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**ROCHESTER INSTITUTE OF TECHNOLOGY**

A Thesis Submitted to the Faculty of  
The College of Fine and Applied Arts  
in Candidacy for the Degree of

**MASTER OF FINE ARTS**

**GLASS IN A SLUMP**

By

**PETER V. ANDRES**

May 1984

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## PREFACE

This thesis has been formed in two major segments. The first portion deals with glass information including processes and techniques. The second addresses my work in terms of personal issues, manner of approach, symbolism, composition, visual eclecticism and internal source of imagery. The subjects dealt with in the two sections are mutually modified in their working relationship. Each yields to the pressure of the other as I constantly want to do more than I am able. I have separated them for the sake of clarity, as I conceive them; the first being the means and the second the end. Even within the context of this thesis the total segregation of the primary subjects is impossible. Processes are selected, changed and created to suit desires. Technical limitations effect the movement from concept to physical existence.

## SECTION ONE: PROCESS AND DESIRES

In my discussion of "Process and Desires" I shall deal with a variety of general information and specific technical information. The choice of the subjects was based on personal directions in my work. Differences between my aesthetic ends and those of other artists has generated information occasionally at odds with other sources of technical slumping information. I have not endeavored to create generalities but to address specifics related to my working situation and the objects I wanted to create. For individuals desiring similar slumping characteristics to my own the section provides unique information.

The richness of color available in glass is one of the qualities that attracts me to it. One of the primary attributes of glass is its ability to become saturated with color. The color is not carried as independent particles within a suspending medium, as in paint and ink, but the glass itself is color. Opaque, translucent or transparent, glass produces color effects unobtainable in any other material. The works in the photographic section of this thesis all reflect my involvement with color.

There are two basic types of colored glass in sheet form. The first type is solidly colored from face to face. In the second, a thin layer or multiple layers of color cover one or both faces while the major portion of thickness is clear or another color. This second type is known as flashed glass. The thin layers of color are referred to as flash.

Most sheet glass is made by one of three basic methods. They are floating, rolling and blowing. Float glass is called by that name due to production techniques. It is what you see in virtually every transparent window. Rolled glass is always at least slightly textured and is often colored. It comprises the bulk of inexpensive stained glass. Blown flat glass is produced as a cylinder which is

opened into a sheet or as a circular form spun flat while hot and known as a rondel. Blown glass in flat form is the most expensive of the three. It is the only type which is flashed. Each of these flat glass types has virtues and faults.

The glass which appears in the photographic section at the rear of this text is all composed of handblown flashed glass. The exceptions are commercial plate glass used presentationally, photographs 1 through 3 and 5, or structurally as in photographs 7 and 8. The reasons for such exclusive use of blown glass extend across technical and aesthetic lines.

In order to fuse glass without cracking or peeling between layers, one must work with glasses which expand and contract within an extremely narrow range of tolerances. One may fuse commercially produced plate glass, rolled or float, using portions of a single sheet to guarantee consistency of formulation. Unless one opts to use enamels or paints, which I did not, these fusings will be of a uniform color nature.

There are two options if one's desire is to produce objects of fused and colored glass. One may use a commercial fusable plate glass from the Bullseye Fusing Ranch.<sup>1</sup> The second option is to produce, or have produced, glass which meets one's specific needs.

The Bullseye glass has two advantages---it is available virtually on demand and it is inexpensive. It has three disadvantages---limited color range, consistent texturing, no flashed colors.

Hand blown sheet glass has two major advantages and two disadvantages. On the good side it can be made in a much broader color range and I can make it. On the bad side it is a time consuming and expensive process.

Being in the fortunate position of having an extensive background in glassblowing and access to a glass facility I decided to make my own glass. Aesthetic control was the clear and unanimous winner in its bout with practicality.

To arrive at sheets of colored glass, the basic element for my fusings, I have used traditional methods of stained glass sheet production. The process involves several steps. Pieces of highly concentrated colored glass are applied to the end of the blow pipe in layers or patterns which will determine the final nature of the sheet. These bits of color are covered with several layers of clear glass and blown into a cylindrical form. During the blowing the color expands to form a skin over the interior surface of the clear cylinder.

After the blown cylinder has cooled the bottom portion is cut away leaving a tube. A lengthwise section one quarter of the circumference in width is removed. Several tubes are placed on their sides, open side up, and heated until they slump into flat rectangular forms. The bottom sections, cut away earlier, may be slumped into circles. The quarter of the tube, cut out earlier forms a smaller rectangle.

There is a drawback to the methods of production outlined above. The resolution of color becomes more precise when applied closer to the exterior of a blown glass form. Because of the texture implied on the lower surface of the slumped sheet the color activities had to occur on the innermost layer of my cylinders. There are two solutions to the situation. One is to open cylinders by hand in the oven. The interior surface may be placed face down in this procedure. The process requires extensive personal attention and severely limits the number of pieces to be flattened in a single firing. The second solution is to have pots or tanks of hot colored glass available to coat the exterior surface during the blowing process. This process also requires additional time and attention. Both solutions were incompatible within the time frame of my thesis.

