

THE ART OF ARCHITECTURE: MEIER'S TIMELESS STYLE

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Abstract

Introduction: An architectural identity is based on lasting architectural designs. Those common features that repeat across the architect's designs determine the architect's style and philosophy. **Purpose of the study:** We aimed to explore the style and philosophy of Richard Meier by studying his building designs developed in different time periods. **Methods:** In the course of the study, we used a mixed-method approach that includes the quantitative and qualitative research methods. By using the quantitative research method, we focused on the five selected cases of Meier's buildings differing in location, typology, and year of construction. The qualitative research method involved the observation method. **Results:** It was established that the main features of Meier's style are the abstract white geometric form, circular structural columns, floor-to-ceiling glass walls, interior double-volume spaces, long circulation axis, and skylights. Richard Meier used the philosophy of combining lightness, placeness, and simplicity to make his vision a reality.

Keywords

Architectural style, design philosophy, design thinking, geometric building, Richard Meier.

Introduction

The purpose of design is to provide the most suitable solution addressing true needs and circumstances and determine a solution-focused strategy, which is essential in the formation of an architect's identity and style. Style is considered a form of expression (Chan, 1994). The concept of style has two main aspects: the process (i.e., the way of doing things) and the product (Lawson, 2005). A style is formed by utilizing design constraints (design issues), manipulating mental images (Chan, 1992), and applying design principles and design methods (Chan, 2001). The number of design features, which cover the functional and geometrical relationships between forms, affects style recognition. Any three common features appearing in a design constitute the basic ingredient of a style while four common features ensure strong style recognition (Chan, 2000). Two factors determine how these common design features can be perceived: the size of these features in a design and the significance of perceptibility (Chan, 2000).

Richard Meier is an American architect who is known for his timeless rational postmodernism style (Phibbs, 2015). He viewed architecture as a social art, focusing on improving the quality of living conditions using natural elements (Phibbs, 2015). Meier's buildings refer to Le Corbusier's designs, especially in concrete forms, but he did not manipulate the space as Le Corbusier did

(Eisenman et al., 1975).

In this research paper, we study the design thinking methods of Richard Meier, aiming to define his style and philosophy by analyzing specific building designs, focusing on design challenges and solving methods. For that purpose, we selected the following five buildings: the Smith House, the Douglas House, the Neugebauer House, the Luxembourg House, and the Jubilee Church. The paper has six sections: Introduction, Hypothesis, Methods, Data Analysis, Results, and Conclusion.

Hypothesis

The research hypothesis is that all Richard Meier's design projects have repeated common features that identify his style.

Methods

In the course of the study, we used a mixed-method approach that includes the quantitative and qualitative research methods. By using the quantitative research method, we focused on the five selected cases, which were divided into two groups by type: the civic public case involving the Jubilee Church, and the residential cases involving the Smith, Douglas, Neugebauer, and Luxembourg houses. The Smith House was selected since it is the first building design by Richard Meier (Badalge, 2018). The Douglas House has specific site challenges, which were creatively solved through the design process. The Neugebauer House has its own design challenge related to the city regulations

in respect of roofing. The Luxembourg House was selected because of its location, design philosophy, and creativity. Besides, all the selected buildings were built in different periods. Such an approach was chosen to see if Richard Meier's design style has changed over time. The qualitative research method was used to study design-solving methods and creativity by observation and define the style and philosophy of the designs. The data were collected from the literature and websites.

Data Analysis

1. Smith House, Connecticut, 1967

The Smith House was Meier's first widely-lauded structure, with an area of 3251 sq. m (Badalge, 2018). The main design challenge was rocky topography. The architect designed three levels of a vertical building instead of a horizontal one to save excavation costs (Badalge, 2018). When designing this house, Meier implemented a basic geometric form, energizing tensions between closure in the front elevation and openness in the back elevation with a view of the water and landscape, which may come as a surprise. The structural system of the Smith House includes circular structural columns supporting the beams and roofing, and timbered walls.

Meier used simplicity, open space, and natural light as the design philosophy for this house. The main design features of the house are the following: an abstract white geometric form, circular structural columns, a chimney, a double volume, an exterior staircase, floor-to-ceiling glass walls, an interior balcony, a ramp bridge, and wooden frame material (Figure 1).

