

FROM 'ART AND TECHNOLOGY'

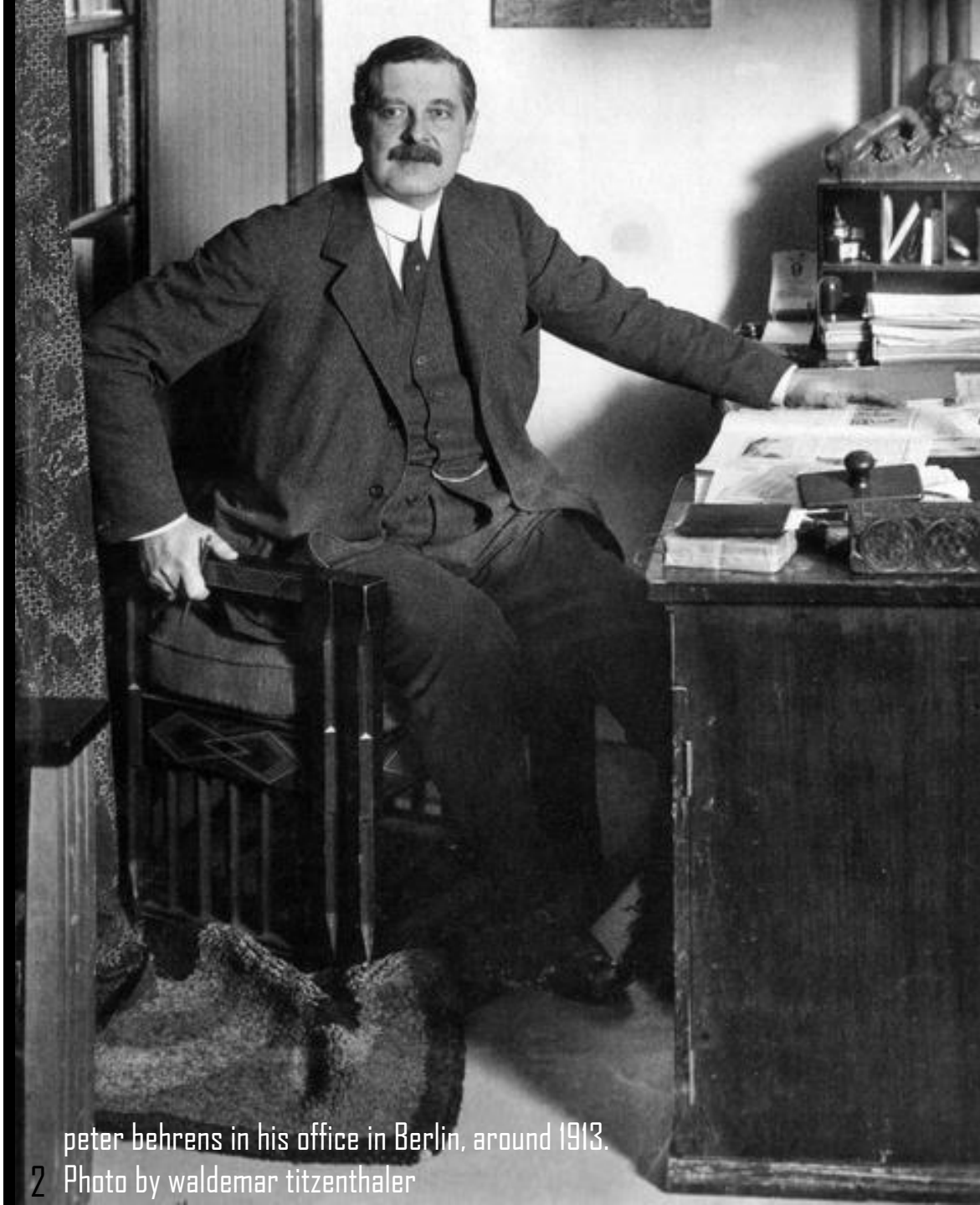
GERMAN ARCHITECT

PETER BEHRENS 1868

1940

THE FIRST INDUSTRIAL DESIGNER

ÇİSEM ATAK
ZÜLAL İMRAN UYAR



peter behrens in his office in Berlin, around 1913.

