, whereas the West, through the classical period of ornament, was inventing physics and chemistry and beginning to look at light beams. The West, in its formative period, becomes more of a technology, a scientific culture. The Chinese become more of an artistic and ritual culture, going back inward and repeating over time the same themes, enriching them.

There is another curious difference between the two cultures. Both cultures introduced figures from nature into their basic keys. These extremely geometric keys were fundamental, cosmological diagrams. I'll call them that. Of interest here is that the word "cosmos" in the ancient Greek language was the same as "ornament." "Cosmos" meant "ornament." Here you get another clue: these basic geometric figures are extraordinarily elegant abbreviations of the culture's sense of how the cosmos works. What they're saying in modern terms is an abbreviation or a comment on how nature works, nature being part of the cosmos, not just stars, but the living cosmos, the astro-cosmos, the micro-cosmos inside of us, that stuff that pervades the universe. Ornament was there to register the existence of the universe around and inside the object. For that reason, in Greek, in Western ornament, it tended to be along the edges of the object, where the object left off and the universe begins, or where the sky begins outside the

object. The ornament tended to be a boundary between the object-hood of, let's say a Greek amphora, and the world in which that object dwelled or was deposited.

The Chinese were more marvelously ambivalent. They didn't use ornament at the edges as stridently as the Westerners did. They would also weave you into the center of the object so that, as you were examining the cosmos, you would sort of wander or be spiraled back into the center, always back in, whereas the Western was out.

Both Western and Chinese ornaments were exploring the cosmos in their own ways, as was Islamic ornament, which is very concerned with the micro-cosmos, going almost down to the level of atoms. I see in these ancient ornaments a parallel in the visual coding of what the physicist and the chemist took up with numbers in their explanation of the natural world, of the physics of nature. The physical world became a subject; chemistry and physics went into codes of their own. Actually, there was a very distinguished scholar who, in the period of DNA, actually used ornament. She was a physicist from Duke University trying to describe DNA and she would use figures of ornament.

These ancient cultures, by all appearances, were registering the cosmos in their ornament and the connection of the object being ornamented to the cosmos, both the cosmos around the ornament and inside it. What was curious, is that very early on, Western culture introduced an element from living nature as part of its construction of fundamental ornament. It put plant life in its ornaments. The Egyptians put lotuses into the ornament and the Greeks put the lotus and the anthemion that finally was turned into the acanthus leaf by the later Greeks and the Romans. All throughout the history of Western ornament, you'll find that they incorporated plant life into the ornament as a way of registering one aspect of the cosmos, the living and the temporal.

The Greeks, early in their classical period, got the spiraling action. They had plants bursting out, little lotuses. Actually, that was started in Egypt where they used very complex coils that they would repeat. In the cusp of the coil the lotus would come out. If you look at Western ornament, you'll see that nature was always implicated in the ornament, right up until the present. It's still a characteristic of Western ornament.

In China they did not do that. They incorporated the serpent into the fabric of their keys. A key would become a coiled serpent. From the very earliest examples of Chinese ornament which goes back to 3,500 B.C, 4,000 BC, and the Shang dynasty up into the Zhou, the serpent was continuously incorporated into the ornament. When you go to the tiniest examples of

ornament in the Chinese, the serpent wasn't there. That went back to the period geometry. But as it became more visible, the serpent moved in. The serpent then becomes the element from nature that is a principal player in Chinese ornament, the same way the plant became a principal player in Western ornament.

The serpent, briefly stated, was a sacred figure from nature for the Chinese. By the way, it was also for the Mesoamericans and I wasn't including them in this conversation. One explanation for the serpent was its enormous power. It could climb a tree; it could go through the earth; it could swim. It was an animal with immense dexterity of motion and movement. But keep in mind that in China, the serpent soon became the dragon and the dragon is not just a snake, not just a serpent as we think of it, but a serpent that begins to acquire wings and beaks and clawed feet so that over time, the Chinese serpent developed into an exotic animal. One way of identifying that would be to say that the Chinese ornament became zoomorphic.

I don't like that kind of classification, but as the dragon develops, it also becomes a symbol of the emperor, so the emperor gets the biggest dragon and so on. It begins to be symbolized. This is why it is such a complicated subject. As it becomes symbolized, it becomes conventionalized. You would now expect to find the serpent or the dragon in Chinese ornament. That's the conventional expectation, but that doesn't mean that it is always functioning symbolically. It just becomes part of the geometry after a while. But don't think symbolism when you think about ornament. That's a deviation that gets you off track.

Yes, symbols are there and so are icons. Icons can become symbols, but the more important thing about ornament is that, at the very fundamental level, it's really about the cosmos. It's a comment about everything-ness, the above and the beyond and the inside of things.

If you look at the next figure, you'll see the Chinese key just made out of serpents in a repeat form.

The Chinese begin to put the serpent in their decoration. This is ornament in the decorative scheme on bronze wine vessels and kettles. Once the serpent gets in, they think of more ways of intertwining tails. The serpent is used as part of the key system. It becomes a

biomorphic piece of geometry. That's the way I would see it, rather than see it symbolically. Think of it as biomorphic geometry. Then we can understand it and not get caught in the symbolism trap.

