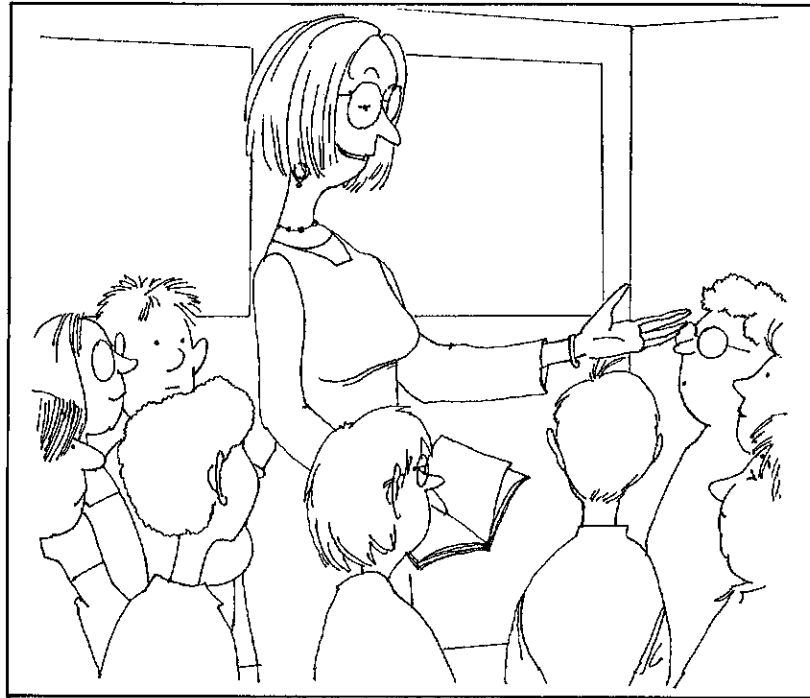


2

Preparation



■ Interpretive and Educational Programs

Expanding an exhibition's theme through innovative interpretive programming is a challenge and the resulting effect is almost always worth the effort and cost. Although the organizer of a temporary exhibition may provide you with some materials and program suggestions, you will have to adapt them for your own special use. The exhibition theme, your audience and community, budget, and staff will all be factors in the design of the program you present. Printed and audio-visual materials, performances, workshops, lectures, and special tours are among the programs which will help bring the exhibition to life. Consider the following points:

1. It is essential to involve your entire staff. Communication and cooperation at the beginning among preparators, security officers, curators, educators, and administrators will result in an organized, efficient and well-run program. When planning an exhibition installation, you should

Figure 28

An exhibition may be supplemented with educational programs such as a lecture or film. The organizer may sometimes provide a study guide for use in discussions with younger audiences; it may also supply a catalog and bibliography.

consider your educational program. For example, tour groups will require adequate space for viewing objects or panels; space for holding workshops should be cleared and ideally be located in an area adjacent to the exhibition.

2. If materials have been provided with the exhibition, consider the variety of ways in which they may be used or adapted. For example, catalogs, label copy, or slide programs can be used by tour leaders or docents.

3. Consider your audience. Special interest groups, children, the aged, disabled, young

adults, students, and teachers will require programs for which the format and content is often different.

4. Consider the form the interpretive materials should take. An exhibition may include one or more of the following: publications such as brochures, children's books, handouts, catalogs, or posters; audio-visuials such as slide/cassette programs, films, filmstrips, or videotapes; live performances including concerts, plays, puppet shows, mime, and workshops; scholarly programs such as lectures, guided tours, seminars, and discussion panels.

5. If money for these programs is not available within your institution, you will have to raise funds through other sources. Local resources may become sponsors of the exhibition and provide program support: corporations, clubs or business groups, small businesses are examples. Locate a company or group whose work relates to the exhibition topic. It is in the best interest of most companies to support the arts and humanities. A company's credibility as well as visibility will be enhanced through cooperative programming which gives appropriate credit for efforts and interests. In addition, distributors and educational organizations will frequently donate books, films, and other existing educational materials. Ask them for their order forms with descriptive information.

6. If personnel shortage is a problem, look to your community's commercial or educational institutions for volunteers. A newspaper employee may speak on the development of newspaper printing for an exhibition on the history of news reporting. Equipment may be brought in for demonstrations or else tours of the printing plant may provide an outreach activity. Other sources for volunteers might include local libraries, universities, schools, colleges, historical societies, performing arts organizations, or other museums. Teachers who are planning a gallery field trip will need information about the exhibition far in advance. They can, in turn, provide you with curriculum guidance for your gallery.

7. One should never overlook any suitable resource. Ideas, people, creativity, and money can all work separately and together to your advantage in planning a strong and challenging interpretive program.

There is always more than one method for interpreting an exhibition. The challenge is in finding the most appropriate and effective one for bringing out the best in the audience as well as in the exhibition.

■ Public Relations

In order to attract an audience, "getting the word out" and "the message across" is of vital importance to those involved with cultural institutions. As the range and volume of leisure activities increase, so too does the necessity of bringing information about your future exhibits to the attention of the public. A promotion strategy must be vital and imaginative, and based on good relationships with news media.

Figure 29

Most exhibit organizers will furnish a press kit containing a news release and 8x10 black and white photographs of important pieces.