2 Photo by waldemar titzenthaler

Peter Behrens was born in 1868 in Hamburg, Germany. He was the first industrial designer and founder of modern objective Industrial Architecture. Before he became an architect, he studied at Christianeum Hamburg from 1877-1882 in the field of painting.



Peter Behrens.
The kiss, detail, 1898



In his early career, he worked as a painter and illustrator. He painted his masterpieces in Bohemianism style. bohemianism

BOHEMIANISM

Bohemianism is supporter of unordinary and independent lifesytle. Its principles based on rebelling and non-traditional life style of marginalization.



DARMSTADT ARTIST COLONY

In 1899, with a inaugural invitation which came from Grand Duke Ernst Ludwig of Hesse, he contributed to Darmstadt Artist Colony.

'My Hesse should flourish and art in Hesse too.' Grand Duke Ernst Ludwig

Darmstadt Artist Colony was established by Grand Duke Ernst Ludwig with the purpose of creating a unity of art and trade in order to develop the economy of his land.

Thus, Ernst Ludwig set a society which artists work and live together.

The colony was officially opened in 1901 with a exhibition called a Document of German Art. All the 8 houses in that colony were furnished by the invited artists.



Ernst Ludwig House



Wilhelm Deiters' House



Wilhelm Deiters' House



The large Glückert House



Peter Behrens' House



Joseph Maria Olbrich's House



Upper Hesse Exhibition House



Workers' House by Metzendorf

JUGENDSTIL

Most of those artists were working in the style of Jugendstil.

Jugendstil basically is the movement of Art Nouveau in Germany. (German Art Nouveau).





Das Behrens-Haus, Nord-Fassade vom Westende. Die Seiten-Ansicht vom St. Bernhards-Platz in Köln.



NORD-FACADE DES HAUSES BEHRENS

Die Beschaffenheit der Türgriffe ist ein wichtiger Teil der Inneneinrichtung. Sie müssen nicht nur schön, sondern auch praktisch sein. Die Beschaffenheit der Türgriffe ist ein wichtiger Teil der Inneneinrichtung. Sie müssen nicht nur schön, sondern auch praktisch sein.



Das Behrens-Haus, Esszimmer. Spitz-Sitzstühle.

Esszimmer-Abzug (Winkel) von H. Behrens & Co., Dresden, 1902. Die Zeichnung ist von C. Lang & Böhmer, Plauen, 1902. Die Ausführung ist von H. Behrens & Co., Dresden, 1902.

After Peter Behrens attended to this colony, he also built his own and first house which was designed according to norms of Jugendstil.

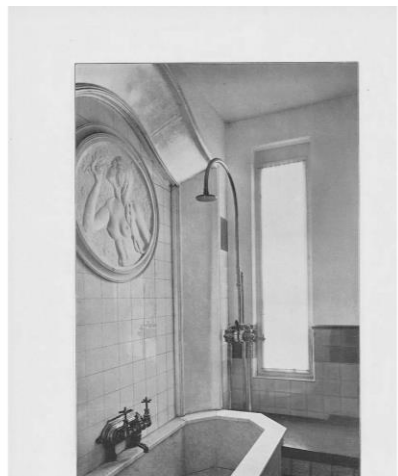
The principles of Jugendstil based on the natural forms which against to straight lines and angles.



Das Behrens-Haus, Esszimmer. Spitz-Sitzstühle.



Das Behrens-Haus, Arbeitszimmer. Die Seiten-Ansicht vom St. Bernhards-Platz in Köln.



Das Behrens-Haus, Bad. Die Seiten-Ansicht vom St. Bernhards-Platz in Köln.



Das Behrens-Haus, Küche. Die Seiten-Ansicht vom St. Bernhards-Platz in Köln.



Das Behrens-Haus, Werkzeuge. Die Seiten-Ansicht vom St. Bernhards-Platz in Köln.

He was one of the milestone characters of 20th century which was flowing through industrial era. He contributed this flow as a designer of factories and office buildings in brick, steel and glass.