Historians love to find meaning in everything they are talking about, so if they find a symbolic or local meaning to something, they'll emphasize it and you, as the amateur, will be prohibited from being allowed to savor it because you don't understand the meaning. That means you are being kept out in the rain. Historians are invaluable. It's the historians who saved all this material, who put it in museums, who present it to us. Without the historians we wouldn't know what we were talking about. However, you can be sure that many individuals in antiquity didn't have the hard meaning that the historian puts on something. You can read ornament in its cosmic characteristics without being limited to local meanings. You can do that in many cultures. That's important to bring it back alive.

Yes, people can intuitively understand ornament if they'll allow themselves to and if they will not be prohibited by scholars who say, "you really can't understand that, it comes from a different place and a different time. You cannot understand it because you are here, you're not there." That's a cutoff. That's simply, in my entire experience, profoundly false instruction. You should go to these ancient cultures. You should go into the museums and try to understand ornament on its own terms as visual phenomenon.

We always have to meet in committees, if we are doing a large project. We were meeting a group in Colorado and we wanted to use leafage and everybody said, "fine, let's use it." Then somebody would raise their hand in the far corner and say, "well, what kind of leaf are you going to use?" Generally, ornamenters use something called a "conventionalized leaf." It's a leaf which works in ornament. It may not be a real leaf, but it works just fine. It is a biomorphic geometry that pervades the ornament to talk about life and temporality which is part of the cosmos. But if they ask you for a specific leaf, as happened to us in Colorado, then suddenly you are talking about Aspen or Columbine which you can't use because there was a bad event at a school called Columbine. You can't use the Columbine leaf because there was a massacre, so we have to use the Aspen. As ornamenters we listen to that, we take notes and if we can give them a little bit of Aspen here and there, fine, but it's not going to drive the ornament. It's not going to be in the driver's seat. Something else is in the driver's seat and when you get it all together, they'll love it

just because it's got the geometry and the biomorphology and the pulsations that ornament has to have to do its job, to perform.

In China, the Chinese got plant ornament from the West around 200 through the Buddhists coming from India, but in the Ting Dynasty, they took it out. The emperor said, "let's get back to what we do." You can go to a Buddhist temple in China and you'll see the plant ornament, that's kind of a hybrid phenomenon, but the basic, deep Chinese ornament is serpent-driven.

China is extremely hybridized in its influences, much more than we are. It had Indian, Western, Muslim, Greek of course, etcetera. Because of those multiple influences, the dynasties were quite rigorous about maintaining the central idea. In the last Dynasty, the Qing dynasty, you can find figures of ornament that will take you all the way back to the Zhou dynasty, 2000 or more years before.

Now, I'd like to take you to another issue. We have this thing called "ornament," but where do we distribute it? How does it link with objects? This is a question I've been asked repeatedly. How do we decide where to put ornament? This is a big conversation.

If you go to this Greek amphora, which is a wine jug, you'll see two versions of the Greek spiral. You'll see a curvy one on the belly of the amphora and a geometric one on the neck that's straighter. The sites often found for these geometries are homeomorphic, similar to the curve, to the shapes in the ornament.

Here is a Greek vase. It's a little more refined than the Greek amphora. You will see the Greek key surrounding the top of the vase. You'll see on the face of the bottle a drawn figure, and at the neck of the bottle you'll see some spirals. What's interesting about this is that the key is located at the edge. It's used as a way of framing the drawn figure from something beyond. It exists at the liminal zone between the figure drawing and where the bottle leaves off and becomes something else.

Most Greek key work is done on boundaries that mediate between the body of the object and something beyond the object which is another one of the functions of ornament, to mediate between the utilitarian object and the cosmos, but also to mediate between other symbols that are on the object or about the object and things outside the object. It usually occurs in boundaries. In the West this is very important. The West ends up putting ornament on picture frames, which is a popular site today. You see ornament on picture frames. You see ornament on architecture on the eaves of buildings. On plates you see ornament running around as bands on the outer edge.

At first, when we studied ornament, it was considered an ancient language of some sort. Perhaps this is what people did before they knew how to draw. That's simply untrue. If you go back to the caves in France, seventeen thousand years ago, the drawing is incredibly good. The Greeks could draw as well as anybody. They could do figure sculpture that has hardly been surpassed. At the same time in which they reached that level of accomplishment in what we generally call drawing and sculpture, they were inventing ornament. They knew it was a different language. It was a different realm, a different domain of communication. The maturing of Greek statuary and the maturing of Greek ornament happened at the same time. One didn't precede the other. If you look through the history of western art, you'll see that ornament, in all of its different shifts and moods, occurs alongside of, but not in lieu of, or before or after, the same fluctuations in painting and sculpture and architecture. It was an agency of its own. It had its own function.

Art history didn't exist in antiquity. History begins when you start looking back, when you start recording and theorizing about something that preceded you. This began in the Renaissance to some extent when they started looking at ancient Greek temples or what they dug out of the ground, the golden city of Rome. You can say architectural history began with Vitruvius. We can fine-tune the beginnings of things. When what we call ornament, or the figures that we are talking about, began, they were given equal weight with any other factor, whether it had to do with construction or with color. It was just one of the things that was there.

As the academies developed, they took ornament, figuration in ornament, the high craft of glassmaking and fine weaving, and put them in a category called the "decorative arts." Then they had another category called the "fine arts." So, you had the decorative arts and the fine arts. This became heavily codified in the 19th century when museums were being developed for the first time for public use. You don't find museums in the 18th century. That's a 19th century invention and these categories are 19th century inventions.

