

The Expansion of the Square

Notan is a Japanese word which means "dark-light." The word, however, means more than that. The principle of Notan as it relates to design is defined as the interaction between positive (light) and negative (dark) space.

Western culture tends to emphasize the positive elements of design - also known as the *figure*, with less emphasis on *ground*, or negative space. Eastern culture, the originator of Notan, seeks a more balanced view of the world and of design as it relates to our human experience of the world.

The classic yin/yang symbol is a reflection of this desire for balance.

Notan, the interaction of positive and negative, or field and ground, is the basis of all good design and exists all around us. The *Expansion of the Square* exercise is one Notan exercise designed to study the interaction of positive and negative space, but these very cool designs can also be turned into quilt blocks, images to be printed, or small embroideries.

Both symmetrical (the same all around) and asymmetrical (different on each side) designs can be achieved through the use of the expanded square concept. In order for the exercise to be completed successfully, there must be a feeling of balance in the design created. A symmetrical design can still be heavy, ponderous, or boring. If the design is working, it will be interesting and will feel balanced on all four sides. Test this idea by turning your paper as you study a completed design. Does it measure up when rotated and studied? Is it interesting from all directions?

An asymmetrical design will, by its nature, consist of shapes which are not alike. Even though this is true, the design should also be strong enough to stand up to scrutiny from all angles. If the expanded square has succeeded, it should have an interesting shape in what remains of the original square, and also feel well-balanced in terms of the expanded parts and how they interact with one another.

To create an expanded square you'll need the following supplies:

Black paper - the best paper is an art paper, not construction paper which tears easily. Canson and MiTientes are both good art papers and can be found at many art and craft type stores or ordered from Dick Blick.

Exacto knife with a #11 blade, and/or small, sharp scissors.

Ruler

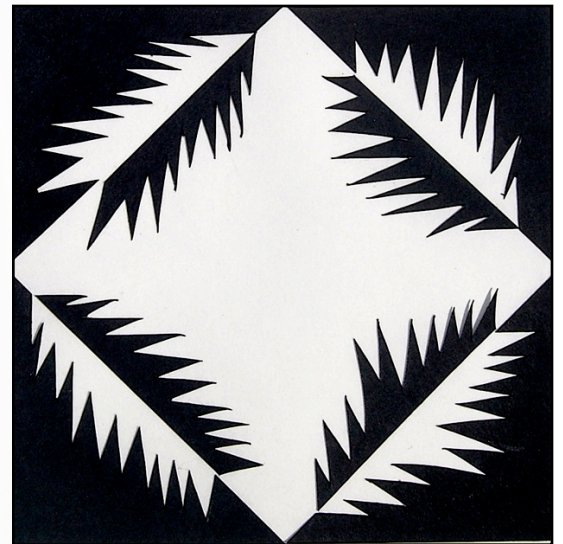
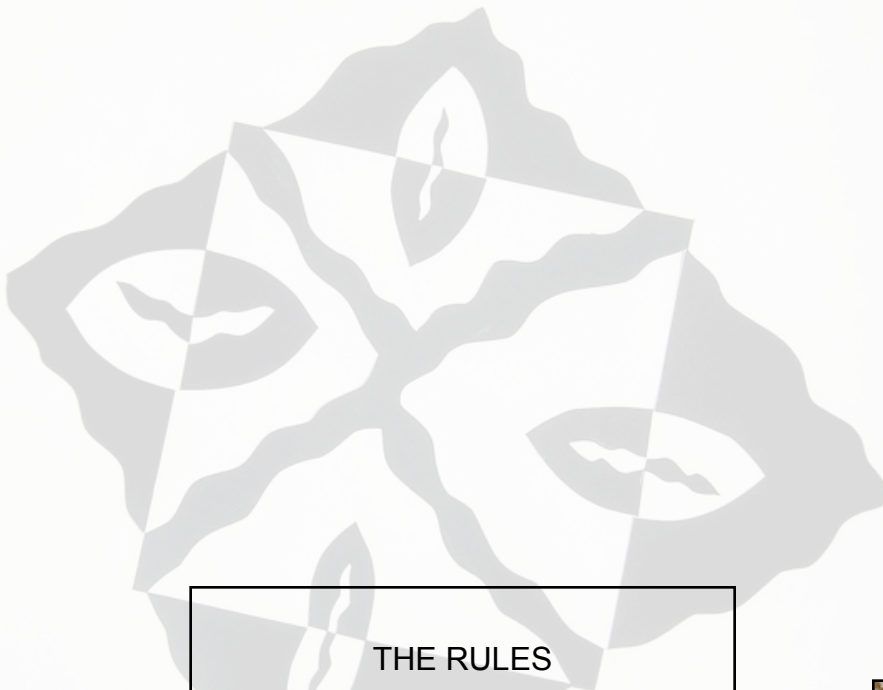
Glue stick

Pad of white paper at least 11" x 14". Larger paper gives you more room for gluing down the pieces.

Old washcloth to clean your fingers as you work

How to Make an Expanded Square

1. Cut out a series of 5" squares from the black paper. Smaller squares are hard to use; bigger ones take up a lot of room on the white paper. These squares should be as perfect as possible, as uneven sides or angles will skew the exercise.
2. Begin cutting shapes from the sides of the square. Every time you cut out a shape, it must be glued down as the mirror image from where it was cut. The basic idea is to cut out the piece, flip it out so that it mirrors the cut out space, and then glue it down. See the examples to get the hang of this.



THE RULES

1. Don't cut off the corners. Keep the integrity of the square shape.
2. No pieces can be discarded. Every piece you cut away from the square needs to be glued down in its opposing position on the paper.
3. Cutting through the center makes it harder. Then you have to figure out which side to put the cut out piece on. In the beginning, avoid cutting through the center.





Once you know how to follow the rules, then you can obviously break them! This expanded square was created after several months of *playing inside the rules*! It is one of my all time favorites and has been used as a double image, and also as a silkscreen for printing on fabric.



These notes were derived from exercises in Notan: The Dark-Light Principle of Design, (Dorr Bothwell and Marlys Mayfield: Dover Publications. 1968), a terrific book if you are interested in studying the balance of positive and negative space – which is important for anyone interested in design.