As soon as the opening date is set, prepare an announcement for the media "calendar" of cultural events. About two weeks before the event, send out a reminder if you want good press coverage. Look for a special "angle" concerning the exhibit that may make a good feature story. Include all the facts in one release, along with the name and daytime telephone number of a contact.

For your media opening, the press kit should include a cover release containing details of the exhibit, perhaps several short releases dealing with items or persons associated with the exhibit, biographies of special guests or lecturer present, and 8x10 black and white glossy photographs with captions. Give credit to the organizer and any source of financial aid that made the exhibit possible.

Not every exhibit will attract the same number of visitors. For those with narrow appeal, there are many things you can do to create wider interest—such as presenting lectures, films and "gallery talks." For the latter, schedule a talk at the exhibit, where visitors can have an open discussion with the speaker. To generate attendance at these gallery talks, however, you must inform the media in advance and follow up with a reminder of time and place.

Here are some tips for audience-building:

- **Press**—Suggest feature articles, letters to the editor, exclusive stories; include foreign language newspapers, company and organizational newsletters.
- **Publicity**—Develop a general mailing list and then break it down into special interest groups. Send brochures, posters and announcements to libraries, schools, banks, colleges, hospitals, clubs, and organizations. Be sure your announcement is included in the "package" mailing of other arts groups. Ask the local Chamber of Commerce to publicize the area's cultural resources.

Figure 30

An exhibit opening should be an event—a time for good will and conviviality. It will make new friends for your organization and result in greater support and recognition.

- **Advertising**—Put across your message on banners, billboards, matchbooks, posters, stickers, school and office bulletin boards, shopping centers, menus, handbills, window displays, bus cards, spot TV ads.
- **Special events**—Sponsor a series of exhibit related events such as a poster contest for high school or college art classes. Present a special evening for the local professional women's organization. Sponsor research studies, and awards and presentations.

■ Arrival of the Crates

When the crates arrive at the loading dock, they are placed on dollies and moved into the unpacking area. They will be lettered or numbered to correspond with to the contents list (manifest). Instructions for unpacking are usually sent in advance by the organizer. Some crates may need to be opened before others since they may contain cases or structural elements that will have to be assembled first.

Needless to say, extreme care should be taken in the handling of the objects. The fewer persons involved in unpacking and examining, the less chance there is of breakage. It is a good idea to make notes of the wrapping and placement of objects, noticing any peculiarity in the position of one object to another. A condition report concerning damage or loss sustained while in transit or at the previous location will need to be filled out. Any problem should be reported to the organizer immediately; he may be able to send you a replacement. He will also need detailed information for insurance claims.

Be sure to store the display items away from the exhibit area until all maintenance staff, carpenters, painters or electricians have finished their work and removed their tools. Just prior to installation, bring in the objects and place them on padded tables. Never leave anything sitting on the floor—you are inviting catastrophe. In addition, never place equipment on the same table with the objects. A careless or quick move can topple a valuable item onto the floor to be forever lost.

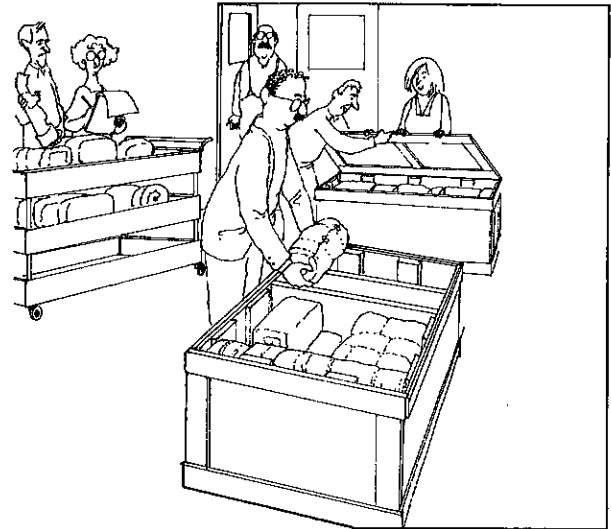


Figure 31

While unpacking the exhibit notice how certain objects have been wrapped and placed. Keep all the original packing material to use when repacking.

■ Exhibition Maintenance

Good housekeeping is mandatory if you wish to retain your reputation as a cultural showcase. There is nothing quite so bad as walking into an exhibition and not being able to see it because of dirty glass or burned-out light bulbs. Instill in the minds of all personnel that your gallery is a source of pride. Its appearance should be in mint condition at all times.

Someone should make a tour of the exhibit area at least twice a day to check for dirty glass, refuse on the floor, burned-out light bulbs or graffiti. Conditions such as these invite a poor attitude on the part of the public and may cause serious damage for which you will be held liable.

