Light, transparency and an appropriate image in furniture

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LIGHT, TRANSPARENCY AND AN APPROPRIATE IMAGE IN FURNITURE

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CHAPTER I
INTRODUCTION

This thesis is an exploration into furniture design and as well an attempt at the understanding of the complexities of the design process which were used to create each piece. The designs resulting from this study give a cohesive over-view of my thoughts and feelings on this topic. Also they reflect my growth as a furniture designer. Within this body of work there is unity and diversity in the materials, ideas, and forms.

Visually I think the ideas and forms are new and original, yet they inevitably have links to the past and present furniture designs of others. Because of this link each viewer's perception of understanding or interpreting each design is contrived or shaped by past experience. This provides the base from which the viewer builds when experiencing a new design and its environmental setting. This new experience or dimension is or will be as unique to each individual as is the historic link.

To the viewer the most apparent common element of the furniture in this study is glass and the manipulation of it as a structural and expressive medium. Each composition is an integration of architectonic elements and metaphors of
nature. While always important to the message, the integration varies in proportion from piece to piece. The final designs create a visual harmony so the materials, forms and ideas support each other as a cohesive image but still contain interesting juxtapositions and complexities that entertain and stimulate the viewer. Sharp contradictions of the viewer's preconceived ideas of, or experience with, furniture forms cause a moment of contemplation when viewing each piece. I intend in this thesis to attempt to make each moment of contemplation more rewarding and to enhance for the viewer the messages and ideas that I have explored.
CHAPTER II
UNDERSTANDING APPROPRIATE IMAGE

Appropriate image is a subjective concept. To develop an appropriate image is a value judgement made by the artist during the creative process. Appropriate image is the conveyance of a visual message. The meaning may be political, social, physical or aesthetic. It is not at all necessary that the meaning is fully understood, but the visual elements and the meaning should be a cohesive unit. A base to the design is achieved by appealing to the viewer’s preconceived ideas or historical knowledge of the object. It should have an identifiable relationship with his or her subconscious memory but at the same time extend or add to that knowledge as a new visual experience. Without the latter, art or design would be a static and basically an unoriginal image.

This quotation by Vincent Scully adds to the meaning of appropriate image:

"There is no way to separate form from meaning; one cannot exist without the other...empathy and the identification of signs are both learned responses, the result of specific cultural experiences. The two modes of knowing and of deriving meaning from outside reality
complement each other and are both at work in varying
degrees in the shaping and the perception of all works of art.

In that sense, the making and the experience of architecture, as of every art, are always critical
historical acts, involving what the architect and the viewer have learned to distinguish and to image through
their own relationship with life and things. It therefore follows that the strength and value of our contact with art will depend upon the quality of our historical knowledge"(1).

The design elements, that is, shape, proportion, color, texture, point and line are the basic tools to manipulate an esthetic form. Furniture that is built with these tools and on a historical foundation is likely to have an appropriate image. An example of this would be the non-functional chairs by John Brooks (2). Their simplicity suggests a Shaker chair while the tall slender form can be associated with the elegance of a Mackintosh tea room (3). The use of natural branches marked with vivid color sets an informal mood like being in a mountain lodge. Although these chairs are a skeletonized form, they do create an appropriate image.

The sculptural qualities of design deal with appropriate image, while appropriateness deals with the functional aspects. I will consider both appropriate image
and appropriateness in terms of my own work and attempt to support why I feel it is appropriate. The primary materials for this study have been limited to glass and wood. Though I made use of chrome steel, plastic laminate, and fabric to enhance an image, it is the extensive use of glass, I feel, that has the best qualities for the image I wished to achieve. The green edges are the most apparent property that defines it as glass and alludes to an image of precious gem-like quality. The image is reinforced by a preconceived image such as that experienced by viewing mother’s fine-cut crystal.

Historically wood has been the prime material for furniture. It provides a contextual understanding to a piece of furniture that is a part of the viewers past. The type of wood and how it has been manipulated is most important to the image. Although wood itself creates the image of warmth and natural beauty, different grain patterns and figures found in endless variety stimulate a more specific image. For example, a beautiful marble-figured veneer and its projection of an image go back to the opulence of a Louis XV Rococo salon (4). Wood found in endless variety has many other meanings and historical styles to support an appropriate image.

