

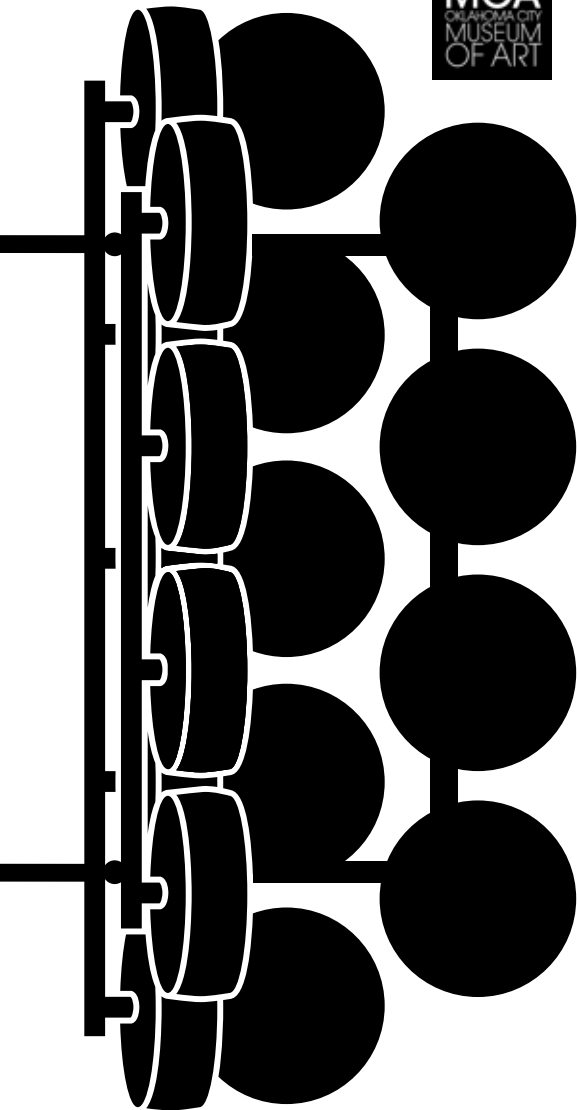
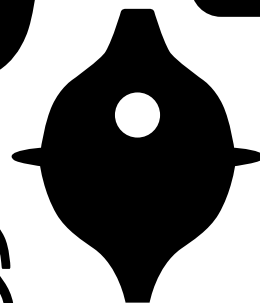
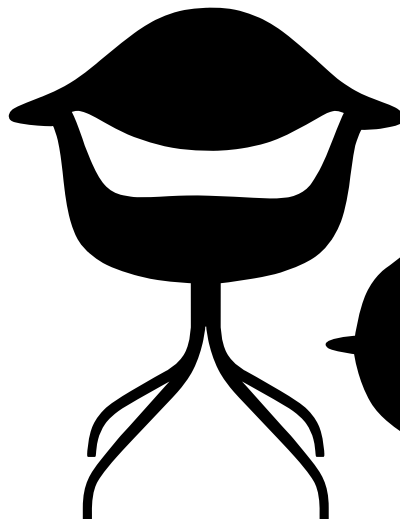
George

NELSON

Architect | Writer | Designer | Teacher  
February 3–May 8, 2011

An exhibition of the Vitra Design Museum, Weil am Rhein, Germany.  
This exhibition has been generously sponsored by Herman Miller.

RESOURCE GUIDE



# GEORGE NELSON: ARCHITECT, WRITER, DESIGNER, TEACHER

February 3 - May 8, 2011

George Nelson (1908–1986) was one of the most important American designers of the 20th century. After earning an architectural degree, Nelson began his career in the 1930s as an author and journalist before opening his own design office in 1947. This step was prompted by a commission from the furniture manufacturer Herman Miller to design a collection of furniture. This first collection marked the beginning of a collaboration that would last nearly three decades and spawn numerous classics of furniture design. In addition, Nelson took on the position of design director at Herman Miller, expanding his role from pure product design to shaping the company's overall image. Early on, Nelson was convinced that design should be an integral part of a company's philosophy, and by promoting this viewpoint, he also became a pioneer in the areas of business communication and corporate design.

Within his New York design office, which enjoyed its most productive period in the 1950s and 1960s, Nelson assumed the role of a generalist. George Nelson & Company accepted commissions in the fields of architecture, interior design, graphic design, and exhibition design along with all manner of product design assignments. This convergence and cross-fertilization of various disciplines was seen by Nelson as a defining characteristic of the work of an industrial designer.

With his domestic and office furniture designs, home accessories, as well as in his architectural and exhibition constructions, Nelson typically followed a systematic modular approach—for reasons of economy as well as to make the end result more user-friendly.

Nelson's conception of design was wide-ranging. In his view, design related to the whole cultural landscape, the entire increasingly urbanized "man-made environment." To work in a creative capacity, Nelson felt it was critically necessary to maintain a conscious and critical perception of the everyday environment. For Nelson, reflecting and writing about design and the societal role of the designer often preceded or accompanied the actual design task. Always seeking to place design in the larger sociocultural and economic context, his writings as a design author established him as one of the most significant voices on American design.

## CURATOR

Jochen Eisenbrand received a master's degree in Cultural Studies at the University of Lüneburg and has worked since 1998 for the Vitra Design Museum. He has curated numerous exhibitions that have traveled from Weil am Rhein to museums in Europe, the United States, and Japan. This includes an Isamu Noguchi retrospective, an exhibit on Ingo Maurer, and *Airworld: Design and Architecture for Air Travel*. Eisenbrand was co-curator of the exhibition *Open House: Architecture and Technology for Intelligent Living*, which was organized in collaboration with Art Center College of Design in Pasadena, California. Eisenbrand has co-edited and contributed to several exhibition catalogues and writes for different German design and architecture magazines. Since April 2007, he has served as a member of the acquisitions committee of FRAC Centre in Orléans.