The temperatures at which glasses become malleable varies depending upon their formulation. The Weston cullet used for my base glass reaches this slumping point at slightly above 1000°F. I was consistently able to heat my cylinders to



1000°F in three hours without the occurrence of cracking. The same was true of stacked portions of sheet glass later in the assembly process.

From 1000°F onward, the oven I employed was slow accumulating temperature. From 1000°F to 1400°F was a two-hour climb. An oven which heats more rapidly above 1000°F is desirable. Glasses which tend to devitrify, forming a crystalline scumming on their surface, tend to do so less if rapidly heated and cooled when above the annealing range. Only two of the colors I began with showed an inclination to devitrify. I eliminated these colors from my selection rather than modify the existing oven.

To flatten my cylinders a climb to 1400°F and no more than twenty minutes maintained at that temperature was sufficient. The glass must be cooled rapidly back to the annealing temperature, in my case 950°F to 975°F. Repeated openings of the oven doors is the standard procedure for rapid cooling.

For all my annealing I soaked (maintained temperature) for two hours. The temperature was then reduced 50°F per hour for five hours. At 750°F an additional soak of one hour was included. Two turndowns of 75°F per hour reduced the temperature to 600°F. Beyond that point the natural cooling rate of the oven was less than 100°F per hour. This natural dissipation of heat was slow enough to avoid thermal shock cracks in the glass.

The annealing pattern I have just outlined was followed for all the slumping and fusing in my thesis. Included in that body of work were pieces varied from 1/8 to 3/4 of an inch in abrupt changes.

After slumping the cylinders flat the cutting and assembling of parts began. Plate glass cutters, circular diamond saws and a diamond band saw were used for cutting. Grinding of edges was accomplished with 120 and 400 grit glass beveling wheels and belt sanders. The works involving chemical bonding of elements, Figures 4-8, contained bevels and edges which could not be fire polished and required the use of pumice and cerium oxide polishing equipment.

The pieces with which I began my thesis, Figures 1, 2 and 3, were wall hangings. They related more to the qualities of paintings than the later and more sculptural works. In these three pieces I wanted to create color interactions within an essentially plane-like format. The use of a single yet multicolored background plate accentuates the low relief elements. It also creates a situation in which the viewer may perceive a variety of depth relationships rather than the more visually determined qualities of relief. In order to produce these plane-like forms I used butt seams. These seams presented me with some technical difficulty.

When I fused the butt seams with high enough heat and sufficient time to guarantee strength I lost the edge quality I desired in the relief forms. Because I wanted to use the quality of direct-color abutment I developed several potential solutions to the problem. Overlapping beveled edges, multiple firings adding relief, sections of glass crossing seams and a back-up plate each met with varied success.

Overlapping beveled edges did not work well for me in a visual sense. The beveling resulted in an uneven line quality where the color was cut due to the variations in thickness of the blown glass sheets. It also exposed the clear glass beneath the flashed layer and created a distractingly concrete division between the color which would not allow the more strictly visual depth relationships I was seeking. If strength had been the only issue or glass of mechanical consistency had been used the technique would have worked well.

Firing the base plate and adding relief elements in a second firing works well with certain exceptions. Some Kugler and Zimmerman colors, my sources, tend to pucker in multiple firings. Any glass which devitrifies will do so to a greater extent in each firing. The prebonded base sheet requires a slower warming cycle due to increased susceptibility to thermal shock.

The addition of parts crossing the butt seam on the top surface works very well, as can be seen in Figure 3. It is important to make the cross pieces thick enough and of sufficient surface area to support the weight of both sides.

The use of a back up plate fused to the main body of glass is the best solution to seam difficulties. The only reason not to use this technique would be an aesthetic dissatisfaction with the additional thickness.

To provide the consistency of finish I desired in my pieces it was necessary for all edges to be polished. Grinding edges to a scratch-free, 400-mesh grit surface provided a high polished edge when coupled with a 1400°F firing. Rougher surfaces prior to firing produced a shiny but pitted edge.

All of my slumping and fusing was done on Fiber Frax Paper.<sup>2</sup> The combination of the paper's texture and the firing pattern I employed sometimes produced a serration of the contacting edges. This can be circumvented by slightly beveling the bottom portion of the edge before firing.

I have spoken of some of the difficulties I have encountered in my slumping experience. The last of them I would like to address is bubbling between layers. The uneven top surface and textured bottom of my glass caused air entrapment when pieces larger than one inch square were fused. This is less of a problem with commercial plate glass. Since the glasses I was used were opaque the bubbling only concerned me when it manifested itself as a rippling of the top surface causing a pattern of reflected light. The solution was to fire at a low enough temperature for a short enough period of time to prevent warpage. The consistency of surface which I was seeking is evident in Figure 3.

There are two valuable slumping practices I have employed which are not evident in the pieces depicted at the end of this text. They are worthy of mention in this technical section because I have not encountered mention of them anywhere else. The first is the use of an insulation material as a mold and the second is a time and risk eliminating technique.

