

# Depth Perception

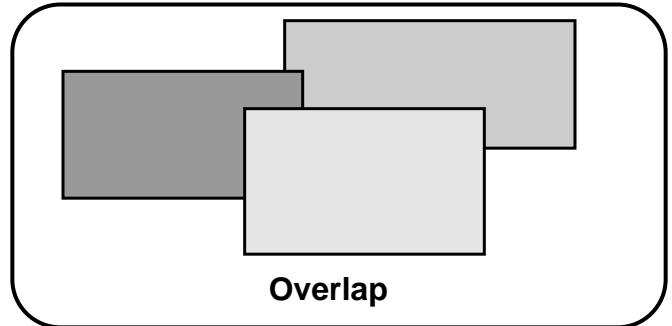
Many techniques for adding perceived depth to balloon graphics may be learned by observing the techniques used in other graphics media.

## Look Around !

Look a little closer at cereal boxes, bill boards, TV ads, magazine covers, and even comic books. They are full of graphic techniques you can use to get relief from standard, flat, balloon graphics.

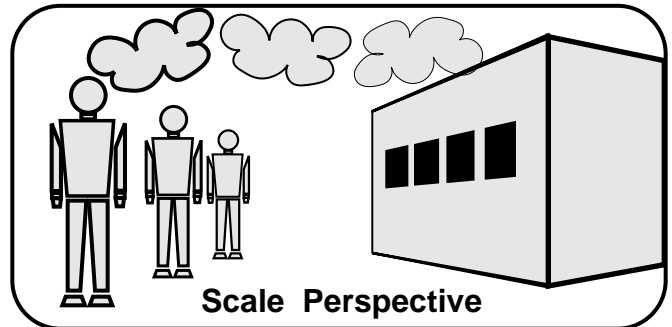
### **Overlap:**

- Perception of depth is increased when one object partially blocks the view of another object.



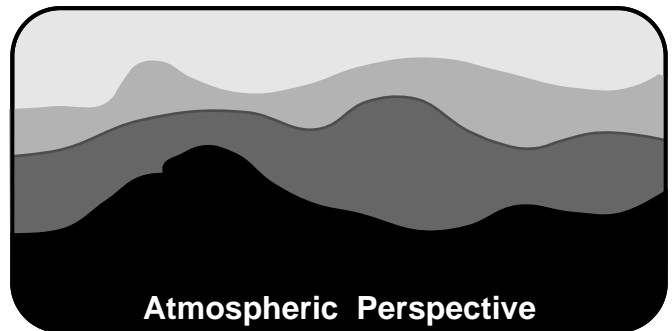
### **Scale Perspective:**

- Perception of depth is increased when similar objects are presented with one smaller than the other.
- Perception of depth is increased when portions of a single object are shown as smaller even though they are known to be the same size.
- Perception of depth may be increased with changes in the weight (thickness) of the lines used to draw objects.



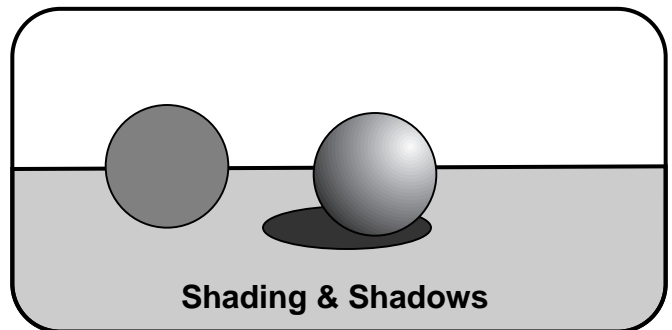
### **Atmospheric Perspective:**

- Perception of depth is increased when similar objects are presented with varying levels of color intensity.



### **Shading and Shadows:**

- Perception of depth is increased when objects are highlighted and shaded.
- Perception of depth is increased when shadows from one object fall on another.

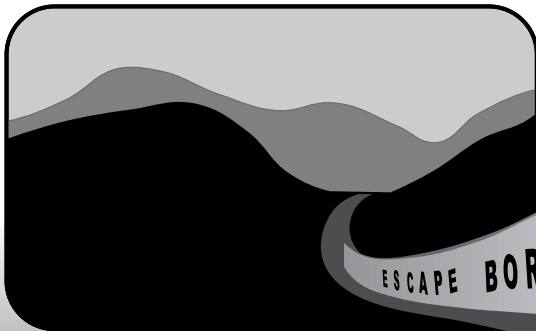


### **Escape Borders:**

- Perception of depth is increased when objects in a graphic extend beyond normal borders.

