

ATELIER MUJI GINZA Gallery 1  
Exhibition: Surviving long into the future---50 chairs passing down their DNA  
—From the collection of Keiji Nagai—



Date : Thursday, 4 April ~ Sunday, 21 July 2019

ATELIER MUJI GINZA Gallery 1 will hold an exhibition of 50 chairs that pass down their DNA to the future inherited from a single chair that has been in production for the longest time in the history of modern design. The starting point of the story is Chair No. 14 made in 1859 by Gebrüder Thonet in Vienna that laid the foundation for mass production by perfecting the new technology of bending solid wood. The chair was received with great surprise at the time for a structure and design that eliminated unnecessary parts and reduced transportation costs to a minimum thanks to its knock-down structure. Chair No. 14 sees its 160th anniversary this year. The bentwood furniture maker Gebrüder Thonet increased the number of its factories in areas abundant in beechwood and mass produced chairs while expanding variations. In the 1920s, Thonet further contributed to production of chairs made with bent tubular steel devised by Marcel Lajos Breuer and Ludwig Mies van der Rohe in cooperation with Bauhaus, and played a part in the production of cantilever chairs that became another structural revolution after bent-wood chairs. The wood bending and tubular steel bending technology spread globally, and many unique chairs using these methods have been made in Japan as well. In this exhibition, a chair is considered to an organism, and an attempt is made to visualize its network of DNA through 50 chairs made with bending technologies. It will also be a rare opportunity where design archetypes and variations, remix, and outstanding models are assembled under a single roof. Ways of looking at “new” designs may change when the continuing “tree of life” of chairs is deciphered. We would be delighted if we could share with you this opportunity to contemplate the secrets behind objects that are not merely consumed and discarded but live long, useful lives.

ATELIER MUJI GINZA

50 Chairs featured in Atelier Muji Ginza Gallery 1.

In this pamphlet, the chairs are presented in a tree diagram according to the “DNA” of their technology and design. It all began in 1859. No. 14 was the chair that the Thonet company used to build a foundation for mass production utilizing solid wood bending technology.

Here we tell a short story of the “DNA” of this long lived chair that sees its 160th birthday this year? Models of long-life design still being produced at present in 2019 are marked with their age. Why not join us in thinking about the nature of long lived design through the tree outlining this chair’s life?

## Explanation of the chair

No.  
Year  
Designer  
Manufacture  
Material  
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※All ages are design years.

※The product name may vary depending on the manufacturer of the current product. In addition, the manufacturer name will be the same as the exhibit in this exhibition.

1.  
**No.14**  
**1859**  
**Michael Thonet(1796-1871)**  
**Thonet**  
**Beech, Fabric**

Two hundred years ago in 1819, Michael Thonet opened a furniture studio in Boppard, which was then a territory of Prussia. He later founded Gebrüder Thonet with his sons in his new home ground Vienna. Michael invented solid-wood bending technology, and after a series of trial and error he unveiled the side chair No. 14 as its ultimate form. It is a simple and lightweight chair composed of only six parts, which was truly innovative as it also brought success in reducing transportation costs thanks to its knock-down structure, and laid the foundation for mass production. Approximately 50 million units were produced in 40 years from the time No. 14 was first unveiled, and even today, after 160 years, it is an unrivaled long-life design product that is being produced by various manufacturers.

2.  
**unkown**  
**unkown**  
**No. 14K (knotted leg)**  
**Thonet**  
**Beech, Cane**

This chair was made by taking solid-wood bending technology to the limit by imparting a knot to one of its legs.

3.  
**unkown**  
**unkown**  
**No.14 1/2**  
**Akita Mokko**  
**Beech, Cane**

A model of No.14 redesigned with an addition of a *tatami-suri* crossbar at the bottom so that it will not scratch tatami mats in Japanese-style rooms.

4.

**No. 6009**

1871

**August Thonet(1829-1910)**

**Thonet**

**Beech, Cane**

As with No. 14, this chair is composed of six parts but realizes a weight reduction to just 3.5 kg. It is called Vienna Chair and was popular among modernist architects. Le Corbusier in particular chose No. 6009 for the Pavilion of the Esprit Nouveau unveiled at the International Exhibition of Modern Decorative and Industrial Arts in Paris in 1925 as well as for the interior of a residence designed for the housing exhibition *Weißenhofsiedlung* (the Weissenhof Estate) in 1927, it is also called the Le Corbusier Chair.

5.