Hidden or unexpected delights and surprises are another aspect of what I feel makes an appropriate image. This is the original and innovative part of the image that provides
the rewards that make viewing such a pleasant experience, even possibly inciting a child-like wonder. This is a first impression response and hopefully an enticement for the viewer to consider some of the other more subtle elements. It also creates a physical relationship on a personal level. Since these ideas are conceptual, examples in my own work will best convey my meaning.
CHAPTER III
LIGHT AND TRANSPARENCY

Light and transparency have qualities that alter the way we perceive an object and the way we relate to it. Physically glass reflects, defuses, distorts, filters and transports light. These properties can be working simultaneously yet independently and will change as a viewer moves about an object. Though it is commonly understood how light is physically produced it still has an aura of the supernatural. Transparent solids have a similar mystique in that they form an invisible barrier as if by some unexplained force. These feelings set a precedent for the creation of an appropriate image.

Poetic images of light apply to the making of an appropriate image. There is fire light, candle light, heavenly light, supernatural light, sun light, light at sunrise or sunset, moon light, star light and reflected light. Every viewer draws upon his or her own connotation of these poetic, romantic and other light-type experiences when viewing a piece of furniture or an object.

Glass in furniture is by no means a new idea. The throne from the tomb of Tutankhamon has glass inlays. As far back as the seventeenth century glass was used for
mirrors and case doors. Modern designers have utilized plate glass for table tops and frameless doors. In each design I have explored suitable possibilities for the applications of glass both esthetically and structurally to use the properties that can be advantageous to designing furniture.

I feel glass is also a poetic material full of subtle meanings and symbolism. It is brittle and often fragile. Its broken or natural edge is sharp and potentially dangerous. Glass is like ice, like water, like vapor and can be used metaphorically. Glass is a window that can transport a viewer to another world or to a dream-like crystal ball or Alice’s looking glass.

Glass and structure seem to be dissimilar topics but if the compressive strength is utilized and tensile stress minimized then glass becomes an appropriate structural material. Also simply increasing the mass or thickness adds to the physical strength of a glass element. Use of architectural glass block is an example of simple use of these concepts.
CHAPTER IV
MY OWN WORK

The following are explanations and interpretations of my studio objects.
1. Wild Grid Chair, A Chair

My goal in this design was simplicity in concept and form. The chair when seen in side elevation is two curvilinear lines. One is the functional line of sitting. This is extended to form the back rest and the front legs. This plane is defined by the architectural grid. Juxtaposed to this plane is the second line, the organic line of the back legs. Their symmetry is a matter of function. The organic horn-like form is ornamental. The historical image precedents are the rustic Victorian elk or bull horn chairs found in the West. The glass stretcher is intended to complete the triad of visual elements. It is cut in a geometric curve which contrasts with the organic curves of the back legs and, more emphatically, to the rigid lineation of the grid work. The image of a glass chair is like Cinderella’s glass slipper. Both are sharply contradictory to a viewer’s preconception of appropriate materials. When first viewing the chair the glass may not be apparent, but when noted the glass is perceived as a pair of lines, a nonplaner element. Frequently a point of reflected light on the glass edge becomes a fourth ghost element haunting a viewer’s image. The glass stretcher is a surprise but an appropriate element.
2. Fire Water, A Liquor Cabinet

This is a piece of furniture that is associated with a social occasion or is complimentary to an individual slowing down the pace of his or her life, i.e., relaxing. Therefore it has a function to set a mood as well as hold the wherewithal to cause relaxation. It establishes an environmental context much like a stage prop. My design script reads, "The ambient room light is dimmed, the cabinet tambour is lifted and the serving leaf dropped, much as though this were a curtain call. The contents are still shadowed but set a transitional mood. When the hidden switch is activated the cabinet comes aglow with a soft green light that is produced by the edge lighting of the glass. It is as though the stagelights are turned up. This lighting seems to brighten the viewer's mood just as though Fred Astaire and Ginger Rogers had danced into the room".