If you go into a museum, what do you expect to find? The academies of fine art, which were founded in the late 18th century, declared the fine arts to have autonomy, to have something that was self-sufficient. Weaving in rugs, ornament, and craft did not come with that self-sufficiency. That was put aside into a category called the decorative arts and given a slightly inferior rating. Great art was fine art that reached beauty through autonomy, the great painting, but the decorative arts were taken out. Even today, if you go to a great museum like the Metropolitan Museum or the Cooper Hewitt, they tend to segregate those categories. You don't see one sitting next to the other, but this is beginning to change as we speak.

There is more attention being given today to the importance of what had been shoved off to the side. There have also been periods in the past, for example, in the turn of the 19th and 20th centuries, when the decorative arts practically took on a supremacy over the other arts. That was the great age of Art Nouveau, of department stores like the Galerie Lafayette in Paris, that foreground the ornament and decorative-art side of their being.

It was reaching a very high level when modernism clicked in, and was one of the reasons why modernism had to hit it so hard. For modernism to stake its claim, ornament and the decorative arts was a moving target. It was a moving target for two reasons. One is that you can make a magnificent work with just the decorative arts, with what we now call "architecture" somewhat in the background, almost like a stage set. The other reason was that the architects

wanted to assert their own artistry. Modernism was associated heavily with an effort of the architectural academy to reinforce its identity as a profession saying, “we are also fine art,” although they didn’t use the words, “fine art.” “The stuff we do is as lofty and as singular in character as what a painter or a sculptor does; we can synthesize it all into the great building.”

One of the curious follow-ups was the removal of ornament from the curriculum. Architecture no longer taught, in a rigorous way, the tradition of ornament. This is the real crime in my mind, the removal of ornament from the curriculum. What they focused on was building design, function, and the elements of construction.

We have to look at a Chinese vase from the Shang Dynasty and notice that the Chinese keys are also located in a band.

.

We see this in a mirror; this is actually a mirror where the serpents are intertwined in very complex geometries that the Greeks were also working with. As the Greeks developed their keys into ornament, they also played wonderful geometric games that were both the work of the ornamenter, and a further puzzling-out of the complexity of all things.

I have an example of a Ming vase. In Ming porcelain, you see a very interesting phenomenon which is the Western botanic ornament moving into the Chinese. You have both systems admitted into the same culture.

What's important is to see how the shape of the plates, of the vessels, inform the ornamenter about the kind of ornament and where to locate and distribute it. A curvy surface takes a curvy ornament.

In architecture you also have ornament located at the edges of certain elements. It can be located at a leading edge of the whole building, like the crest on top of it, or the pediment of a temple. If you go inside, you can find the Greek keys located around ceiling details, or details of capitals at a variety of scales. Ornament can ornament the entire building, an element of the building, or the furniture in the building. It exists at all of these scales and almost always on the edges.

The reason it is on the edges is because it's fundamentally a mediator. Ornament mediates between the utilitarian object and something outside the object. It speaks to something other than the object. Very often it runs along the top of walls where the wall turns into a ceiling, so the ornament is saying "this is more than a wall, it's a wall that is talking to you about something that is above the wall as it becomes a ceiling." It both frames something and is a portal to something else.

Ornament lives in this 'in-between' space and one of the reasons ornament has had such a rough time in the 20th century, and still does to some extent, is that the 20th century was the century of specialization. That's the century in which painters wanted to be known as painters *qua* painters, sculptors *qua* sculptors, architects had to be architects. They were architects, not artists. I've sat on many juries and reviews in the academy of architecture in which a student would be told they were behaving like an artist, they should behave like an architect. Although toward the end of this century the architect was behaving more as an artist-like person. They

began to dress like artists to some extent and have museum shows that they didn't have in the beginning of this century. There is still this cultural conflict. Inside the classroom there was this notion that it was not bad to be an artist, but that's not what you are supposed to be if you're an architect. There is great stress on what an architect is that is different from what an artist or what an ornamenter is.

I've gone to art schools and talked to students who were very interested in ornament, but the schools say, "no, you should be interested in painting," in what they now call "art." I don't even know what that is anymore. "Art" is a catch basin now. It's just about anything that is admitted into the museum or the gallery, so, curiously enough, its portability is its surviving feature. It's very unspecific in the modern age and that is amplified by the fact that it's self-defining. A person can call themselves an artist. A person cannot call themselves an architect or a physicist without studying a body of work and being examined on that work. You can't just wake up, jump out of bed, and say you are a ballerina; you'd fall flat on your face. Same with ornament. You have to study it. You can't just call yourself an ornamenter.

But you can call yourself an artist. I was up at a big symposium on what they call "New Genre Art" at the Portland Museum in Maine, and the presenters actually said that you become an artist when you decide to be one. It's a state of mind. My work has been documented in articles such as *Art in America* but I recoil at the notion that I'm an "artist" even though I have degrees in art and my work is held in many museums. I'm an ornamenter. That's what I do. If I have to be identified from the standpoint of a profession, instead of just being myself, which is my preferred identity, then I want to be an ornamenter, not an artist because "artist" is too fuzzy.