**No. 209**

1927

**Poul Henningsen(1894-1967)**

**Thonet**

**Beech, Cane**

A redesign of No. 6009 by Danish architect Poul Henningsen who is known for masterpieces in lighting fixtures. A subtle difference is seen in the curvature of the arm portion (from No. 6009).

6.

**No. 7500**

1876

**Gebrüder Thonet**

**Thonet**

**Beech, Cane**

Thonet also made optimal use of wood bending technology in the structure of rocking chairs and unveiled several designs. Among them, Rocking Chair No. 7500, which is called chaise longue (the most elegant rocking type) uses eight meter-long beechwood pieces on both right and left sides. A version with armrest is shown in the company's catalog in 1879 and later. Neither types were made in mass quantities.

7.

**Café Museum**

1898

**Adolf Loos(1870-1933)**

**J. & J. Kohn**

**Beech, Cane**

A chair made for the coffee house Café Museum in Vienna by Adolf Loos. The curve was designed to appear more delicate by making part of the cross section of the bentwood into an oval shape. Production at the time was by bentwood furniture maker J&J Kohn that was founded in 1869 and became a rival company of Thonet (this company merged with another rival Mundus in 1914 and then merged with Gebrüder Thonet in 1922).

**8. A stool for Austrian Postal Savings Bank**

**9. An armchair for Austrian Postal Savings Bank (No. 6516)**

1902

**Otto Wagner(1841-1918)**

**GTV**

**Beech, aluminium**

Two pieces of furniture designed by Otto Wagner who is called "the father of functionalist architecture" for the Austrian Postal Savings Bank. The armchair adopts a pioneering structure where the front legs, arms, and the backrest are connected with a single square log. The stool with its innovative structure using a standardized frame had an immense influence on modern design thereafter. Aluminum, which was a new material at the time was used in the joint screw, which is also a part of its design.

10.  
**No. 811**  
1930  
**Josef Hoffmann(1870-1956)**  
Thonet  
Beech, Cane

It is generally thought that No. 811 was designed by Josef Hoffmann, but some hold other opinions, such as that it was co-designed with Josef Frank. Variations in the form of the front legs are seen depending on the era. Hoffmann was an apprentice of Otto Wagner and was a central figure in the Vienna Secession as well as the founder of Wiener Werkstätte (studio).

11.  
**Side Chair**  
1939  
**Søren Hansen(1905-1977)**  
Fritz Hansem  
Beech

A redesign of No. 14. The design of the sidebar of the backrest is more modern. The reinforcement of the leg is not a ring but in a C form.

12.  
**Beechwood bentwood chair**  
2008  
MUJI  
Thonet  
Beech

A redesign of No. 14. It was designed to match tabletop height by raising the backboard of the backrest, and given a more simple design by eliminating the leg-reinforcement ring.

13.  
**Club Chair B3**  
1925 – 26  
**Marcel Lajos Breuer(1902-1981)**  
Gavina  
Steel tube, Canvas

Marcel Lajos Breuer served as a lecturer at Bauhaus in Dessau. He realized the world's first indoor chair using a tubular steel frame inspired by bicycles at the time. It became an epoch making work that embodied modernism. Thonet Mundus bought Standard Möbel founded by Breuer and its copyrights in 1929. Advancements in B3 were made over time, and in the 1960s Breuer teamed up with the Italian company Gavina to make further adjustments and produced a model that led to the chair being referred to as *Wassily*.

14.  
**Folding Chair B4**  
1927  
**Marcel Lajos Breuer(1902-1981)**  
TECTA  
Steel tube, Canvas

This folding chair is a variation of Club chair B3.

15.  
**Side Chair B5**  
1926-27  
**Marcel Lajos Breuer(1902-1981)**  
Thonet  
Steel tube, Canvas

A side chair using tubular steel as the frame.

16.  
S33  
1926  
**Mart Stam(1899-1986)**  
Thonet  
Steel tube, Leather

In 1925, Dutch architect Mart Stam did a structural experiment by connecting gas pipes to realize a chair without hind legs. The completed result S33 has been etched in history as a work that led to a structural revolution in chairs. When this cantilever chair was unveiled at the housing exhibition *Weißenhofsiedlung* (the Weissenhof Estate) in Stuttgart in 1927 along with exceptional variations by Marcel Breuer and Mies van der Rohe, cantilever chairs became a symbol of the spirit of the era.