A playful juxtaposition of elements are combined to form this image. The glass legs are derived from neo-Classic paired columns. They form an appropriate waterfall metaphor and as well a window to inspect the flame-figured book-matched panels behind. The flame image is strengthened by the up lighting in the glass columns, thus becoming an icon for the cabinet's contents. Graphically the teak door pulls repeat the parallel lines of the glass legs with the exception of the curved segment of
the upper pull. This is a graphic transition to the interior from the exterior and is related to the structural curves of the wine rack. The wave-like image of the wine rack glass softens the composition, an image that induces a further positive effect on the viewer's mood. The cantilevered glass shelf below asymmetrically delineates the interior space while adding to its utility. The overall asymmetrical composition of the cabinet is visually balanced by five elements: the glass legs, their base box, the stepped grid bracket, the cabinet case and the monolithic right leg. All of these elements function structurally and enhance the image for the occasion.
3. Dreamland 's Com'n, A Bed

Dreamland 's Com'n is a collage of materials, forms and ideas. The concept was inspired by early Twentieth Century collages expressing a feeling of three dimensional layering. This feeling is translated into furniture by using the two dimensional format of the headboard as a painter's canvas. The first layer sets the viewer's preconceived historical precedent so as to reinforce the viewer's comprehension of the overall image. This is achieved by the over-scaled four posts and chrome tubing, which generate an image like a traditional big brass bed.

The middle ground is formed with plate glass cutouts which creates an image of a transparent mountainous dreamscape. With the circular piece of glass one can fantasize dreamrise or dreamset. By controlling a hidden dimmer switch, the glass may also be edge lit to stimulate either a relaxed or romantic mood.

The foreground is defined by the upholstered arch. This is functional for lounging but is also the keystone for much of the symbolism in the design which is defined by the stepped brake in the arch. Implied is an imaginary line between male and female. The division is reinforced by the headposts and the asymmetry of the collage. The headposts which also function as night tables, set a horizontal order for the bed and its companion, the dressing table. The
order is established by using the same proportions and materials at respective strata. By unifying the nightstands with the head posts a stronger more defined column image is achieved and the overall scale exaggerated. The left side table is square with open legs, while the table on the right is round and sits on a cylinder that is hinged to open a hidden compartment. This small cabinet is an unexpected surprise that is also functional storage for bedside accessories. The post on this side is hexagonal while the other three are cylindrical with ball finials. The finial on the hexagonal post is a twelve sided diamond with a hexagonal glass base to define the transition between it and the post. This jewel gives the composition a regal feeling and reinforces the male and female dualities that are appropriate to a double bed.
4. Reflections of Dreamland, A Dressing Table

I approached this design contextually. The materials and proportional relationships dictated by the order established in the bed, "Dreamland 's Com' n". Then by creating a metaphor, an independent but compatible image from that of the bed is formed in response to the function, the user's need to apply makeup. In this metaphor the mirror becomes a reflecting pool and the seven glass discs become concentric radiating ripples. It is an appropriated fairy tale image of the ugly duckling crying tears into a pond and disturbing the smooth surface. Then as the reflection regains clarity she realizes to her delight that she is indeed a beautiful swan.

Hollywood is also an image with which a viewer can associate, with all its glitter and "pizazz". It is a theatre marquee, the star's dressing room with her makeup lights. This image is brought out by the bare transparent light bulbs and the glass discs behind, which seem to become over-scaled light bulbs with their own reflecting filaments, a reflection of the light bulbs. The glass discs are edge lit. This light source and the bare bulb are controlled by two separate dimmer switches. This enables the dressing table to become also a soft mood light companion for the bed.

The symmetrical composition separates the identity of
the dressing table so it is not an extension of the bed's image. The symmetry also gives the piece an abstractly Palladian feeling, one more formal than the bed and more appropriate to a dressing table's function and image.
Winter plays with the sky like no other season, especially high in the Rocky Mountains above treeline, where the snowscape appears to become part of the sky. The wind and cold are masters of all the beauty in this wilderness. This table is a metaphor for a number of winter alpine experiences. Winter images are always dynamic and very unexpectedly abstract, making them very inviting for a design metaphor.