2. Douglas House, Michigan, 1973

The Douglas House is one of the most interesting Meier's house designs in terms of its relationship with the surroundings, with an area of

450 sq. m (Lynch, 2016). The high-sloped site was the main design challenge. A bridge as the main entrance, an exterior staircase connecting the three house levels, and floor-to-ceiling glass walls were the main creative design solutions. The house has an abstract rectangular form with a linear circulation axis, which is similar to the design-solving method used in the Smith House. It has circular structural columns supporting the beams and roofing using reinforced concrete.

The architect used simplicity, open space, and natural light as the design philosophy for this house. The main design features of the house are the following: an abstract white geometric form, a bridge, circular structural columns, a chimney, concrete material, a double volume, an exterior staircase, floor-to-ceiling glass walls, an interior balcony, a long middle corridor separating the public and private zones, and a skylight (Figure 2).

3. Neugebauer House, Naples, 1998

The Neugebauer House is a creative building design of white color with a unique structural roof solution chosen to meet the city regulations, and a skylight. The building is rectangular in form. Its linear organization consists of five parallel layers from front to back: access, service, living, sun terrace, and lap pool (Sveiven, 2011). The structural system includes columns and a roof structure, which consists of modules that control the structural bay. The building geometry design is divided into six equal rectangles with a pool view and glass wall elevations as well as a skylight integrated in a butterfly roof structure.

The main design features of the house are the following: an abstract white geometric form, a butterfly roof structure, concrete and limestone materials, a double volume, floor-to-ceiling glass walls, a long middle corridor

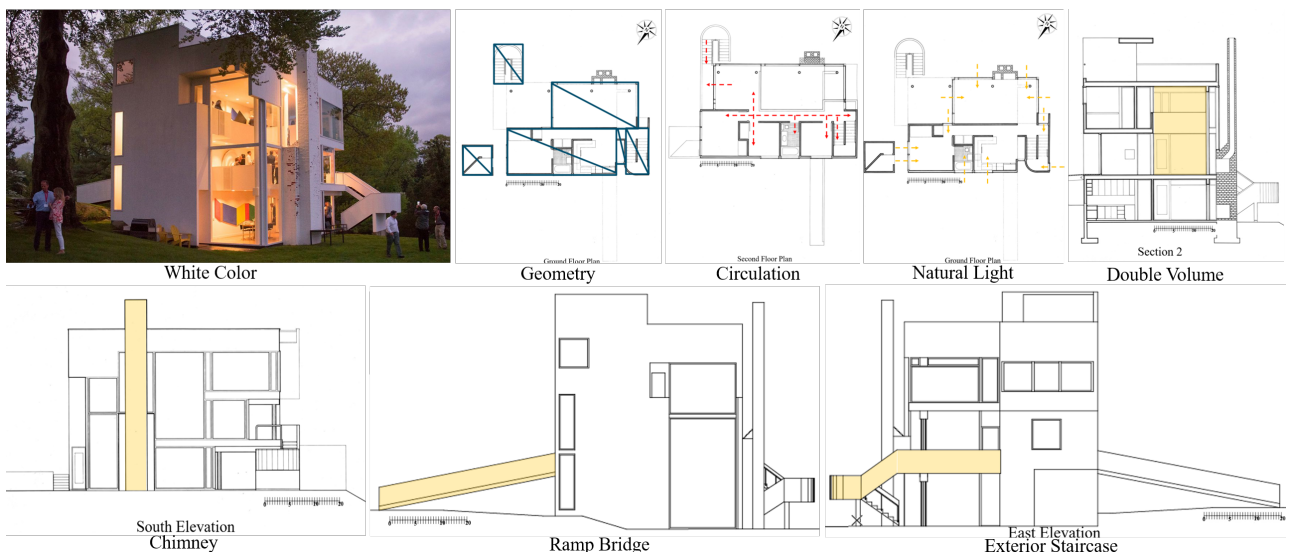


Figure 1. Some of the main design features of the Smith House (Badalge, 2018)

separating the public and private zones, and a skylight. The design philosophy of this house includes simplicity, open space, and natural light (Figure 3).

