

hues being capable of creating either pleasant or unpleasant colour combinations.

These observations suggest that when selecting colours for an interior the first aspect to consider is the value of colours, then the chroma and finally the hue. However, once the pattern of light, shade and emphasis has been established by the choice of the value and chroma for different surfaces, the range of hues that is available may be limited. For example, if a given surface is to have both strong chroma and high value, then it must inevitably have a yellowish hue. Conversely, when a surface is required to have low value and strong chroma, a colour from the red to blue part of the hue circle must be used. Once the level of chroma is reduced from a high level, the whole range of colours is available.

The light reflected from a surface of strong chroma will be coloured, and may influence the colour of other surfaces. The most common situation where this is seen is the case of a floor covering of strong chroma lit by a lighting installation that does not light the ceiling directly. In this situation the ceiling will mainly be lit by light reflected from the floor, which will tend to colour the ceiling.

1.7.3 Object colours

The colours of objects within an interior can have a marked effect on the appearance of the space. In choosing a combination of colours for both the surfaces and equipment within a space, it is preferable if the elements can be considered as a whole so that a degree of visual co-ordination can be achieved. The actual choice of a combination of colours to produce a co-ordinated colour scheme is probably one of the most elusive design tasks, and at present there is no single widely accepted design procedure.

There are limitations to the choice of colours of some objects within the space. These arise from the use of colour for the coding of services and to indicate potential hazards. The use of colour for the coding of services is governed by *BS 1710* and should be undertaken sparingly, with emphasis given to identification of outlets, junctions and valves. The use of colour to identify potential hazards is governed by *BS 5378*. Care should be taken to avoid confusion between *BS 5378* on hazard warning colours, *BS 1710* on service colours, and other colours in the interior. The lighting should not unduly distort the colours reserved for services or hazard indication in such a way as to be confusing.

1.8 Light source radiation

This *Code* is primarily concerned with light source radiation in that small part of the electromagnetic spectrum, from 400 nm to 780 nm, which stimulates the sense of sight and colour. However, all light sources radiate energy at shorter wavelengths in the ultra-violet as well as at longer wavelengths in the infrared parts of the spectrum. This radiation can promote physiological effects that are either a benefit or a hazard. The basic function of luminaires is to control the visible radiation (light), but they can also concentrate, diffuse or attenuate the non-visible radiation from lamps. The lighting designer needs to be aware of the effects of all the radiation that is being emitted.