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GOTHAM: THE INSPIRATION OF THE FLYING CARPET DESIGN by Stanley Bulbach

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Building Upon the Historic Traditions of Fiber Art

During the 20th Century cities were stigmatized in the U.S. for their urban problems more than appreciated for their vital contributions to progress and culture.

This devaluation of the "urban" and the idealization of nature were often reflected in the contemporary American Fiber Art movement, which focused on a return to "nature" and "the natural." A review of fiber art's publications from the later half of the century depicts fiber art largely as a field divorced from its urban roots and traditions.

As a contemporary fiber artist living and working in New York City and having studied the ancient Near East in depth, I am sensitive to the tug-of-war between the urban and the rural roots of our venerable art form. In my case, many perceive me to be a back-to-nature fiber artist who works with sheep growers and who gathers dye materials from nature to carry on the magic of these ancient arts. But others see me as a contemporary urban fiber artist who lives and works in the middle of Manhattan creating woven imagery strongly influenced by my city's spirit and its centuries of history.

But the truth is that the urban traditions of the carpet weaving arts are just as deep and vital as the rural, more "natural" ones are. Cities today can be just as rich a source of designs, patterns, rhythms, colors,



Gotham © Stanley Bulbach

shades, and ideas as the countryside can be. And the traditions of this ancient art form combines wonderfully with modern urban influences in the flatwoven carpet arts that I use as my artistic medium of expression.

Sample of Urban Carpet

One example of the timeless urban tradition in the weaving arts is a design found in a number of antique kilim (flatwoven) Anatolian carpets that spread out a Near Eastern city literally before our eyes. The one illustrated here is about 1.8 x 3.5 m in size, is about two centuries old, and is created with lustrous wools and traditional vegetal dyes.



Antique Anatolian kilim

The design elements are not unlike the architectural shapes used in prayer carpets, but the intended function of this particular piece is not clear. It is a weft-faced, flatwoven piece, meaning that it has no knotted pile and that the weft yarns cover the warp yarns. It also means that the designs will tend to be different from those used in knotted carpets, reflecting difference in construction and structure.

The presentation of the piece is delightful and dramatic. It is alive with simple basic colors and shapes; but it has depth and perspective as well. Its rectangular shape is almost a 1 x 2 ratio. That ratio can seem too elongated to the Western eye which is more comfortable with the proportions of the less elongated Golden Rectangle. As functional furniture, the 1 x 2 ratio of many traditional flatwoven carpets probably reflects the proportions of the humans who would actually be using the carpets -- an early example of "form equals function." The Western eye should permit itself to see this not as too long, but as exuberant, dynamically flaunting itself in its longer dimension. Indeed, viewed from the side, the 1 x 2 ratio of this carpet appears to emphasize the dramatic wide-angle panorama of an old, traditional Near Easter urban skyline. It creates a strong feeling of overlooking a *medina* from a balcony.

Appearance — Pattern and Abstraction

Second, the design elements are a typical reflection of the inherent mathematical, rhythmic structure of the flatwoven technique as a source rich in the ability to create abstract patterns and effects.

The structure of this type of carpet weaving consists of two different sets of yarns. The first, the warp yarns are stretched under tension and spaced parallel to one another to constitute the length of the carpet. They are the internal "bones" of the piece holding everything in place and are not intended to be very visible, except perhaps at the end of the weaving.

The second type of yarns are the wefts. (Sometimes it helps to remember "weft" as related to "weaved" since the weft yarns are the woven yarns.) The weft yarns travel at right angles to the warp. In general the weft yarns weave over and under each successive parallel warp yarn, from the first warp on one side to the last warp on the other side. Then the weft yarn reverses direction and returns, this time weaving under and over the same warps. As soon as two rows of weft are completely woven, one sees a thin line of weaving stretch across the width of the growing carpet.

If the weaver weaves more wefts with the same color yarn, then that thin line grows into a thicker stripe. But if the weaver terminates the first colored yarn and begins using another color, then the first line or stripe is followed by a line of the new color with no additional effort. Continue the process and that new line will grow into a bar of the second color.

So the process of simply weaving back and forth can easily produce a solid bar of color or an infinite variation of parallel lines and stripes of any thicknesses. This breathtaking design flexibility is inherent in the structure of flatweave, just waiting for the weaver and his or her materials to materialize and exploit it. This inherent quality is very clearly illustrated in the antique kilim here, in the six areas where its design consists of simple clusters of parallel lines and stripes running across the width of the piece.

Such lines and stripes are relatively easy to make, reflecting the inherent structure of the physical construction of the flatwoven piece or its "grain."

