

Silhouette Chair

Competition Elective
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“The story of Modernism is the story of change. It is the triumph of possibility and imagination over the oppression of an entrenched status quo. Modernism is a manifestation of humankind’s belief and hope for the future... a celebration of individual expression.”¹

Man’s triumph over machine in the late nineteenth century ushered in a new era in the design world; twentieth century modernism. Pioneers in the field began to take advantage of and experiment with the new technologies that were becoming available to them; steel was the newest, and most exciting of these materials, known for its strength and durability, amongst other characteristics. It was given its time to shine when Joseph Paxton designed the Crystal Palace in London, using prefabricated steel components to construct the immense and impressive structure. The precedent for steel’s mass-production abilities had been set, and it was only a matter of time until its capabilities for enhancing not only building construction were fully realized. Steel played an integral part of the design process for the designers of the machine age, who came into their own during the early twentieth century. Young designers became obsessed with notions of man-made elements and the lack of human interventions in the world of design. It became a universe of manufacturing, and it was their job to erase the hand of man from the aesthetic of design. Spearheading this new “mantra” was Le Corbusier, famous for his quote that “the house is a machine for living in.”² This statement was made “to suggest an ideal form suitable for standardized industrial methods and clean, efficient living. As an interior designer Le Corbusier advocated open, uncluttered spaces with furnishings that resembled industrial equipment.”³ Such determination in erasing the human touch turned the design world into the realm of mass-production and of machines. Le Corbusier, Ludwig Mies van der Rohe, and later, Charles and Ray Eames became the beacons of success in the furniture design world, with their minimal, elegant interpretations of the modernist aesthetic. Sensual curves, evocative of the female figure, inform the shape of the Silhouette chair. Its design references iconic chair of the early 20th century by emphasizing human qualities and feminine silhouettes which evolves the traditional form. The modern design is furthered through the selection of Corian, a malleable plastic, as the focal point of the material palette. The curved frame permits the chair to oscillate, mimicking female movement. The user can choose their desired angle of repose by moving the steel rod along grooves set into the bottom of the frame. This modern chaise maintains the elegance and structure of the past, while updating the form and materials to the present.

Chair design in the twentieth century raised the importance of the furniture to iconic status and importance in the field of design. Designed with the ideas of mass production and machinery in mind, the chairs spoke to a new generation of designers and buyers alike. Le Corbusier developed his chaise lounge as a piece of furniture to inhabit his Weissenhof house, in Stuttgart, Germany.



Figure 1, Le Corbusier's Chaise lounge

“Corbusier envisioned furniture as universal “domestic equipment” which should be scaled to the proportions of the human body. The point of his “machine aesthetic,” however, was not that design should become machinelike, but that mass production and functional design could create less expensive and better furniture – a reaction against the notion that “good” furniture was a privilege of the upper classes alone. Designed with Charlotte Perriand, his Chaise Lounge of tubular steel and black leather, dubbed “a rest machine” by Le Corbusier, is easily adjustable for maximum comfort.”⁴

He continually explored the relationship between the inhabitant and the space, fluctuating back and forth between the more human, sensually curved shapes, and the rigid rectilinear lines of his architecture. His famed Chaise Lounge is arguably his most well-known piece of furniture, taking the shape of the human form and accentuating it, rather than using the rigid, flat surface of the traditional chaise. His Club chair and sofa retain strict rectilinear geometries, though they both have the same material palette of tubular steel and leather. “Le Corbusier championed the forms of modern industrialization –materials technology, standardization, and rationalization – and sought inter universal ordered solutions in their application.”⁵ The design of Le Corbusier's furniture exploited the “interior equipment of a dwelling”⁶ while taking into account the personal comfort and proportions of the user.



Figure 2, Le Corbusier's Club chair

Mies van der Rohe had his success with furniture design, as well. Designed in 1928, his tubular steel chair retained the initial ideas of Dutch architect Mart Stam's ‘cantilever chair’ though the introduction of the semicircular curve in the legs and arms improved upon the original design. These cantilever chairs exploited the physical properties and capabilities of the steel structure by eliminating the back legs and giving the chairs a spring effect and a weightless look. The curved legs added elegance to the chair, but



Figure 3, Mies van der Rohe's Cantilever Chair

also brought into the design the user's proportion and contour. His architecture was completely void of circular geometries, but the same did not apply to his furniture. "Mies saw the curve in relation to the human body, to human perception and action, while he regarded the rectangle as an objective structure or space and construction, of tectonic fact."⁷ The Barcelona chair, designed in 1929 to complement the World's Fair Pavilion in the city, used the curve as

part of the scissor shape in the structure.

"Visually, the Barcelona chair was also modern, its simple, slightly bent, flat steel line embodying the aesthetic economy of Rationalism and New Functionality. All necessary features were kept to a minimum, and the construction method was not concealed."⁸

Mies achieved the desired effect of minimal interventions to reach the maximum level of comfort and design in the design of the Barcelona chair. His furniture was designed for human inhabitation and use, rather than solely objects of art and desire.