George Nelson in the Herman Miller advertisement "Traveling Men," ca. 1954  
Photo: Vitra Design Museum Archive

## EXHIBITION INFORMATION

### MAIN THEMES

- Exhibition Design
- Education
- The Home
- The Office
- Graphic and Corporate Design

### OBJECTS

- Furniture
- Lamps
- Clocks
- Industrial design products
- Historical documents (drawings, promotional brochures, advertising)
- Architectural models
- Films and slide shows

### EXHIBITION HISTORY

- Vitra Design Museum, Weil am Rhein, Germany, Sept. 12, 2008–May 3, 2009
- Fundación Pedro Barrié de la Maza, A Coruña, Spain, June 15, 2009–Nov. 29, 2009

## EDUCATION

Education, and in particular aesthetic education, was one of George Nelson's greatest concerns. For him, this included the development of a conscious and critical perception of our everyday environment. Nelson fulfilled this self-imposed educational mission with a vast number of lectures, most of which were accompanied by slide shows and occasionally by films as well. Nelson's slide shows were not merely an illustrative accessory to his lectures, but served to convey a substantive portion of the message.

The majority of the visual motifs came from Nelson himself: individual documentary snapshots recorded on his many travels that achieved a higher level of significance when strung together in a visual narrative.

Nelson's decades-long preoccupation with the design and visual perception of the entire "man-made environment" found early expression in the 1953 multimedia presentation *Art-X* and culminated in the 1970s with the lecture *The Civilized City* and his book *How to See*.



George Nelson, late 1940s  
Photo: Vitra Design Museum Archive

## BEFORE VIEWING

**Define and discuss the following terms:** design, architecture, aesthetics, man-made environment, visual culture, visual information

## AFTER VIEWING

Nelson makes a distinction in teaching between training and education. Training promoted an individual's skills and talents, whereas "the aim of education" was to concentrate the entire potential of an individual, enabling the student to relate the most diverse phenomena from completely different areas of life. How does Nelson's concept of education relate to his approach to design?



One of the genuine oddities regarding this wonderful Age of Information we are now living in is that nobody, apparently, ever stops to remind us that most information, most of the time for most of the people, is meaningless and of no use. There is an infinity of information, and it has to pass through a variety of sieves before it can be assimilated or managed. The material out of which such sieves can be constructed, traditionally is called wisdom, something which has always been in short supply and doesn't ever seem to have much of a market.

<<George Nelson



## EXHIBITIONS

Exhibitions presented Nelson with an interesting opportunity to test out new structural techniques and materials on the temporary constructions. The organizational aspects also gave him a chance to exercise his skills as a design manager. Independently and together with his office, Nelson planned and designed over 30 exhibitions.

Starting in the mid-1950s, one of his most important clients was the United States Information Agency (USIA). The governmental agency USIA was established in 1953 to promote dialogue and exchange between the United States and other countries and to form a Cold War-era counterweight to the internationally directed information campaigns of the Soviet Union.

The USIA-commissioned American National Exhibition held in Moscow in 1959 is a prime example of the Nelson office's comprehensive work on exhibitions.



Workers on Fiberglass Umbrellas for the American National Exhibition, Moscow, 1959  
Photo: Vitra Design Museum Archive

### THE AMERICAN NATIONAL EXHIBITION IN MOSCOW, 1959

The American National Exhibition, which took place in the summer of 1959—in the middle of the Cold War—in Moscow, was the largest exhibition the U.S. ever held in the USSR. It was the result of an agreement on mutual cultural exchange between the two countries and was probably the most costly and lavish form of self-portrayal the U.S. has ever undertaken on an international level. In any case, it was by far the largest project the Nelson office ever had to tackle.

In September 1958, the government body responsible—the United States Information Agency—appointed George Nelson as chief designer of the exhibition. The order the exhibition organizers received from President Eisenhower was short, but clear: “Open the door of the Iron Curtain a crack.”

Along with organizing the exhibition, Nelson's substantial contribution to its success lay above all in two specially conceived space-creating constructions that housed thousands of exhibits: the so-called *Jungle Gym* and the *Fiberglass Umbrellas*.

In addition, Nelson asked Charles Eames to join the exhibition project, resulting in the film *Glimpses of the USA* that showed scenes from everyday American life in an artfully orchestrated presentation on seven screens.

The photos presented here document the development of the exhibition, from the preparations in the Nelson office to the installation in Moscow and the opening on July 25, 1959.



George Nelson, American National Exhibition, Moscow, 1959  
Photo: Vitra Design Museum Archive



Two staff members in Nelson's office with a model for the American National Exhibition *Jungle Gym*, Moscow, 1959  
Photo: Vitra Design Museum Archive

### MODEL OF THE JUNGLE GYM FOR THE AMERICAN NATIONAL EXHIBITION IN MOSCOW, 1959

Scale: 1:6

Model building: Patrick Maier-Blanc, Manfred Utz, 2008

Material: Wood

With the *Jungle Gym*, the Nelson office developed a gigantic framework for an extensive exhibition of American products in the Welton Becket Pavilion. The framework could be accessed on two floors, adequately and flexibly offering space for furniture, toys, sports equipment, electrical appliances, a fully automated open-view kitchen, and a completely furnished open-view apartment, inhabited during the exhibition by Americans commissioned to act as if they lived there.

The Nelson office built three different models of the *Jungle Gym* in various sizes and in various materials: natural wood, wood painted black, and metal. Unfortunately there are no surviving examples. The reconstruction is derived from the largest of the three models, though it employs wood unlike the original model that was presumably made of brass. It still illustrates the modular character of the three-dimensional framework, which was based on cubes measuring 3 x 3 x 3 meters.



Model of the Fiberglass Umbrellas at the American National Exhibition, Moscow, 1959  
Photo: Vitra Design Museum Archive

### MODEL OF THE FIBERGLASS UMBRELLAS FOR THE AMERICAN NATIONAL EXHIBITION IN MOSCOW, 1959

Scale: 1:10

Model building: Oswald Dillier, 2008

Material: Polyurethane

Nelson had six-meter-high fiberglass umbrellas developed to create additional urgently needed temporary exhibition halls, which could be interconnected, thereby forming a translucent roof for more exhibitions and a fashion show. Altogether 90 umbrellas were produced and arranged into three halls of various sizes on the exhibition grounds.

## BEFORE VIEWING

Define and discuss the following terms: cultural diplomacy, Cold War, Iron Curtain

## AFTER VIEWING

The organizers of the American National Exhibition in Moscow received an order from President Eisenhower to "Open the door of the Iron Curtain a crack." Consider the term cultural diplomacy and discuss how this approach to diplomacy is different from other forms.

