



Salahaddin University- Erbil  
College of Engineering  
Department of Architecture

# Architecture design II

Lecturer: Staff

# Design process:

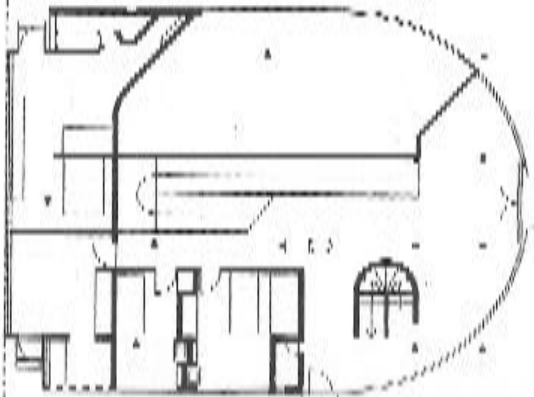
1. Architectural Drawing: The definition of plan, section, elevation, and site plan.
2. Modern architecture and greatest modernist architects: researching the principles of modern architecture and modern houses of architects.
3. House type: studying types of houses such as; detached houses, semi detached, row house, court yard house.
4. Space requirements: name and size of each space as required.
5. Concept phase studies for architectural design.
6. Site analyses: Study site variables, such as (topography, orientation, main roads, paths, Water storm, sewerage, electric...).
7. Sketch drawing: designing a house considering all above requirements.
8. Presentation drawings: final house design.

Modern architecture and greatest modernist architects

## Le-Corbusier: Iconic House (Villa Savoy)

The five point of the building:

- 1- The use of Pilots
- 2- Free-open plan
- 3- Free design of the facades
- 4- Horizontal Windows
- 5- Roof Garden



# Frank Lloyd Wright: Falling Water house

The principles of the Building:

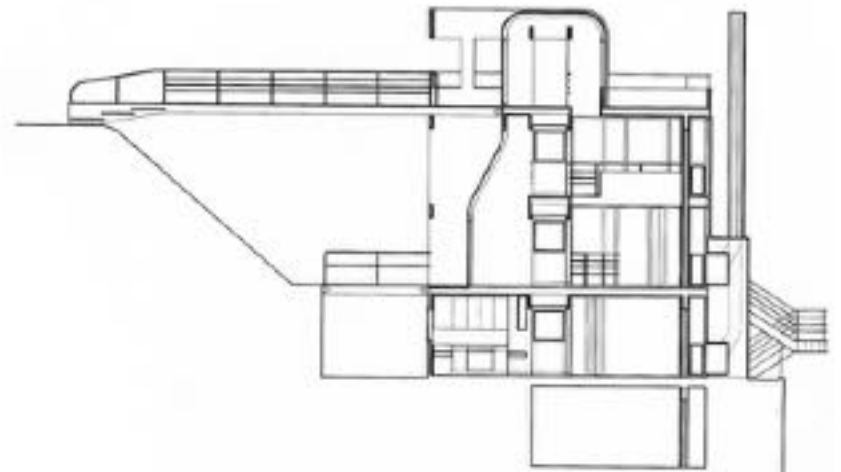
- 1- Organic colors
- 2- Simple geometrical shape
- 3- Integration the building with the nature
- 4- Strong horizontal lines
- 5- Hidden Entries