If case interiors have collected dust, open the cases before public hours and clean the flat horizontal surfaces. Use a soft animal-hair brush so as not to cause any damage to the objects. In

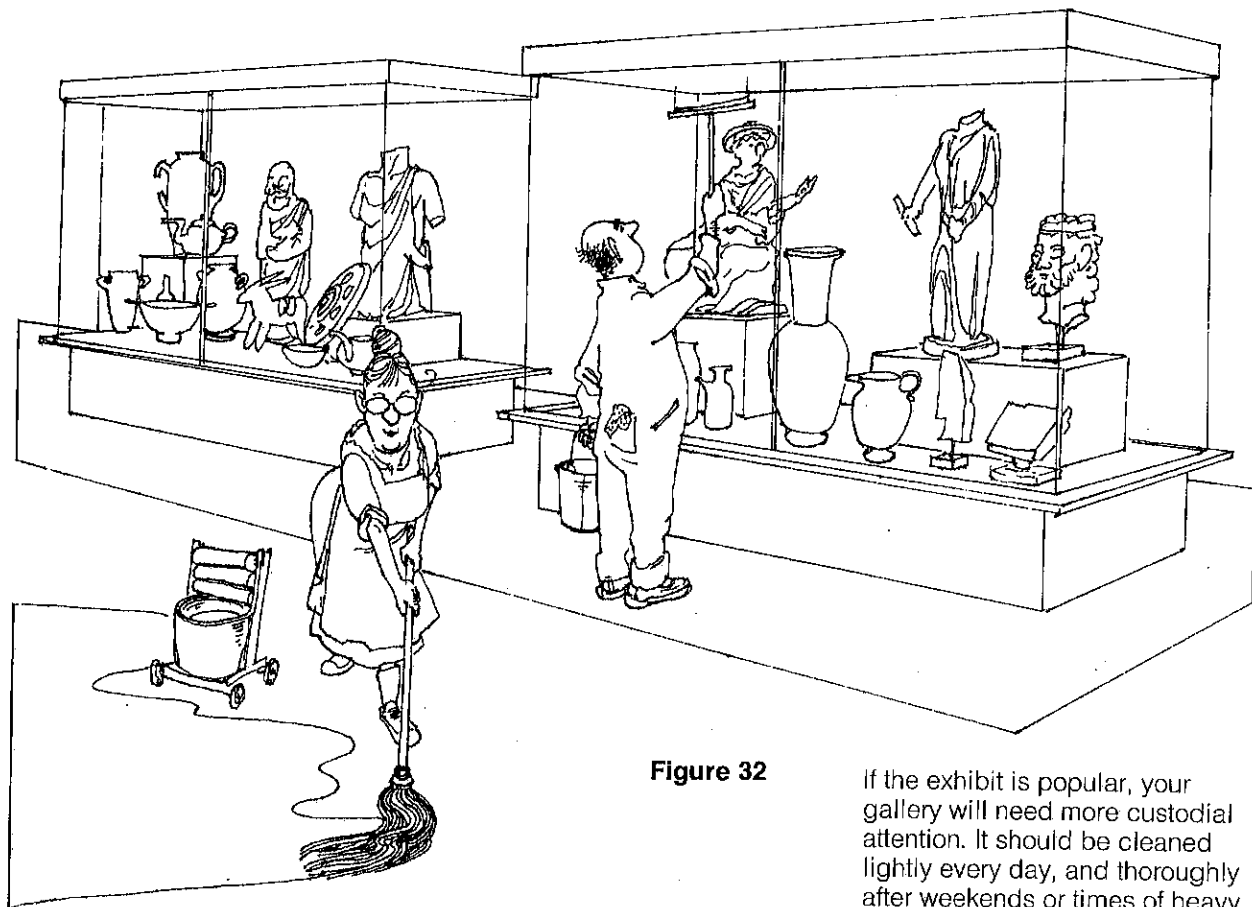


Figure 32

If the exhibit is popular, your gallery will need more custodial attention. It should be cleaned lightly every day, and thoroughly after weekends or times of heavy traffic.

some urban and industrial areas you may note that glass objects and metal (especially silver, brass, and copper) will begin to look cloudy, or even tarnish. If this occurs ask the exhibit's organizer at once for recommendations regarding cleaning. Occasionally when lending an object for circulation in a traveling exhibition, the original lender of the object has placed stringent restrictions on how and by whom that object is to be cleaned. It may be necessary to call in a professional museum conservator to do the work. Therefore, it is best to check with the organizer of the exhibit before some irreparable damage may be unintentionally caused by a well-meaning person.

By the same token, wooden or painted objects

(especially folk art where colors may not be stable), textiles, fur or feathers, and some stone and ceramic items should only be dusted. Never apply water, soap, detergents and most cleaning solvents on any object unless you have specific instructions from the exhibit organizer.

■ Dismantling and Packing

It is easy to assume a lax attitude toward an exhibit that you have been looking at every day for at least four weeks. You may even be anxious to get it out of your gallery and packed because a new and much more exciting exhibit is arriving in a day or two. Do not fall into this trap. Every object shown in your gallery, regardless of your

personal preferences, deserves the best possible care you can give it. Carelessness, negligence, or a disdainful attitude will ultimately result in your not being able to borrow or even rent another traveling exhibit. Furthermore, it may lead to your possible liability for loss or damage. The museum gallery community is relatively small; an organization possessing a lackadaisical reputation will soon be excluded from it. On the other hand, an organization that takes particular care of objects in its charge will soon gain a reputation for being reliable and conscientious.