Duraboard<sup>2</sup> is a ceramic fiber insulation commonly used in glass annealers and ceramic kilns. The product is lightweight and easily formed. It can be sawn by hand or with conventional power tools, carved and sanded. It is softer than plaster. Slumping over Duraboard works very well. It is designed to withstand repeated firings and does so admirably when used as a slumping mold.

The only difficulty I encountered with Duraboard was textural. A short term solution is to leave the sanded particles impacted in the pores of the surface. This reduces but does not eliminate the texturing. A smoother and more lasting solution may be obtained by following the Glass Fusing Book One<sup>3</sup> section on "Finishing the Fiber Mold."

The movement of a piece while still hot can eliminate a firing, thus saving time and risk. A second firing is more time consuming and risky than the first. Works involving fused yet articulated parts must be heated more cautiously than stacked sheets. The risk of cracking due to irregular expansion is greatly increased. By placing both the mold and piece in accessible positions in the oven, heating until the glass has fused and moving the piece over the slumping form, one eliminates the risks and time involvement of a second firing.

The hot shifting of a piece should occur at the higher end of the desired temperature range. Heat loss should be minimized. Care must be taken not to drop the temperature too far into the annealing range, risking thermal shock. I experienced no difficulty moving pieces at 1300<sup>0</sup>F in a top-loading side fired oven. I used a spatula to raise an edge and lifted the piece with gloved hands. All the support was from the bottom so there was no marring of the top surface.

Technique is a method of translating a mentally visual language into a physically visual language. Because my work is not about manipulation of the material, the technique must be consistent and virtually invisible. I want people to

see the color, form, line and content, not the method of their achievement. These desires do not dismiss technique but call for highly developed material control. Technical flaws may only be considered so within the context of a specific work. Each "mistake" offers new potential. It is the struggle with technique which produces in each artist the means to communicate.

## SECTION TWO: AESTHETIC INCLINATIONS

I see possibilities. When I look at a complete work of art I see where it might have gone had different turns been taken. I see where the next piece might begin. When I start one of my own works it is with a central element or issue. I think about what I could add to highlight or diffuse that centrality by contrast or similarity. In a literary sense these would be the choices of theme and sub-theme or plot and counterplot.

Having taken one step, I have three hundred and sixty degrees in which I can turn before my next. I always consider many directions, and I usually try several out before making a choice. Each step generates a multitude of new potential.

There is a point in the additive process I have described when visual, emotional and intellectual unification must be obtained. All loose ends must be tied or remain loose for a reason. I must bring together threads of different dimension and direction which radiate from the center at which I began. I want them bound tight enough that they become a whole. I want them loose enough that when more closely examined, they maintain individual integrity.

The elements of each piece I make are interdependent. If one part is removed or added it shifts the balance. I balance my works with time and care, in that one respect, they are like a house of cards.

I do not feel tied to any group of artists or period of art in terms of style or content. I do consider the manner in which I approach the production of a work to parallel a few post-constructivist sculptors. The building block like constructions of David Smiths "Cubi" series and the found object works of Joseph Cornell and Louise Nevelson exhibit the same concern for placement of parts as I feel exists in

my own pieces. Each of the three artists is concerned with a precise visual balance. In Smith's works the minimal number of parts and their geometric nature emphasizes the precariousness of balance which he is describing. Nevelson's works, as well as Cornell's, involve the massing of individual elements into sections which are carefully conjoined to create the composed feeling which their completed works possess.

I do not work in series, I work in sequence. Series seems, in art, to mean works grouped easily by content or consistent approach to format. For myself each work is a step based upon the last and leading to the next, not a repetitive step with slight variation. There are only a few consistent qualities which bind my thesis works as a whole. Exploration and exploitation of color is consistent throughout. The presentation of personally emotional issues expressed in an abstract form is highlighted in figures 1-3 and 7. The creation of motion within a plane occurs in every work. Motion in a third dimension is a dominant factor in Figures 4-6. Illusion and enigma are recurrent issues in my work and are addressed most directly in Figures 6 and 8.

With the remainder of this thesis I shall discuss each piece in relation to one or more of the qualities just mentioned. I do not intend such a dissective analysis to create a perceptual framework around the pieces. Each viewer is different and should operate with the works subjectively, relating them to his or her own personal concerns and experiences. I simply intend to illustrate some of the concerns and issues which exist during the creation of each work and every part of it.

The pieces which represent the visual portion of my thesis began with low relief fusings for the wall. The works are depicted in chronological order at the end of this text. They are numbered and referred to interchangeably by number or title. The first of them is "Rain Icon," Figure 1.

"Rain Icon" started with the rectangle which remains at the center of the work. That particular section of glass elicited responses from me relating to my youth. It is a symbol of my childhood days in Ohio, a complex relationship of overcast and drizzly days contrasted by the warmth and comfort of my home and family. The two homes I lived in through my teens were designed by my parents and included abundant windows. Days which were wet, by far the majority in spring and fall, were often spent in the embrace of those places. One of my favorite occupations was to sit and divide time between reading and extended periods of watching the rain move across the landscape. The central element of "Rain Icon" is a symbol for those days. It is a sky and cloud symbol bright with warmth.