# Richard Meier: Douglas house



LOWER LEVEL



# Concept phase studies for architectural design

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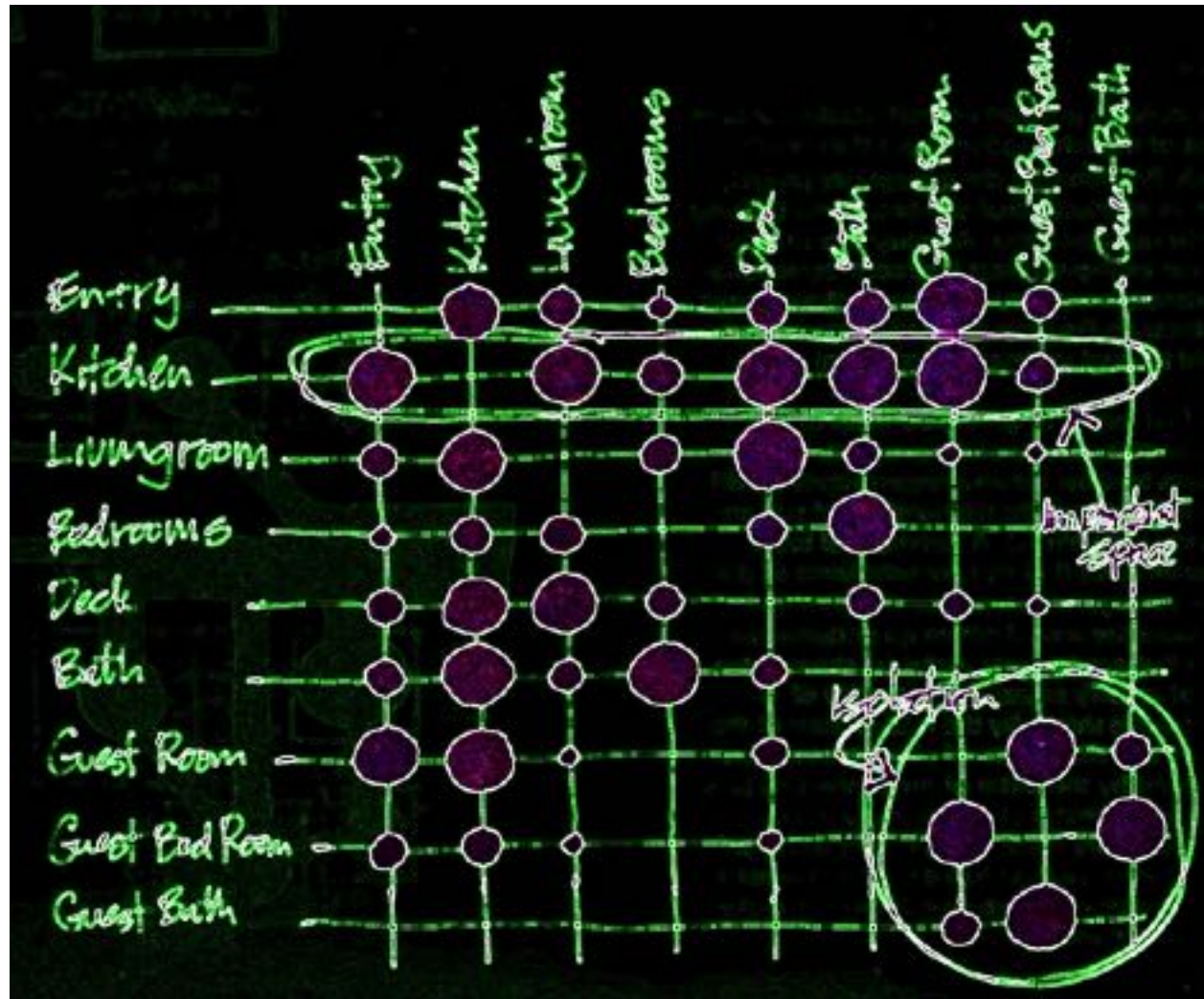
Design tools

The design process begins after the architectural program. The design process goes into a linear progression of steps in which each step elaborates upon previous decisions. The four steps in the architectural design sequence are:

- 1- Relationships Matrix
- 2- Bubble Diagram
- 3- Zoning Diagram
- 4- Site Analysis
- 5- Concept Plans

# Relationships Matrix

The Relationship Matrix is a design tool that abstracts the building program to conveniently summarize for activities to be housed and their required relationships.