The poster for Deutsche Werkbund-Ausstellung: Kunst in Handwerk, Industrie und Handel; Architektur, Cöln, Mai- Oct. 1914. © Library Of Congress

In 1903, Behrens became the director of Kunstgewerbeschule (The School of Arts and Craft) in Düsseldorf. The school educated according to specific art and craft skills such as weaving, sculpting, painting. He implemented such a new things as a reform in that term.

THE GERMAN WERKBUND

He accombined with 12 companies and 10 other people, one of the important character was Hermann Muthesius in order to establish The German Werkbund. (German association of craftsman) in Munich in 1907.

The artist of this important organization intended to provide mass production with good design and craftsmanship. Their shared-purpose was sustaining craftsmanship and protecting valuable art and artist while the world and the Germany was getting industrialized.

The leaders of this organization; Hermann Muthesius and Henry Van de Velde were influenced by William Morris who was one of the leader of British Arts and Crafts Movement that proposed industrial crafts to be revived as a collaborative enterprise of designer and craftsmen.

Muthesius and Velde administrated the organization with two vice versa objectives.

Muthesius objective was feeding the industry by art which should create standardization and types. Muthesius also aimed to make Germany able to compete with England in global market.

Velde's objective was protecting individuality in design. He maintained the value of artistic and cultural expression. Peter Behrens took the side of Muthesius from these two debating leaders. The Werkbund took attention among artists, architects, politics, industrialist, investors, critics and academics.

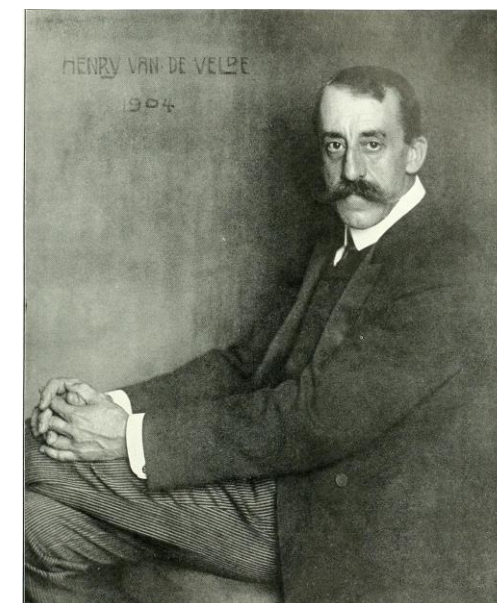


Pioneer of British Arts and Crafts Movement

William Morris



Hermann Muthesius



Henry Van de Velde

AEG

In 1907, he started to work at AEG as a design consultant until 1914. Behrens's works and designs included typefaces, logos, printed materials, products and buildings for the company. The works of him at AEG were the proof of the performed and proven ideas which comes from Werkbund which is; vitality and viability of initiatives and objectives.



Electric kettle, designed by behrens for aeg, hammered brass and wicker, circa 1909. Photo courtesy of Quittenbaum



Synchronal electric supply clock, designed by behrens for aeg, 1910. Photo courtesy of Quittenbaum

AEG COMPANY

AEG (General Electric Company) was the pioneer of modernism and large-scale industrial growing of Germany in 1883, Berlin.

They were producing wide range of electrical products such as lamp, turbine, small motors. Also, in that era AEG company became respected in global market as a German brand. AEG company's success proved the power of German industry.

