1106-H1-1979 Elizabeth Whiteley* (contact@elizabethwhiteley.com). Creative Uses of Basic Geometry to Construct Elegant Pattern Designs.

Pattern design relies on symmetry and repetition. If the symmetry and repetition is grasped too easily by the viewer, a pattern can become uninteresting. I show how to use a few basic geometric operations to create half drop surface design patterns which appear both fresh and complex to the viewer. This talk presents ways to transform 2-D design elements within generators for p1 translations. Examples will demonstrate this new approach to constructing elegant patterns from lattice plans based on square, parallelogram, rhombus, and quadrilateral shapes. (Received September 15, 2014)