Remember, you are usually responsible for the outgoing shipping arrangements and freight charges. To assure the exhibit's arrival on time at its next destination, make pickup arrangements with your local freight agency or hauler in advance and have all shipping documents filled out *clearly*. Failure to follow shipping instructions, or sending the exhibit to the wrong institution (unless the organizer himself is making the arrangements) will result in you having to pay the rental fee of the next exhibitor, as well as extra shipping charges. □

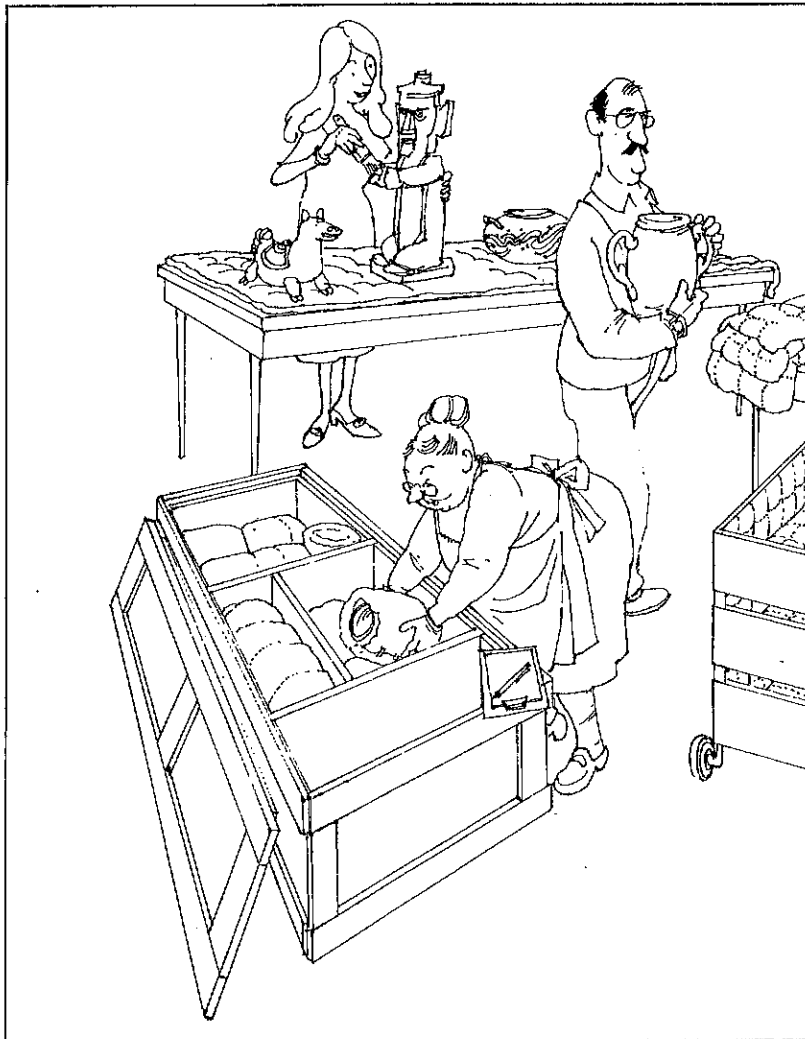


Figure 33

To prepare the articles for re-packing, place them again on padded work tables. Wearing white cotton gloves, the staff should dust each object before it is wrapped. Dirt can be abrasive.

4

Illumination

■ Lighting

Lighting is a critical element in an exhibition installation. It can also be the least understood.

When designing your show, consider first what objects you are displaying and plan to light them with the visitor's point of view in mind; then think about enclosures, cases and panels and how they should be illuminated effectively.

Artificial lighting, which can be focused, moved, intensified or dimmed, and which is totally independent of the outdoors, is the ideal. Like any other medium, it must be handled with common sense. All exhibitions require an overall illumination, so that people can find their way around comfortably. Since the eye will always focus on a brilliant spot, lighting is the easiest way to place emphasis on an object or area. By the same token, lack of it can be used to "hide" dull corners and give contrast to bright areas. An even light is desired for paintings, framed objects and textiles while for three-dimensional objects a more dramatic effect will emphasize form, solidity and surface qualities.

We suggest that anyone involved with exhibit installation read about the art and science of lighting.* Certain terms, however, may be confusing, especially when it comes to measuring light levels or illumination value. In international