I have one example of the Mesoamerican. That actually is a yoke. A yoke is something that a ball player waves around, carries around his belly when not in combat. You'll see where the keys are distributed in the yoke.

To see the distribution of keys in Mesoamerica, the best place to go is the architecture. Look at the great temples of Tikal and you'll see clearly where the ornament cuts in, cuts out, the picture language and the glyphs cut in and cut out. It's usually also along the edges. You see the hook motif along the tops of many of the great Mayan temples.

Mesoamerican culture definitely had a characteristic key. You can find it all the way from the Inca culture to the Peruvian to the North American. You can see there was a single ethnic group. They had great centers like Teotihuacan and the Mayan Palenque, Tikal, the great temples.

What's interesting about looking at the Mesoamerican keys is reinforcing the notion that they occurred in the classic periods of those cultures. They occurred quite stridently in the great peaks of Mesoamerican culture, Mexican, Incan, American. Unfortunately, those cultures were destroyed in their mainstream of development long before the Chinese and Western were. They were conquered. Their artifacts were either destroyed or removed from public places. Yet curiously, they had the power to continue to exist. If you go into parts of Mexico and Peru, you still see these ornaments living in popular artifacts. Even though their cultures were destroyed, the ornament lives on with the same keys.

It's a great proof of the perdurance of these fundamental forms. They show up in Mexico. You'll see the little step motifs on belts. You'll see them in trivia. When I was lecturing in Taiwan and lamenting the elimination of ornament from the new architecture of Taiwan, the students said, "oh, it's there." "It's all in bric-a-brac." You buy it and hang it in your room. It's all over the place. It's been wildly eliminated from the new architecture of China except in restaurants. Actually, the communists kept a certain amount of it going. Their bridges from Korea to China have ornamented Chinese keys in the railings. I'm absolutely amazed when I see these things. But in this massively Western explosion of buildings in China, you see very little ornament. You'll find it in restaurants like you do in this country in Chinese restaurants. It's not embedded in the architecture, but it's living this strange sort of fifth column life in trivia, which is very interesting.

I focused almost entirely on one predominant type of ornament in this discussion, which is a repetitive patterning with these keys and a certain amount of natural imagery. Metamorphosis is another trajectory of ornament. If you go inside ornament, if you look, for example, at ornament during the Greco-Roman period, Pompeian ornament, when there was a

confluence of a new culture emerging and an old culture still intact to some extent, you see a lot of metamorphosis.

If you go inside the ornament, you see coils that sometimes turn into plants and sometimes turn into dogs. Or you'll get a pot that turns into a spiraling leafage. The explanation for that I know and feel because we do it in our own work. We know when it happens that ornament is talking about things outside the object. Pure ornament, and I'll use the word "pure ornament," is just the geometry that I spoke about, but as it begins to acquire, accept, and bring into itself these other images from nature it cannot bring them in whole cloth. You can't put a full horse, actually the Byzantines tried that in some of their ornament, a full oak tree, a complete bird, etcetera, inside the ornament. There would be too much stuff.

If an ornament is mediated, just to pick an outrageous possibility, but in ornament it's not outrageous, suppose you were mediating between the sky and the forest and an animal, for some reason. You are talking about different domains that the ornament is expressing. You wouldn't bring in a whole bird or a whole animal, you would bring in part of a bird, part of an animal and you would connect it into the tissue, the geometry of the ornament. You might have a spiral, the end of which turned into the head of an animal while the tail, the backside of the spiral might turn into leafage so that inside the ornament you have the phenomenon of metamorphosis. A metamorphose is the manifestation of the phenomenon of metamorphosis which is turning from one thing into another.

In some periods of history, cultures did foreground metamorphosis as a principle of life, things turning into another. As you go up, the figure turns into an angel, or the angel is between you and the heavens, so you go from your earthly state to your celestial state. In the Christian religion you turn from one entity into another so that the metamorphose, the winged angel or the cupid, talks about this transition from the wings as the airy figure in space, the heavens, to the mortal figure. There is no difficulty discussing the apparition or appearances of metaphoric metamorphosis inside the band work of ornament. It's a perfect place for it, as the great historian Henri Focillon said, "ornament is the chosen home of metamorphosis" because it is the place that accepts all things, scrambles them, turns them into energy. It's a cauldron of all things, otherwise it couldn't make the claims it's making, "I'm the pot but I'm also the stars." That's one way of looking at it.

The appearance of the metamorphose as a freestanding figure, like a griffin, is a little more difficult. Griffins love to exist at the end of the ornament band. If you see a foliated scroll going down the side of a building, a griffin may be at the end of it. You see this in the Victorian staircase foliated metalwork. At the end a griffin pops out. A griffin ornament is a perfect linkage between the griffin and reality. Ornament is the world of the imagination in this respect. You are imagining these things to some extent. The reality of it is a kind of meta-reality. Ornament, to the extent that it deals with reality, does not do so by expressing mechanical functions, for sure, or by expressing the human body the way a medical doctor would. It's expressing the human body as a fragment in the larger cosmos. Ornament is a good place. This is what Focillon meant when he said that ornament was the chosen home. It's a good region in which to put metamorphoses.

