

Lecture 7: Perceptual Bases for Design



Introduction

Architectural expression, like language, is continually evolving into new forms based on, or in contrast to, the past.

Characteristics of past styles or building techniques that remain valid are carried into the present, while those that become antiquated are dropped from use.



Boston city hall, Paul Rudolph, 1963

Architectural Statements

Buildings that come to be recognized as good architecture are generally those that accommodate a number of communications into a totality and express them elegantly.

The quality of the communication becomes the basis for public criticism and the collective evaluation of a building.

The primary mode through which architects communicate is visual. Other modes may include other senses like hearing, feeling and touching.



Strength in Medieval Castle in Wales



Formality in Washington University auditorium



Accessibility in Stansted airport



Formality of the Lever House office building

Sources of Architectural Statements

Although a successful composition of architectural form is seldom appreciated by a user, this does not mean that it has not affected them in some way.

The desire for information about the environment raises sensitivity to the nuances of form that will direct people to their desired goals.

Approached to generating statements are:

- Building Program
- Building Type
- Building Site
- Individual Style
- Behavioral Research
- Building Technology

Sailboats as an image for the opera house. What is sacrificed in achieving that image?

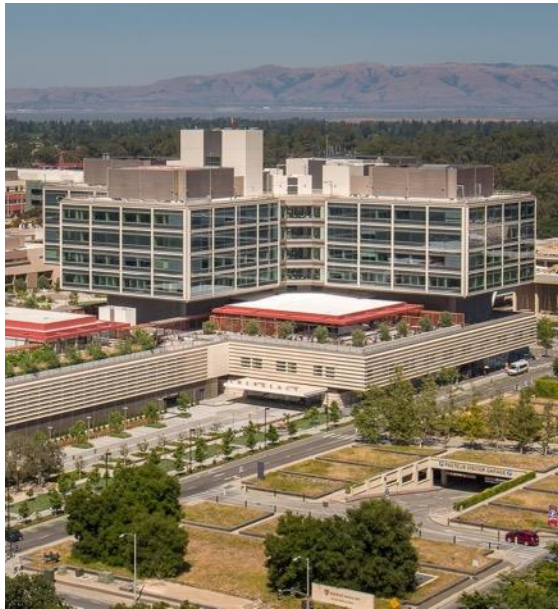
Sydney Opera House, Jorn Utzon, 1959



Sources of Architectural Statements

Program

It could be the basis for hierarchy to be expressed in the building



Stanford Hospital

Building Type

Each building type is symbolic of its function in the society and has a traditional place in the context of it.



Sulaymaniyah Mosque

Site

Beyond the technical constraints, the site may embody a certain imager and meaning that can be advantageous.



Saltbox House, the effect of climate, taxes, available materials.

Sources of Architectural Statements

Architect's Style

Style is a more general expression of concern than those generated by the program.



Disney concert hall, Frank Gehry

Behavior

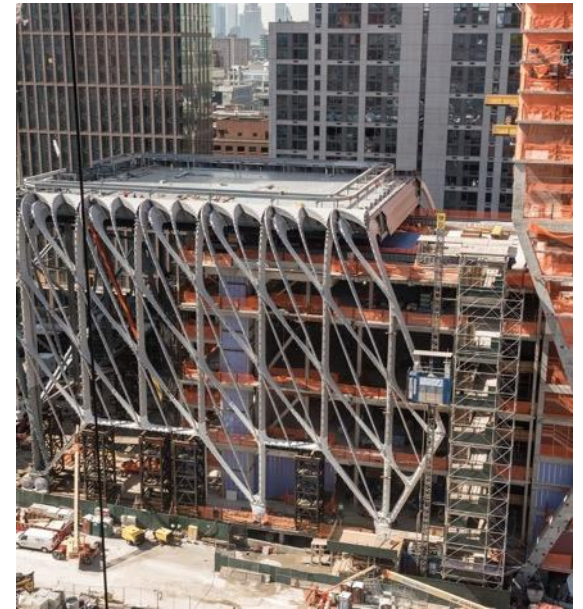
Studies in human behavior become a source of architectural statements, because they help in predicting the behavior in the space.



Conference room design based on level of participation

Technology

Major advances in building technology, out of the need, allowed for larger structural spans and employed new materials in architecture.



