



Figure 7.1

Three layers of electric light. (Courtesy of Claudia Giselle Designs; photo credit: Garrett Rowland)

This chapter describes the shapes and distribution of light; the types of **lamps** (*bulbs*, in layperson's terms) and fixtures available; lighting applications; and the relationship of light to other elements, human factors, and the environment. Both the quantity and quality of light are of importance to design solutions; these issues will also be discussed in this chapter.

GENERAL CONSIDERATIONS FOR LIGHTING SOLUTIONS

Most of what we see of light is what is reflected from a surface, not the light itself. Therefore, the surface characteristics of the space and the objects within that space must be considered. A lighting solution is application-specific, meaning its success can be truly evaluated only within the context of the requirements of a specific client or user group for a particular function.

The thought process of designing with light should start early on (see *FYI . . . Twelve Questions to Ask Yourself When Designing with Light*). Having an

appreciation for the power of light fosters good design habits, which include considering light at the inception of a project, rather than as an add-on.

TYPES OF LIGHTING SOURCES

Sources of lighting are categorized as being either natural or artificial in origin. Natural sources of light include daylight and flame. Artificial sources are mainly electric in origin.

Natural Light

The integration of daylight or **daylighting** into interior space is vital to creating quality and sustainable environments. This practice includes **daylight harvesting**, that is, capturing daylight for the purpose of illuminating interiors and saving energy.

Distinguishing between sunlight and daylight is important. Sunlight is considered light that enters a space directly from the sun. This type of light has its disadvantages as direct sunlight can produce glare and excessive heat, and it can cause materials to fade.

Daylight, or skylight, is the term that describes the desirable natural light in a space. Daylight avoids the glare and ill effects of direct sunlight. Daylight, which is even in its distribution, is generally considered the standard for determining true color.

The direction and quality of the natural light, in particular, from daylight, is often considered during the architectural planning stage, when decisions are made about the location and orientation of buildings on a site or of spaces within a structure. The placement and type of windows and doors are discussed in Chapters 8 and 9. How windows are treated, such as the choice of shades, blinds, solar films, shutters, or draperies, is also reviewed in those chapters and in Chapter 10.

Daylight enhances visual acuity for reading and writing. It is important for the interior designer to consider whether the natural light source is in the warm or cool range. Additionally, it is important to have an appreciation of the effects of natural light on both mood and the various surfaces within the space (e.g., the interplay with texture and colors). Natural light has proven to enhance overall well-being.

flexibility in that it may be curved on-site, creating a sculptural effect.

Portable luminaires are usually placed either on the floor or on a table (or desk, shelf, and so on). Floor lamps may be at a standard height for task lighting (generally reading) or for more general ambient lighting. Other floor lamps are height adjustable. Another name for a standing floor lamp used for overall lighting is a **torchiere**.



Figure 7.12 c
Interior with sconce. (Courtesy of Claudia Giselle Designs; photo credit: Garrett Rowland)

The type of shade or globe selected for a portable fixture will significantly influence the direction and amount of illumination. For example, an opaque black shade will throw less light than one made of translucent rice paper.



Figure 7.12 d
Chandelier. (© Hemis/Alamy Stock Photo)



Figure 7.12 e
Interior with track and cable lighting. (Christopher Barrett/Hedrich Blessing; designed by Tigerman McCurry)