17.  
S64  
1929  
**Marcel Lajos Breuer(1902-1981)**  
Thonet  
Steel tube, Cane, Wood

An armchair that is one of the variations of Side chair B32. The combination of the tubular steel bent like a single-stroke line from the arm section and the rattan seat and backrest stretched over the wooden frames exudes a sense of sharpness and warmth at the same time.

18. 19. 20.  
MR10/ MR 20 (armchair) / MR10 (cane version)  
1927  
**Ludwig Mies van der Rohe(1886-1969)**  
Thonet  
Steel tube, Leather(18), Leather(19), Cane(20)

Seeing Stam's rough prototype of the cantilever chair, Mies created an elegant form employing a bending method that brought out a sense of elasticity in tubular steel.

21.  
Brno Chair  
1930  
**Ludwig Mies van der Rohe(1886-1969)**  
Knoll  
Steel tube, Leather

This project was originally designed as dining chair of Tugendhat House in Brno, a city in the former Czech Republic, designed by Mies. The owner of the house Tugendhat was a Jewish business family, they fled to Switzerland in fear of persecution by the Nazis in 1938. Mies, who served as the 3rd-generation principal of Bauhaus, moved to the US after the school was closed by the Nazis in 1933 and established his status as a master of modern architecture.

22.  
Tatlin Chair  
1927  
**Vladimir Tatlin(1885-1953)**  
Nikol Internazionale  
Steel tube, Leather

This cantilever chair was made by an Italian manufacturer based on a bentwood chair prototype by Tatlin, a leading illusionist of Russian Constructivism that emerged in the 1910s. Tatlin was also strongly interested in flying and levitation, and was engaged in the development of a bird-like flying machine called Letatlin.

23. 24.

Lariana / Sant'Elia (armchair)  
Giuseppe Terragni(1904-1943)  
1936  
Zanotta  
Steel tube, Moulded Plywood(23), Leather(24)

A furniture piece designed by Giuseppe Terragni, who was a representative architect in Italian rationalism for Casa del Fascio in Como (a city in Italy) under the Mussolini regime, and later manufactured by Zanotta from 1983. A variation of the cantilever structure.

25.

41 Armchair Paimio  
1931-32  
Alvar Aalto(1898-1976)  
Artek  
Birch, Bent Plywood

One of the furniture pieces in the Paimio tuberculosis sanatorium designed by Finnish architect Alvar Aalto in the early 1930s. Aalto designed tubular steel furniture strongly influenced by Bauhaus in 1929 and entered them in competitions held by Thonet Mundus and others, but through a sanatorium project discovered modern design possessing unique structures and a warmth connected intimately with humankind and nature. The bent laminated plywood frame in place of the tubular steel and the organically formed seat can be called reinterpretations of bentwood and bent-pipe furniture.

26.

42 Armchair  
1932  
Alvar Aalto(1898-1976)  
Artek  
Birch, Bent Plywood

For 42 Armchair, another project for the Paimio sanatorium, Aalto realized a cantilever armchair with bent laminated plywood with a springy effect.

27.

Stool 60  
1923-33  
Alvar Aalto(1898-1976)  
Artek  
Birch

28.

Stool X600  
1954  
Alvar Aalto(1898-1976)  
Artek  
Birch

Alva Aalto collaborated with wood furniture artisan Otto Korhonen of Turku, Finland, and worked on developing techniques for using birch as a material. This resulted in the L-leg, where cuts are made in the end of a piece of wood, wood chips inserted, then bent to create stability. The first application of this technique was Stool 60, which became a symbol of long-life design. Aalto and Korhonen created a further revolution in the bent wood industry by combining two L-legs together at a 90° angle to make the Y-leg, and then the X-leg that comprised five L-legs cut in a fan pattern (Fan-Leg).

29.

**Model 5331**

1960

**Rud Thygesen(1932- ) & Johnny Sorensen(1944- )**

**Magnus Olesen**

**Beech**

30.

**Stool**

1970s

**Rud Thygesen(1932- ) & Johnny Sorensen(1944- )**

**Magnus Olesen**

**Beech**

Rud Thygesen & Johnny Sorensen are a design team known for numerous furniture pieces from Magnus Olesen of Denmark. 5331 is a variation of a double frame cantilever chair. Stool is a fresh design combining molded plywood legs with dyed black seat. Incidentally, their representative work is the 8000 Series Stool (not exhibited) that used an assembly system which inserted legs into the seat without using tenons or dowels and realized the first mass production and variation since No.14.