The blue which surrounds the central rectangle is a more traditional and therefore viewer accessible symbol for sky or water. The blue is framed on two sides with slightly lustrous black panels. From those black portions outward I have placed balancing and framing forms and colors. These elements of enclosure relate stylistically to the weavings of southwestern native Americans.<sup>4</sup>

The selection of a native American style was consistent with the central issues of "Rain Icon." My mother's collection of native American crafts and weavings was as much a part of my youth as the rain. The position and feeling for nature among that population as expressed in their art made their symbolisms compatible with my own.

In both "Rain Icon" and the native American art works with which I am most familiar there is a sense of precise looseness. The precision is in the geometric nature of forms and their relationships. The looseness is in the handcrafted quality and the occasional disruption of symmetry which animates their works. Geometric precision is often suggested but seldom actually employed.



The feelings I was exploring in "Rain Icon" were the point of departure for "Rain Icon II." Once again the piece was worked out from center. The panel in the midst of the work with its ragged bottom edge is a storm symbol. The small squares at the upper corners are expressive of rain. The lower section of the work is done in blues and is a topographic symbol for land and sky.

"Rain Icon" and "Rain Icon II" differ in several ways. The focus of the first was internal and the second external. Where "Rain Icon" explored feelings of warmth and security, personal in nature, "Rain Icon II" involves perceptions of events we have all experienced. Altered awareness of colors is the primary occurrence which I am addressing. When wet, certain colors in the landscape become darker and more recessive. The browns of organic debris, of the earth and the bark of the trees all become darker when wet. The rain washes dust from leaves, stems, stalks and flowers. The greens, blues and reds of these living things are heightened by the glossy wetness and the darker than normal background on which they operate. The greens of the background plate and blue green of the lower portion of "Rain Icon II" are among the colors that undergo the changes I have described.

The framing devices of the first piece are gone in the second. The native American format which was appropriate to the internalization of "Rain Icon" would not be so for the external perceptions of "Rain Icon II."

Both of these first pieces are nearly bilaterally symmetrical along the vertical axis. The symmetry in each was used for stability and centrality. Symmetry is grasped by many individuals who have difficulty understanding less rigid forms of abstract composition. Symmetry is an old shoe, well worn but very comfortable. I wanted these pieces to welcome the viewer. The surprises were to be small ones, without shock value but with a purpose. I have attempted to break the ease of comprehension, the glance and move on habit of viewers, by introducing elements subtly askew.

The most obvious breaks in symmetry in "Rain Icon" and its sequel are the variable color patterns. Once inside the symmetric outlines of forms the internal color actions are markedly asymmetric on several occasions. This is most notable in the central portions, the primary focal points of both works. The dashed squares and ragged edge of "Rain Icon II" are uniformly directional across the center line. The black triangles at top and bottom center of "Rain Icon" repeat a motion rather than reflect it. The large black panels of that work are of differing scale and cut on separate angles. The perception of these activities occurs on an unconscious level until the pieces are more keenly scrutinized.

We live in the most artistically eclectic society to exist. Our aesthetic, as it is reflected in museums, galleries and publications, is of worldwide content. It is of the deepest history which archeological techniques and object survival will permit.

I have never viewed objects created in other places and times as bits and pieces of other cultures. Those things which exist for my viewing are part of my culture.

Galleries, museums and publications offer visual paths which I have traveled. I follow them freely to arrive at the destination of my choice. I prefer different routes and alternative scenery to the same rutted trail.

I am a product of my past and my society. I am as much an eclectic as my society is. For these reasons there are no bounds between the formal symbolic treatment of native American art and abstract expressionism. Balance remains balance and form continues to be form, only the evaluative context changes.

The three wall panels in my thesis group are all abstract. None deal with literal rendering. All are emotive. The prime difference between them is ease of accessibility. The reason for this is familiarity of format and systematization in

the earlier works, Figures 1 and 2. The present wave of less formal modes of abstraction will eventually lead to the same kind of familiarity and inherent understanding.

Symmetry provides a system of balance. Each line and form is counterweighted across a central axis by an equivalent line and form. To balance dissimilar forms and colors, as in Panel 3, is more difficult.

Panel 3 deals with illusory lines. These lines are drawn by the mind and eyes of the viewer rather than with a physical existence. They are implied lines. Such lines occur between the reddish-orange sections at upper left and lower right of the panel. They also exist between the three squares at lower center and the individual square at upper right. In the two cases just mentioned the connection between parts is based on similarities of color, shape and scale. A different motion creator is the violet triangle. It is a directive form, leading toward the activity to its left.

The placement of colors and forms which produce illusory lines determines the viewer's movement through the piece. They are positioned in a manner which focuses attention toward areas of importance, allows each area independent interest and creates tension that prevents the viewer from becoming isolated in one area for too long a period of time.

