

Functionalism of Sculpture in Architecture: A New Perspective on Art and Form

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Abstract: Sculpture and architecture have traditionally been separate, with sculpture serving as decoration. However, with the rise of modernism and functionalism in the 20th century, sculpture began to be seen as an integral part of architecture, not just as an ornament. Functionalism in architecture suggests that the form of a building should follow its function, and sculpture, in this context, serves both aesthetic and practical roles. Examples from architects like Antoni Gaudí and Le Corbusier show how sculpture enhances the functionality of buildings. Modern technologies, such as 3D printing and laser cutting, have further integrated sculpture into architecture, allowing for more complex and interactive designs. Today, sculpture in architecture continues to evolve, blending aesthetic and functional elements to create spaces that are both beautiful and practical.

Keywords: Sculpture, architecture, functionalism, Gaudí, Le Corbusier, 3D printing, laser cutting, ecological design, interactive art.

Introduction

Sculpture and architecture have long developed as two separate but interconnected elements. In traditional concepts, architecture was seen as a discipline focused on creating functional spaces and structures, while sculpture served as a decorative complement or symbolic accent. However, with the development of modernist movements and functionalism in the 20th century, this division began to be contested, and sculpture began to be viewed not only as an ornament but as an integral part of architectural objects, possessing functional value.

Functionalism in architecture suggests that the form of a building or its elements should directly follow its function. In the case of sculpture, this means that artistic elements should not only be visually appealing but also perform specific practical tasks, whether it is creating an aesthetic context, emphasizing an important element of the building, or engaging the viewer in the perception of the space. In this context, sculpture in architecture becomes not just a decorative element but an active participant in the architectural process.

One vivid example of functionalism in sculpture in architecture is the work of architect and sculptor Antoni Gaudí. His works, such as the Sagrada Familia Cathedral in Barcelona, demonstrate how sculpture can become not just decoration but an important element that supports and highlights the functional aspects of the building. Gaudí used sculpture to create visual harmony while simultaneously emphasizing the structural features of the design, such as arches and columns. In this way, sculpture became not merely an additional ornament but a crucial component in conveying the ideas of architecture and its functionality. In this case,

sculpture was integrated into the architecture on a deep level, combining aesthetics with functionality.

Another example of functionalism in sculpture in architecture can be found in the work of Le Corbusier, particularly his famous "Villa Savoye." For Le Corbusier, sculpture was not merely an ornament, but an important element that could express the functional and aesthetic qualities of the building. He regarded architecture as a means of creating functional spaces, and sculpture, in turn, served to highlight these functions. In the "Villa Savoye," sculpture and architecture merge into a unified organic process, where form and function become inseparable. Sculptural elements, such as reliefs and sculptures on the facades, do not merely decorate the building but also help express its philosophy: functionality and simplicity. Le Corbusier often argued that architecture should be "action" and "function," and sculpture here becomes an expressive complement to this philosophical approach.

While early examples of functionalism in architecture were limited to minimal decorative elements, the development of modern technologies and materials opened new possibilities for integrating sculpture into the architectural context. In recent decades, architectural works have increasingly incorporated sculptural forms created using the latest technologies, such as 3D printing and laser cutting. This has allowed artists and architects to create complex shapes and structures that were previously impossible with traditional methods. Contemporary architects, such as Zaha Hadid, actively use sculptural elements to emphasize the functionality of buildings while maintaining their aesthetic value. Hadid, for example, created a series of buildings where form and function blend together, and sculpture plays a key role in creating unique spaces that are both functional and visually striking.

In recent years, the concept of functionalism in sculpture has evolved within the framework of conceptual and interactive art, where sculpture is no longer a static element. Contemporary artists and architects have begun developing installations that respond to the movement of people, changes in lighting, and other external factors. Sculptures created in this context can change their form or appearance depending on how they interact with the surrounding world. An example of this approach is the work of British artist David Howard, who uses new technologies to create sculptures that change depending on the angle of view and lighting. In this case, sculpture becomes not just an element of architecture but an important tool that helps reveal new aspects of space perception.

At the same time, functionalism in sculpture and architecture is not limited to visual effects alone. Contemporary approaches to creating sculptural elements in architecture often include a social function, aimed at engaging viewers and creating public spaces that encourage interaction and communication. In the architecture of public buildings, sculpture can play a role in organizing the space, helping to highlight important areas and direct the flow of people. This is especially relevant for objects such as museums, theaters, and public squares, where sculpture helps set the desired atmosphere and enhance the perception of the surrounding space.

Furthermore, sculpture in architecture often carries symbolic significance, which is an integral part of functionalism. Within the frameworks of modernism and postmodernism, sculpture became an important element that could reflect the philosophical and social ideas of the architect or society. This can also relate to the use of elements that carry cultural or historical value. For example, the works of architects such as Richard Meier or Renzo Piano often include sculptural elements that not only highlight the functional aspects of a building but also serve as a reminder of the space's meaning or its cultural value.

Sculpture in architecture and functionalism has also become an important part of ecological and sustainable design. Modern approaches to construction and architecture involve the use of sustainable and environmentally friendly materials, as well as the creation of spaces that can adapt to changes in the surrounding environment. Sculpture in architecture can play an important role in creating such spaces, including elements that contribute to energy savings, air quality

improvement, or light flow. This may include using sculptural forms that are not only aesthetically pleasing but also functional in terms of sustainability.

Thus, functionalism in sculpture and architecture is a multifaceted and meaningful concept. It is not just an attempt to combine form and function, but a desire to create art that serves not only aesthetic goals but also has practical significance. From early examples, such as the works of Gaudí and Le Corbusier, to contemporary installations that respond to the environment, sculpture in architecture continues to evolve, opening new horizons for the interaction of art and space. In this context, sculpture becomes not just an ornamental element, but an important component that helps create more harmonious, functional, and inspiring spaces.

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