31.

**N118**

1984

**Ben af Schulten(1939- )**

**Artek**

**Birch, Fabric**

Ben af Schultén is a Finnish designer who has inherited the “DNA” of Aalto. He worked at Artek from the 1960, serving as art director for 28 years from 1976. N118 passed down wood bending technology with lamella inserts to contemporary times.

32.

**No. 270**

1966, 1970 -

**Verner Panton(1926-1998)**

**Thonet**

**Birch, Molded Plywood**

A frame armchair made of laminated wood by Danish designer Verner Panton. The seat and back are made of molded plywood fixed to the frame with screws. In this period, Panton has already succeeded in commercializing the moulded plywood cantilever chair 38 with Thonet.

33.

**Lia Chair**

1966

**Claudio Salocchi(1934-2012)**

**Sormani**

**Aluminum, hair calf**

A cantilever chair by Italian designer Claudio Salocchi. He worked with the Sormani company and is known for research into the utilization of aluminum alloy.

34.

**Cantilever Chair**

1987

**Niels Jorgen Haugesen(1936-2013)**

**Prototype**

**Steel tube**

A unique chair that hangs a mesh seat on a cantilever frame. A prototype by Danish designer Niels-Jorgen Haugesen.

35. 36. 37.

**Yoga / Z-Down Chair / Z Chair**

1960s/ 1965/ 1960s

**Erik Magnussen(1940-2014)**

**Torben Orskov**

**Steel tube, Moulded Plywood(35), Leather(36), Canvas(37)**

Two-leg folding chairs 36 and 37 designed by Erik Magnussen for the Danish company Torben Orskov, and tubular steel chair that looks like a yoga pose. They are rare models that were produced in small lots. Reevaluation of Magnussen's tubular steel chair is awaited as it fascinates many people.

38.

**No. 276 S Chair Thonet 1956 (1965)**

1956(1965)

**Verner Panton(1926-1998)**

**Thonet**

**Molded Plywood**

39.

**Panton Chair Vitra 1960 (1967)**

1960(1967)

**Verner Panton(1926-1998)**

**Thonet**

**FRP**

Two of Panton's works use materials that are not found elsewhere in this exhibition. S Chair is made with molded plywood, while Panton Chair is molded plastic. The plastic in the latter was FRP at the time, but was changed to polypropylene in consideration of the environment. Incidentally, when it first went on sale, there was a controversy that a similar cantilever chair had already been proposed before Panton Chair.

40.

**Tric**

1965

**BBB Bonacina**

**Achille Castiglioni(1918-2002) & Pier Giacomo Castiglioni(1913-1968)**

**Beech, Molded Plywood**

41.

**Mezzadro**

1957 (1970)

**Achille Castiglioni(1918-2002) & Pier Giacomo Castiglioni(1913-1968)**

**Zanotta**

**Steel, Beech**

Tric is a redesign of a folding chair with a high back from Thonet. Mezzadro is evaluated as a revolutionary chair that employed the ready-made approach, utilizing an existing tractor seat for the chair seat. Also of import is that this work conveyed the fact that the tractor seat, developed in the early 20th century, was a cantilever structure. This might just be a Castiglioni kind of irony regarding the argument between Stam and Breuer about who invented the cantilever chair. The answer to their question lies in anonymous design.

42.

**Stool No.202**

1958

**Isamu Kenmochi(1912-1971)**

**Akita Mokko**

**Beech, Cane**

A stacking stool unveiled in 1958 by bentwood furniture maker Akita Mokko founded in 1910. A current product, over 1.2 million units have been produced, and has become one of the symbols of long-life design in Japan. It is a masterpiece that is thought to be a redesign into a stool of the "stacking type square table" shown in Akita Mokko's 1938 catalog.



43.

**Armchair No.207**

1960

**Isamu Kenmochi(1912-1971)**

**Akita Mokko**

**Beech**

The seat height is 38 cm. Representative designers in Japan at the time unveiled chairs with low seat heights one after another, and they are once again appreciated in today's lifestyle.

44.

**Armchair**

1967

**Sori Yanagi(1915-2011)**

**Akita Mokko**

**Beech, Cane**

An armchair that appears differently depending on the viewing angle with a design that fully brings out the appeal of bentwood. Yanagi created this elaborate design and finished it into a functional stacking chair.

45.

