

*“Welded Wire Chair”*, Harry Bertoia, ca. 1952  
Spotlight Paper by Lynne Hobbs, 2017



### **Artist’s Background**

Harry Bertoia, American, born Italy, San Lorenzo, 1917-1978

- Education: Cranbrook Academy of Art, Bloomfield Hills, Michigan
- Influences: Eliel Saarinen, Eero Saarinen, Charles Eames, Florence Knoll
- Art movement: Modern American Design
- Medium: mostly metal sculpture (steel, bronze), but early work included painting, wood-block monotypes, drawings, metal jewelry, the chair series, sculpture of small and monumental scale that hangs, stands alone, fastens to walls, composing “Sonambient “music played on hi tonal sculptures.

### **Technique and methodologies:**

Harry Bertoia particularly liked bending steel rods of all sizes and welding metal to metal in various shapes, and he loved the ‘dancing’ between rods when space was left in between. His later sculpture was sometimes highly polished and reflective and sometimes deliberately left rough and oxidized, some welded,

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some cast, using a wide range of finishes. Bertoia produced an amazing range of styles and series of forms during his career. His work always reflected nature, movement, airiness, light, and his interest in mathematics, music, philosophy.

Harry Bertoia’s impact on the world of art and design: Though most well-known for his series of chairs designed for Knoll International from 1952-1954, they were early in the arc of his career. Harry Bertoia was a complete modern artist, whose conscious mission was to generate designs and art that were ahead of their time:

- His innovative chair series has been in continuous production since 1952.
- His jewelry, monotypes and small sculptures are available through auction houses and command high prices from collectors who understand his design sensibility and range.
- His collaborations with modern American architects resulted in dozens of his monumental, sculptural pieces enhancing important architecture. A few examples where his pieces can be seen include the Saarinen-designed General Motors Technical Center, the MIT Chapel, and Dulles International. Very large wall screens, fountain pieces and suspended sculptures grace corporate headquarters and major buildings throughout the U.S., and at least 3 are in Europe.
- Palm Springs Art Museum owns another five objects by Bertoia, including another Welded Steel Side Chair and four later free-standing sculptures. The Bertoia chairs are an important complement to the Museum’s collection of midcentury design and architecture.

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**My Impressions and Analysis of this object**

Harry Bertoia is most well-known his chair series, designed in the early 1950’s while working for Knoll Furniture Company in Pennsylvania.

These chairs include many of the elements that make midcentury design unique: line, lightness, clean design, shiny and transparent, revolutionary compared to what had come before in chair design and the use of new materials. Harry Bertoia said, “If you look at these chairs, they are mainly made of air, like sculpture. Space passes right through them.”

The Bertoia Collection of welded wire chairs come in several shapes. The side chairs are often used as dining chairs; a taller version is a bar stool. The famous Bertoia “Diamond Chair” has more curves that become arm rests, and there is a high-backed “Bird Chair” and another asymmetrical chaise lounge.

Harry Bertoia’s continual interests in nature, airiness, mathematical formulas and curves were expressed in his chair series, his jewelry and all of his sculptures. Additionally, in designing the chairs, he placed an equal importance on physical comfort along with modern, enduring design.

He worked on the base of the chair separately, and the curving wire mesh basket suspends in the base, with the finished chairs having flexibility as the body moves. These chairs are remarkably comfortable. The pair shown here from the Museum’s permanent collection also have a vinyl pad on both the seat back and chair. More often now the chairs are seen with the seat pad only because of the appreciation of seeing the polished metal grid simultaneously reflective and transparent, geometric and light. The pair of chairs can stand alone as art objects, as well as they enhance midcentury modern architecture.

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Harry Bertoia was born in Italy in 1915 and moved to the U.S. in 1930. Even as a very young child, he was recognized for his exceptional artistic talents, and fortunate to have many people help him nurture that talent with educational and professional opportunities.

Those links include art teachers who arranged an interview for Harry with Eliel Saarinen, Founder and then-Director at the Cranbrook Academy of Art, who offered him a scholarship on the spot. Other key relationships included fellow Cranbrook students Eero Saarinen, Charles and Ray Eames, and Florence Shust (Knoll). While at Cranbrook, he experimented with metal, jewelry making, and graphic arts. He enjoyed printing many monotypes, which he sent to Hilla Rebay, Head of Acquisitions for The Guggenheim, who personally purchased all of them. She continued to open doors for him for many years.

Even while completing his degree, Bertoia was put in charge of the metal shop at Cranbrook and taught there. He taught after graduating, and, in addition to selling monotypes, he created and sold many pieces of metal jewelry, that are still in high demand today.