Some of those metamorphoses may have symbolic value of their own. For example, a winged griffin combines an eagle and a lion, which is a dual symbol of power. The lion is further energized by the wings of the eagle so that you can almost begin to say, "well, is that not an emblem or symbol of power?" And the answer is, "yes." You are in a gray zone where ornament is really becoming autonomous in its own way. It's very interesting that even a griffin has to be properly located, just like ornament. A griffin has to have a home. If you walk down the street and saw a bunch of griffins sitting on the porch, you would think it was really weird, the same way you would if you walked down the street and you saw a bunch of people sitting on the roof. It's very strange, people sitting on the roof and griffins sitting on the porch. Why? Because griffins belong on the roof where they blend themselves with the sky and people belong on the porch where they have chairs. Ornament allows this world to exist. It is between things.

A monster is going to definitely appear out of ornament. I mean a monster. If you have a spiral that's turned into a leafing scroll and has a head coming out of it, that's a monster. In the world of the imagination a monster is an important creature. We can say a monster is a creature of the imagination. It's also something that speaks of a state of our own existence and lives. "Monster" means large. Monstrosity exists all over the place. I see more monstrosity in modernist architecture than I see in ornament. These oversized bland objects are monstrosities in many cases. Monstrosity has moved over into modernism without admitting what it is, whereas in ornament it's an admitted presence. It's part of a playfulness, an imaginative domain, as it blends its geometry with the world around. That's a very short explanation. In medieval life where you find cathedrals you find monsters more frequently. There is more of a specific

function for the monsters. They were not always found in ornament. You just found them hanging out of the buildings and carvings. Yes, they're ornament, but not in the pure sense that I've been discussing ornament up to now.

In the medieval mind, you had opposites working together: good and bad, heaven and earth. It was a construction of differences that were amplified in their ceremonies, in their architecture, and in their ornament. For example, in illuminated manuscripts you could have a psalm to marriage and around the edge of the psalm, in the illuminated corners, you could have all sorts of profane, outrageous stuff going on. The reason for that was that when you were talking about the good, you should also be aware of the bad. When you were talking about beauty, you should also be aware of ugliness. When you were talking about harmony, you should be looking at dissonance. You could not get one without the other.

A problem of modernism, and when I use the term, "modernism," I'm terribly oversimplifying and I apologize to all the modernists who are not doing what I am talking about, which are many. But in the pop version, the white building that speaks of purity and clarity wants to be a clean building. It doesn't want to be dirty. It doesn't want anything profane in there. It's pretending that we're noble, clean people. But I would say that in the apparition of monsters, of the profanity that you find fairly explicit in 13th century Indian stupas alongside geometric and botanic patterns of ornament, they are trying to tell the whole story of life. They're not pruning it out. You can do that in ornament. You can have monsters.

Enea Vico was a great Renaissance ornamenter who was wonderful at monsters, great horrible monsters, three- or five-legged creatures coming out of plants. In my mind, it was just a way of talking about a world, whether it's our world that has been posited imaginatively in the fabric of ornament, or it is the fact that these monsters and mutations can really perform well in ornament which functions to take you from one place to another where mutations exist.

If ornament were not a natural language, I don't believe the similarities between the cultures that I pointed to would have been as similar as they are. That these major cultures that were quite apart from each other came up with more or less the same figures indicates there is a figure that we humans use to talk about mediation between things: a spiral as the thing you go into and come out of, into and out of, that takes you into the macrocosmos, into the outside, and then, with the Greek, would sprout and go back into the inside. It is the way the mind can reach that idea best and our minds are rich. They are much richer than we've often allowed by the

hyper-specialized world in which we live. Ornament deals with, or expresses, the way we think. When we think, we don't think in fixed space or in fixed figuration. We don't choose beauty and stay with that as a fixed harmonic structure.

We go through extremes and we do it in our viewing of the world, even in our behavior. We try to stay out of trouble, if we can, but we certainly will explore. A child will explore any amount of options. Can they fly? What can they get away with? Can they lie? It's natural to the mind to have this kind of core, the cauldron of choice and blending of differences. When the differences get fixed, they get fixed into what you should do. This is what counts. That's when I go back to modernism, to the orthodox, canonized modernism in architecture which said a building should be functional. It should keep the rain off. It should be clean. It should be simple. Usually, you can find a bedroom with the right size room for a bed. Well, should it be just the right-size room? What else goes on in a bedroom? What else goes on in the living room? What else goes on in a house? Is the house a utilitarian object or is it a place for life, with all of its activities?

If you prescribe things as tightly as they have been prescribed, in the way that modernist architecture identifies itself and defends itself in its rightness, and again, there are many great architects who transcend what I'm talking about, I'm making a big generality here, but the notion that architecture is clean and direct, gives you what you need where and when you need it, is extremely prescriptive. When buildings were ornamented, they took you, they transported you out of the building. They didn't just hold you inside. They transported you to other places.

I heard a very good comment the other day, from a man who is funding the design of a new opera house. He said that in the modern opera house, you would go and watch the opera and hear the music and experience the acting, or it could be a great ballet and your mind would be put into a much higher state of complexity, of sensitivity, of nuance, of variation, of structure, by the virtuoso performance. Then, at intermission in that modern auditorium, when the lights go on, it's like falling into cold water. Perhaps, to the designer this was a magnificent space, but it's so far from the complexity of the performance that you lose. He felt he lost the momentum. He almost had to close his eyes and wait till the performance started again because he didn't want to be drowned in the simplicity of the hall. He wanted to stay where he was. He said, if you go to the great opera houses, Paris opera house, places where Beethoven used to play, the Austrian opera houses, that doesn't happen. The ornament takes you through the intermission and keeps

you at the same high level. It doesn't throw you into the cold bath. I thought that was an amazing comment.

