

SANTA FE WINDOWS by Tom Patti

The reputation of the Massachusetts artist Tom Patti rests primarily on his small-scale fused and laminated glass sculptures, although for a number of years he has executed architectural commissions. In 1987 Glen and Sara Hiner engaged him to create a series of five windows for their home in Santa Fe, New Mexico, an adobe-style structure designed by Michael Fischer. Installed in September 1989, Santa Fe Windows reflects Patti's innovative glass technology.



This commission was exciting from a number of standpoints. It gave me the opportunity to learn about a region of the United States and another culture and then respond visually to that knowledge. The clients allowed me both sufficient time to develop my ideas and the freedom to express them. In its final form, *Santa Fe Windows* is a radical departure from any of my previous work, although I have been interested in architectural openings for more than eight years.

The five windows—designed to fit existing frameworks—increase in height from three to six feet and span a curved wall in the entrance hallway and face a terraced garden. Since this wall has been notched into the side of a mountain, the view is restricted. By contrast, the other windows of the house provide a panorama of the New Mexico desert and mountains.

My windows, each composed of a varying number of

stacked translucent glass panels, complement this landscape view. The glass used, which I fabricate from industrial materials, has a surface quality that heightens light transmission, so with each passage of light or shadow through the hallway, the windows change. And because the wall is curved, a visitor sees only one or two windows at a time; this allowed me to play with viewer anticipation as I built the visual progression.

The woven blankets of the Navajo inspired my design. The top of each window features a large two-paneled section representing a different style of blanket. For me, these geometric motifs became archetypal symbols, an expressive visual vocabulary. I learned that the colors and images of the blankets had changed as increased contact with Anglo-Americans altered the Navajos' traditional way of life. To echo this change, I designed one side of each "blanket" using patterns from the early 1800s, and the opposite side using the more complex arrangements of the late 19th century (these appear predominantly on the interiors).

While the symbols seem symmetrical, light reflects off them asymmetrically. Depending on the quality and position of light, those from the front (interior) or back (exterior) may dominate, or both front and back may merge to create a density of images. These effects were achieved by means of two-sided retrocasting and sophisticated diagonal undercutting techniques—forming processes by which shapes or images are created simultaneously on the surfaces of the glass as well as within it.

I increased the height of each successive window by adding narrow panels below the blanket design. The panels' stratified colors and shapes stand for different aspects of the landscape and suggest evolution. The blue band, which runs through all five windows, represents the skyline, and is approximately at eye level with the horizon line outdoors. The bronze panels in four of the windows echo the earth/desert, and below that, in three windows, monochromatic aqua panels represent the desert when it was the sea. Each panel exhibits gradations of color because the thickness of the glass has been varied by recesses and undercuts.

The images on the lower panels appear curvilinear and organic, with randomly emerging geometric shapes rising up through the layers of landscape. These shapes refer, in fragmentary form, to the floor plan of the house and the artifacts of the neighboring Tesuque tribe. As the eye travels upward, from earth to sky, the forms become more geometric and codified, breaking finally into the blanket patterns.

I developed a system for attaching the windows to the Pella frames to allow for installation and removal. Since I wanted to be able to bring the panels preassembled to the site, I had worked out the expansion coefficients for each material in advance and found a way to deal with trapped moisture. I protected the exterior side against exposure to the weather with an 1/8th-inch GE Lexan® MR 5 sheet, coated front and back. The structural aluminum frame which holds the glass panels was treated with a blue-gray powder-coated epoxy-

polyester paint to complement interior details of the house.

While I wanted to make a personal statement, I also regarded the commission as a collaboration requiring sensitivity to the architecture, locale and client. The entrance hall has become a passageway with stations of light for viewing. Like the surrounding landscape, the windows are always changing—responding to the natural environment. For me, they are a visual dialogue with the land and the history of New Mexico.

—TOM PATTI



OPPOSITE PAGE: Night view of *Santa Fe Windows*, a residential commission by Tom Patti, each composed of stacked glass panels retrocast front and back, 3 to 6 feet high, 2 feet wide. ABOVE: The second of five windows: the design of the aqua panels derives from a Navajo blanket pattern, the blue represents the skyline, and the bronze, the New Mexico desert.