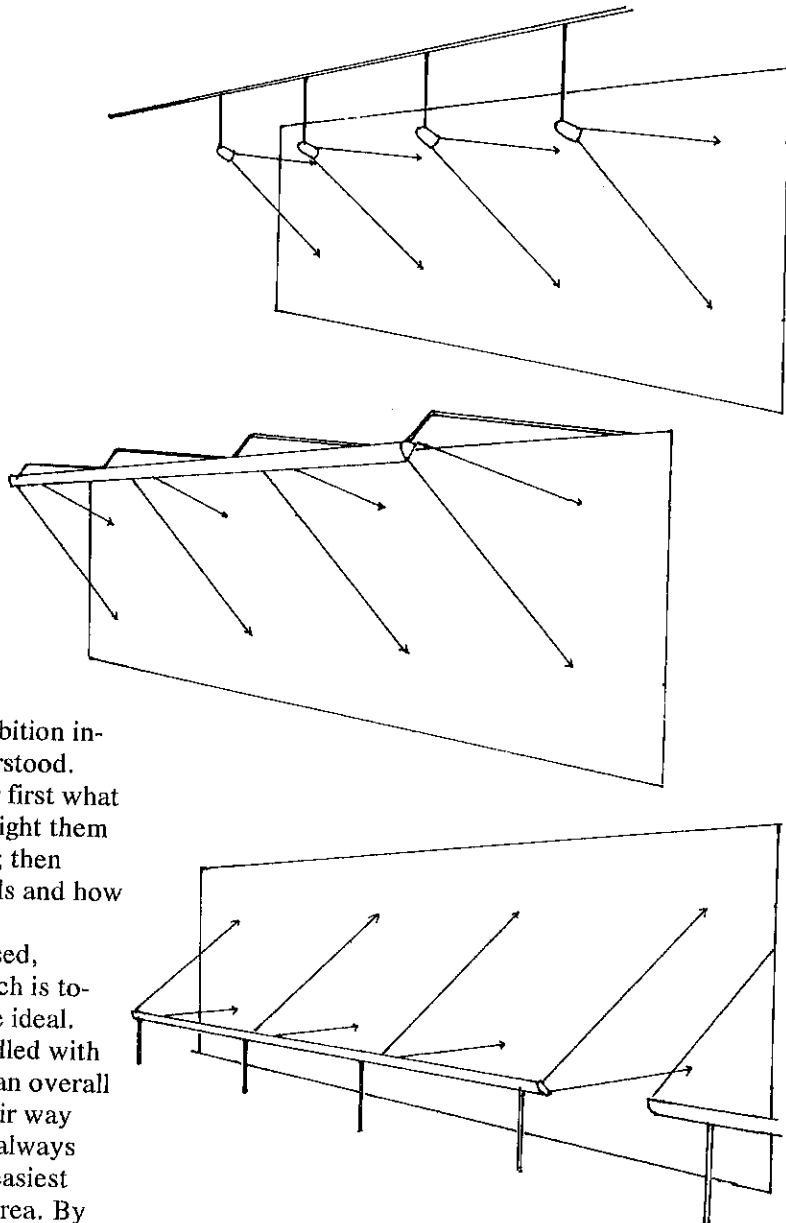


Figure 84

Filament or incandescent lamps give the most efficient illumination but can dazzle the eye. They must therefore be placed out of the line of sight and in a location so the light beam does not reflect into the viewers' eyes. Light bounces off a surface at the same angle at which it hits that surface.



Figure 85

To illuminate a wall surface evenly, the light source should never be closer than the proportion of one to four, otherwise "hot spots" on the wall surface will be noticeable while leaving the bottom of the panel in relative darkness.

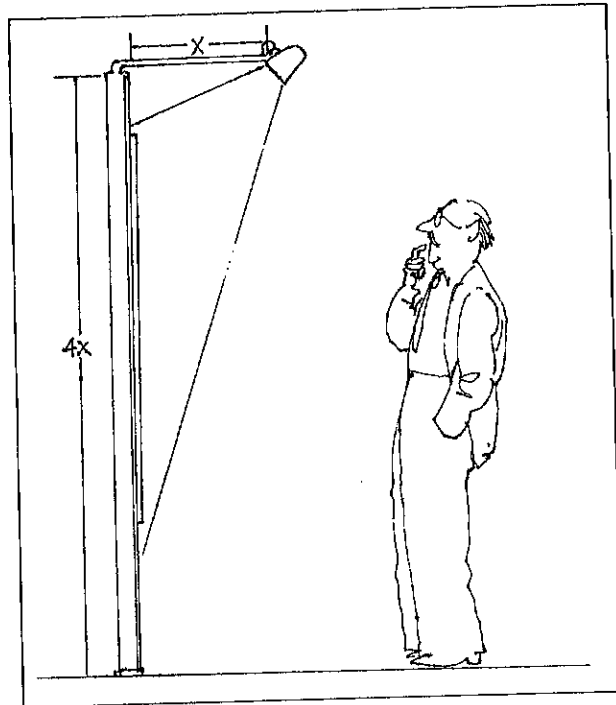
journals and publications, illumination is measured in *lux* where 1 lux equals 1 lumen per square meter. In Great Britain and in the United States illumination is still quoted lumens per square foot or footcandles. One lumen per square foot equals approximately 10 lux.

There are two main types of artificial illumination, fluorescent and filament or incandescent lamps. Fluorescent lamps provide an even, shadowless emission of light; they are extremely economical and come in cold or warm colors. However, they cannot be focused and do not project parallel beams of light. They are best used to provide general illumination, or next to a flat white surface that reflects light from the back of the tube. Its major drawback is the considerable amount of ultraviolet radiation it emits that is extremely harmful to pigments, paper and organic materials such as wool, fur and feathers. If there are fluorescent lamps in your facility, cover the tubes with U-V filter sleeves or use Verilux (a trade name) tubes to eliminate much of the radiation.

Filament lamps, on the other hand, have an insignificant ultraviolet emission, but produce considerable heat (which is also harmful if the lamp source is too close to the object being illuminated). They are more expensive to burn, though there are some low voltage lamps available that reduce the cost. Filament lamps offer more flexibility, particularly for special lighting effects.

A variety of filament lamps is available, each

*Prime source: "Lighting of Art Galleries and Museums," Illuminating Engineering Society, Technical Report No. 14, London, 1970. Additional sources, see Bibliography p.166.



designed for a particular purpose. Flood lamps give a general light in one direction. Spot lamps and parallel beam reflectors throw a light beam at a considerable distance with sharp shadows. A focused spot lamp (with a lens system incorporated into the light fixture) can throw a beam of considerable length, focused sharply on an object. For light to travel farther, higher wattage is required; for example, two 100-watt lamps give off the same light as one 200-watt lamp, although the one 200-watt lamp will throw the light further.