Research other examples of cultural diplomacy in American history.

How did Nelson portray everyday American life at the American National Exhibition in Moscow?



**Design... is an expression of the capability of the human mind to step beyond.**

**<<George Nelson**



**Design is a response to social change.**

**<<George Nelson**

## THE HOME

From the mid-1930s through the late 1950s, Nelson's chief interests focused on the home: the industrial fabrication of housing, the layout of floor plans, and the furnishing of the home. With his bestseller *Tomorrow's House* published in 1945, Nelson made a pioneering contribution to the promotion of modern, contemporary home planning, oriented to the spatial needs of the occupants instead of merely copying architectural styles from past eras.

With the furniture manufacturer Herman Miller and the Howard Miller Clock Company, Nelson found two ideal partners based in Zeeland, Michigan, for the implementation of his ideas of modern furnishings for the home. Starting in 1946, Herman Miller produced home furniture designed by Nelson, and in 1947 Howard Miller began manufacturing clocks by Nelson followed later by lamps and other home accessories.

Nelson's concept of modern home architecture is most clearly embodied by his Experimental House from 1957, though it never progressed beyond the model stage at the time.



*Storage Wall*, published in *Life Magazine*, 1945  
Photo: Vitra Design Museum Archive

### STORAGEWALL

Nelson developed the Storage Wall concept for the book *Tomorrow's House*, which he published together with Henry Wright in 1945. As Nelson explained, the book was nearly complete but they still needed to come up with a chapter on the subject of storage. While pondering what he could write about, Nelson found himself staring at the wall and suddenly realized it was hollow and would offer storage space if built a little thicker. This epiphany marked the birth of the *Storage Wall*. Even before the book came out in print, *Life* and *Architectural Forum* dedicated extensive spreads to the *Storage Wall*.

The success of the *Storage Wall* opened the door to Nelson's association with the furniture manufacturer Herman Miller and served as the point of departure for Nelson's nearly two-decade preoccupation with the development of storage furniture and systems. With the burgeoning flood of products in the postwar era, the issue of storage space had taken on greater urgency.



*Marshmallow Sofa*, 1956  
Photo: Vitra Design Museum Archive

### MARSHMALLOW SOFA

No 5670  
1956 / produced 1956–1965  
and since 2000, Irving Harper  
Iron, plywood, foam cushions with  
Naugahyde covering

The basic idea for the design of the *Marshmallow Sofa* was an industrial series production of the round cushions by means of a self-skinning polyurethane foam. As this could not be realized as originally planned, the cost of manufacture of the sofa was significantly higher than budgeted, so sales figures at that time fell far behind expectations. Nevertheless, the *Marshmallow Sofa* quickly achieved the status of a modern classic.



*Swaged Leg Group: Swaged Leg Chair* (1954) and *Swaged Leg Desk* (1958)  
Photo: Vitra Design Museum Archive

### SWAGED-LEG GROUP

1954 ff. / produced 1958–1964, since 2007  
Charles Pollock

The legs of this group of furniture, which includes chairs, a table, and a home desk, take on a special form due to the so-called swaging, where the steel rods were pressed thin and bent. To keep production costs down, all four legs of a table or chair have the same shape.

The form of the seating of the swaged leg chairs was based on Eames' plastic chairs. A decisive innovation was the division of the surface, allowing for a movable back. For this purpose, the two parts are linked to one another by way of an adjustable metal component and by the shock mounts developed by Eames. On the back, the shock mounts were changed so that the ball head of the metal component can slide out if the back is overextended.





*Comprehensive Storage System, 1959*  
Photo: Vitra Design Museum Archive

### COMPREHENSIVE STORAGE SYSTEM (CSS)

1957 / produced 1959–1973  
Extruded aluminum, wood

The CSS shelving system was both a continuation and successful culmination of Nelson's two-decade-long preoccupation with storage furniture. With a standard measurement of 32" between the supports, the system offered a tremendous variety of possible uses. At a trade show, the system was once even presented with an integrated bed. Compared to earlier solutions, the system of supports onto which shelves and other components are mounted is lighter and easier to transform. The shelving system is based on a similar concept that Nelson and his office had developed a short time beforehand for the OMNI shelving system produced by the aluminum manufacturer Aluminum Extrusions.



*Pretzel Armchair, 1952*  
Photo: Vitra Design Museum Archive

### BENTWOOD OR LAMINATED CHAIR (PRETZEL CHAIR)

N° 5890 (without armrest),  
N° 5891 (with armrest)  
1952 / produced in 1958  
John F. Pile

This plywood chair was intended to complement the Rosewood Case Group. The design was inspired by classical Thonet bentwood chairs, used as office seating in the Nelson firm. The first small series of the chair was produced without armrests in 1952. Since high production costs translated into a price tag of over \$100, the chair did not go into serial production. In 1957, the company Lawrence Plycraft claimed they could produce the chair more affordably. The chair was then reintroduced in the 1957/58 Herman Miller catalog, now with the option of armrests. This time around 100 chairs were produced. After disagreements between Herman Miller and Plycraft, the production was ended.



*Coconut Chairs with Ottoman, 1956*  
Photo: Vitra Design Museum Archive

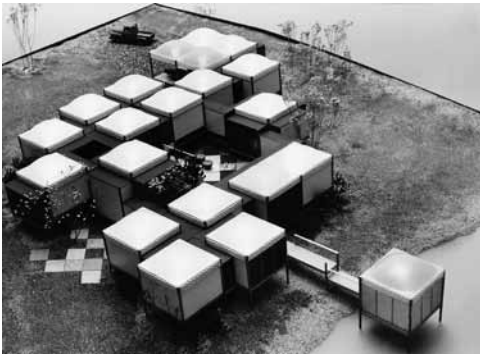
### COCONUT CHAIR WITH OTTOMAN

No 5569 / N° 5898  
1955 / produced 1955–1978  
George Mulhauser  
Aluminum, sheet steel, foam,  
Naugahyde

This armchair was initially produced with a seat of bent steel that was cushioned with foam and covered with fabric or Naugahyde. Later, Herman Miller produced the seat using fiberglass-reinforced polyester. The frame was at first strengthened using bent steel rods that echoed the form of the chair. Later, the three legs of the chair were screwed individually into the seat.