4. Luxembourg House, Luxembourg, 2012

The Luxembourg House offers both privacy and seclusion as well as panoramic views of the surrounding landscape and has an area of 975 sq. m (Stevens, 2014). The main challenge was sloped topography. In the design of this building, Meier used two rectangular geometric forms with three stories, with a garage on the bottom level. The public spaces including living and dining rooms are on the middle level, and the private spaces are on the upper level. Such a three-story house ensures privacy and does not tower over the neighboring buildings. Besides, the house has a long corridor circulation on each level and a grid structural system with circular columns in a double-volume space. In this design, Meier used the philosophy of placeness, lighting, and simplicity.

The main design features of the house are

the following: an abstract white geometric form, aluminum material, circular structural columns, a chimney, a double volume, an exterior staircase, floor-to-ceiling glass walls, an interior balcony, a long middle corridor separating the public and private zones, and a skylight (Figure 4).

5. Jubilee Church, Rome, 2003

The Jubilee Church is a rich case study of the relationship between natural light, geometric forms, and space design. The church has an area of 830 sq. m (ArchDaily, 2009). Among the design challenges, the typology of the building and the shell design can be mentioned. A new concrete mix (TX Millennium) was developed especially for this project, providing a creative solution for the shell design (Cardelicchio, 2018). The design philosophy of the building focuses on lightness, responding to nature, and the quality of the space.

The main design features of the building are the following: an abstract white geometric form, shell structures, a double volume, floor-to-ceiling glass walls, marble and concrete materials, and a skylight

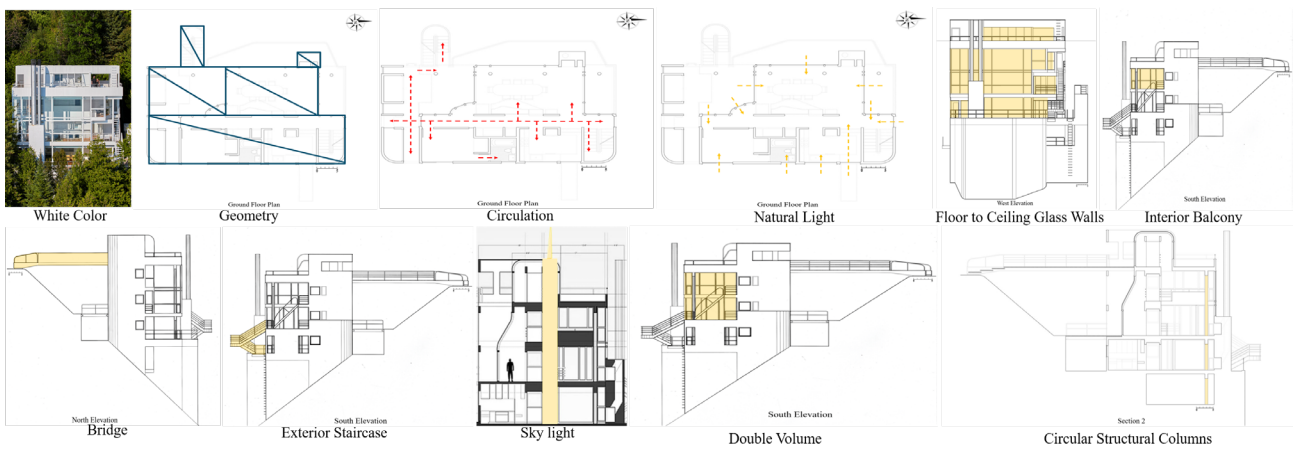


Figure 2. Some of the main design features of the Douglas House (Lynch, 2016)