Some things to remember: fluorescent lamps behind a translucent ceiling give off an even flood of top light (shadows are almost non-existent); indirect light reflected from a ceiling produces a pleasant soft light, but is insufficient to illuminate exhibits; spot lights from a ceiling can highlight exhibits dramatically, but will not give adequate general lighting; lamps should be arranged to give direct light on exhibits and general light for the overall space.

If you have a fixed lighting system that allows for no flexibility, you may have to supplement it

with lights mounted on panels (clamp-on flood or spot light or even fluorescent) or on freestanding units if the ceiling is high enough. It might be necessary to place lights near the floor to create an "up light" much like theatrical footlights.

If the ceiling has standard recessed fluorescent tubes, you might paint the ceiling dark and install louvers on the fixtures to diminish reflections;

then place cases directly beneath the fixtures. If the cases are table-top or desk-type with a shallow angle of glass, a neutral tone panel hung above it may be effective. Illuminate the panel so that the light falls onto the case. Line the case interior in a neutral shade.

To arrange the lighting before the objects are in place, assemble the following items: ladder or

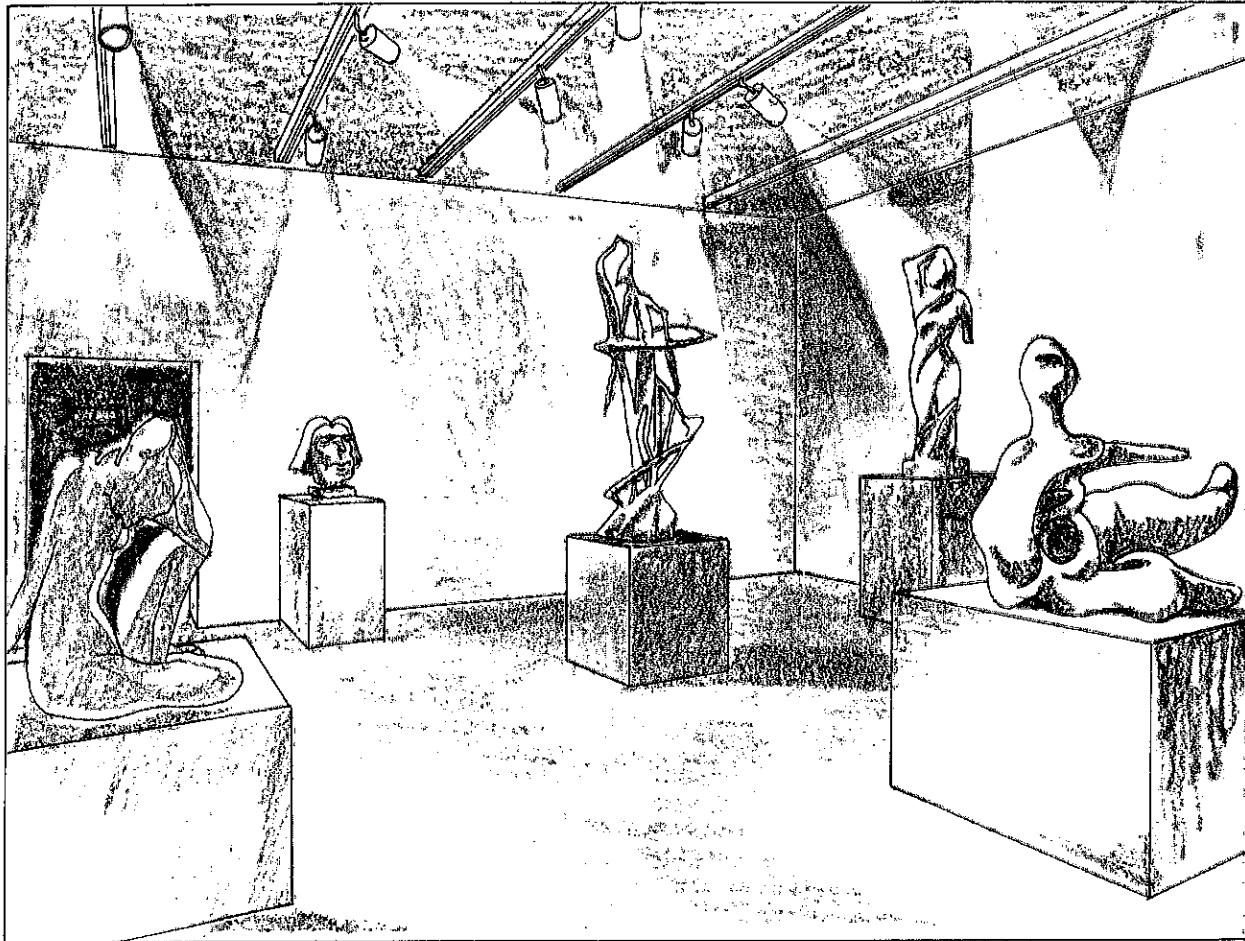


Figure 86

The effect of modeling is achieved by the direction and dominant angle of the light flow.