Three experiences or phenomena come to mind to compose the image of Winter Sky. The clear glass and white glass level surfaces represent a snowy plain and the sky giving the idea that they can appear as one. The low sun seems to reflect equally off the snow and the sky. The two act as parallel surfaces. When the wind is blowing and the snow is drifting the delineation between the two planes becomes more vague. This is the experience of another world - a high alpine experience. The second is symbolized by the amorphous purple glass representing the lenticular clouds that form in the lee of the Rocky Mountains. The crisply attenuated form of the clouds makes them look like hovering alien space craft - an unnatural looking fleet of streamlined vaporous ships. The third phenomenon is the light refracting columns of frost crystals shimmering
symmetrically on either side of the cold solstice sun like a golden gate. This is represented by the three glass squares stacked in the square leg. The other two legs are triangular and circular, respectively, in plan. These primary forms are an appropriate image because they allude to the simplification of the snow-covered landscape.
CHAPTER V
CONCLUSION

The result of this thesis is far from what I imagined when the topic was being developed. The understanding of an appropriate image is a much stronger design concept than I expected. Light and transparency in the planning stages of this project were for me something mystical with untapped potential. Now light and transparency are part of my basic design vocabulary and are also important to the creation of my furniture. Despite what has been done in this study light and transparency still have great unrealized design potential. The results of these designs should be mystical for the viewer and stimulate memories of the viewers visual past.

I felt at the time I chose this topic I was risking too much because I might not be able to answer the questions it imposed. The proposal was a sufficient catalyst to establish a general criteria for the designs and ideas that evolved through this project. The risks I took have been rewarding. The idea of appropriate image is applicable in defining criteria for many design problems and will inevitably have links to my future furniture designs.

Learning and doing seem to simplify complex ideas and
problems. By analyzing and defining these ideas and solving the problems as outlined in this thesis, I have had a most beneficial and enjoyable educational experience.
ILLUSTRATIONS

The following photographs are the works corresponding to Chapter IV.
Wild Grid Chair
Fire Water
Reflections of Dreamland
Winter Sky
Cabinet detail
Dreamland 's Com'n
Cabinet detail
Reflections of Dreamland
APPENDIX
WORKS OF ART

1. WILD GRID CHAIR 1983

Materials: Mahogany, bleached maple, 3/8 inch plate glass

Finish: Danish oil, lacquer, glass edges polished

Location: Private collection

2. FIRE WATER 1984

Materials: Curly maple, teak, 3/4 inch plate glass, 3/8 inch plate glass, 3/8 inch slumped glass, brass hardware, lit with six 120 volt, 25 watt, six inch showcase bulbs

Finish: Oil varnish, glass edges polished

Location: Private collection

3. DREAMLAND 'S COM’N 1985

Materials: Maple, birdseye maple veneer, mappa veneer, color core(R), high density particle board, chrome plated stainless steel, 100 percent cotton fabric, 3/8 inch plate glass, 3/4 inch plate glass, (matching quilt) 100 percent cotton shell, polyester lining, poly gatting, lit with dimmer controlled 120 volt, one
40 watt twelve inch showcase bulb, one 60 watt standard bulb
Finish: Clear and black nitrocellulous lacquer, glass edges polished
Location: Private collection

4. REFLECTIONS OF DREAMLAND  1985
Materials: Maple, birdseye maple veneer, mappa veneer, color core(R), high density particl board, plated mirror, 3/8 inch plate glass, lit with two dimmer controlled 120 volt circuits, one with six inch 40 watt showcase bulb, the other seven with two inch diameter clear candelabra bulb
Finish: Clear and black nitrocellulous lacquer, glass edges polished
Location: Private collection

5. WINTER SKY  1984
Materials: 3/8 inch plate glass, 3/4 inch plate glass, purple glass ingot, 1/4 inch white glass, cherry wood
Finish: All glass edges polished, ingot top faces natural, ingot bottom polished, ebonized and danish oil
Location: Private collection
ENDNOTES