I have addressed the issue of attention focusing in terms of the purple triangle in Panel 3. A second kind of visual focusing occurs in that piece at the intersection of the eyes travel on illusory lines. The "eye lines" from upper left to lower right and lower center to upper right meet around the violet triangle. The triangle points to the small blue and green rectangle. From that rectangle the viewer's eye is likely to move to the sibling rectangle at upper left or out the gradient steps of rectangles to the irregular edge of the three black forms. Either of these final motions tends to lead us back to the orange-red forms and, perhaps, a repetitive cycle.

Directional forms and tension between similar forms and colors are two methods of stimulating movement through a work. I have included several illustrations of the types of motion some of the forms in Panel 3 stimulate, independent of the entire piece (see next page). As one overlays these types of motion they create even greater complexity and interrelational tension.

Independent interest of forms is a key element in Panel 3. Each of the tension creating forms I have discussed has enough personal integrity to become an isolated pocket of interest. Without such isolated interest I would be making connect-the-dot patterns and allow the viewer no resting points.

When I moved from low relief forms and off the wall with my pieces I made some technical changes. I felt that by fusing only some elements and gluing others my visual vocabulary would be increased. Working in this manner, I was more able to raise vertical forms from horizontal planes. Pieces 4 through 6 represent works done employing such a coupling of techniques.

Piece 4 involves only four types of form. All of the four are geometric in nature. They are the rectangle, the circle, the triangle and the arc. None of the forms are mathematically perfect. Each is altered in one manner or another. The closest in trueness to their geometric parent are the pink circle and the small circles at the far end of the base plate. These circles form a nebulous focal point around the attachment area of the black arc.

There is an emphasis on edges in Piece 4 as well as the group of three. Traditionally inlaid mosaic does not stress the slight thickness of the glass as does the raising of form upon form. The emphasis on edges lends greater impact to the contrast of smooth and irregular edging. I use the edge quality as some painters employ impasto technique to heighten the visual interest of an area by the addition of another quality.

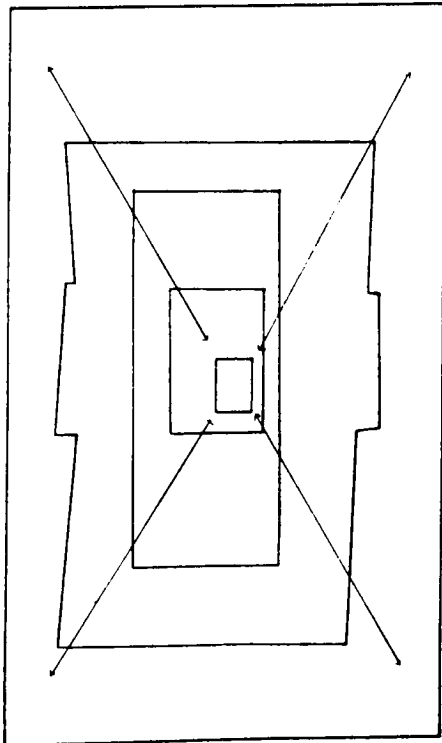


ILLUSTRATION 1. Expansive/contractive movement created by similar forms enclosing one another.

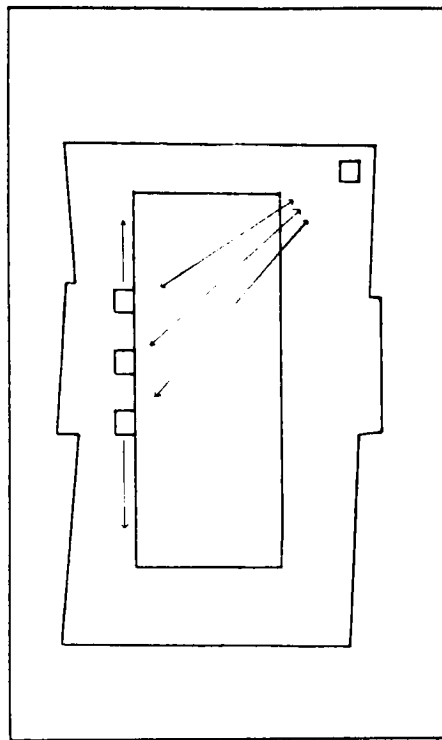


ILLUSTRATION 2. Scale, shape and color similarities cause back and forth movement. "Dotted line" produces a linear motion.

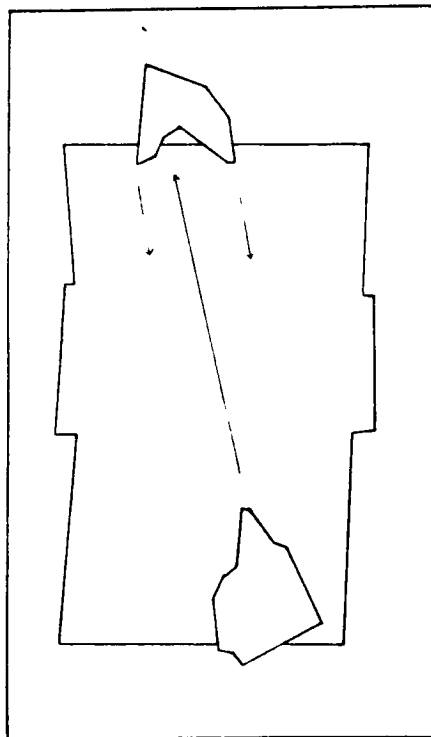


ILLUSTRATION 3. Arrowhead forms create directional motion through the plane of enclosure. Scale and color similarities combat that motion.

