

# WHAT REALLY MAKES A GOOD BUILDING?

**Abstract:** Is it possible to identify the factors that can make a good building? Thankfully or not, architecture is far more complicated than a simple yes or no answer to this question and, after all, a “good building” is a combination of many things happening simultaneously. The main objective of this paper is to mention, analyse and clarify the numerous factors that play an essential role, in order to understand how a “good building” can be translated in architectural terms. The purpose of this research is to identify the important elements of “good architecture”.

**Keywords:** good architecture, building design, important design elements, design procedure

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## Introduction

Is it really possible to identify the factors that can make a good building? Can they really be specified and have architectural formulas, or even checklists, that result only in good buildings? Are the architectural prizes, the amount of “likes” in social media, or various evaluations enough reliable criteria for a “good building” (Cantacuzino, 1994)? Thankfully or not, architecture is far more complicated than a simple yes or no answer to the above questions and after all a “good building” is a combination of many things happening simultaneously. The main objective of this paper is to mention, analyse and clarify the numerous factors that play an essential role, in order to understand how a “good building” can be translated in architectural terms. The purpose of this research is to identify the important elements of “good architecture”.

Indeed, it is rather hard nowadays to formally define the term “good architecture”. Probably one of the oldest (from the 9<sup>th</sup> century) but best definitions of “good architecture” was given by Vitruvius. According to him, in order to have “good architecture” and therefore a “good building” it is necessary to include three basic qualities: *utilitas*, *firmitas* and *venustas*. In other words, a structure should be useful, solid and beautiful (Rowland, 2001). It is worth mentioning that Vitruvius didn't set any kind of hierarchy or priority between these three qualities. Each of them is as important and as necessary as the other two.

In our times, there can be many interpretations and different point of views regarding these three qualities. Architectural structures and buildings define the common spaces, facades, aesthetics etc. which we use and experience in our everyday life. According to F. Keré, “architecture is not just about building. It's a means of improving people's quality of life” (in Hales, 2005). So, in a way, architecture is everywhere and it affects everything. Modern architects usually work for a client and therefore satisfying the client is usually top priority. Throughout time, Vitruvius' three qualities were re-evaluated, re-stated, re-approached and they were adjusted according to the values and the priorities of each era, starting from the interpretations of Leon Battista Alberti (in the 15<sup>th</sup> century) and Andrea Palladio (in the 16<sup>th</sup> century), until the present values. Nowadays, there is a shift in design priorities and there is a special focus on goals like sustainability, zero waste buildings etc. (UN, 2020).

## The surrounding environment of a building

From a first point of view, the surrounding environment of a building is of great importance from the very early stages of the design process (Ding, 2008). It is a factor of thorough research because, after construction, a whole “new reality” and “new system” of communication, circulation and new relationships will be created (Fig. 1). Whether the new building is located in the heart of a city, in an area of great natural beauty, in a rural area, or on the outskirts of an urban area (e.g. industrial zone), the importance of the surrounding environment is still of great importance.



Fig. 1. Life between buildings: on the left, the seafront public space, Thessaloniki, Greece. © Facebook Hello Greece, free use. On the right, the ancient theatre / conservatory in the city of Patras, Greece © Prof. N. Tsinikas

It is very common – especially in urban areas – to observe the construction of new buildings. The relationship of the new building with the surrounding environment and the pre-existing buildings in this case can be intrusive, harmonious, indifferent etc. (Mehta, 2007). There are certain rules and limitations (always depending on the existing building regulations) that apply for these relationships e.g. minimum distances between the buildings, volume, height, shape and material specifications (Fig. 2). In total though, whether the new building fits harmoniously with its surrounding

environment is a matter of many variants. Apart from the subjective opinions of the users, it is simultaneously a matter of successful plot utilization, aesthetics, maintenance, cost issues, etc.