**Design is returning humanity to society. If design doesn't work for people then there isn't much point in doing it. I'm not so much interested in designing things as I am in designing systems. That is what is important. <<George Nelson**



Model of *Experimental House*, 1957  
Photo: Vitra Design Museum Archive

## EXPERIMENTAL HOUSE, 1957

Scale: 1:20

Model building: Marc Gehde, 2008

Material: Brass, acrylic glass

The model is based on the no longer extant original model created in the Nelson office with the assistance of Nelson employees Ronald Beckman and William Katavolos.

One of Nelson's chief interests in the area of architecture was the industrialization of building. From the early 1940s through the early 1960s, he was intensely concerned with the possibilities of serially prefabricating the component parts of the home. His deliberations on the topic crystallized in the *Experimental House*, which he originally conceived for a model housing project of innovative homes in Grand Rapids, Michigan. Though the housing project failed to materialize and the *Experimental House* was never actually built, Nelson's model received considerable attention in numerous magazines and journals.

The *Experimental House* was based on two types of cube-shaped modules, which themselves consisted of wall panels inserted into an aluminum frame. With the dimensions 12" x 12" x 12" and a transparent dome roof, the larger cubes were to contain the actual living areas: living room, bedroom, bathroom, kitchen, and study. The smaller modules measuring 12" x 4" with a flat roof could be attached to the larger units. These extender units served to connect the larger modules and create more space or accommodate additional functions. The modular construction method was intended to enable home buyers to expand or reduce the size of their house over time in accordance with their given financial resources and space needs.



*Bubble Lamps*, ca. 1952  
Photo: Vitra Design Museum Archive

## BUBBLE LAMPS

1952

William Renwick

Steel wire, plastic shade, bulb

Manufacturer: Howard Miller Clock Company (Zeeland, Michigan)

In coming up with the design of the *Bubble Lamp*, Nelson took inspiration from Scandinavian lamps with silk shades that were sold in the U.S. at the time for exclusive prices. Nelson sought a less expensive solution and came across a sprayable plastic that had been developed by the R.M. Hollingshead Corporation for the U.S. military. Among other purposes, it was used to encase mothballed warships and protect them from rust.

The wire framework of the lampshade onto which the plastic was sprayed required a small number of components. Furthermore, the pieces were stuck together instead of welded, which also helped keep manufacturing costs low. Because the plastic contracted upon drying, the construction was further stabilized.



The chair remains unassimilable and in consequence it becomes very conspicuous...as much a piece of sculpture as an object of utility. The once-humble chair has emerged as a thoroughly glamorous object.

<<George Nelson

## BEFORE VIEWING

Considering the above quote, discuss how and why the chair became a significant object for mid-century designers.

**Define and discuss the following terms:** ergonomic, utilitarian, form, function, space, shape, line, balance, variety, and unity

## AFTER VIEWING

After World War II the demand for single-family homes prompted mid-century designers to develop new living concepts instead of simply copying architectural styles from the past, which allowed designers to not only consider the architecture and structure of housing, but also the utilitarian objects of everyday life. Describe the characteristics of mid-century design.

How is the everyday American family during the Cold War different from the present-day American family?



## CLOCKS

The collaboration between George Nelson and the Howard Miller Clock Company began in 1947 and lasted more than 35 years. During this period, Nelson and his office developed over 130 clock models for Howard Miller. The design of the clock series was based on Nelson's insight that people told the time by viewing the position of a clock's hands, not by looking at the numbers. His second observation was that wall clocks in the age of the wristwatch were no longer first and foremost about indicating the time, but served as "decorative elements in the furnishings of a room." The clock series thus formed a counterpoint to the simplicity that Nelson promoted with his storage furniture designs. Furthermore, the early clocks all featured the same internal clock mechanism despite the variety of their outward appearance, which helped keep production costs low.



Wall Clock No 4755 (*Ball Clock*), 1949  
Irving Harper  
Wood, brass  
Photo: Vitra Design Museum Archive



Zoo Clocks, 1965  
Photo: Vitra Design Museum Archive

## BEFORE VIEWING

**Define and discuss the following term:** industrial design

In partnership with the Howard Miller Clock Company, Nelson produced a series of "radically modern clocks," but the process of manufacturing those clocks needed to be as inexpensive as possible. Discuss the impact of production costs on product design.

## AFTER VIEWING

Nelson described the post-World War II American society as a "Kleenex culture." Nelson also remarked, "We are not building antiques of the future any more (...) We are just making things to use and throw away." However, many of Nelson's product designs remain popular today. Discuss the characteristics of Nelson's designs and the reasons for their continued popularity.

## THE OFFICE

In his first collection of home furniture for Herman Miller, George Nelson presented an L-shaped desk recognized as the precursor of the workstation that would come to typify the modern office: a modular working unit combining all the necessary functions from a writing surface, space for a typewriter, and diverse storage elements to integrated lighting that moreover helped to structure the space. On the basis of this L-shaped desk, Nelson developed two office systems in the 1950s—the Executive Office Group (EOG) and the Modern Management Group (MMG)—before being entrusted in the early 1960s with the design of Action Office 1 (AO 1) conceived by Robert Propst.

Following the tremendous boom in the modern home furniture market in the U.S. in the 1950s, the production of office furniture began to assume increasing importance in the mid-1960s—in particular for Herman Miller. Contributing factors were the sharp rise in the number of office workplaces, the proliferation of open plan offices, and new developments in the field of office equipment and computer systems. Office designers and planners were greatly influenced by the investigations of the Quickborner Team in Germany. Starting in the mid-1950s, the group propagated an open office landscape structured according to workflows and communication needs instead of hierarchies and prestige—planning principles that were embraced by the Action Office, especially the later Action Office 2, as the first office furniture system and that were also taken up by Nelson's office system Nelson Workspaces.