Figure 4, Mies van der Rohe's Barcelona Chair

Charles and Ray Eames took the ideas of mass production and materiality from the designers of the twenties, Mies van der Rohe and Le Corbusier as well as Gropius and Breuer, but used the materials and ideas of the 1950s to propel their design. Instead of tubular steel and leather, they experimented with plywood, steel wires and fiberglass, materials that were widespread and available to them. "The wire mesh chair, an exemplary essay on the minimal use of a "new" material, had a tremendous impact."⁹ It focused

on standardization and method, as well as functionality and durability. The "machine aesthetic" remained, and mass production of their furniture became an important design feature and focus.

[Eames's] interest in mass-producing molded plywood shapes that could be used in low-cost, high-quality furniture resulted in plywood shell



Figure 5, Eames's Wire Frame Chair

chairs... and was influential for his use of standardized prefabricated parts.”¹⁰



Figure 6, Eames’s Bent Plywood Chair

The interest in the human form of the Eames’ designs was evident from their initial designs for soldier’s leg braces during WWII. They had an obvious understanding of the human body and its proportions and rather than trying to make rectilinear pieces to fit into their rectilinear houses, they embraced the curves from the start. They manipulated rectilinear materials to adjust to the human form, creating new designs from the new materials available.

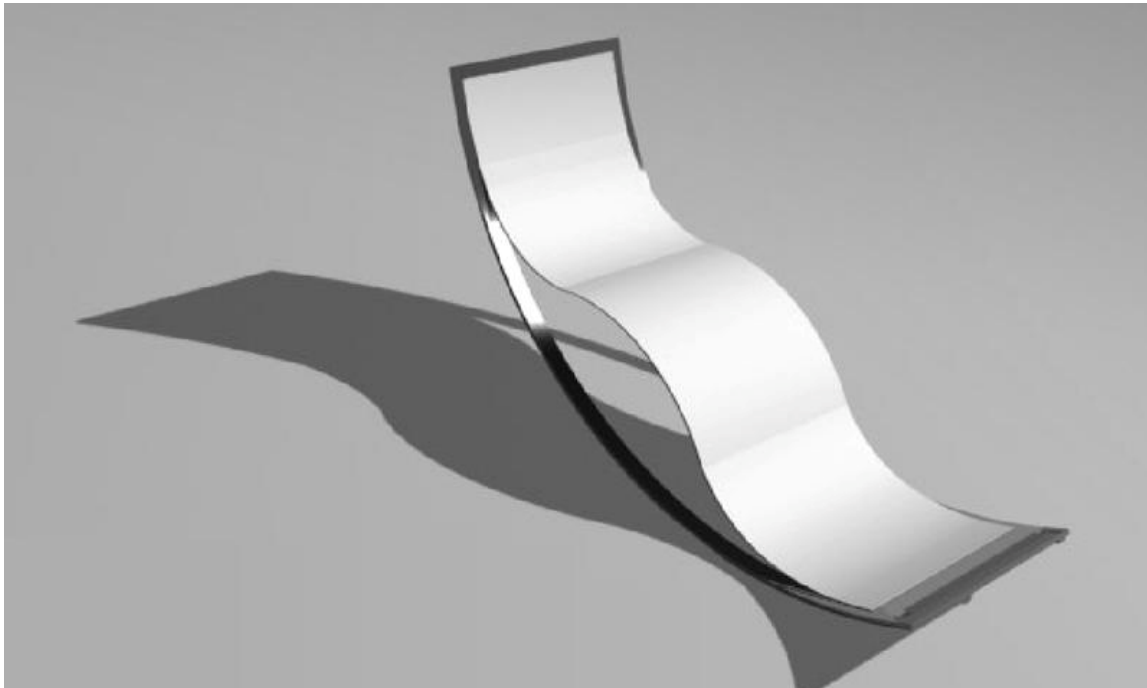


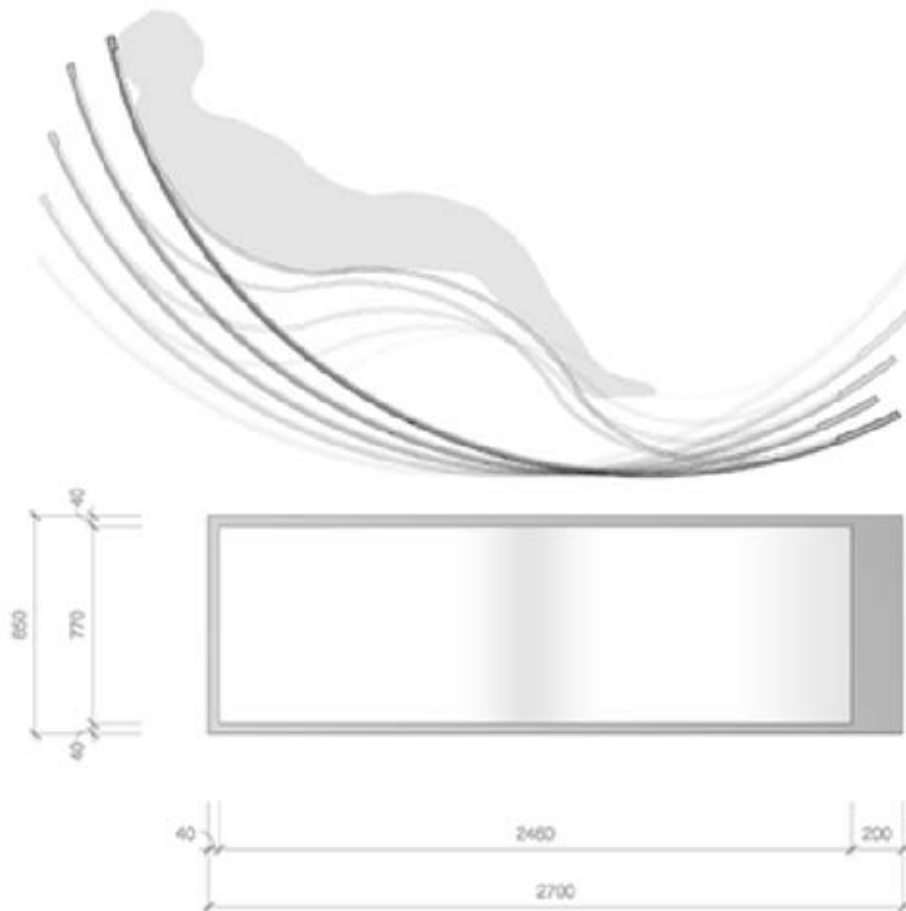
Figure 7, Silhouette Chair

The Silhouette chair takes on the form and proportion of the female body, exploiting its sensual curves and profile. The intention of its design was to take the historical typology of the chaise longue, often associated with reclining women throughout, as well as the famous chaise designs during the twentieth century and combine them using contemporary technologies and materials.

“The visual vocabulary that characterized technology and the progress for most of the century was ascetic and purist, based on clean, simple forms with bare surfaces. It flourished during the 1920s in Germany, where progressive designers developed what they considered to be the appropriate aesthetic

response to industrial production, a style based on principles of economy and efficiency.¹¹

The Silhouette chair responds to the needs for efficiency and the ease of production, and can be mass-produced quickly and easily. Its minimal material palette uses only flat-plate steel and Corian for both an elegant aesthetic and for ease of construction. Corian is a pliable material which can adopt easily the shape and silhouette of the human form. Its plastic qualities allow for seamless planes and waves, while also allowing for an ease of mass-production. It can be easily customized to suit the customer with availability in a wide range of colours. The strength of the plastic lends to the seat its thin profile, while still maintaining its curved form. The strength properties of steel were utilized for the construction of Le Corbusier's classic chaise and Mies van der Rohe's Barcelona chair; the popularity of the material has not diminished due to its ease and efficiency of production and assembly. It carries the load of the Corian while still maintaining a thin profile, giving the chair its delicate silhouette, emphasizing the sensual form.