Fig. 2. On the left, Pompidou centre in Paris, France and, on the right, Metropol Parasol in Seville, Spain. New buildings and their relationships with the pre-existing buildings in the heart of cities. © Wikipedia public domain, © Unsplash photos free use



Fig. 3. The surrounding area of Parthenon. In front of it, the new Acropolis museum by B. Tsumi, Athens, Greece. © prof. N. Tsinikas



According to Aldo Rossi, in his *L'architettura della Citta* (first published in 1966), where he thoroughly describes his perception on issues regarding environment, a turn towards the release of architecture from historic and traditional conventions is obvious in order to redefine the architectural vocabulary at the times of industrialization (Rossi, 1991). At the same time, Robert Venturi's *Complexity and Contradiction in Architecture* is published and he states that a new building in an existing built environment can't always achieve a harmonious integration and this fact can be either part of a deeper architectural design intention or not (Fig. 3). In conclusion, architects have to deal with this issue as it is a new challenge or a new opportunity. If one could translate Venturi's perception into today's needs, the "energy consumption issues" in buildings could be considered as a challenge.

## People using the space

People who use the built environment or the new building are in the centre of attention and importance in architectural design. After all, the design of a new construction aims to provide shelter and comfort (Zanariah et al., 2013). The famous principle of Louis Sullivan "form follows function" is linked with the use of the space and therefore architectural programming depends on the use of the space and its layout. Examples regarding the interior architecture of open plan layouts for open spaces or flexible/adaptable spaces are connected to the multifunctional use of the same space. In these cases, other issues come up e.g. energy consumption or even sanitation issues during the recent experience of the COVID-19 pandemic (2020).



Fig. 4. Villa Savoye by Le Corbusier, one of the most representative modern movement masterpieces, Poissy, France © Wikipedia public domain

These functionalistic and rationalist approaches are explained in detail in Le Corbusier's *Vers une architecture* (1923) and also identified in Alvar Aalto's interior design details. One of the most representative works of the modern movement in architecture, is Villa Savoye. This masterpiece by Le Corbusier is perhaps the best example of his attempts to create a house which would be a machine for living in (*machine a habiter*) (Fig. 4). The house is near Paris and it is considered to be as beautiful and functional as a machine. This Villa was the product of many years of design, and the basis for much of Le Corbusier's later architecture. Although it looks simple in photographs, it is a complex and visually stimulating structure. The design features of the Villa Savoye include:

- \_modular design – the result of Le Corbusier's researches into mathematics, architecture (the golden section), and human proportion;
- \_pilotis – the house is raised on stilts to separate it from the earth, and to maximise the use of the plot. These also suggest a modernized classicism;
- \_absence of historical ornaments;
- \_abstract sculptural design;
- \_pure colour – white on the outside, a colour associated with newness, purity, simplicity, and health (Le Corbusier earlier wrote a book entitled *When the Cathedrals Were White*), and planes of subtle colour in the interior living areas;
- \_a “very open” interior plan – so open that it makes it difficult to heat;
- \_dynamic, non-traditional transitions between levels/floors – spiral staircases and ramps;
- \_built-in furniture;
- \_ribbon windows (echoing industrial architecture, but also providing openness, unification with the exterior, and natural light);
- \_roof garden, with both plantings and architectural (sculptural) shapes (primary integration of an architectural element that is used widely today);
- \_interior garage (based on the turning radius of the 1927 Citroen).

All the above include functionality, durability, beauty and comfort. On the other hand, the interior atmosphere and the total experience that people get from a building may be the final judge of whether a building is “good” or not. In other words, an architect may have analyzed beforehand all the necessary data, set the design goals, worked with passion and energy, but the result may not be the expected one if people don't spend time in it or don't use it as much as they are supposed to.

According to the philosopher Gernot Böhme, atmosphere is achieved only by the use of people inside a building. Defining the term atmosphere is rather difficult as it is linked to time and personal experience and perception (Stidsen et al., 2010). At this point it is worth mentioning Zumthor (2006) and his detailed explanation on the way he aims to achieve a “perfectly tempered feel” in his built spaces. His intention is to create architecture that immediately communicates a certain atmosphere to those who experience it. According to him, a successful atmosphere is one in which people want to stay longer, where they feel comfortable in their surroundings and at the same time one where they can be surprised and intrigued. He implies that atmosphere is an aesthetic element or a quality a building can achieve and states that good architecture should “move” him. The impression of a building can offer a basic insight into its atmosphere. Speaking of atmosphere, he highlights that “in the fraction of a second – [you] have this feeling about it. We perceive atmosphere through our emotional sensibility – a form of perception that works incredibly quickly” (Zumthor, 2006, p. 13).

