Architecture/Reference

For more than thirty years, the beautifully illustrated Architecture: Form, Space, and Order has been the classic introduction to the basic vocabulary of architectural design. The updated Third Edition features expanded sections on circulation, light, views, and site context, along with new considerations of environmental factors, building codes, and contemporary examples of form, space, and order.

This classic visual reference helps both students and practicing architects understand the basic vocabulary of architectural design by examining how form and space are ordered in the built environment. Using his trademark meticulous drawing, Professor Ching shows the relationship between fundamental elements of architecture through the ages and across cultural boundaries. By looking at these seminal ideas, Architecture: Form, Space, and Order encourages the reader to look critically at the built environment and promotes a more evocative understanding of architecture.

In addition to updates to content and many of the illustrations, this new edition includes a companion CD-ROM that brings the book’s architectural concepts to life through three-dimensional models and animations created by Professor Ching.

FRANCIS D.K. CHING is the bestselling author of numerous books on architecture and design, including A Global History of Architecture, Architectural Graphics, A Visual Dictionary of Architecture, Interior Design Illustrated, and Building Construction Illustrated, all published by Wiley. He is a registered architect and Professor Emeritus at the University of Washington in Seattle.
The basic patterns of linear and planar elements that define discrete volumes of space, and the varieties of openings that serve to connect these spatial volumes to one another and their context are presented on pages 158–59 and 161. The qualities of an architectural space, however, are much richer than what the diagrams are able to portray. The spatial qualities of form, proportion, scale, texture, light, and sound ultimately depend on the properties of the enclosure of a space. Our perception of these qualities is often a response to the combined effects of the properties encountered and is conditioned by culture, prior experiences, and personal interest or inclination.

**Qualities of Space**
- Form
- Color
- Texture
- Pattern
- Sound
- Proportion
- Scale
- Definition
- Degree of Enclosure
- View or outlook
- Light
Two spaces may be related to each other in several fundamental ways.

**Space within a Space**
A space may be contained within the volume of a larger space.

**Interlocking Spaces**
The field of a space may overlap the volume of another space.

**Adjacent Spaces**
Two spaces may abut each other or share a common border.

**Spaces Linked by a Common Space**
Two spaces may rely on an intermediary space for their relationship.
A large space can envelop and contain a smaller space within its volume. Visual and spatial continuity between the two spaces can be easily accommodated, but the smaller, contained space depends on the larger, enveloping space for its relationship to the exterior environment.

In this type of spatial relationship, the larger, enveloping space serves as a three-dimensional field for the smaller space contained within it. For this concept to be perceived, a clear differentiation in size is necessary between the two spaces. If the contained space were to increase in size, the larger space would begin to lose its impact as an enveloping form. If the contained space continued to grow, the residual space around it would become too compressed to serve as an enveloping space. It would become instead merely a thin layer or skin around the contained space. The original notion would be destroyed.

To endow itself with a higher attention-value, the contained space may share the form of the enveloping shape, but be oriented in a different manner. This would create a secondary grid and a set of dynamic, residual spaces within the larger space.

The contained space may also differ in form from the enveloping space in order to strengthen its image as a freestanding volume. This contrast in form may indicate a functional difference between the two spaces or the symbolic importance of the contained space.
An interlocking spatial relationship results from the overlapping of two spatial fields and the emergence of a zone of shared space. When two spaces interlock their volumes in this manner, each retains its identity and definition as a space. But the resulting configuration of the two interlocking spaces is subject to a number of interpretations.

The interlocking portion of the two volumes can be shared equally by each space.

The interlocking portion can merge with one of the spaces and become an integral part of its volume.

The interlocking portion can develop its own integrity as a space that serves to link the two original spaces.
The one-story space flows into the larger volume of which it is a part and to the outdoors.
Adjacency is the most common type of spatial relationship. It allows each space to be clearly defined and to respond, each in its own way, to specific functional or symbolic requirements. The degree of visual and spatial continuity that occurs between two adjacent spaces depends on the nature of the plane that both separates and binds them together.

The separating plane may:

- limit visual and physical access between two adjacent spaces, reinforce the individuality of each space, and accommodate their differences.

- appear as a freestanding plane in a single volume of space.

- be defined with a row of columns that allows a high degree of visual and spatial continuity between the two spaces.

- be merely implied with a change in level or a contrast in surface material or texture between the two spaces. This and the preceding two cases can also be read as single volumes of space which are divided into two related zones.
Two spaces that are separated by distance can be linked or related to each other by a third, intermediate, space. The visual and spatial relationship between the two spaces depends on the nature of the third space with which they share a common bond.

The intermediate space can differ in form and orientation from the two spaces to express its linking function.

The two spaces, as well as the intermediate space, can be equivalent in size and shape and form a linear sequence of spaces.

The intermediate space can itself become linear in form to link two spaces that are distant from each other, or join a whole series of spaces that have no direct relationship to one another.

The intermediate space can, if large enough, become the dominant space in the relationship, and be capable of organizing a number of spaces about itself.

The form of the intermediate space can be residual in nature and be determined solely by the forms and orientations of the two spaces being linked.
Paths may be related to the spaces they link in the following ways. They may:

**Pass by Spaces**
- The integrity of each space is maintained.
- The configuration of the path is flexible.
- Mediating spaces can be used to link the path with the spaces.

**Pass through Spaces**
- The path may pass through a space axially, obliquely, or along its edge.
- In cutting through a space, the path creates patterns of rest and movement within it.

**Terminate in a Space**
- The location of the space establishes the path.
- This path-space relationship is used to approach and enter functionally or symbolically important spaces.