### **Relief Graphics:**

- "Relief" refers to graphics with some real depth (thickness) even though it may not be in normal proportion to the length and width. This allows lighting to create actual shading and shadows as well as to present a limited amount of overlap and perspective.



# Depth In Balloons

Aperture frameworks such as RMS (Rouse Matrix Systems™) and SDS (Skistimas Design System™) work especially well with the graphic techniques shown here, but other balloon graphic formats may use the techniques as well.



## Perspective And Shading

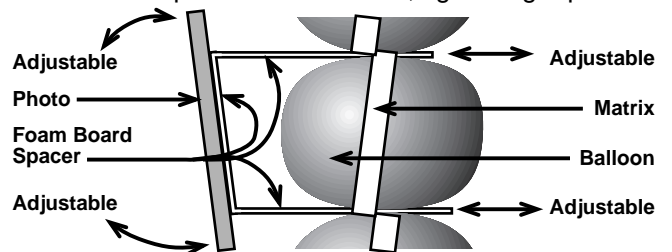
The "Athens" balloon tapestry to the left was a flat, single layer balloon graphic in an RMS framework. It depended on atmospheric and scale perspective as well as shading to produce a sense of depth. The original was in color and 15' tall. Both the color and the large scale of the mural added to the sense that the ship might sail out of the wall and over the heads of those who stood in front of its 3000 plus balloons.

## Overlap

Foam board, corrugated plastic, poster board, and other light weight panels may be used for overlays on balloon backgrounds. The panels may be plain cutouts or decorated with paint, photographs, collages, or even balloons. These panels may be glued directly to the background, attached with hook and loop fastners, tied to the neck of background balloons, or attached to the framework with other types of spacers. Depending on the relative size and spacing between the overlay and the balloon background, the added sense of depth can be slight or dramatic.

The "Welcome" sign to the left uses corrugated board Rouse Designer Panels to hold the "Welcome" text in balloons. The panels were then attached to the balloon background with spray adhesive.

Another technique for attaching overlays to balloon graphics is illustrated below. Foam board strips are bent into a "U" shape and inserted between balloon and the aperture framework to provide adjustable support for mounted photos or other stiff, light weight panels.

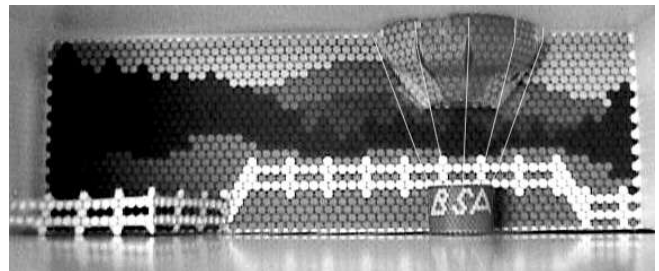


## Low Relief

The First Steps logo mural to the left incorporates added depth by using douplets of balloons inserted perpendicular to the framework to make the stack of children's blocks. Additional framework holds these protruding blocks in place. (See additional pages for notes and illustrations on this technique.)

## Escape Borders, High Relief Plus,

The paper model to the right is for a floor to ceiling balloon graphic utilizing several depth enhancing techniques. The fence not only gives drawn perspective but escapes the borders and comes out into the room. Half the hot air balloon extends into the room and all the way to the ceiling. The forest fades into the distance with atmospheric perspective.



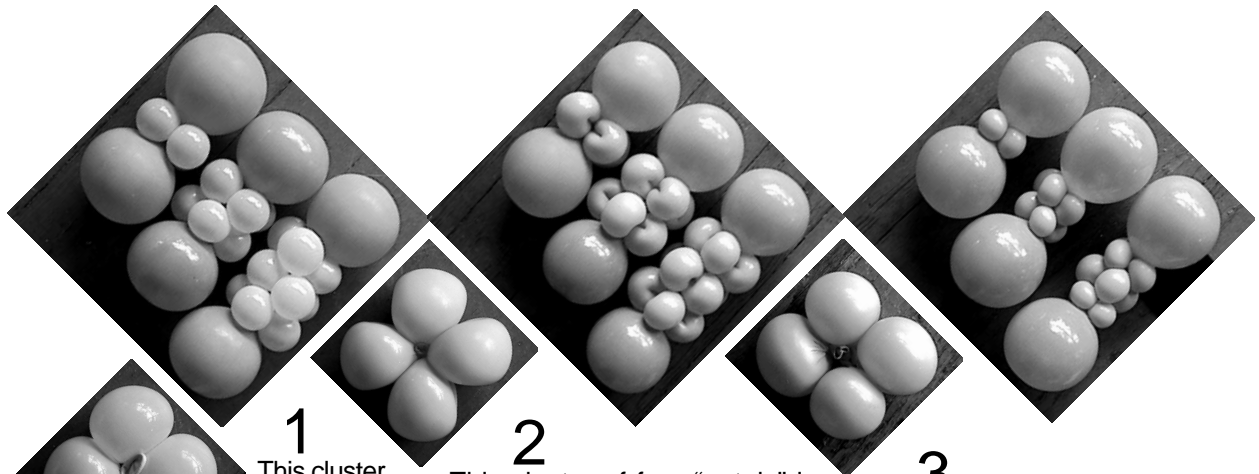
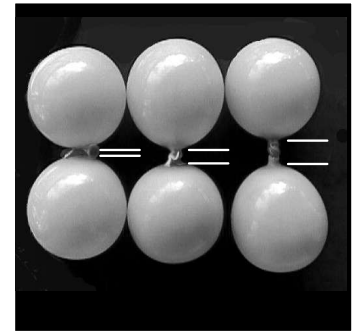
# Relief - Doublet Deep