Highly diffused light tends to flatten shape and form, suppress detail and dull the sheen or glaze of metals, ceramics and many embroidered or woven

fabrics. On the other hand, excessively sharp, direct lighting can give an unduly harsh appearance.



mechanical lift, and a selection of lamp fixtures and bulbs, spots and floods in a number of wattages.

Ideally, a gallery in which temporary exhibits are continually shown should have flexible modular lighting capabilities. This means a track-lighting system that will offer all the flexibility you need. A manufacturer or an agent for a track-lighting company will give you a cost estimate to install a system in your gallery.

If you already have track lights or fixed lighting, you may still want some outside advice. Persons involved with theatrical lighting (a theater group, high school or college drama department) may be willing to give assistance. Also, a photographer knowledgeable in studio lighting may help, or a store's display staff, which usually has someone on board who understands lighting.

■ Lighting for Emphasis and Modeling

If items are to be viewed to their best advantage, they must be lighted so that their special features are brought out most effectively. The eye is always drawn to the brightest and most strongly accented parts of a scene. Lighting, therefore, should highlight the objects without being overdone. Sometimes a strong punch of light on an

object in a dark surrounding, or against a powerful contrasting background color, may rivet attention, but it can at the same time prevent details from being seen clearly. Some general illumination in addition to localized lighting is almost always desirable.

The modeling effect of light is often needed to reveal the true shape and texture of objects. (Figure 86). Study each object to see what traits to emphasize.

Some idea of lighting can be roughed out in advance when you work on the full-scale mock-ups of cases and scale model of the gallery. As mentioned earlier, a reflected ceiling plan is absolutely necessary to locate the lighting fixtures in relation to panels and cases, and indicate spot or flood lights and wattages.

After everything is in place and you "fine-tune" the lighting, you may still have to experiment a little on site. Your needs may sometimes conflict, so watch out for glare and reflections as well as emphasis and modeling.

■ Color of Light and Background

Visual adaptation operates with respect to the color of light and to light intensity or brightness. This means that daylight reflected into your

Objects and Light

*Recommended Maximum Value of Illumination**

Objects insensitive to light, e.g. metal, stone, glass, ceramics, stained glass, jewelry and enamel

Unlimited, but in practice subject to display and radiant heat considerations

Oil and tempera painting, undyed leather, horn, ivory, wood, and lacquer (oriental & European)

150 lux or
15 footcandles

Objects specially sensitive to light, e.g. textiles, costumes, watercolors, tapestries, prints and drawings, stamps, manuscripts, miniatures, paintings in distemper media, call papers, gouache, dyed leather and many natural history exhibits, especially those including skins, insects and botanical specimens.

50 lux or
5 footcandles

exhibit area, color of walls, floor panels (or any colored or non-colored surface from which light can bounce) will have an overall effect on how visitors perceive the exhibit.

Colors are either warm or cool. Tungsten filament lamps are warm with exaggeration at the red end of the color spectrum; thus reds and oranges appear emphasized in comparison with their appearance in daylight. Though they are warm and cool, most fluorescent lamps are intrinsically strong in the green, blue and yellow regions. The effect of different light sources on the colors of objects is called "color rendering." In practice, *cool* fluorescent lamps are compared with *cool* daylight, while *warm* fluorescent lamps are compared with *warm* incandescent sources that are realized by tungsten filament lamps. The choice in practice between different types of fluorescent lamps should be made in terms both of color rendering and of color appearance—that is, warm versus cool. Good color rendering is always desirable but is particularly significant at exhibits that stress the importance of color, as in the case of paintings and textiles.

The background color of a wall or panel has a tremendous influence on the effectiveness of the exhibition. It should give the illusion of being recessed in relation to the display. This does not exclude the use of a vivid background, provided that illumination is focused on the object(s). If the display arrangement makes it difficult to achieve a gradation of illumination, then select a weaker background shade. Avoid bright patterns since they can detract from the object. If you are creating an environmental context as one of your exhibit's educational objectives, however, these rules do not hold true.

When a very light background is used for the display of dark objects, they should have a small and darker background of their own. Details in the dark objects can be lost unless there is a separation of intermediate tone to assist viewing. The reverse is also true; that is, for very light objects displayed against a dark background.

A white or off-white matte surface is one most often used as a background for modern paintings. This, however, creates a sharp contrast between

the paintings and the background that can actually be a detriment. For better viewing, the background color should be in a light tone of neutral value like beige, buff or light warm gray, avoiding excessive contrast. Try it in one of your installations and see if it doesn't work.

A consideration when lighting wall-mounted cases or cases mounted on a large display panel is that a reflection of himself and his surroundings on the glass may interfere with the visitor's vision. To avoid this, place the light source almost

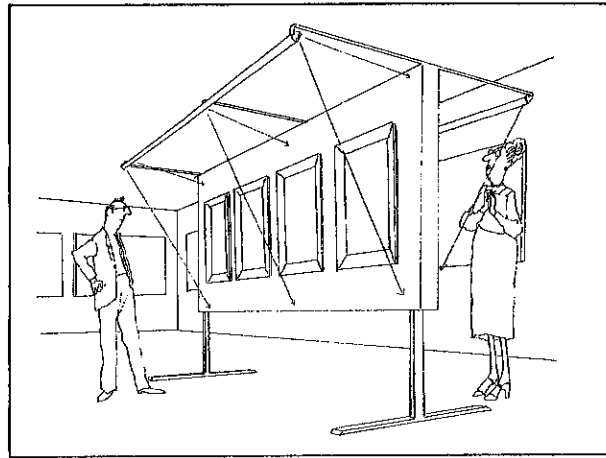


Figure 87

A row of UV-filtered fluorescent tubes can also be used to "wall wash" and to illuminate flat elements on a wall or panel.

overhead but slightly in front of the perpendicular glass case front. If the light source were located further from the wall, the viewer would stand between the light source and the object, casting a shadow on the display.