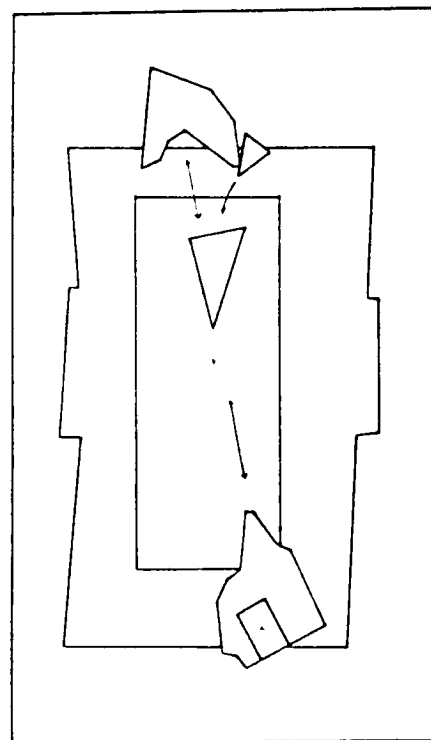


ILLUSTRATION 4. Additional forms punctuate and redirect the movements stimulated in Figure 3.

The primary impact of all eight pieces to be dealt with in this text is color. They are not about color as in Joseph Albers' painted explorations of color interaction. I have used color in a softer and more decorative manner, as lusciousness and invitation to the pieces. Work number 5 is a good example, not of color softness, but of color invitation.

Henry Halem<sup>6</sup> spoke of "Ooh Value" at the 1979 Glass Art Society Conference in Corning, New York. What he meant by "Ooh Value" is the high impact, entice-the-viewers-and-make-them-goggle-eyed, kind of flashiness used so often by contemporary glass artists. Works of this ilk say emphatically, "Look at me!" Number 5 is my "Ooh" piece. It has expensive sports car like colors which serve to draw the audience in.

The salvation of work number 5 is that it doesn't stop operating on the level of color flash. It has further layers of effect such as transmutation of color in a black reflective surface and other reflective qualities. I intend to exert quite a bit of force on the viewer to see the surface reflectivity effects by encircling the arc with a form which must be looked into in order to see the juncture of arc and base plate. The small triangular forms, and the downturning of the arc apply additional force toward the perception of reflections.

The surface of the base on work five doubles the depth of the form visually when perceived from above. It also creates an illusory situation in which arc encloses cylinder, a direct contradiction of the physical form. The triangles operate as a divisional line through the center of the illusory form.

The triangles offer contrasts to the arc and cylinder. The most obvious is scale and spatial contrast. The distance from the cylinder and comparative minuteness of the triangles causes a bounce from triangle to arc top or tip and back to triangle. The angular line they create across the black plane differs from that of the arc attachment and the torqued angle of the arc in space.

It is these activities beyond the initial flash of color and level of finish which create sufficient involvement for repetitive viewing. That is a value of paramount importance to me. I have no desire to create works which are worn out in one viewing. The variable nature of reflective qualities and glass to light source relationships are two of the attributes which attract me to glass as a material.

One of the key activities of light employed in this body of works is in combination with the matte black iridescent elements. The color and textural qualities of the black parts changes with the shifting of light source. Other light related activities occur in beveled edges and reflectively through the color near the edges of forms.

The surface qualities of the painted wood and formica base parts on objects 4 through 6 repeats the matte surface of the black glass elements and contrasts the glossiness of the remaining glass. It has been used to reinforce and bind the composition of these three forms. The formica and wood are transitional elements segregating glass from pedestal or table top less abruptly than direct placement.

The sequential connection between works 4 and 5 was the use of four geometric forms. In number 5 the forms have become more refined and the circle has mutated to a cylinder. The contact between work 5 and "Latticino Pen and Pencil Set", work number 6, is the use of enigmatic space.

"Latticino Pen and Pencil Set" presents a number of ambiguous depth situations. The arcs may be penetrating or extruding. The line which runs lengthwise through the black plate splitting it in two may function as a horizon line or as textural variation on a plane. The fence-like form indented in the black base reads spatially while the angular indentures indicate a more plane-like motion. The black rectangle may be alternately viewed as sitting upon a gray surface or floating in space between blue and black pylons. I enjoy these nebulous relationships. The enigma they create is the facet of the work which will maintain

its persuasion to participate through time.

The two pieces which remain as yet undiscussed are "Pyre" and "Magician's Box." Both pieces vary from the entire body of work in several ways. They are entirely constructed with chemical bonds. They involve commercial plate glass as a support element. They are without the frames or bases of alternative materials which are evident in other works.