## Functionality – Durability – Beauty. Analysing the basics

The fundamental quality of functionality refers to the program and the uses of the building in order to maximise the satisfaction of the users. A new building without functionality may be beautiful but not useful at all – than it is like a sculpture.

Durability refers to the construction details of a building. Concrete, metal, wood, mud or no matter what other material is used, the construction must be steady and obey the laws of physics. In order to be part of “architecture”, beauty and analogies need to also be a part of it; otherwise, it is closer to engineering than architecture.

Beauty refers to the aesthetics and the appearance of buildings. Vitruvius refers to it as “delight”. Visual pleasure in terms of architecture could be noticed on a well-constructed brick wall, a vaulted stone ceiling, a slot for natural light in a dark room. Beauty is the essential part of “good architecture”. Without the element of beauty an exceptionally functional building is just utilitarian and it has nothing to add to architecture; it is the difference between a plain suburban house and Frank Lloyd Wright’s Fallingwater. Beauty standards have also changed through time. An understandable example on this change is the Kennedy Centre (Washington D.C.) by Edward Durrell. At the time it was constructed (1971) it was considered to be the most



stunning building, but now it has received negative comments based on the simplicity of its shape, its analogies and the interior design.

Sometimes, beauty in architecture is linked to a certain architectural style which is “in fashion” or to architectural elements that are excessively used. As time goes by, certain architectural trends come back “in fashion” with new arguments and regrets for their abandonment. It is worth mentioning a relevant characteristic example in Florida (USA). The art deco style hotels built in the 1970s and 1980s were re-appreciated after years of neglect. After a while, they were renovated and now they are a worldwide known tourist attraction and a landmark for Miami. Architectural masterpieces such as the Parthenon, Stonehenge, the Pyramids, the Louvre, etc. impress with their spatial power and their size.

## Conclusions

In conclusion, is it possible to say whether a building is “really good”? Maybe if one can answer positively to most of the following subjects:

\_Has functionality been expressed in a substantial yet visually interesting way? The visual information along with proportions (height and volume) that respect the human scale play a vital role. For example, an aerodynamic shape of an airport or an abstract shape of a contemporary museum may enhance the final result.

\_Does the building have a competitive, or a harmonious relationship with its surrounding environment? The limits of a “good building” are not supposed to be obvious. When designing a single building, the surrounding environment is crucial for the integration of the result. Some of the most valuable architectural buildings are not invasive to their surrounding environment (especially in cases when this environment is the natural landscape), and the choices of the applied materials and their volumes totally respect nature (Fig. 5). On the other hand, in other cases, new buildings use a totally different architectural vocabulary from the one used in their surrounding environment in order to gain visual attention and depending on their use.

\_Is the new building well-constructed? As Mies van der Rohe once quoted, “God is in the details”. A well-constructed building with attention to the details (e.g. the color of a wall, the material of a

single door, etc.) can always play a vital role for the coherence of the final result.

\_Will its architecture last in time? “Good architecture” has a significant character that remains over time even if the use of the building or the space changes/adapts to the needs of the users. The Grand Central Terminal in New York was built in 1913 with large waiting rooms for the passengers. Despite the fact that passengers continue to sit in the same rooms, the interior of the station changed over time. New enhanced uses, coffee areas, shops and – almost – a shopping mall appeared. The sense one gets is still the same – the feelings of glamour and impressiveness become even greater as time passes by.

The element of “surprise” in architecture can be translated into an inspiring quiet corner for recreation or a beautiful enclosed green garden. These are spaces that can evoke feelings in users and therefore they become places. Understanding the complexity of architecture can be terrifying but yet challenging. There might be more “good buildings” and even “good cities” if more people tried to approach and understand the deeper meanings of architecture.



Fig. 5. Thermal Baths, Vals, Switzerland, by P. Zumthor: To be noted the surrounding area and the relationship of the building with the natural environment. © Wikimedia commons free use

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