It was once much more exciting to travel to Asia, Latin America. or Europe than it is today. It's all look-alike. We're making this look-alike world out there. What was attractive about the world that evolved out of the native cultures was that they had more richness and content.

The reason I went over to the opera house analogy is to suggest that the mind seeks and is always exploring the richness of things. To the child, an open mind will find dimensions in ornament, if the dimensions are right. There is good ornament and bad ornament. There is great ornament. Sullivan was a great ornamenter. When you see his ornament, you go into it naturally. I went into Sullivan's ornament, with my mind and eye, long before I became a scholar of the subject or an academic, or even a producer of it, as I did in the Paris Opera House. I was there. I saw these things when I was a teenager. I loved the Paris Opera House because it had monsters. It had these metamorphoses, all these faces, and I wondered why the monsters were there. I loved them, terrific, cool, great monsters.

I think it's a universal that the brain, the human brain, has certain proclivities towards preferring or identifying or zeroing in on certain patterns. This is much more well-known in music than it is in the visual arts. Musicians know more than the visual artists how to get a group of people dancing, how to get them to listen, how to get them to concentrate, how to get them to feel relaxed. This is high-level knowledge. There is a group in McGill University that is studying universal pattern structures in the brain. It's gotten to the point where we can do this with brain scanning. If you use MRI equipment, you see what stimulus ignites other stimulus, what people zero in on.

In the beginning of the 20th century, there was the Gestalt school of psychology. They were coming up with universals at that time, but they were very primitive. In 1910, in Berlin under Max Wertheimer, the Berlin school of the psychology of perceptions initiated the possibility that there were clear universals by which we perceive and prefer things. It made a lot of headway but in the middle of the 20th century, it fell into disgrace for two reasons. First, it was too simplified. The experiments they made favored extreme simplicity. They didn't explain complexity. Secondly, in the hands of the wrong design theorists they came up with the notion of good universals versus bad universals. That was happening right after the Second World War. We were approaching the Civil Rights Movement. So, certain groups got into good universals and

another dozen into bad Gestalts. The whole Gestalt movement, except in the hands of those who studied it and weren't caught in the unfortunate mischaracterization of the efforts that the Berlin school made, tended to talk less about universals. However, I and others have held to the notion in our own work that there are universals of a kind. Right now, in contemporary neuroscience and investigations of how the brain works, the credibility of certain kinds of universals is coming back.

There are reasons why we can love a Renaissance painting, even though we're not in the Renaissance. There are reasons why we love a great Gothic cathedral or certain forms of Asian music or chanting. We actually like it; we're attracted to it; we remember it. We're not in those cultures. In the meanwhile, in the intervening years, things became more culturally specific. Everything was different. We were different as individuals. Our cultures were different. The person who spoke about universals was back in the Middle Ages. Fortunately, this is shifting. I say it is fortunate because I think it will have a good effect on ornament.

You can go back to the primitive beginnings of pre-ornament, when there were just little markers. With artifacts you can go way back. Ornament has been a living part of the architecture of the whole arena of what we call the decorative arts. Architecture was more a part of the decorative arts until it became heavily professionalized with the radical developments in the 20th century. That's when it collapsed. Right after the First and the Second World Wars, there was the major appearance of the highly simplified form of modernist design that was heavily associated with the new technologies, the new politics, and even with the Gestalt theories of the Berlin School. It was almost as though, after the horror of the World Wars, there had to be a cleansing, a clean-up job, a sanitation of everything that recalled the past. There was an anti-historic movement in the academies.

In the United States, history continued to be taught as it did in many of the European academies, but Euro-modernism was more strident than American modernism. America had Frank Lloyd Wright and Sullivan. Frank Lloyd Wright kept ornament in. He was ornamenting up until the day he died, which was shortly after the Second World War, in the fifties. He kept it in and is now an exemplary designer to look at for the future of ornament. In Europe they went towards a much more radical sanitation in the abstraction of ornament with the Euro-modernists. The English were sort of halfway between the continent and this country, although lately they've become a little more strident in their modernist thinking. I think those movements were

movements of sanitation, trying to clean up, trying to go against all that caused these horrible wars with millions of lives lost.

Ornament was seriously affected. It was associated with wealth, with the church, with dictatorships, with power, and with tradition because ornament, over time, becomes appropriated by the powerful. If we were in an unequal society, and ornament considered as wonderful as I believe it is, the wealthy people would have it and the poor would not because it was desirable. But the wealthy also would have more water around them; they would have more stone; they would have more servants; they would have more of a lot of stuff. They would have better food. We didn't toss out food and music and water, but ornament was an easy target because it could be easily associated with people in power and it was precisely the people in power who were thought of so poorly after these wars.

This iconoclasm, the tearing down, also happened after the French Revolution. The great French ornament of Louis the 14th, 15th, 16th, was very subdued after the French Revolution. It was subdued in this country because we were escaping. The Puritans were escaping the pompous English. After the big wars they were also objecting to these emblems of power. Modernism came through, trying to be on a very high moral ground. "We are concerned with the mass public, with the poor, with shelter. Everybody should have it." Of course, they should have it.