Action Office 1, 1964  
Photo: Vitra Design Museum Archive

### ACTION OFFICE 1 (AO 1)

No 649-Series  
1960 / produced starting in 1964  
Concept: Robert Propst  
Design: George Nelson

The Action Office was the result of three years of experiments by the Herman Miller Research Department in Ann Arbor, Michigan, under the direction of Robert Propst. The experiments included extensive studies on human behavior in the office and the environmental influences on productivity, health, and enthusiasm for work. Action Office broke with traditional, hierarchically arranged office formations in favor of an open, less rigidly structured office. Desks of differing heights were to encourage alternation between sitting and standing to promote concentration and creativity and thus increase efficiency. Desks with a closable roll top would allow unfinished work to simply remain on the desk in the evening, to be resumed the next morning without delay. Shielded and soundproof telephone tables facilitated phoning within the open office. The Action Office designed by George Nelson and his office attracted considerable attention from fellow designers and in the press and was honored with the Alcoa Industrial Design Award in 1965. Despite this acclaim, the system was a commercial disappointment.

## BEFORE VIEWING

Discuss what makes a good working environment. Compare and contrast office work spaces to classroom work spaces. Consider the difference between single- and multi-user work spaces.

## AFTER VIEWING

Credited with inventing the modern workstation, Nelson essentially invented the office cubicle. However, Nelson struggled with the complex needs of work environments. Near the end of his career, he said, "If one wants to break through existing problems in office planning and design, the answers are to be found in the people, not the hardware." Discuss how work spaces could be better adapted to human needs.



**There is a great deal if intermittent socializing; there are struggles for status and power. There are kinds of people and kinds of work. There are people who file and people who pile. There are doers and dreamers. In all the apparent simplicity of 9 to 5 work there are endless complexities.**  
 <<George Nelson

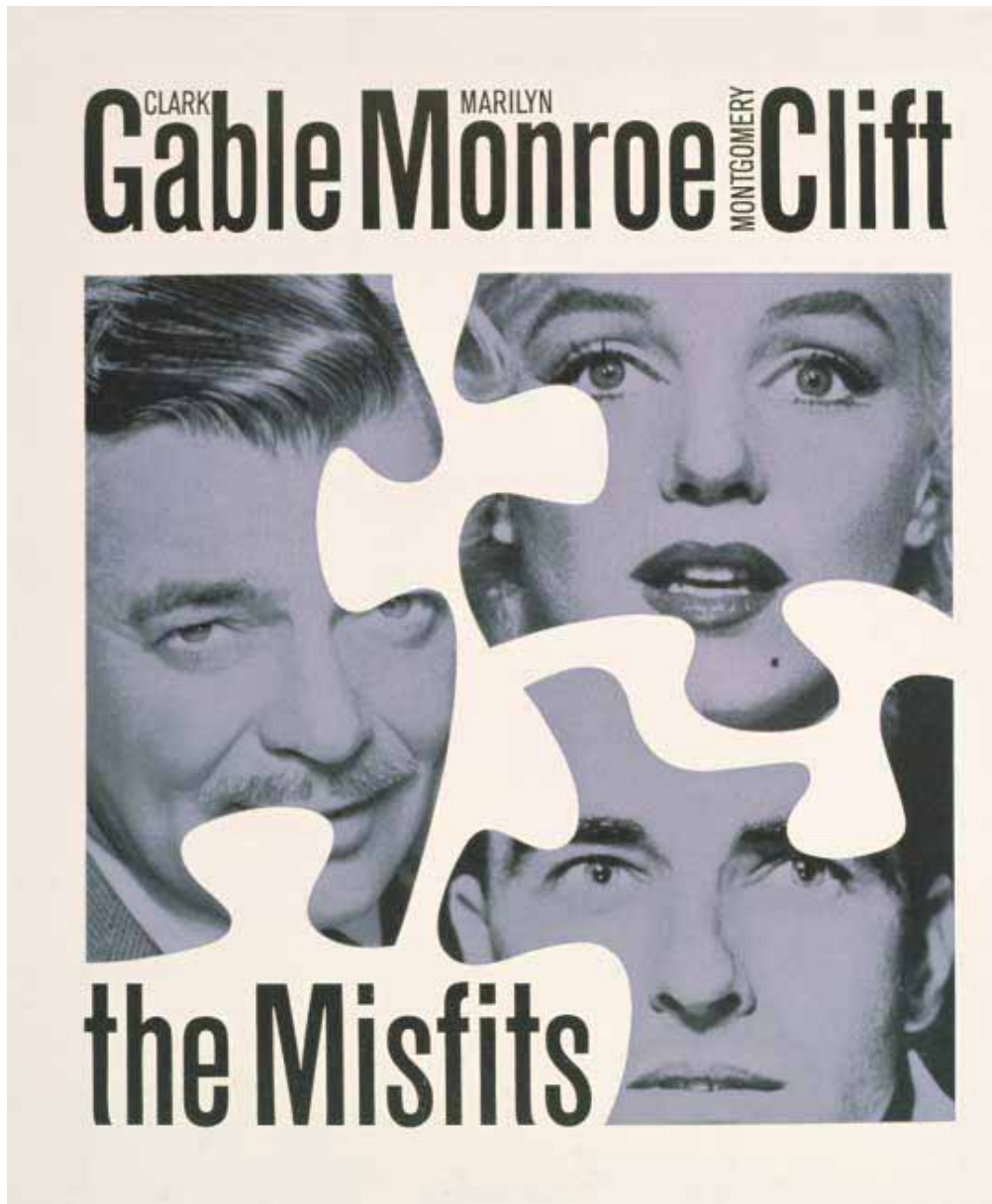


## GRAPHIC AND CORPORATE DESIGN

George Nelson and his office were responsible not only for the design of products, but also for the graphic design of Herman Miller and the Howard Miller Clock Company: the company logos, catalogs, and advertisements. The Nelson office also received commissions from numerous other companies to design printed material and packaging and thus shape their corporate image. Nelson was one of the first to recognize the importance of corporate design even before it had become an established concept.



Daybed, 1950  
Photo: Vitra Design Museum Archive



Poster for *The Misfits*, 1961  
Photo: Vitra Design Museum Archive



The biggest single problem in the design field today revolves around the question of values. In relation to this question all other problems, while interesting, are superficial.  
 <<George Nelson, 1961



**GEORGE NELSON (1908–1986)****1908**

George Harold Nelson is born on May 29 to Simeon Nelson and Lillian Canterow Nelson in Hartford, Connecticut.

**1924**

Graduation from Hartford Public High School.

**1928**

Bachelor of Arts, Yale University.

