Exploring the Works of Furniture Design Master Mies van der Rohe Through the Lens of Mathematical Geometry: A Study of the Barcelona Chair

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Abstract

This study explores the works of Mies van der Rohe to uncover the simplicity of his furniture designs and the unique geometric forms, thereby revealing the essence of the design process. By interpreting his works through the lens of mathematical geometry, the paper aims to understand how Mies van der Rohe integrates mathematical principles into his designs. The analysis is centered around three pivotal aspects of his work: the use of metal materials, the simplicity of the frame structures, and the distinctive geometric shapes. Through detailed case studies, the paper elucidates Mies van der Rohe's design philosophy and dissects how he infuses his pieces with mathematical geometry. Beyond the realm of aesthetics and functionality, furniture design must also reveal the visual connections between the elements of life it encompasses. Such a design not only captures its essence but also affirms its worth, inviting the reader to appreciate the artistic allure of mathematical thought.

Keywords

Mies van der Rohe, Furniture Design, Geometric Form, Mathematical Thinking