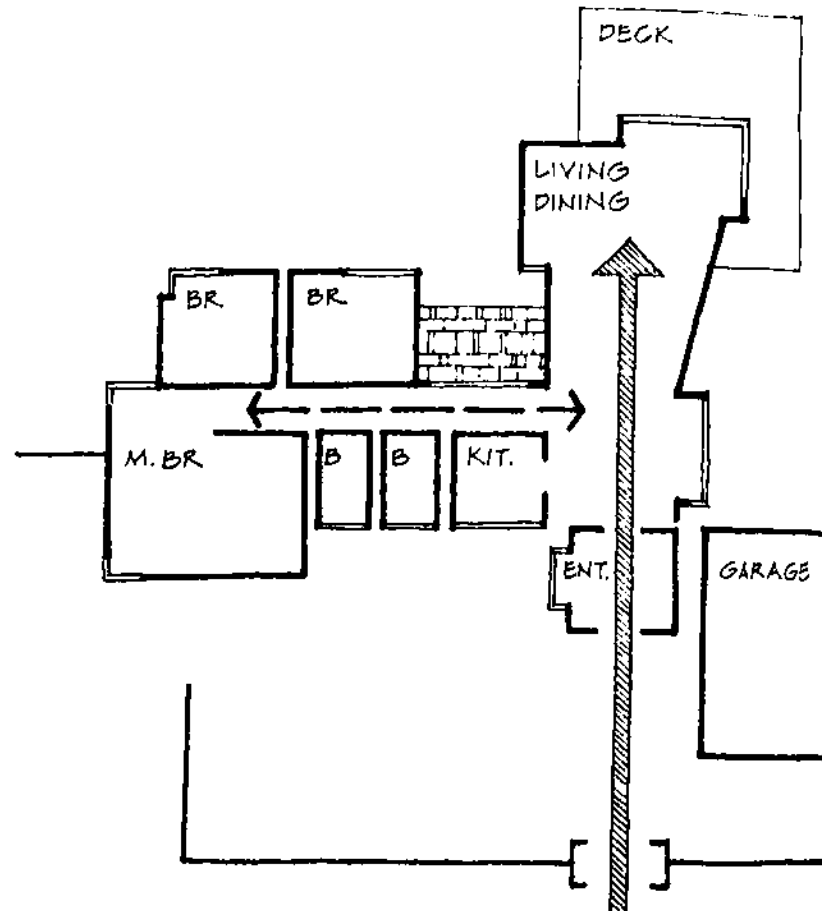
The moving Shed, New York

Visual Ordering Techniques

The building program lists all the spaces that are required in the building, their interrelationships, their form and significance.

The designer can use any of the following techniques to arrange the program information to express the intent of the building:

- Proximity Diagrams



Proximity Diagram for a house

Visual Ordering Techniques

- Signs and Symbols
- Vignettes
- Archetypes
- Patterns



Signs at Montreal metro station



Vignette: George town University, Student center



Proximity Diagram for a house

Archetypes: Northwoods Mall, IL

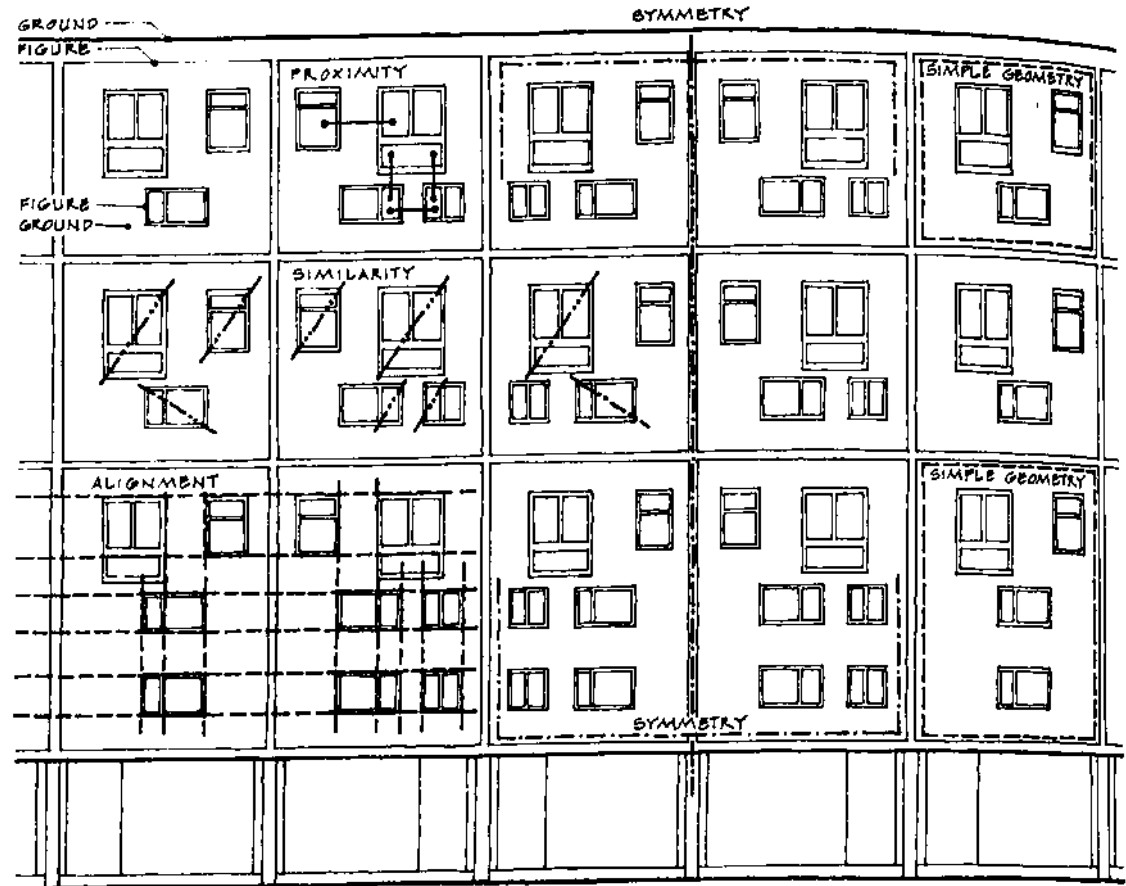


Structural and mechanical Patterns, Pompidou

Visual Ordering Techniques (Gestalts)

The theories of gestalt psychology are of interest to architect because part of the design process is concerned with expressing the relationships between parts of the design.

It is important to note that concepts of visual organization relate to what we can see at a particular moment.



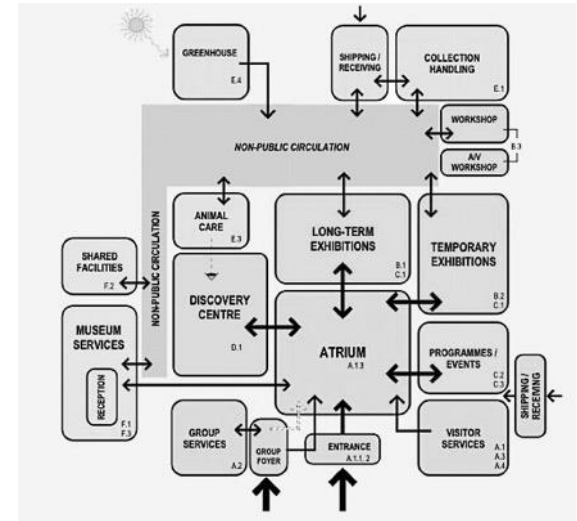
Elevation for Roosevelt Island housing proposal.

Visual Ordering Techniques (Gestalts)

- Figure/Ground
- Center of Gravity
- Configuration
- Similarity



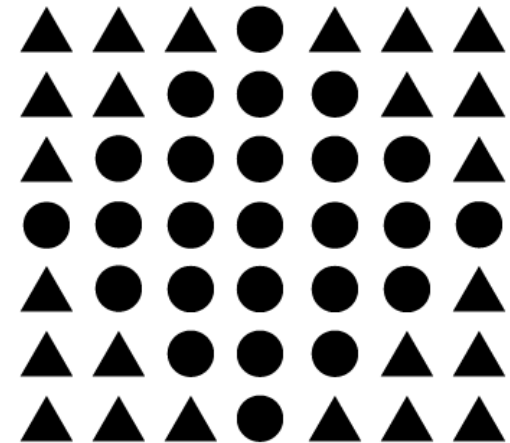
Figure Ground, Siedlung House, Le Corbusier



Center of Gravity, Main spaces.



MCA, Simple Configurations



Similarity of form

Visual Ordering Techniques (Gestalts)

- Proximity
- Symmetry
- Closure
- Form Reproduction



Proximity of openings, Saltzman House, Meier



Symmetry, Salk institute, Louis Kahn



Closure, Church of Light, Tadao Ando



Form Reproduction,

References

Snyder & Catanese, Introduction to
Architecture, McGraw Hill, 1979

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