The phrase, "ornament is a crime," is an example of the banality of the arguments against ornament. That was written in a short essay by Adolph Loos as a satire. What he was satirizing was a kind of costuming that was going on in Vienna at that time. He was making a criticism. I've been told he used the word, "crime" because ornament was associated with tattooing. Loos himself said later that ornament is certainly not a crime. He was a very good architect and he certainly didn't mean that ornament was literally a crime.

What is amazing is that people took it seriously. That is fascinating to me, that the term survived. No one could seriously believe such a banal statement, such a piece of satire. The students at Yale in the Architecture School, about fifteen years ago, gave their annual Beaux Arts ball and their theme was ornament. They came dressed as prisoners, some with handcuffs, just to mock the idea. It's just a bad idea. That's so silly it can be thrown out the window immediately.

What is more interesting, is that while that was being done, ornament was being accused by many of being "feminine." Somehow ornament was emotional and feminine and that's what

was wrong with it. Nowadays, people might argue, well, maybe that's what's right with it. It was also a wisecrack. It was all tossed into the insult box.

Today, there is no doubt in my mind that ornament is resurfacing. Before it gets out there, it has to resurface in the academy. Architecture is a very powerful profession now. There are thousands of architects graduating each year, entering the profession. Art schools are producing people who could make a big contribution to this.

Where ornament is reappearing is not from the schools so much, but from the younger generation of architects and designers who are really interested in pattern. They love it. They love polychroming. They love the excitement of complex space and complex patterning. A lot of them are developing it on computers and generating it in computer-driven machines, CNC. They'll type something in and it will come out the other end and they're flabbergasted by what they're able to do.

In a sense the labor problem that beset ornament in the beginning of the 20th century is also passé. Much of what is built now is being built in automated and semi-automated, wholly industrialized, ways. There is no argument that is very persuasive against the production of ornament and the young crowd knows that. They know they can build whatever they want. I notice in the school that the young people are really interested. They'll ask questions, they'll sit around, and they'll talk and I'll take them to some of my ornament seminars and they're wide-eyed about it, whereas twenty-five years ago, they were so caught up in the rationalization against it that they stayed away from it, but that's all changing.

Twenty-five years ago, or more, the arguments against it would have been labor. That's an easy argument. They immediately say, "well, it's going to cost too much." They overlook the fact that there are a lot of people out there who can do it for them at not much money, and still can. Another argument in the academy is that it's excessive. Simplify the building down to the basics. Don't put that stuff in there, you don't need it. It's cluttering. It's busy. You know that word, "busy"? I've never quite understood it. I love busyness. I love the court of ballet. The Balanchine ballet was doing busyness. It's the proclivity towards clean design as doing better design. Students who try to bring ornament back by designing a classical building are going to be told that they're out of step with the time, that they're using an obsolete style. However, this can also be overcome by architects.

There are architects out there, major pace-setters, designing buildings with orthodox traditional features. They're doing that at Yale. I've worked with these people. When anything from the past is attacked, it's tradition itself that's attacked. At one time it was difficult to use the word, "beautiful." For many years it has been difficult to use the word, "tradition." Then it became the "traditionalist" who was somebody moving at a slow pace, had their feet a little bit in the mud instead of in the avant-garde, breaking out of the box.

But there has never been a group that I know in history that has copied itself so continuously and for so long as the Modernists. You look into magazines; you see the same table setting. Here is a table in an empty white room with a painting on the wall and a glass window at the end. I've been seeing that all my adult life. That's somehow a normal dining room. We go back to the Victorian age, in a ten-year span there will be amazing new moves made in what it would be like to have a dining room. Modernism is stuck. If there is something stuck in the mud, it's not tradition.

If you look at the history of Western art, you can see a continuous trajectory of ornament built on the very keys I was talking about, with incredible changes going on, each of them exploring a different avenue of figuration, different technologies, different places to distribute the ornament. We had a lot of ornament in the 19th century when they invented skyscrapers. The first major skyscraper, the Wainwright Building by Sullivan, has a magnificent ornament freeze showing ornament moving easily into major changes of technology and different forms of expression.

You can look at Sullivan and say, "this is Sullivan." I have not stressed in my own work that you look at my stuff and see "Bloomer." I've been told by some they can spot what we do too, but basically, I was trained in modern art, modern sculpture, modern architecture, and a lot of our work in the studio generates out of a kind of plastic language that comes out of the early 20th century schools of modern sculpture and design, but we saturate it, we compress it into the field of ornament.

I'll talk about my work in this regard. I was trained in the modernist academy, both in architecture and in sculpture, and I was also trained in the sciences at MIT, in contemporary science, quantum theory, so I was trained as a modern person. I loved my teachers. I loved Brancusi, the great sculptor who did the bird, the fish, very simple free-standing objects. I would

go to the Museum of Modern Art and savor them. My early work was based on the modernist canon of sculpture, the autonomous object.