**1929–31**

Lecturer at the Yale School of Fine Arts.

**1931**

Bachelor of Fine Arts, graduation with honors, Yale School of Fine Arts.

**1931–32**

Graduate studies at Catholic University, Washington, D.C.

**1932–34**

Nelson wins the renowned Rome Prize with a two-year stipend to study at the American Academy in Rome. He uses the opportunity to travel extensively throughout Europe, to learn Italian, and most notably to meet and interview some of the most prominent European architects of the day, including Le Corbusier, Mies van der Rohe, and Walter Gropius.

**1933**

Marriage to Frances ("Fritzi") Hollister in Rome.

**1935–36**

Nelson publishes twelve portraits of modern European architects in the American architectural journal *Pencil Points*.

**1935**

Nelson becomes an associate editor of the magazines *Architectural Forum* and *Fortune*. He works for the two publications in various capacities through the late 1940s.

**1936–41**

Nelson runs an architectural practice in New York with William Hamby.

**1938**

Registered architect in the state of New York. Nelson publishes a book on the architect Albert Kahn.



George Nelson, ca. 1965  
Photo: Vitra Design Museum Archive

**1941**

With William Hamby, Nelson realizes the Sherman Fairchild House, one of the first modern townhouses in New York. Nelson is a member of the Architecture Committee of the Museum of Modern Art, New York, and organizes the exhibition *Versus* at the Architectural League in New York. The same year, he receives the prestigious Scarab Gold Medal for his contributions to the field of architecture.

**1941–44**

Design critic at the Columbia University School of Architecture.

**1944**

Together with Henry Wright Nelson develops the concept of the storage wall, which is published in early 1945 in *Life Magazine*.

**1945**

Together with co-author Henry Wright, Nelson publishes the book *Tomorrow's House*.

**1946**

D.J. De Pree, president of the furniture manufacturer Herman Miller, hires Nelson as a furniture designer. Nelson's premiere collection for Herman Miller consists of some 80 pieces and is followed by further collections. As design director, Nelson helps forge the company's image over the next two decades and plays a key role in establishing Herman Miller as one of the most important modern American furniture producers.

**1947**

Nelson founds an independent industrial design practice in New York. The first Herman Miller catalogue written and designed by Nelson is published. Initiation of the collaboration with the watch manufacturer Howard Miller.

**1948–56**

Nelson regularly serves as an editor for *Interiors*.

**1951**

Nelson takes part in the first International Design Conference in Aspen.

**1952**

The *Bubble Lamps* go into production at Howard Miller. Corporate identity program for the aluminium manufacturer Aluminum Extrusions.

**1952–55**

Nelson serves as an advisor to the School of Fine Arts at the University of Georgia in Athens and organizes the multimedia presentation *Art X* in 1953 together with Charles Eames.

**1952–62**

Design consultant for General Electric.

**1953**

Nelson opens an architectural office together with Gordon Chadwick that is affiliated with his industrial design practice. That year and the next, Nelson publishes three books (*Chairs, Living Spaces, Storage*) on the home and its furnishings and a fourth (*Display*) on the theme of exhibitions.

**1954**

Nelson travels to Germany with other American designers and architects at the invitation of the German government.

**1956**

Design of the *Coconut Chair* and the *Marshmallow Sofa*.

**1957**

The model of the *Experimental House*—a modular prefabricated house Nelson and his office have been working on since 1952—is published in the press. The exhibition *US Education for the Theater*, organized by Nelson & Company under commission from the United States Information Agency, receives a gold medal at the São Paulo Biennial. The essay collection *Problems of Design* is published. Nelson travels to Japan at the invitation of the Japanese government.

**1957–59**

Corporate design for the pharmaceuticals manufacturer Abbott.

**1958**

Introduction of the Swaged Leg furniture group at Herman Miller. OMNI shelving system, produced by the aluminium manufacturer Aluminum Extrusions.

**1959**

Nelson is the lead designer of the American National Exhibition in Moscow. Introduction of the Comprehensive Storage System shelving system. Marriage to Jacqueline Griffiths.

**1960**

Nelson appears on public television. The title of his presentation: *Problems of Design: How to Kill People*.

**1963**

Nelson is named a fellow of the American Institute of Architects.

**1964**

Nelson & Company design the exhibition pavilion for the auto manufacturer Chrysler at the World's Fair in New York. The *Action Office 1* system comes onto the market.



**George Nelson is unique. He is an industrial designer with a sense of humor.<<Arthur Drexler**

**1965**

As program chairman, Nelson organizes the International Design Conference in Aspen. The theme chosen by Nelson is "The New World." From that year on, Nelson remains involved as a member of the conference's board of directors.

**1966**

The Nelson office organizes the travelling exhibition *Industrial Design - USA* that tours through the USSR.

**1968**

Nelson is named a fellow of the Industrial Designers Society of America.

**1968–73**

Editor-in-chief, *Design Journal*.

**1969**

Interior design for the store chain The Children's Place.

**1969–76**

Member of the board of directors of the Industrial Designers Society of America.

**1970**

Interior design of the restaurant La Potagerie, New York. Honorary Fellow, American Institute of Interior Designers.

**1972–76**

Visiting critic/lecturer in architecture at Harvard University.

**1974**

The Civilized City slide lecture.

**1975**

Interior design of the restaurant NYMMS, New York.

**1976**

The Nelson Workspaces office system manufactured by Storwal International comes onto the market.

**1975–77**

Visiting professor, Pratt Institute School of Architecture, Brooklyn, NY.

**1977**

The book *How to See* is published.

**1979**

The essay collection *George Nelson on Design* is published.

**1982**

Program chairman of the International Design Conference, Aspen.

**1984–86**

Professor of Design Research, University of Michigan, Ann Arbor.

**1986**

George Nelson dies on March 5 at the age of 77 in New York.

**PRESCHOOL-ELEMENTARY SCHOOL READING LIST**

Resources from the Metropolitan Library System

Bell, Cece. *Itty Bitty*. 2009. (Preschool-Grade 3)

Finding an enormous bone, tiny Itty Bitty the dog works hard to make it a special place to call his own, but after cutting out windows and a door, he finds it just too empty and so now must locate the appropriately sized decorations to fit inside his special home.

