Industrial Design
By Mary Smith

Within the notebooks of Renaissance man Leonardo da Vinci are drawings and diagrams that would earn him the title of the world's first scientific illustrator. Combining mathematical calculations with keen observation, he conceived of many prophetic inventions, including the first flying machine. It is in da Vinci's genius that one finds the roots of industrial design.

It would not be until the 19th century, however, and the advent of mass production that industrial design would come fully into its own. Part art, part science, industrial design is concerned with how a product functions and how it will be produced. Such design work, with rare exceptions, is done anonymously and often as part of a team. For this reason, it came under scrutiny not long after its emergence because of what some saw as the dehumanization of the creative process and a loss of quality in the finished product. Leaders of the Arts and Crafts movement in England, which sought a return to the medieval craft tradition, included the architect and designer William Morris. Morris' ideology would have a profound influence on modern designers, including Walter Gropius and Gustav Stickley. Mass production, however, would endure even in Morris' own furniture company. There was simply no other way to manufacture goods that the working class could afford.

Gropius took Morris' ideas and merged them with art and industry to create the Bauhaus in Germany. Both a building and a school for architects, the Bauhaus promoted Gropius' vision of craftspeople working together in utopian harmony to capture the energy of modern society. One of Gropius' followers was Ludwig Mies van der Rohe, who would emigrate to America, as Gropius did, when the Nazis closed the Bauhaus in the 1930s.

In New York, Mies van der Rohe would utilize a new design concept known as streamlining to erect his glass and steel skyscrapers, an ode to industry's commitment to efficiency. Streamlining, which could be seen in the design of automobiles and trains, as well as toasters and tea kettles, would remain popular until the 1960s when Computer Aided Design transformed product development into a high-tech industry. Morris' concept of craft, however, would be resurrected in the second decade of the 21st century when industry again embraced the art of clay modeling in the design of modern automobiles and other products.

Sources

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