"Pyre" is iconoclastic. The character I have used as the dead in "Pyre" is one I have used as a life symbol for several years. These creatures are myself, mankind and life in general. They are normally animators in my vessels. This is one dead, stripped of motion and adornment. I have played an extensive and intimate part in the process of several family deaths within the last few years. This piece rings out my dead with color and light. "Pyre" contradicts science and religion as they were expressed in my youth. It is a celebration of life and of release from pain.

Fire is the proper destruction of the body. Not the fire of some hidden crematory closet but the fire of a funeral pyre. Fire burns clean; smoke and ash are preferable to the images of decay which surround burial.

The death image I have created is understated. It is not about brooding melancholia. It is softer and less painful. It mirrors my own views of death. It is my own cleansing and a celebration of life.

The solitary work remaining unilluminated is "Magician's Box." The title refers to the piece's "Now-You-See-It, Now-You-Don't" qualities. It is a series of facades in which colors are two-faced, surfaces imply solidity only to be contradicted by open space. Events for the eye are concealed from initial discovery.

The three major views of "Magician's Box", the top and two side views, convey totally different impressions of the work. The top presents a continuous surface of an illustrated nature. The side view with red and black sheet glass



implies solidity even while offering a glimpse of internal structural elements and space. The third view contradicts the solid nature implied by the first two. It is open-ended and a minimum of structural construction with tinted transparent glass leaves a feeling of airiness.

"Magician's Box" is ornate with an oriental styling seen in many magic props. It is visually complex while some views of it seem simple when casually observed. The work is oriented toward change and illusion, dependent upon the viewer's position.

The box is an illustration of myself and glass. I am the magician. I am the maker of illusion who focuses attention on one hand concealing the activity of the other. All artists are magicians. They are workers of transformation and the creators of marvelous spectacles.

