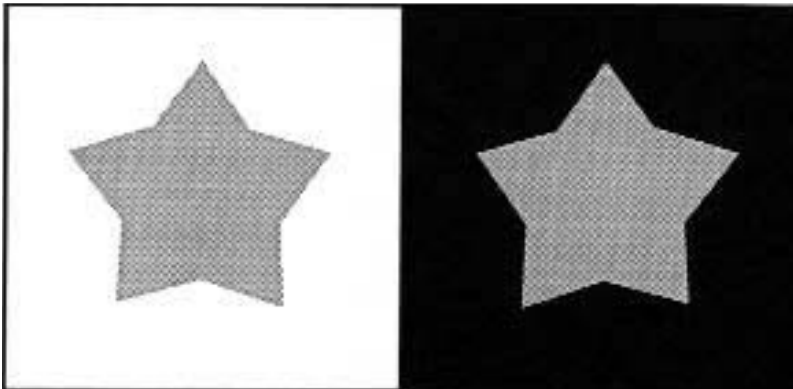


**Figure 7.1** The red, yellow and blue colour circle

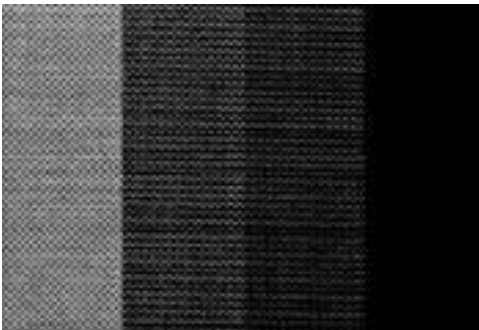
**Figure 7.2** Simultaneous contrast: Each grey star is identical in brightness

**Figure 7.3** Simultaneous contrast: note the 'fluted' effect where the grey tones touch each other

7.1



7.2



7.3

colour panels is important for contrasting effects: large panels of colour are most effective for a startling visual contrast, particularly when the contrast is both in value and hue. Strong contrasting colours in minute areas such as spots or lines become diffused by the eye and tend to conceal each other resulting in an overall dullness. Opposite colours, therefore, are most effective in contrast when used in large panels of colour. Adjacent or analogous colours on the other hand are best displayed in different minute areas. The effective use of analogous colours can be found in many traditional stone or brick walls. Each stone though from the same quarry is a slightly different hue or shade of hue. They all blend naturally together. The same effect can be found in some deeply weathered brick walls where all the bricks vary in colour but are all from analogous parts of the spectrum.

The foundation of colour harmony dates from the early nineteenth century and the work of Chevreul (1967). This theory established certain rules and principles. The first is that individual colours are beautiful in themselves; second, so are tones of the same hue; third, different hues, analogous or closely related on the colour circle, are in a harmonic relationship when they are seen in uniform or closely related tones; finally, complementary hues seen in strongly contrasting tones are also harmonious. Assorted colours when viewed through the medium of a feebly coloured glass take on a harmonic relationship.

Chevreul distinguished six distinct harmonies of colour forming two main groups: the harmonies of analogy and the harmonies of contrast. The harmonies of analogy are: (i) 'the harmony of scale' in which closely related values of a single hue are composed together; (ii) 'the harmony of hues' in which analogous colours of similar value are the basis of the composition; and (iii) 'the harmony of the dominant coloured light' in which an assortment of different hues and values are composed in a scheme as if pervaded or submerged in a dominant tinted light. The harmonies of contrast according to

Chevreul are: (iv) 'the harmony of contrast of scale' in which strongly different values of a single hue are combined; (v) 'the harmony of contrast of hues' in which related or analogous colours are exhibited in strongly different values and also in strongly different degrees of purity or chroma; and (vi) 'the harmony of contrast of colours' in which colours on opposite sides of the colour circle are combined as complements, split-complements and triad combinations.

Harmonic colour analysis for the purposes of the urban designer, for convenience, will be based upon those in Birren (1969), *Principles of Colour*. Particular attention will be paid to the harmony of modified colours. The classification that follows is a simplified version of Chevreul's work. The classification of colour harmonies to be discussed in detail will be: the harmony of adjacent colours; the harmony of opposite colours; the harmony of split-complements; the harmony of triads; the harmony of the dominant tint; and the harmony of modified colours.

### **THE HARMONY OF ADJACENTS**

Colours tend to look good to the average viewer when they are analogous or closely related. They appear best when clearly chosen from the warm or cool side of the spectrum. Analogous colours then take on an emotional quality and contribute to mood. Analogous colours are those that sit next to each other on the colour circle. These are the colour effects that occur in nature and are found in some traditional settlements. Examples include the red to orange range of the sunset or the autumn colours varying from red to orange to yellow. Flowers exhibit the same harmonic range, the yellow nasturtium becomes deep orange at its centre and the red rose will have purple red shadows and orange red highlights. The traditional brick village in southern England has a burnt orange roof, walls with deep red stretchers and orange-red

7.4

**Figure 7.4** After-image: Stare at the centre of the black star for several seconds then look steadily at the black dot

**Figure 7.5** Colour triangle

7.5

headers. In many Victorian areas subtly polychromatic brick and stone work combined with clay tiles produces a similarly harmonious effect.

Analogous colour effects are usually thought best when the key or central hue is a primary or secondary colour: red, blue, yellow, orange, green or violet. That is colour ranges such as red with red-violet and red-orange; orange with red-orange and yellow-orange. In these and similar instances the simple primary or secondary colour is supported and enhanced by its near neighbours. More problematic are the colour schemes where the tertiary colour is supported by its neighbours, for