Gonyea, Mark. *A Book About Design: Complicated Doesn't Make It Good*. 2005. (Grade 1-Grade 5)

Introduces readers to the fundamental elements of design by using simple shapes, lines, and humor to explain why complicated is not always the best way to go.

Guarnaccia, Steven. *Goldilocks and the Three Bears: a Tale Moderne*. 1999. (Preschool-Grade 3)

Illustrations featuring elements of the modernism movement in art provide a new look to this traditional tale of the uninvited visit of a young girl to the home of a family of bears.

Keats, Ezra Jack. *Peter's Chair*. 1967. (Preschool-Grade 3)

When Peter discovers his blue furniture is being painted pink for a new baby sister, he rescues the last unpainted item, a chair, and runs away.

Ljungkvist, Laura. *Follow the Line*. 2006. (Preschool-Grade 3)

Invites the reader to visit a wide variety of places and count different objects found in each, from fire hydrants in a big city in the morning, through starfish in the ocean during the day, to babies sleeping in a country village at night.

Ljungkvist, Laura. *Follow the Line Through the House*. 2007 (Preschool-Grade 3)

Rhyming text invites the reader to search different rooms of a house to find hidden objects.

Renshaw, Amanda. *The Art Book for Children, Book Two*. 2007. (Grade 4-Grade 6)

Encourages young readers to explore objects of art along with concepts such as clocks, time, music, mirrors, collecting, trust, movement, line, and shape, and explains how great artists used these themes to create their works.

Rubin, Susan Goldman. *Toilets, Toasters & Telephones: The How and Why of Everyday Objects*. 1998. (Grade 4-Grade 6)

Discusses the evolution of industrial design and the invention of a variety of household appliances.

Shoulders, Micheal. *The ABC Book of American Homes*. 2008. (Grade 3-Grade 6)

A is for apartment. B is for Beach House. C is for Cajun Cottage. This alphabetical survey spans four centuries of architecture, highlighting the diversity of American homes.

Shulevitz, Uri. *So Sleepy Story*. 2006. (Preschool-Grade 3)

In the quiet of the night, a sleepy boy awakes to find the dishes, chairs, and clocks enjoying themselves.

Williams, Vera. *A Chair for My Mother*. 1982. (Preschool-Grade 3)

A child, her waitress mother, and her grandmother save dimes to buy a comfortable armchair after all their furniture is lost in a fire.

Weaver, Janice. *It's Your Room: A Decorating Guide for Real Kids*. 2006. (Grade 4-Grade 6)

Provides tips for children on how to redecorate a bedroom, including information on building a budget, cleaning up, using space, and finding colors, patterns, and accessories to get just the right look.



**MIDDLE AND HIGH SCHOOL READING LIST (GRADES 6-12)**

Resources from the Metropolitan Library System

**NONFICTION**

Berry, John R. *Herman Miller: The Purpose of Design*. 2009.

Explores modern furniture design elements through the history of this US manufacturer, including George Nelson's time at the company as design director.

Fandel, Jennifer. *Wright*. 2006.

A biography of Frank Lloyd Wright with information about 20th-century architecture and the modern design movement.

Grant-Hays, Brenda. *Color in Small Spaces: Palettes and Styles to Fit Your Home*. 2003.

Focuses on color in interior design and ways for beginners to incorporate design elements into their living spaces.

Henry, Sandi. *Making Amazing Art: 40 Activities Using the 7 Elements of Art Design*. 2007.

The elements of line, shape, form, color, value, texture, and space are incorporated into activities for children and teens, with examples by classic and contemporary artists.

Miller, Judith. *20th Century Design: The Definitive Illustrated Sourcebook*. 2009.

This sourcebook includes 5,000 photographs of important accomplishments in 20th century design, including furniture, clocks, and domestic wares.

**FICTION**

Balliett, Blue. *The Wright 3*. 2007.

Sixth-graders Petra, Calder, and Tommy use art, geometry, literature, secret codes, and more to solve a mystery and save an architectural masterpiece from destruction.

Halpern, Julie. *Into the Wild Nerd Yonder: My Life on the Dork Side*. 2009.

Teenager designer Jess makes new friends and is encouraged to embrace and explore her creativity and personal style.

Reinhardt, Dana. *How to Build a House*. 2009.

Seventeen-year-old Harper Evans volunteers to spend her summer building houses in Tennessee in a tornado recovery effort; the importance of architecture as physical creation is explored as the act of construction becomes a metaphor for building relationships.

**ADULT READING LIST****BOOKS BY GEORGE NELSON**

- Nelson, George. *The Industrial Architecture of Albert Kahn*. New York: Architectural Book Publishing Company, 1939.
- Nelson, George. *Tomorrow's House*. New York: Simon and Schuster, 1945.
- Nelson, George. *Living Spaces*. New York: Whitney Interiors Library, 1952.
- Nelson, George. *Chairs*. New York: Whitney Interiors Library, 1953.
- Nelson, George. *Storage*. New York: Whitney, 1954.
- Nelson, George. *How to See: Visual Adventures in a World God Never Made*. Boston/Toronto: Little, Brown and Company, 1977.
- Nelson, George. *Problems of Design*. New York: Whitney Library of Design, 1979.
- Nelson, George. *George Nelson on Design*. New York: Whitney Library of Design, 1979.
- Nelson, George. *Building a New Europe: Portraits of Modern Architects, Essays by George Nelson, 1935-1936*. New Haven/London: Yale University Press, 2007.
- Nelson, George. *George Nelson: Architect, Writer, Designer, Teacher*. Weil am Rhein: Vitra Design Stiftung, 2008.

**BOOKS ON GEORGE NELSON**

- Abercrombie, Stanley. *George Nelson: The Design of Modern Design*. Cambridge, MA: MIT Press, 2000.
- Webb, Michael. *George Nelson: Compact Design Portfolio*. San Francisco: Chronicle Books, 2003.