When World War II’s need for all metal resources closed the Cranbrook metal shop, Charles Eames convinced Harry to move to California. Eames had won a contract to design innovative leg splints for injured war veterans. This led to a team of artists, designers and architects who worked together and were encouraged to create new products and it was here where Bertoia learned welding. This team worked on a winning design for submission to the MOMA Furniture Design Competition, now known as an “Eames Chair”. It is the molded plywood chair with the seat separated from the back rest. Harry Bertoia was very instrumental in designing the chair’s ability to be flexible for increased comfort.

After leaving the Eames organization, Bertoia was recruited to innovate aeronautical tools and cockpits for the U.S. Navy near San Diego. This experience led to Bertoia’s enduring interest in the body and physical movement, a key element in his chair designs for Knoll Furniture Company. He has been called “the father of ergonomics”.

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Florence Schust Knoll, his former classmate at Cranbrook, believed that architects and designers should be involved in the furnishings designed for living and work spaces. She brought Harry and other brilliant artists and architects to Knoll’s Pennsylvania headquarters in the early 1950’s without demanding that they design furniture. They were allowed to experiment and innovate on their own. Harry Bertoia and his colleagues from Cranbrook were influenced by the Bauhaus movement, and aware of furniture designed by Mies Van der Rohe. They would have seen the polished chrome and leather chairs by Marcel Breuer.

Bertoia had experimented with chair design as early as 1940, and again as part of the “Eames team” in California that led to a MOMA Furniture Design Award for the molded plywood chair.

Post World War II, excitement about new uses for steel, molded plywood and plastics began to play a key role in new designs for home and office furnishings. Now, at Knoll, he started bending steel rods, again responding to his continued interest in metal and ultimately created the Bertoia Chair Series in less than 3 years there.

The royalties he earned from the chair series allowed Bertoia to purchase a farm nearby that included studio space, where he could pursue metal sculpture and where he created for another 25 years, until his death at age 63.

He went on to create in metal:

- free standing sculptures, both large and small (the Museum’s collection includes three),
- wall screens,
- hanging chandelier-type sculptures
- tonal sculptures, which made what Bertoia called “Sonambient” music. You can buy CD’s today of his compositions and his son, Val, gives concerts on Harry Bertoia’s extensive collection of tonal sculptures.

Harry Bertoia was aware that he was doing important work and he was also described as a philosopher. You can hear him describing his philosophies on Youtube.com.

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His chairs are a gleaming highlight of his legacy of work, and Palm Springs Art Museum is fortunate to have these in their permanent collection.

**Comparing other chairs in the Museum Collection**

There are many other chairs in the Museum’s collection, that were designed in the same period. Currently, in the exhibition *“Montgomery Meets Modernism: Two Americas”*, there are several examples of midcentury modern chair design, including the beautifully disciplined wrought iron and birch chair by Paul McCobb, designed in 1953. This chair includes similar elements to the Bertoia side chair including symmetry, clean line, transparency, lightness of the base and curves at the side of the seat.

A second chair in the same exhibition, from that same period, are the pair of Werner Blaser steel and leather chairs (1957). These chairs reference designs created by Marcel Breuer whose chairs also had a curving, polished steel tubular frameworks with suspended leather seats – all of which contributed to flexible, comfortable seating wrapped in innovative designs.

And yet, with the similarities just mentioned, each of these chairs is completely innovative, modern, and unique in their design.

The pair of Bertoia Welded Wire side chairs were a gift to the Museum from Wilbert and Marybeth Waterman, in 2002.

The chairs are an excellent complement to the Museum’s midcentury modern design collection of architecture, sculpture, furniture, textiles, paintings and photography.

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**Bibliography/ Sources**

- ***The Life and Work of Harry Bertoia***, by Celia Bertoia, his daughter, 2015
- Palm Springs Art Museum archive, library, and Artist files
- <https://www.Knoll.com/bertoia-side-chair>
- [https://en.wikipedia.org/wiki/Florence\\_Knoll](https://en.wikipedia.org/wiki/Florence_Knoll)
- SouthBay Home magazine, II 2016
- <https://www.dunnedwards.com/mid-century-design-iconic-revitalization>
- [https://en.wikipedia.org/wiki/Modern\\_furniture](https://en.wikipedia.org/wiki/Modern_furniture)
- <http://www.furninfo.com>
- <http://cranbrookart.edu/>
- Harry Bertoia Foundation <http://harrybertoia.org/>
- <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ad=rja&uact=8&ved=0ahUKEwjExsHnrSAhUY0WMKHV51BG0QtwIIHTAA&url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3DjAFsSyJkDWU&usg=AFQjCNGTNg3e9IVvOXg9vZsEkxlQDYcSIQ&bvm=bv.148747831,d.cGc>
- <https://archive.org/details/HarryBertoiaSculpture>

**Also owned by Palm Springs Art Museum**

Sculpture *Burning Bush*, Harry Bertoia 1970-1979, copper & bronze