At Yale, I was taught the figure by an Austrian sculptor, Erwin Hauer. He was a bit of a maverick in the sort-of-Bauhaus Academy. The figure was not really thought to be a good thing to study if you are a modern sculptor, so we would set up our classes to run from midnight to three in the morning. I got a classical training in the middle of the night. Gradually, I built upon the discipline of modern sculpture. My own form-making is very dependent on a lot of the inventive thinking that took place in the first-half of the 20th century in sculpture, not the second-half so much. The second-half became more conceptual. But sculpture as sculpture was still being looked at heavily and taught in the first half of the 20th century. Anything that comes out of my studio bears the imprint of that stage of modern art, if I can put it that way.

The second thing is that being trained as an architect, and being a professor of architecture, I understand building. That's a boast, but I would claim that I have an above-average understanding of buildings. I design them. Buildings offer critical sites for ornament that are different from the sites that existed in the 19th and 18th centuries, and so on.

We have an entirely different light. You go back to the middle of the 19th century, which was a great period of ornament, and you had oil lamps. Gas light was just coming in. You go back before that and you had candles in the 18th century, so obviously there are shifts that take place. But you don't have to have the attitude that because we now have electric light, forget anything that preceded the 20th century. I look at history continuously. I have all my dead friends, Ruskin, Focillon in France. I can name a dozen dead friends, people who existed centuries before I did, whom I admire. I look at their work all the time. I keep the tradition alive inside me.

You can look at modernism two ways. Modernism is an all-pervasive style. Modernism is going to have to make certain concessions to the readmission of ornament. Meanwhile, ornamenters are going to have to understand the nature of building in the 21st century, the speeds, the trajectories of elevators, all of it will have to become a part of what the ornamenter has to understand. Many architects are waiting for the opening; fewer and fewer belong to the canon of Modernism. The canon is diminishing and the horizon is opening, but all of the parts have to get together. The young "turks" with their machinery, those more willing to study the tradition of ornament, know they can learn from the Shang Dynasty. It took these people a long time to get at

certain kinds of figurations. You have to look at tradition. You get all these pieces together and I think we're going to see the possibility of a very new, rich palette of ornament. I see it beginning.

How big an aberration have we been living through? Since the second World War, I would say. Prior to the second World War we had the last hurrah of Classicism, Art Deco, and late Art Nouveau. There was still a lot of activity that could be called "ornament." After about 1950, there was a major sea shift in the academy, in the criticism and in the breakdown of that academy, beginning, as early as the late '60s, as a kind of fifth column. It has been simmering and burning embers as it were, throughout the second half of the last century.

Most schools are still teaching the canon. I would say the big shift is taking place as we speak. Students are taking my seminar on ornament because they are interested in the subject, whereas 25 years ago they were taking it out of curiosity.

The biggest break with ornament took place in the mid-20th century. Prior to that there was no break. There were periods of extreme ornament. There was the Rococo period that peaked around 1750. By the time you get to 1800, you get Neoclassicism which is much tidier. There was much less ornament. It was more geometric, symmetrical. Then ornament flares up again towards the end of the 19th century leading towards the Art Nouveau and the Deco, the great period of the early 20th century that then gets killed off after the Second World War. There are still people doing it, like myself, but we are the outsiders. We're definitely "fifth column." We're singing to an empty hall.

I found what was going on to be increasingly boring. Even though there is a lot of weird, "cool" stuff going on, I find it rather boring. I always collaborated with an architect. Architects collaborate. They collaborate with engineers, lighting experts, landscape people, interior designers.

I'm an ornamenter. In each of the projects going on in my studio there is a collaborating architect and each of these architects has a different spin. Some are interested in urban neighborhoods, others in expensive university or high-end buildings. It's all in the public domain, either in universities or in cities. I do very little domestic. Most of my work was national until about eight years ago where most of my work is now here in New Haven.

I worked with Kenneth Boroson on four school additions in the vicinity of New Haven.

Truman School

Clinton School

Mauro-Sheridan Magnet School

Hill Central School

I’ve worked with Yale on a new pavilion, major gates, lights, and metalwork.

Yale Bass Library Entrance Pavilion

Yale Chemistry Research Entrance 2005

Yale Gothic Luminaire

Yale Display cases

A project that has brought another dimension into the studio is the development and construction of a 32-story building. It is the biggest building ever built in New Haven, sitting on top of a four-story parking garage with stores underneath that garage. This is an urban typology where you have parking and stores beneath. Parking garages have a sorry history when it comes to their contribution to downtowns. New Haven has a very sacred downtown and this building is going downtown, so the architect and developer, Bruce Becker, asked me to do the façade and the ornament for the entire part of the building that runs along the streets which adds up to about a New York City block. In order to do that, we have to design the façade to some extent. We are actually doing façade composition and ornament. Then we were asked to do the top of the building, so that's a big project.

The building is located on New Haven's oldest and most distinguished main street. It's a grid town, but it has one street called "Chapel," which is its cherished main street. This town was founded in 1638. It has a green in the middle of it. It's a town full of great architecture. It's a terrific little city that's trying to get itself back together after some bad years economically. This building is on Chapel Street and our assignment is to continue the spirit of Chapel Stret into the part of the building where the parking takes place and around to the entrance which is across from the new railroad station; to basically keep intact the urban pageantry of New Haven by

using ornament and rhythm. We are using our palette of ornament typologies to do this project which is in the works.

360 State Street Parking Garage Façade Design and Ornaments, 2010

Detail