changes in the external illumination, but this will not be the case with sunlight penetration. Here control will be needed, particularly in working areas, because of the adaptation problems that can occur.

Within many working interiors there will be areas intended for circulation or relaxation. It may be desirable here to provide a wider range of luminance values for variety and visual stimulation. Some specular reflections and a limited amount of sparkle would be welcomed from sunlight or display lighting.

1.5 Glare

Glare occurs whenever one part of an interior is much brighter than the general brightness in the interior. The most common sources of excessive brightness are luminaires and windows, seen directly or by reflection. Glare can have two effects: it can impair vision, in which case it is called disability glare (Figure 1.10), and it can cause discomfort, in which case it is called discomfort glare (Figure 1.11). Disability glare and discomfort glare can occur simultaneously or separately.

1.5.1 Disability glare

Disability glare is most likely to occur when there is an area close to the line of sight that has a much higher luminance than the object of regard. Then, scattering of light in the eye and changes in local adaptation can cause a reduction in the contrast of the object. This reduction in contrast may be sufficient to make important details invisible, and hence may influence task performance. Alternatively, if the source of high luminance is viewed directly, noticeable afterimages may be created. The most common sources of disability glare indoors are the sun and sky seen through windows (see previous section) and electric light sources seen directly or by reflection (Figure 1.12). Care should be taken to avoid disability glare in interiors by providing some method of screening windows and avoiding the use of highly specular surfaces.

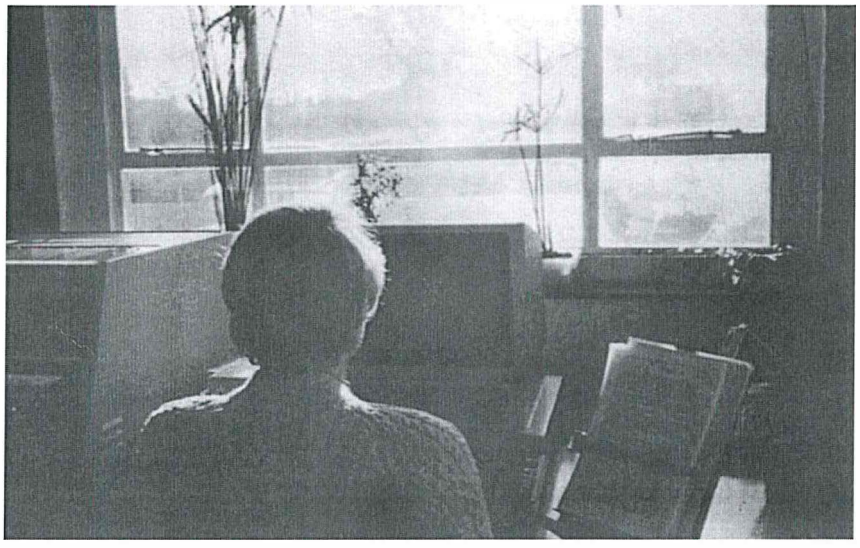

Figure 1.10 Disability glare from bright sky in front of a VDT makes the screen difficult to read