

ity of cases, remodeling and/or the construction of new wings has been the solution chosen for a variety of reasons, including the difficulty of acquiring a suitable building site, particularly if the present site is in a good location; historical value inherent in the existing structure; or, in many cases, the apparently lesser cost of remodeling as opposed to building.

Certain institutions fall under the definition of museum as recognized by the International Council of Museums and by the American Association of Museums, but by their nature have specific needs differing from those of art, history, and science museums. These are historic houses, preservation projects, zoos, botanical gardens, arboretums, planetariums, and aquariums.

The historic house and the preservation project (defined as restoration and/or reconstruction of a building complex to recreate a particular period of history) have their own special requirements. Equipment and furnishings must be of the period, or else especially designed to fit into the existing structure without changing its essential character. Work space requirements are often met by an additional building conforming in style to the historic structure.

Projection planetariums, which first came into being about 40 years ago, are generally associated with science and children's museums. Basic planetarium equipment consists of an auditorium and a projector.

Aquariums are usually, but not always, part of a science museum complex. Physical requirements include specially designed tanks and equipment for pumping, filtering, and treating water.

Zoological gardens have as many different physical requirements as they have types of animals on display. The current trend is toward providing more space per capita for the zoo's population, carefully controlled specific environments within the buildings, and toward creating larger and more natural display areas, such as flight cages and pastures for hoofed stock, rather than small individual enclosures.

Botanical gardens and arboretums have one major requirement of their buildings, absolute temperature and humidity control, necessitating complex and expensive heating and ventilating systems.

(b) *Services Rendered*

Services rendered by museums fall into two general areas: services to the general public, and specialized services to the scholarly fields with which the institution is concerned.

The museum's prime contribution to the general public is in the field of education, with the exhibits serving to reinforce "book-learning" for schoolchildren, and providing new knowledge and new insights for adults. The basic educational tool of the museum is the exhibition. Lighting, case design, and informative labeling contribute to its effectiveness. Visitor flow and crowd pressure in museum halls is now undergoing study. It has been discovered that areas of constant crowd flow should have terse, repetitive exhibits. The circulation of visitors must be planned to fit the logical order of the exhibition. This order is governed by chronology, and by the nature of the materials on display, in order to present a connected sequence of information.