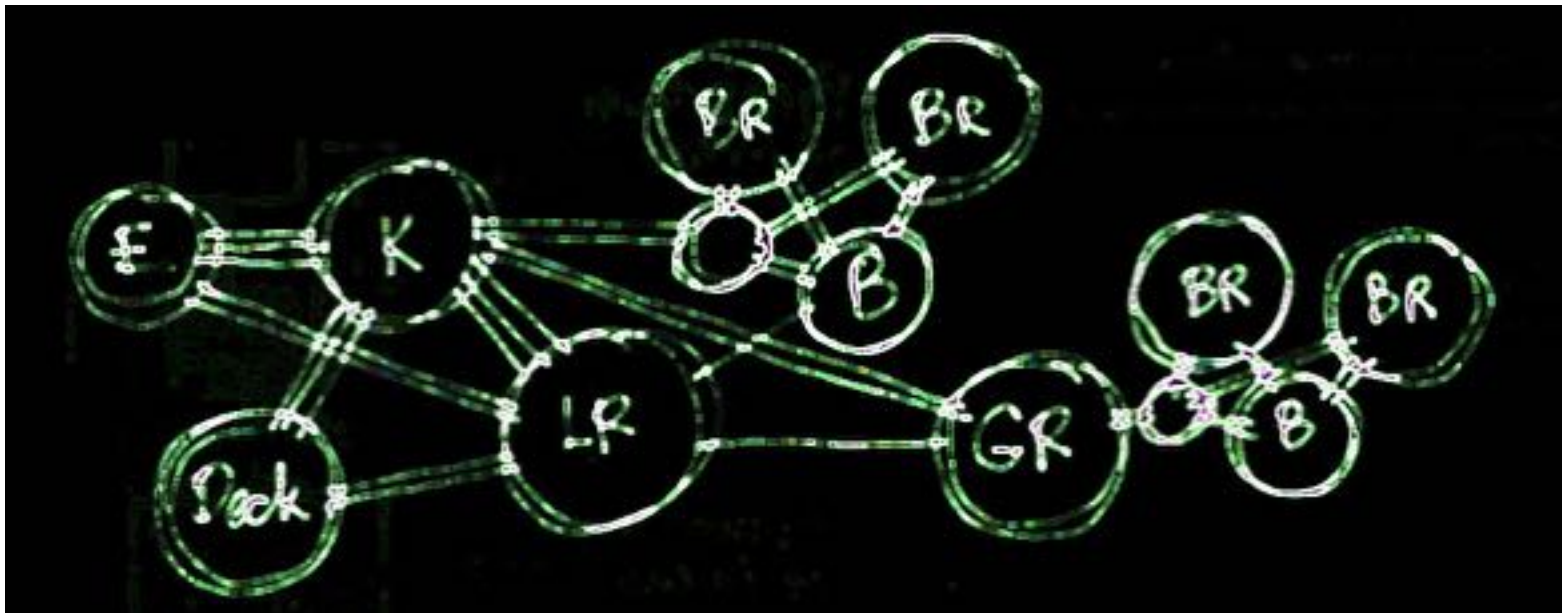
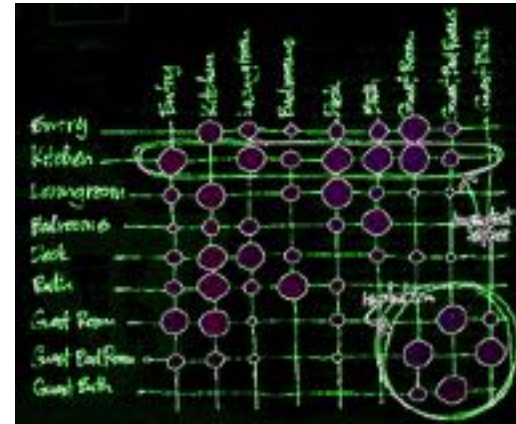
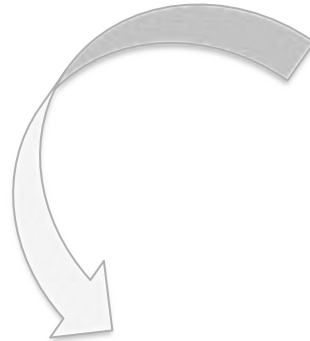






# Bubble Diagram

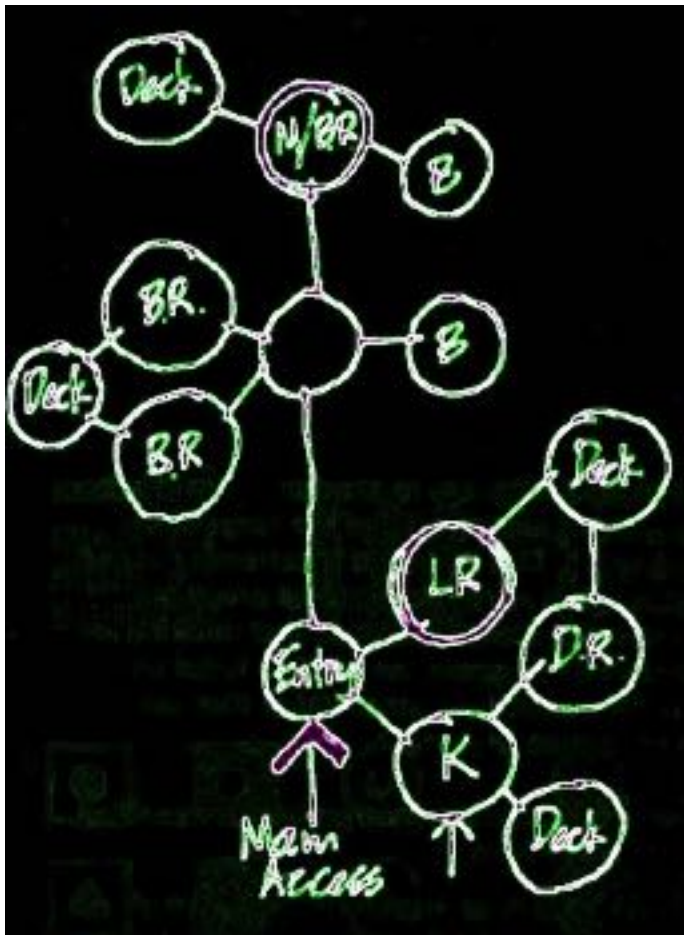
The Bubble Diagram is a tool for the designer to move from the design program to the building design. The Bubble Diagram transforms the program into a visual graphic.