**BOOKS ON HERMAN MILLER**

- Berry, John. *Herman Miller: The Purpose of Design*. New York: Rizzoli, 2009.
- Caplan, Ralph. *The Design of Herman Miller*. New York: Whitney Library of Design, 1976.
- Cruikshank, Jeffrey L., and Malcolm Clark. *Herman Miller, Inc.: Buildings and Beliefs*. Washington, D.C.: American Institute of Architects Press, 1995.
- DePree, Hugh D. *Business as Unusual: The People and Principles at Herman Miller*. U.S.A.: Hugh D. DePree, 1986.
- Piña, Leslie. *Herman Miller Interior Views*. Atglen, PA: Schiffer Publishing Ltd., 1998.
- Piña, Leslie. *Classic Herman Miller*. Atglen, PA: Schiffer Publishing Ltd., 1998.
- Piña, Leslie. *Graphic Herman Miller*. Atglen, PA: Schiffer Publishing Ltd., 2001.
- Piña, Leslie. *Herman Miller Office*. Atglen, PA: Schiffer Publishing Ltd., 2002.

**BOOKS ON DESIGN**

- Albus, Volker, Reyer Kras, and Jonathan M. Woodham. *Icons of Design: The 20th Century*. Munich: Prestel Publishing, 2004.
- Bayley, Stephen. *Twentieth Century Style and Design*. New York: Van Nostrand Reinhold, 1986.
- Buchanan, Richard, Dennis Doordan, and Victor Margolin. Ed. *The Designed World: Images, Objects, Environments*. Oxford: Berg Publishers, 2010.
- Coles, Alex. *Design and Art*. London/Whitechapel/Cambridge: MIT Press, 2007.
- Dorner, Peter. *Design Since 1945*. London: Thames and Hudson Ltd., 1993.
- Dorst, Kees. *Understanding Design*. Amsterdam: BIS Publishers, 2006.
- Fiell, Charlotte. *Design of the 20th Century*. Köln/New York: Taschen, 2005.
- Flinchum, Russell, and Paola Antonelli. *American Design*. New York: The Museum of Modern Art, 2008.
- Knobel, Lance. *Office Furniture: Twentieth Century Design*. New York: Dutton, 1987.
- Meikle, Jeffrey L. *Design in the U.S.A.* Oxford: Oxford University Press, 2005.
- Papanek, Victor. *Design for the Real World: Human Ecology and Social Change*. Chicago: Academy Chicago Publishers, 2005.
- Potter, Norman. *What is a Designer: Things, Places, Messages*. London: Hyphen Press, 2002.
- Pye, David. *The Nature and Aesthetics of Design*. Great Britain: The Herbert Press, 1978.
- Quinn, Bradley. *Mid-Century Modern: Interiors, Furniture, Design Details*. London: Conran Octopus, 2006.
- Raizman, David. *History of Modern Design: Graphics and Products Since the Industrial Revolution*. London: Laurence King Pub, 2010.
- Russell, Frank. *A Century of Chair Design*. London: Academy Editions, 1980.
- Woodham, Jonathan M. *Twentieth-Century Design*. Oxford: Oxford University Press, 1997.
- Woodham, Jonathan M. *A Dictionary of Modern Design*. Oxford: Oxford University Press, 2004.

## GEORGE NELSON CLOCK

### STUDY:

George Nelson Ball Clock

### LEARN:

Primary and Secondary colors plus tint

### TIME NEEDED:

Plan to use as a two day project.

### DAY 1:

Study and learn about assignment.

Each student will begin with a white piece of Bristol Board or heavy paper. They will use a compass to draw twelve 1 to 2 inch circles. These circles will be painted and cut out later when dry. Younger students can trace circles using a template from the teacher.

Each child will begin with the primary paint colors: Red, Yellow and Blue. They will paint one circle each of these colors. Using a paper plate as a palette the children will then mix the secondary colors; Orange, Purple and Green. Now fill in 3 more circles with each of these colors.

Our palettes should now have 6 colors on them: Red, Blue, Yellow, Green, Orange and Purple. We are now ready to tint each of these colors by adding 1-3 drops of white paint to the 6 colors before us. The remaining 6 circles will be filled with these new tinted colors.

### DAY 2:

Each child will choose a color of card stock to be the clock center, or face. Cut out a medium sized circle. Cut two clock hands from scrap paper and attach to center of circle using a metal brad.

Now we are ready to assemble our clocks.

Turn your clock face over and arrange popsicle sticks around the outer edges of the paper so that most of the stick is hanging off the paper. These will represent the numbers on the clock so space accordingly. When satisfied with spacing use a small amount of glue to keep each stick in place. Set aside to dry.

Now cut out each of the dry painted circles.

Turn clock face back over to the front and decide which color of circle you would like to place at the end of each stick. Place a small amount of glue at the end of each craft stick and attach your circles. Your unique clock will be ready to hang when completely dry.



### SUPPLY LIST:

- White Bristol Board
- Tempera Paints: Red, Yellow, Blue and White
- Paint Brushes
- Paper Plates to use for Palette
- Metal Brad
- Compass and pencils (for older children)
- Circle stencil and pencils (for younger children)
- Small Craft Popsicle Sticks
- Scissors
- Craft Glue
- Scrap Paper
- Colored Card Stock



# GEORGE NELSON CHAIR

**STUDY:**

George Nelson Coconut Chair

**LEARN:**

This lesson is designed to introduce students to basic sculpting techniques and creative thinking about three-dimensional objects.

**TIME NEEDED:**

Plan to use as a two-day project

**DAY 1:**

First, students will be shown examples of George Nelson's *Coconut Chairs*. What shape does the seat resemble? How does it resemble a coconut?

Then, students will be given a small amount of Model Magic (1 oz. or less). If desired, white Model Magic can be colored with markers, then kneaded to blend. Have students flatten their clay, but not too thin. Keep it around the thickness of a cookie. Shape the clay into a triangle shape.

Let dry 24 hours.

**DAY 2:**

Clip the sharp ends off of the toothpicks or skewers. Also, cut dowels, toothpicks, or skewers to desired length. Carefully place 3 in each chair, careful not to let the wood poke all the way through the clay. If necessary, a small ball of clay may be attached to one end of the toothpick before applying to chair.

If desired, students can create another chair of their own design inspired by a geometric shape or inspired by a type of food.

**SUPPLY LIST:**

- Model Magic (small amount of many colors, or large amount of white, 1-2 oz. per student)
- Toothpicks, bamboo skewers, or thin wooden dowels (3 per student)
- Device for cutting toothpicks or skewers (scissors, wire cutters, small saw, etc.)
- Markers