VISUAL TRANSFORMATIONS OF SQUARE ROOT RECTANGLES

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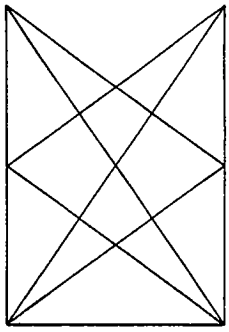
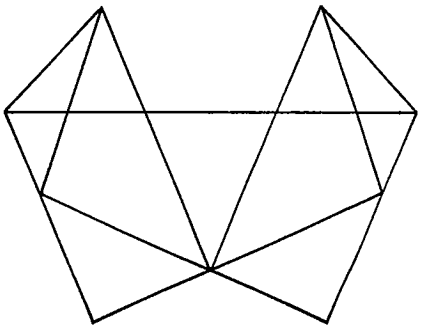
The images in these paintings and drawings are based upon explorations of square root rectangles for their artistic and mathematical properties. They are crossing points for the visual arts, geometry, and philosophy.

Using the principle of dynamic symmetry, the harmonic decompositions for the rectangles $\sqrt{2}$, $\sqrt{3}$, and $\sqrt{5}$ are established. The first group of artworks represents the movement from the natural design to a corresponding man-made shape which also exhibits symmetrical properties. The following line drawings are examples of the models for those painted or drawn shapes.

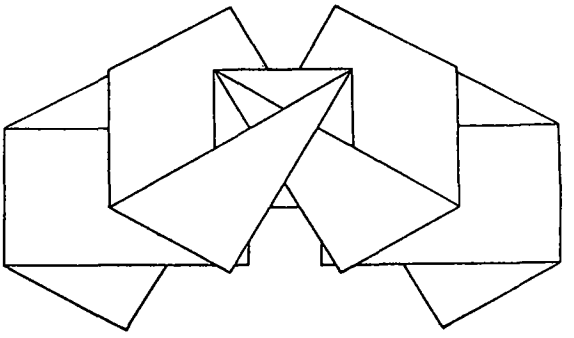


$\sqrt{2}$ Rectangle
Folded Shape

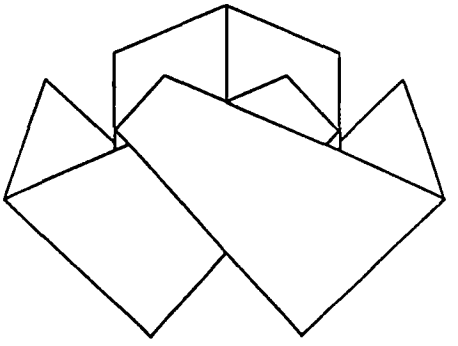


$\sqrt{5}$ Rectangle
Folded Shape

The second group of artworks represents the transformation of those shapes to an iconographic level. They continue to exhibit symmetrical properties. The following line drawings are examples of the models for those painted icons.



↓3 Rectangle Icon



↓5 Rectangle Icon

Technical notes: Acrylic paint is used for the works on canvas; their largest dimension is 34"x 48" (85x120cm). Acrylic paint, India ink, and graphite are used for the works on paper; their largest dimension is 22"x30" (55x75cm).