The curvature of the base allows the chair to take on various positions, both seated and reclining, and various postures in the middle. Indents along the length of the base accommodate a steel rod which determines the angle of the chair's incline. The user can adjust the chair to their own comfort level easily, which also alters how the user experiences the chair within the room. Due to its size and proportion, the chair is a significant piece of furniture in whichever room it is located in, so if it is in an upright or reclined position, it alters the space around it and the space of the room.

The physical comfort of the user is at the forefront of the design, with the shape in section intended to echo the natural silhouette of the reclining body. Its rectilinear shape in plan is meant to fit into contemporary homes, with their right-angle layouts typical of the present.

“The more the more objects of human creation distance themselves from direct touch, the more they become pure geometry. A violin, a car, the things we touch are not very geometric – but the city, for example, is pure geometry.”¹²

The constant juxtaposition between the human and its environment, the dynamic and the static, the curved and the rectilinear, is exposed in the case of the Silhouette chair, as seen with the Corian and the steel. The chair puts forward the idea of the “interior equipment of a dwelling”⁶ responding to the individual as well as the environment, and not only the environment.

The Silhouette chair takes its design cues from the great modernist furniture designers of the twentieth century – Le Corbusier, Mies van der Rohe, and the Eames's. Machine aesthetic, standardization, and production are taken carefully into consideration, with an emphasis on the human form and behavior influencing the design. The chair is to be a piece of furniture to sit proudly and strongly in its environment, but also sensual and inviting enough to become a well-used piece of furniture.

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- ¹ Sollo, John and Nan. American Insider's Guide to Twentieth-century Furniture.
- ² Gordon, Lynn. ABC of Design.
- ³ Heisinger, Kathryn B. and George H. Marcus. Landmarks of Twentieth-Century Design : An Illustrated Handbook.
- ⁴ Gordon, Lynn. ABC of Design.
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- ⁶ Heisinger, Kathryn B. and George H. Marcus. Landmarks of Twentieth-Century Design : An Illustrated Handbook.
- ⁷ von Vegesack, Alexander and Matthias Kries, ed. Mies van der Rohe : Architecture and Design in Stuttgart, Barcelona.
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- ¹¹ Heisinger, Kathryn B. and George H. Marcus. Landmarks of Twentieth-Century Design : An Illustrated Handbook.
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