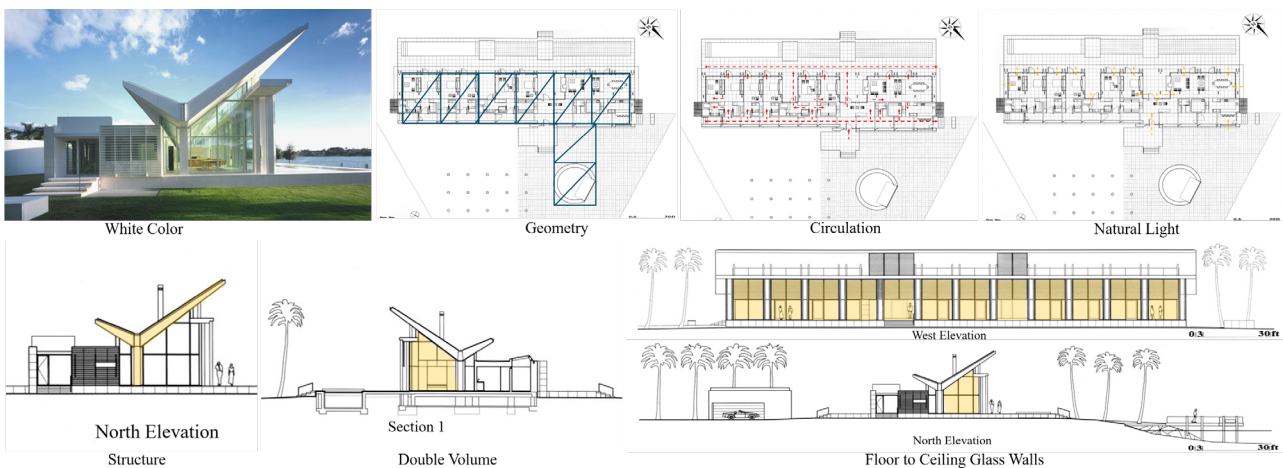


Figure 3. Some of the main design features of the Neugebauer House (Sveiven, 2011)

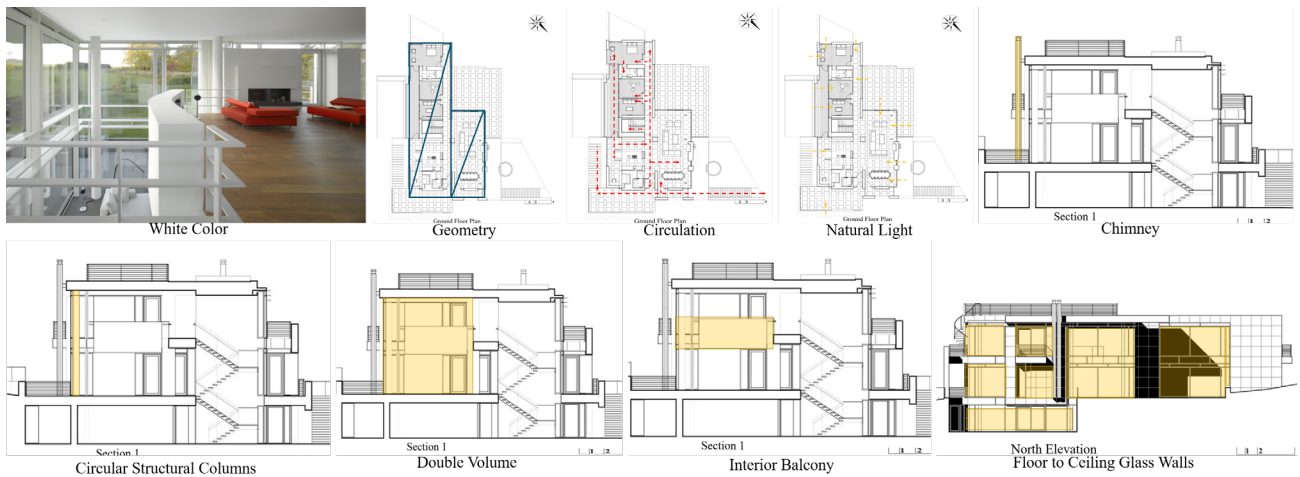


Figure 4. Some of the main design features of the Luxembourg House (ArchDaily, 2014)