Doublets turned perpendicular to RMS and SDS frameworks are effective for adding relief to balloon graphics. Here are techniques for adjusting the depth created with the doublets.

Doublets may be inserted into aperture frameworks with one balloon in the framework in the background and one balloon protruding in front to create added dimension (relief) to the graphic. This page illustrates five ways to separate and fix the position of one balloon in relation to the other.

Balloons are tied closely together or farther apart (as shown on the right) depending on the quantity or size of spacer planned between balloons.

Three types of spacers are made with balloons. One is made with a paper tube (core of a roll of bathroom tissue) and one with a tube of foam insulation (available at hardware stores). It is also possible to use "Geo" balloons

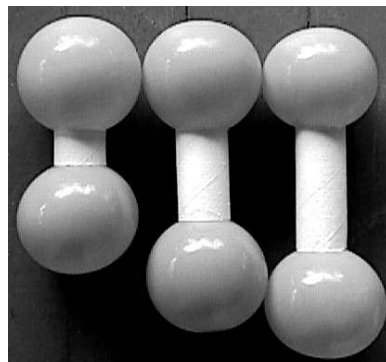


**1** This cluster of four bubbles is made from two, underinflated balloons. Each balloon is pinched and twisted in the middle to make two bubbles each. The neck and lips of the balloon are caught in the twist.

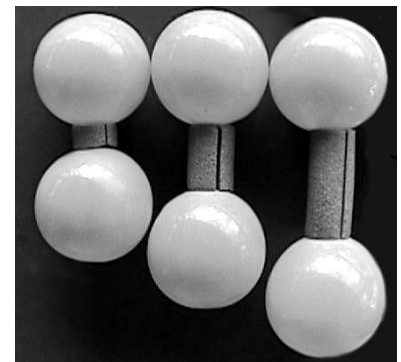
**2** This cluster of four "petals" is made from one #260 balloon. The underinflated balloon is folded and twisted to form the petals. (See a separate page of instructions for details.)

**3** This cluster of four bubbles is made from one #260 balloon. The underinflated balloon is twisted and folded to form the bubbles. (See a separate page of instructions for details.)