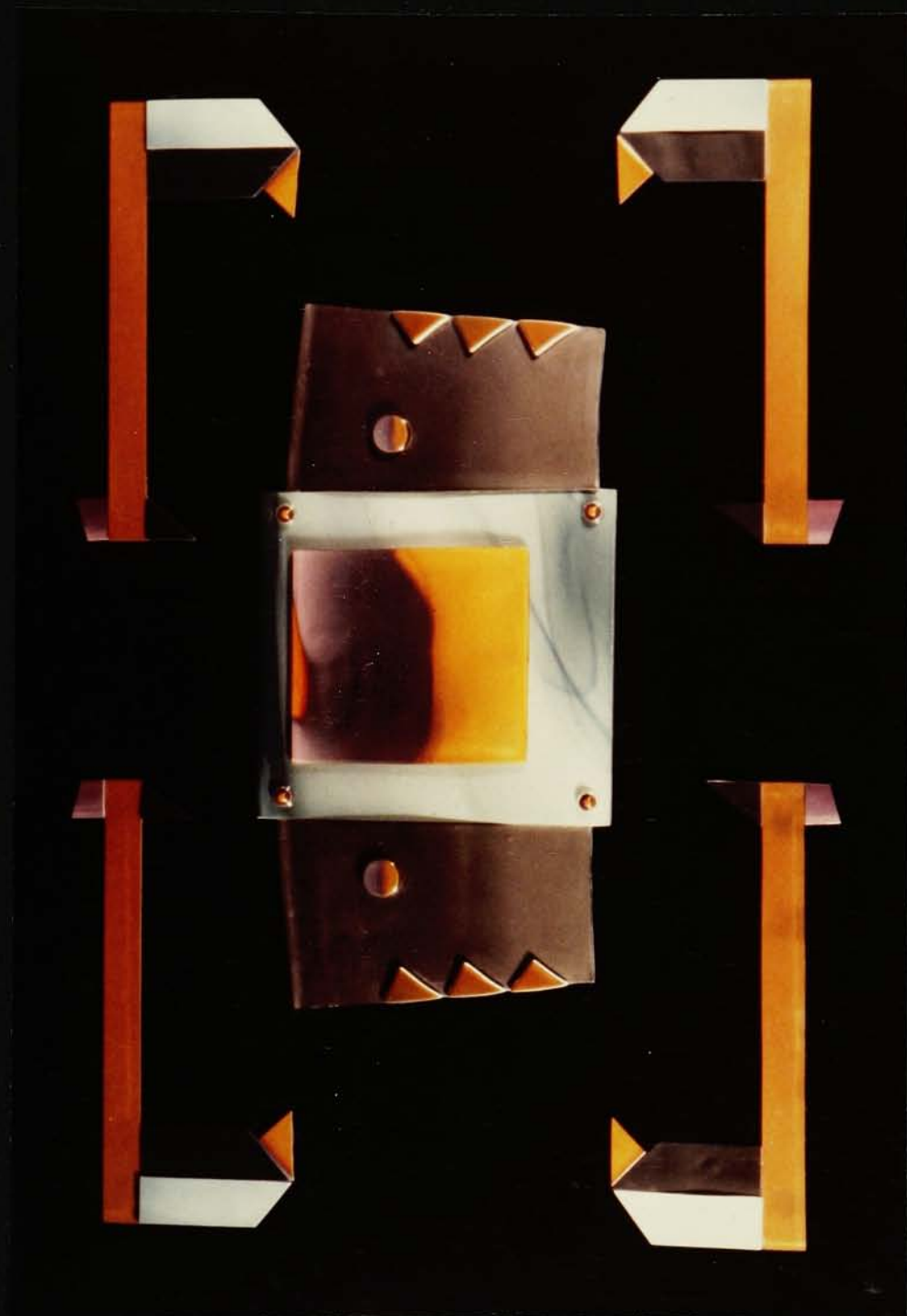


Figure 1



Figure 2



Figure 3



Figure 4





Figure 5



Figure 6



Figure 7



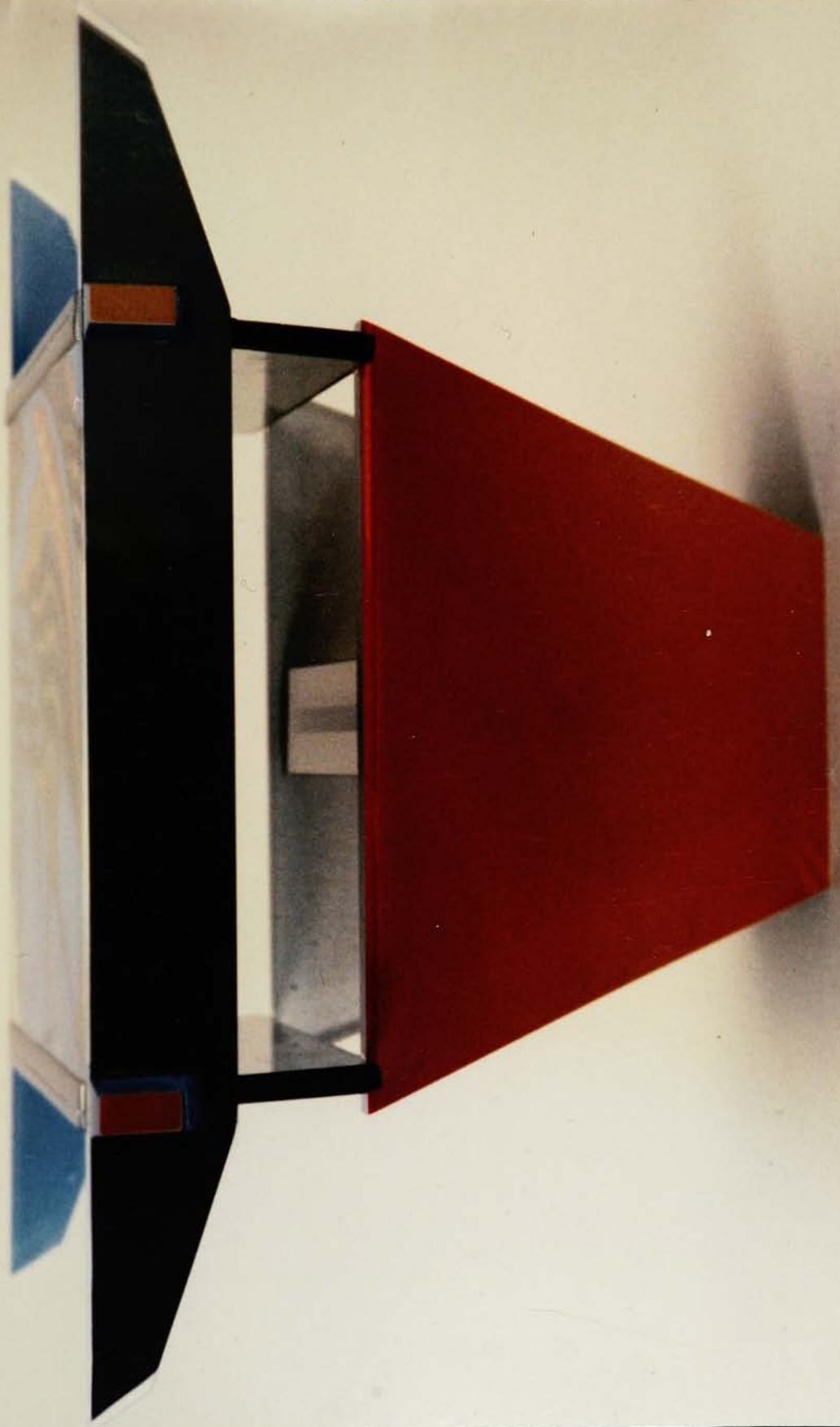


Figure 8

### ENDNOTES

1. Bullseye Fusing Ranch/Bullseye Glass Company, 3722 S.E. 21st Avenue, Portland, Oregon 97214.
2. A Product of: The Carborundum Company, Insulation Division, Niagara Falls, New York 14302.
3. Glass Fusing Book One, Boyce Lundstrom and Daniel Schowerer, Vitrious Publications, Inc., 1983.
4. Weavings of the North American Indian, Frederick J. Dochstader and Thomas E. Crowell, New York, 1981.
5. Henry Halem, Head of the Glass Department, Kent State University, Kent, Ohio.