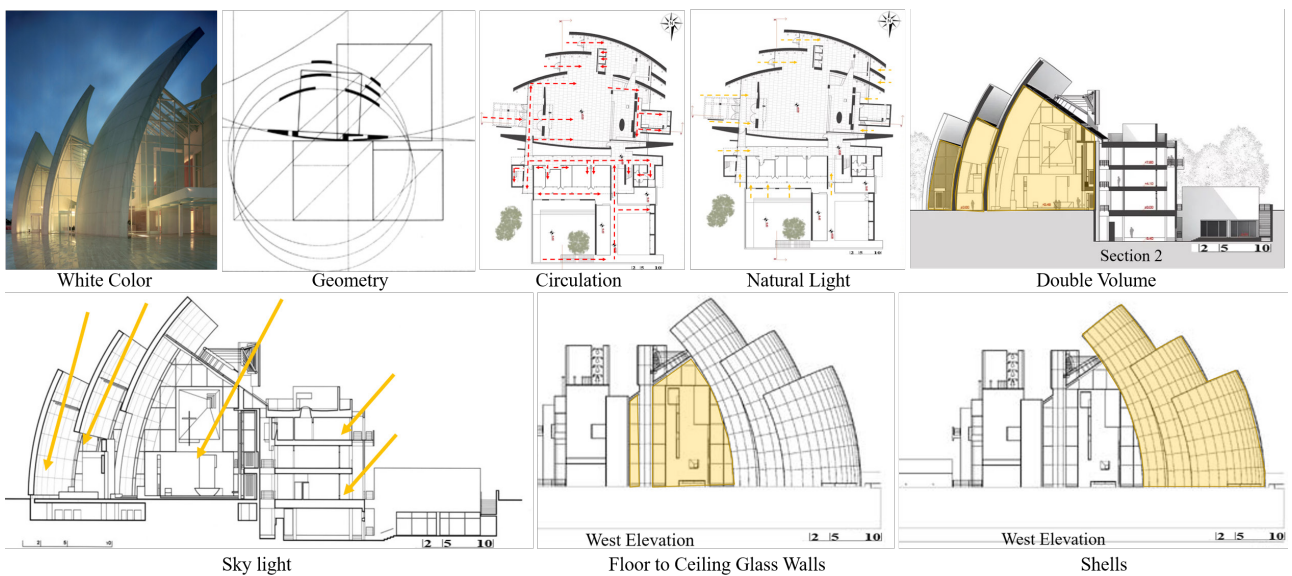


Figure 5. Some of the main design features of the Jubilee Church (ArchDaily, 2009)

(Figure 5).

Results

Based on the analyzed data, we summarized the features characteristic of Meier’s style and philosophy in a table below (Table 1). The results show that the repeated design features observed across all the case studies can be classified into three groups, where the strong design features form the design style. The strong features repeat across four case studies or more and include the abstract white geometric forms, circular structural columns, double-volume spaces, floor-to-ceiling glass walls, long corridor circulation, and skylights. The basic ingredient design features repeat in three case studies only and include the chimney, exterior staircase, and interior balcony. The barely perceptible design features repeat only two times across the case studies and include the bridge and ramp bridge. The design philosophy that repeats across all

the case studies includes placeness, simplicity, and lightness.

Discussion

This research paper shows that the more common features repeated, the stronger the style became. The features that repeat in Richard Meier’s designs the most and define his style are the abstract white geometric forms, circular structural columns, double-volume spaces, floor-to-ceiling glass walls, long corridor circulation, and skylights. These features were the consistent design principles that did not change in 1967–2012, which indicates the timelessness of Richard Meier’s designs. That explains his philosophy about using lightness, simplicity, and placeness.

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Table 1. Summary of the main design features of Meier's style and philosophy

Main Features of Style	Smith House	Douglas House	Neugebauer House	Luxembourg House	Jubilee Church	Strong (S) Style, Basic Ingredient (BI), or Barely Perceptible (BP)
Abstract	●	●	●	●	●	S
Bridge	●	●	-	-	-	BP
Circular Structural Columns	●	●	●	●	-	S
Chimney	●	●	-	●	-	BI
Double volume	●	●	●	●	●	S
Exterior staircase	●	●	-	●	-	BI
Floor to ceiling glass wall	●	●	●	●	●	S
Geometric form	●	●	●	●	●	S
Interior Balcony	●	●	-	●	-	BI
Long Corridor Circulation	●	●	●	●	●	S
Sky light	-	●	●	●	●	S
White Color	●	●	●	●	●	S
Philosophy	Lightness, Simplicity, Placeness					-

●	Feature Exists in the Building
-	Feature Doesn't Exist in the Building

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