Generally a row of 40-watt fluorescent lamps (with UV filters) or equally spaced flood lamps are best to give a soft, overall illumination to wall-hung panels. Key elements mounted on the

panels or on the wall can be highlighted with individual directional spotlights or even a lens-type spotlight fitted with a mask that can shape the beam to the object being illuminated. Be sure the light source is not located so that the viewer passing in front of its beam will create a shadow.

■ How Much Light to Use?

Tapestries, carpets and rare textiles should be given a low value of illumination with UV filtration, since too much light will deteriorate them.

Costumes present a serious conservation problem. Consequently, the illuminations should be low, and UV filters used. Choose lamps that provide color rendering appropriate to the display. Tungsten filament lamps add a touch of sparkle and modeling.

When displaying **glass**, many techniques are possible. Spotting cut glass will emphasize facets that are often best seen against a dark background. Translucent glass may need some front light to show modeling and decoration. Opaque glass should be treated as ceramic, with strong front or side light for modeling against a slightly rough, neutral background. Take care to avoid mirror images of the light sources in the glaze.

Weapons, armor and large metal objects work well with general lighting supplemented by spotlights to pick up luster and modeling. Metal objects of a silvery or steel cast will frequently be enhanced by a pale blue or gray background. Gold, on the other hand, looks best against a dark, rich, velvety background.

General lighting is usually satisfactory for **furniture** displayed alone or in small groupings. If the view is limited, as in part of a room or enclosure, shop window lighting techniques are suitable (an overhead light source is directed at the objects). Conservation is an important consideration, especially if fabrics and textiles are combined with furniture. In this case, place incandescent lamps at a distance so that their heat will not reach the textiles. Use UV filters along with fluorescent lamps.

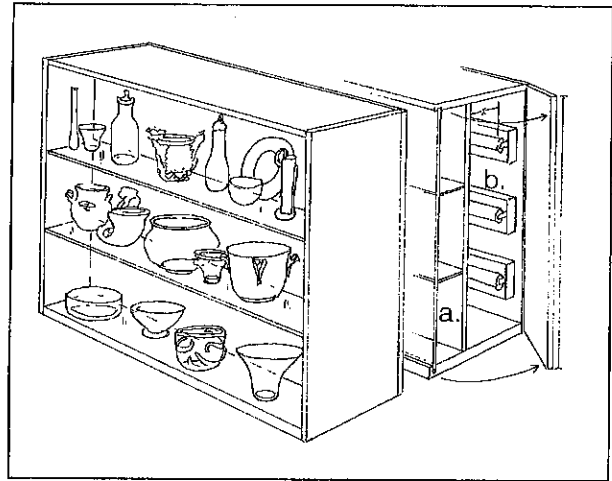


Figure 88 Glassware Lighting

Transparent and translucent glass is shown to best advantage on glass shelves against a softly illuminated background, perhaps a luminous panel (a). Inside the lightbox, painted in matte white, are three fluorescent tubes (b).

Books, manuscripts and stamps are usually displayed in cases. As conservation is a problem, use UV filters and limit the illumination to the appropriate level, not exceeding 5 footcandles.

Coins, medals and seals are also displayed in cases. Some directional lighting will help to accentuate the relief of the objects. To assist the perception of fine detail, a dark background should be used, but the brightness contrast between object and background should not be too great.

Jewelry and fine metal are best shown off with tungsten filament lamps, especially where cut stones are displayed. Avoid excessive temperature rise within the exhibit case. If fluorescent lamps are used, they should be a warm color for gold and brass and an intermediate color for

silver and steel. Small pieces of jewelry are usually best displayed against a dark matte background.

Sculpture of stone, metal, clay, plaster and wood is usually not harmed by light except for painted wood. Some directional lighting looks good on sculpture-in-the-round—adding spotlights will help. Use light “modeling” on sculpture, with most of it coming from one side and not from behind the viewer. Avoid direct frontal lighting.

Very shallow carved panels are best lighted by means of fluorescent lamps located slightly above them. Carving in high relief requires light at a less acute angle; a combination of tungsten filament and fluorescent lamps will enhance modeling and texture.

Heat from incandescent lights can be damaging to ivory and bone, therefore the lamps should be kept out of the case if possible. If not, a low voltage incandescent lamp connected to a rheostat is recommended to allow a minimum of heat build-up within the case. Another solution is to drill small holes in the case (out of sight) and plug with cotton. This will allow heat to escape but prevent dust from entering.

Some ancient religious sculptures once placed on altars were originally illuminated from below by votive candles or oil lamps. Check with your lenders to see if they were used in this manner. If so, plan for low voltage. □