The corollary here is that the minute the weaver wishes to make design elements that go only partially across the width of the carpet or to make design elements that are not exactly parallel to the weft yarns, then the weaving grows



Vertical warps and horizonal wefts

exponentially more difficult for the weaver. Concerns for the structural integrity of the weaving also begin to enter the picture. Therefore, there are significant mechanical influences on the weaver to encourage design elements conforming with the "grain" of the weaving, just like there are similar influences on woodcarvers to create shapes that conform with the grain of the wood they are working.

An example of this can be seen in the antique kilim in between the clusters of lines and stripes in the panels with the architectural elements. To weave those panels the weaver of this particular piece needed to work with more than a single weft yarn per row. In fact for much of those panels, the weaver had to manipulate at least 8 different color yarns for each row of weft being woven across the width of the piece.

The most extreme example of the challenges of working against the "grain" is design elements that are at right angles to the wefts and perpendicular to the natural "grain" of the woven structure. Those often create gaps or slits. Such slits are frequently found in kilims and small ones do appear in this antique kilim at the tops of the spires and along the flat surfaces of the rooftops.

This too differentiates the designs of flat weaving from knotted carpets where the design is made up of tiny points of color, one point from each knot. In knotted carpets, the color of the knots have no relation to the carpet's structure so that the design elements can be developed equally at any angle and in any direction unlike in flatweaving.

Some flatweaving traditions, such as classic tapestry, modern Navaho, and Coptic weaving strive not to let the "grain" play any major role in influencing the development of the design. But in most other weaving traditions, the "grain" typically has significant influence over the design process, generating designs that are less realistic and more abstract. This abstract tendency of traditional flatwoven carpets contributes enormously to their visual vitality. And it is this tendency that is one of the aesthetic elements that is so attractive to the modern cosmopolitan eye.

Thus, the design elements in flatweaving have a relationship to the inherent grain of the woven structure and reading these simple attributes of "grain" can make the process of looking at flatweaving a very rewarding experience indeed.

Another noteworthy quality illustrated by this antique flatwoven carpet is the way that it repeats design elements so easily. Since design elements reflect a specific number of warps and weft rows, the design elements in flat weaving can be easily repeated by copying those counts. This is illustrated in the kilim where the group of four buildings and the sky are rhythmically reproduced again and again. Except for the choice of the colors used, each group of buildings is identical. Although this kilim does not also illustrate it clearly, the design elements can be effortlessly flipped simply by reversing the mathematical counts.

Therefore, not only is there a horizontal "grain" to consider, there is also the inherent ability to repeat complex designs as well as related variations as the weaving proceeds. And one of the most aesthetically delightful aspects of this kind of work is the tension generated between exact repetition and variation in the development of the woven pattern. It can be musical.

Another delicious aspect of this antique flatwoven piece is the way in which the weaver flaunts the qualities of the materials used. The high luster of the special wool energizes the composition and the creation of broad simple fields of color brings the abrash — the prized color variations traveling with the "grain" in flatweaving — to center stage. Suddenly those colors have texture and engaging complex character.

This antique kilim also celebrates other qualities to delight the eye, such as the contest between the willfulness of the materials used and the cunning of the human hand attempting to orchestrate the materials magically. This contest can be witnessed where the more exacting the carpet maker tries to be, the more apparent the interesting variations of the materials become.

The Influence on Gotham

While it is common for Near Eastern carpets, especially prayer carpets, to include the design of an architectural niche, the specific design element itself can appear in many different design settings. In this piece, the element appears in three different manifestations, one atop the other along the "grain" of the weft, so as to appear to be buildings as far as the horizon.

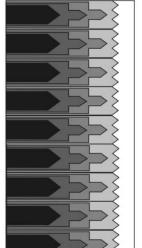
This antique kilim shows how weavers can express additional dimensions within this flat two-dimensional art form and even imbue a sense of movement. It is this creation of additional dimensions, of a sense of a three-dimensional urban place, and the sense of movement within that place, that all greatly influenced my contemporary piece, *Gotham*.

Gotham is a "flying carpet" like those in Arabic legends. Like much of the traditional ethnic work, *Gotham* too is somewhat elongated. That generates a sense of imbalance to the Western eye, which enhances the piece's sense of movement.

Like the antique kilim, *Gotham* is created entirely of handspun wools that were selected for their high luster and reflectivity — Lincoln and Wensleydale. But in Gotham, the majority of the yarns used are undyed, coming from sheep whose colors range from jet black to a creamy white. I am increasingly fond of working largely in the "grey scale" that those colored wools provide. But even the darkest blacks have bluish and reddish chromatic highlights, which are delightful to the eye. I feel that this enhances a sense of urban formality to the design work. The other weft wools I use are colored with the distinctive pallette of ancient traditional dyes.