**OM5017 Lounge Chair**

1965

**Daisaku Cho(1921-2014)**

**Tendo Mokko**

**Cheek**

Daisaku Cho entered a chair that employs the racket structure for the first time in Japan at the Milan Triennale in 1960 for which his master Junzo Sakakura did the exhibition layout design. Several years later, he designed this lounge chair for the National Museum of Western Art in Ueno. Noteworthy are the frame employing the racket structure with inserted pieces and the armrest that reveals the cross-section pattern of the laminated plywood.

46.

**CCC (Carbon Composite Chair)**

1985

**Motomi Kawamaki(1940- )**

**Yamaha → Okamura Seikakujo**

**Beech, Carbon sheet**

A project and a new endeavor in bentwood by taking note of and applying the lightness and elasticity of carbon sheet used in tennis rackets. It was manufactured by Yamaha that had the knowhow in racket structures at the time it was unveiled.

47.

**PK15**

1979

**Paul Kjaerholm**

**PP MØBLER**

**Beech, Leather**

Using the same design as his own tubular steel chair PK12 (1962), he changed the material to bentwood using compressed beechwood. Two extra parts for reinforcement are used. A rare bentwood chair by Kjaerholm.

48.

**Pretzel chair**

1952

**George Nelson(1908-1986)**

**CADSANA**

**Birch, Walnut**

A laminated plywood armchair inspired by Thonet's classic models.

49.

**Cross Check Chair**

1990

**Frank Gehry(1929- )**

**Knoll**

**Maple**

Gehry unveiled Cross Check Chair that is as unique as his unconventional architecture from Knoll in 1990. It is made by weaving thin strips of white maple veneer and using adhesives to attach them to the frame without using any screws. It was a project that was considered unrealizable at the time it was proposed, but Gehry himself tackled development energetically at Knoll and gave it form. It is a piece that implies the possibilities in bentwood would remain into the future.

50.

**Armchair**

2001

**Enzo Mari(1932- )**

**GTV**

**Molded Plywood, Aluminum**

Mari designed a collection including a chair combining a bent aluminum tube frame and a molded plywood seat for Gebrüder Thonet Vienna (GTV). Thonet set the starting point of industrial design, and No.14 is "more than a chair" for Mari. Mari saw utopia in design when Michael Thonet opened the door to mass production and provided the standard that would be cherished by society for a long time, and inherited that legacy.

## Who was the representative maker of bent wood chairs and tubular steel chairs?

Thonet, which also refers to bentwood chairs, in general, has undergone a number of name changes in the 200 years since it was founded by Michael Thonet. There are also cases where many different manufacturers produced the same classic model. As it is very complex, we have presented Thonet's history as simply as possible and outlined the present situation as of 2019, and would be pleased if it is of some use to our readers.

### **Thonet**

1819 Michael Thonet opened a furniture studio in Boppard.

1853 Company name changed to Gebrüder Thonet (Vienna).

1922 Company name changed to Thonet Mundus (Merged with J&J Kohn and Mundus. At this time, they created a prototype for a Bauhaus tubular steel chair. Later acquired the rights to produce some of them).

1939 Company name changed to Gebrüder Thonet.

1945 Rebuilt the company's factory in Frankenberg, Germany, which had been destroyed in WWII.

1976 Split into Gebrüder Thonet (Frankenberg) and Gebrüder Thonet Vienna (Vienna).

2006 Gebrüder Thonet changed to Thonet (Frankenberg).

### **At present, the main makers manufacturing and selling bentwood furniture are as follows.**

Thonet (Frankenberg, Germany)

GTV (Gebrüder Thonet Vienna) (Turin, Italy)

Ton (Began as a factory opened in what is now Bystřice, Czech Republic by founder Michael Thonet. After post-WWII nationalization, this maker took over the right to produce bentwood furniture.

Etc.

### **Main makers of tubular steel chairs from Bauhaus, etc.**

Thonet (Frankenberg, Germany)

Knoll (USA)

Tecta (Germany)

Etc.

### **-Keiji Nagai collection**

The exhibits in Gallery 1 have been borrowed from a vast post-war modern design collection personally handpicked over the last 50 years by Keiji Nagai, interior designer, who devoted much time and effort to it. Nagai was born in Karatsu, Saga in 1948. Having founded his design studio "KEY & DESIGN ASSOCIATES" in 1982, he has contributed to many cultural exchanges inside and outside of Japan and was awarded the "Furniture prize" from Denmark. In Gallery 1, we will hold exhibitions borrowing a different part of the Nagai collection for each.

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