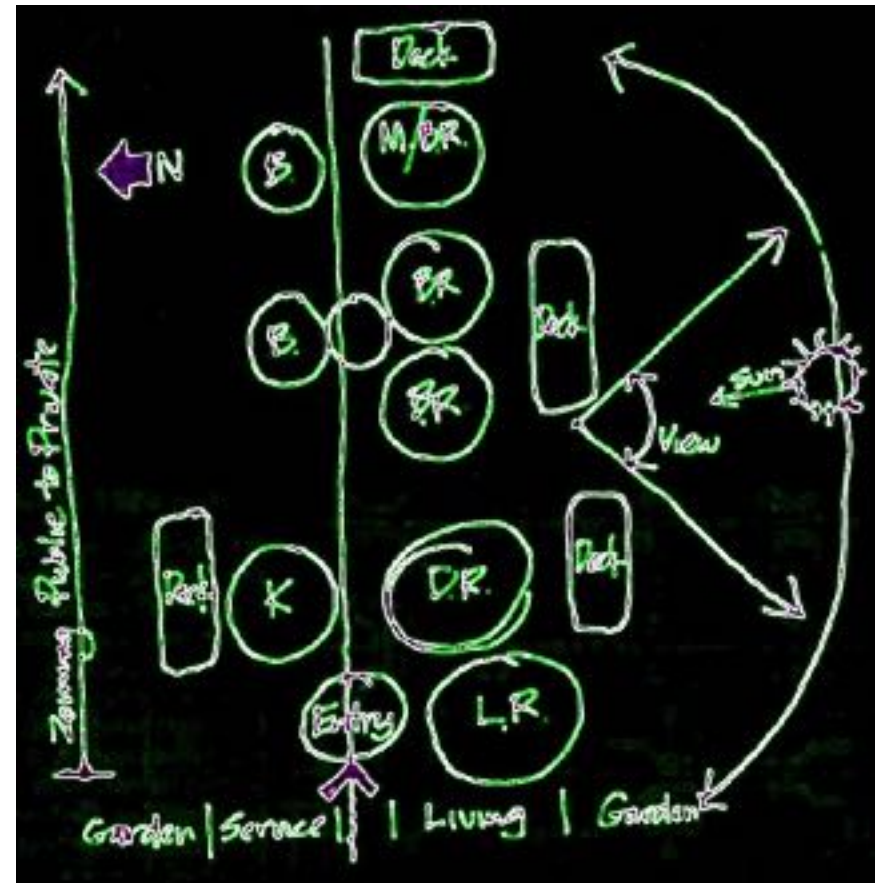
# Zoning Diagram

The Zoning Diagram is an abstraction for an early design. The Zoning Diagram corresponds to the site and climate establishing position and orientation of functions with respect to each other and the natural site. Natural light and heat, views, building access, and zoning of functions are also considered.

1



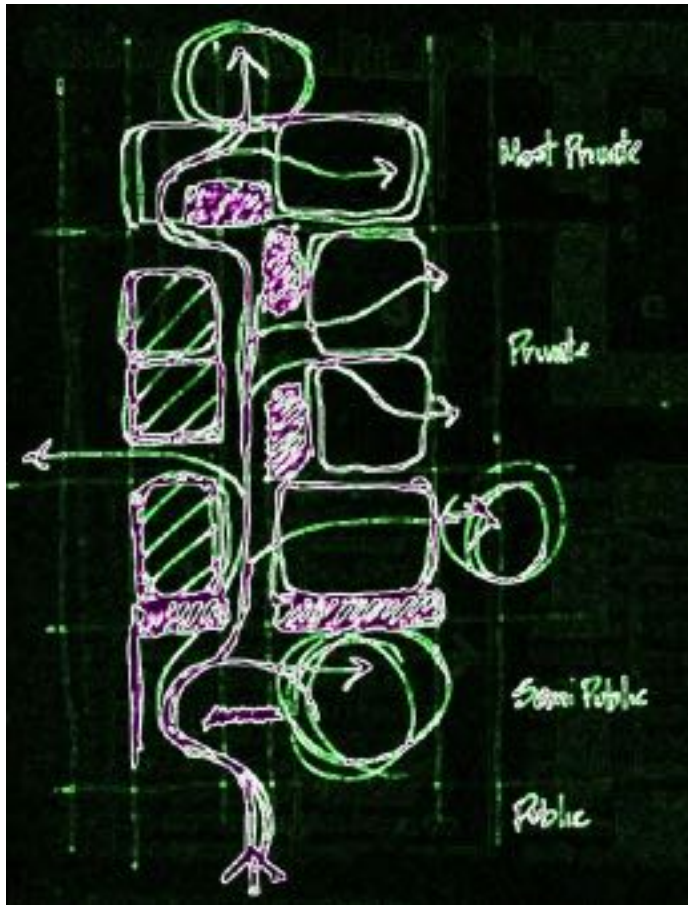
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3



4