And like the antique kilim, *Gotham* too has design elements that are developed along the grain of the weft and then repeated and mathematically varied.

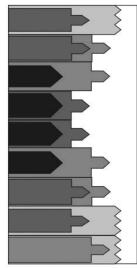
Gotham evolved from this traditional kilim design in steps. First, the traditional design was simplified. The spires of the buildings and the clusters of parallel stripes were removed. Where this particular antique kilim has five groups of buildings with sky, I increased that to nine.



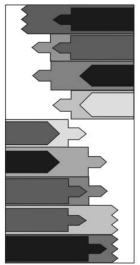
What results is still very similar to the antique kilim. It remains clear as to what the design depicts, and it retains the depth of view, its perspective, and its sense of place. While it no longer has the feel of looking out of balcony windows, it is still a city evenly spread out in front of the viewer in a static way that generates a sense of stability and peacefulness.

But *Gotham* was not intended to impart those particular sensations. As a flying carpet, *Gotham* was intended to impart a sense of change, movement, tension, even disorientation. Therefore half of the buildings were eliminated from every one of the nine panels. Instead of removing elements in a uniform manner to preserve their identical natures, different elements were removed in different panels. This

greatly lessened the formal stability present in the antique kilim's urban panorama. It now began to create a sense of variability and change. It also created a skyline similar to Manhattan's, where tall buildings are clustered in midtown and downtown, but not in between where the granite bedrock disappears far below the surface.



Thus far the design retained the kilim's sense of only one correct way of standing before it. Viewing from any other approach remains clearly incorrect. But *Gotham* was not intended to create a sense of a solidly grounded urban panorama with only one correct orientation. It was intended to be seen from various angles as most carpet are actually viewed.



The inherent structure of flatweaving permits designs to be flipped effortlessly. And in doing that to the traditional design elements here and in varying some of their colors too, the change suddenly disrupts the previous sense of a stabile panorama. Now no matter how the viewer approaches the carpet, some part of the city will always look askew. All viewing angles are now equally wrong and equally correct, creating a strong sense of disorientation, imbalance, movement and confusion.

At the same time, no matter where the viewer stands, he or she will have a sense of being between the two sets of buildings. It is no longer simply a panorama. Now the viewer is *inside* a place. And to me, this imparts some of the sense with which New Yorkers live in Manhattan particularly when craning our necks to look up at the buildings towering over us at all angles.



Lexington Avenue and East 42nd Street, NYC

Manhattanites do not have a solidly established panorama of our own city. What we see usually circles around us and above us in an often confusing, vertiginous manner.

To amplify that sense of motion and height even further and to make the building designs more contemporary, the outline distilled from the traditional kilim design was transformed somewhat more to give them three-dimensional depth and to modernize them. This too was an easy change due to the "grain" of the weft. The originally flat, one sided buildings were each given a medial dividing line primarily by changing the weft colors being woven at that juncture. The modernization was achieved by altering the older buildings' pointed tops into modern flat square rooftops.

Other flatwoven features mentioned earlier were also applied as can be seen in the final piece. For example the sides of the buildings were all given various complex patterns of horizontal stripes parallel to the "grain" to lend a sense of various angles and architectural textures. The parallel lines inherent in the "grain" also draw the eye in a direction that enhances the sense of the buildings' height. And the grain also permitted a richness of patterns of lines and stripes to increase the sense of depth and perspective.

The rich variations of those patterns permitted by the "grain" of the weft also enhanced the effect of the play of light. On the one hand, the city in the antique kilim is presented in simple flat shapes with broad fields of primary type colors lending a sense of peaceable well-being and stability. On the other hand, during its actual weaving process the shading and coloration of *Gotham* carpet underwent a slight change from its initial idea. Whereas the glass and steel buildings were originally intended to play with the golden rays of the sun on the horizon, the final play of light and color actually woven seems to reflect something more like a conflagration.



In the ancient legends, flying carpets magically transported characters in their adventures from one life experience to another stage of life. This contemporary flying carpet offers to carry one on a ride that twists and turns over the rivers surrounding New York and through the glass and steel canyons that define life in this modern *medina*. This carpet also strives to represent passage from one stage of life to another, perhaps even a connection to some place beyond this life. Both the urban and the rural sensitivities of weaver's ancient traditions can still speak to us today.

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