**4** Balloon necks may be tied together through the center of the paper tubes.

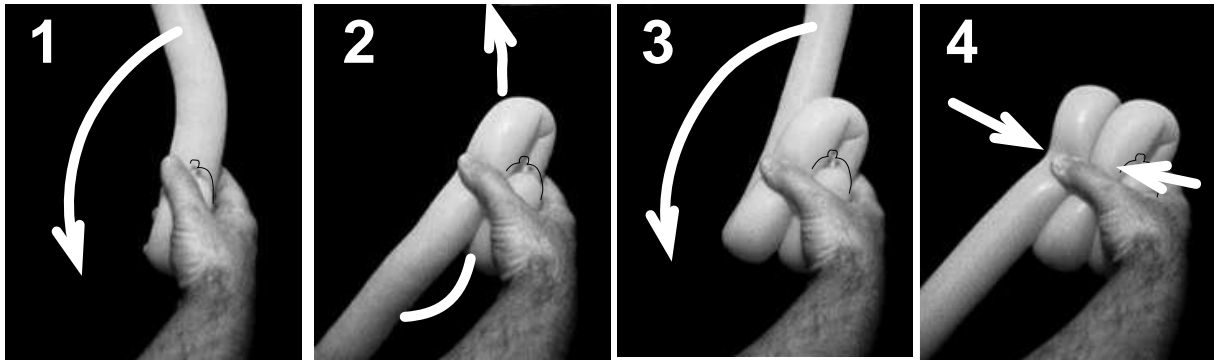


**5** Foam insulation tubes may be easily wrapped around balloon necks.

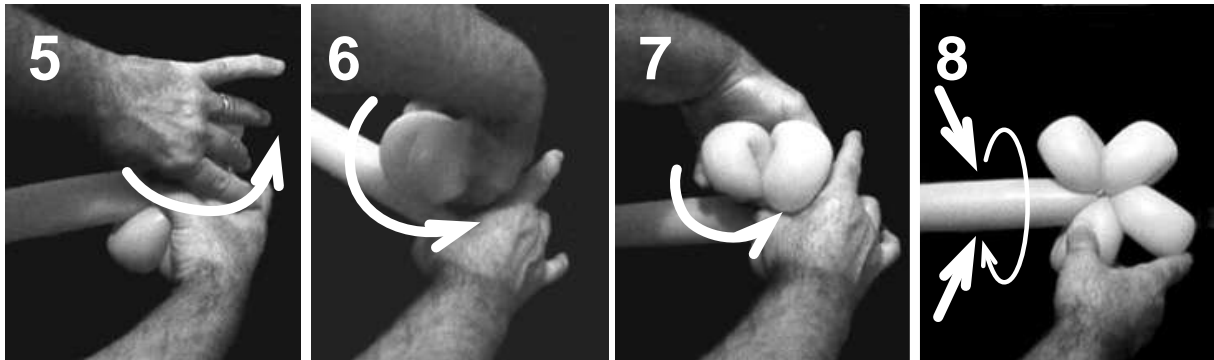


# Doublet Balloon Spacers

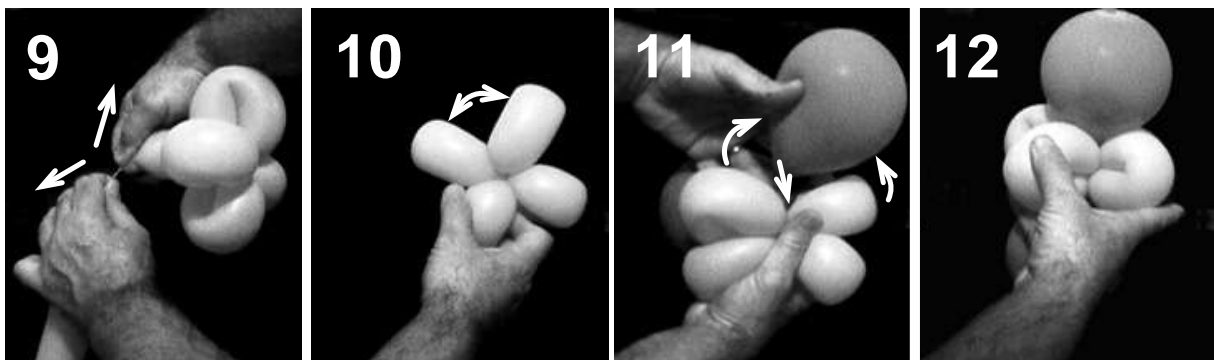
Doublets turned perpendicular to RMS and SDS frameworks are effective for adding relief to balloon graphics. Here are techniques for adjusting the depth created with the doublets.



Start with a # 260 balloon inflated about 24" in length. Fold about 2" at the knotted end and hold as in #1. Fold the long end over and back as the arrow in #1. It should be a maximum of 4" from the outside of one fold to the outside of the other. Fold the long end under and forward as the arrow in #2. Fold the long end over and back as the arrow in #3. Pinch the bundle in the middle (at arrows in #4) with the thumb and first finger of the right hand.



Grasp the bundle in the middle with the thumb and first finger of the left hand and twist as in #5, #6, and #7. Be sure to grasp the knot with your first finger as you twist. Leave the petals flat as shown in #8. Pinch and twist the long stem of the balloon a few inches from the center of the petals as show with the arrows in #8.



Cut the balloon at the twist or, with practice, you may learn to hold the balloon firmly at the twist and jerk the balloon in two pieces by pulling your hands away from each other as show by the arrows in #9. You may save or discard the long stem of the balloon. Wrap the short end of the balloon around the center of the petals several times to secure it. Pull two of the petals apart as indicated by the arrows in #10. Wrap the petals around the necks of two balloons (see #11) that have been tied into a doublet. The four petals will serve as a spacer to hold the two round balloons in place relative to each other. Add additional spacers for more space between balloons.

Shorten the lenth of the folds to create smaller spacers with bubbles rather than petals.