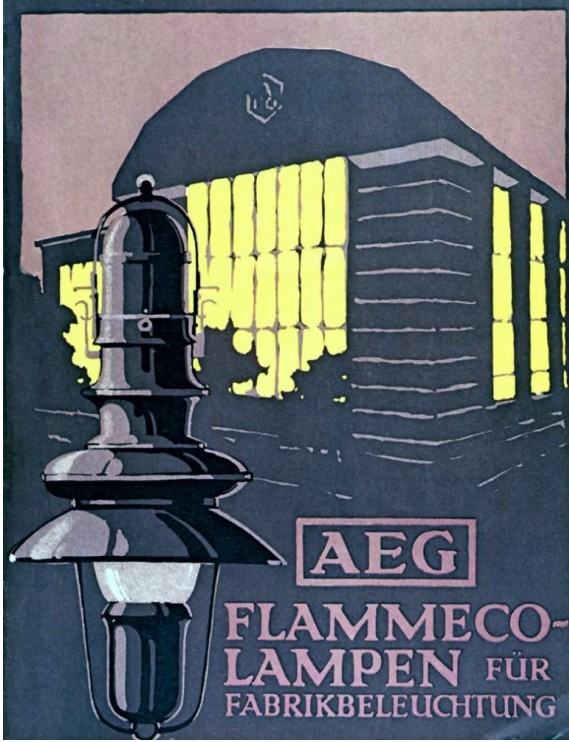
The machine design and industrial processes in that time were represented by Behrens and his designs for AEG for the first time.



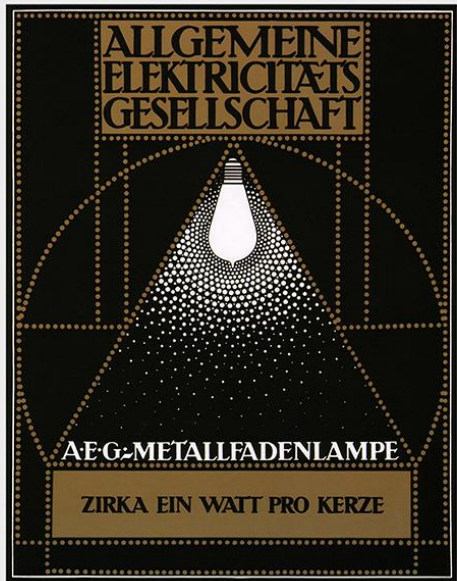
Luzette lamp, designed by behrens for aeg, circa 1910. Photo courtesy of garageonline.se



Heater, designed by behrens for aeg, 1920. Photo courtesy of Quittenbaum



Title page of a product brochure, designed by Behrens, 1910



Behren's design-arc lamp

Sir Nicholous Pevnser :

'same purity of form'

He claimed that Behrens' works clearly defines the directness of function in his work for AEG.

Eventually, it made him one of the pioneers of modern movement and the first industrial designer in history.

His first mission for AEG was re-designing the arc lamps which were for factories, warehouses, railway stations, public buildings.

'Design' he wrote 'is not about decorating functional forms- it is about creating forms that accord with the character of the object and that show new technologies to advantage'. Peter Behrens

'Our most serious task, therefore, is to help technology to achieve artistic quality at the same time helping art to great achievements through contact with technology.'

From the text, 2nd page



His another notable mission was designing a factory for AEG. This factory became a milestone for architects to design a factory during industrial age instead of engineers.

In that project Behrens cooperated with the engineer Karl Benhard. While he was cooperating and designing factory with engineer Karl Bernhard, Behrens desired high technological structures that symbolize the technological and commercial leadership of AEG.

During this co-working, sometimes Behrens and engineer Benhard got opposed to eachother because as an engineer Karl Benhard defended the usage of higher and totally new technology and systems such as naked steel framings but Behrens opposed him with his idea that defends softening the technology with tradition.



aeg turbine factory in Berlin, built by peter behrens in 1909. © Getty Images

'Peter Behrens by 1908 and still by 1911 primarily was thinking in the terms of proportion and written on which as an architect he above all would have to aim at whereas Karl Banhard primarily was imaging the possibilities to convert structural forces in to both suitable and also visually convencing shape.'

Dicleci, C. 2000, Karl Bernhard. Die Durchdringung von Kunst und Technik: Deutsche Bauzeitung 134(6), p. 116-119

Peg Weiss :

'the father 20th century fuctional architecture'

SMALLER FLANKING
CONSTRUCTION TO
ACCOMMODATE STORAGE
AND SECONDARY
MANUFACTURING
OPERATIONS.

FAST TRAVELLING CRANE
FOR HEAVY LIFTING AT AN
APPROPRIATE HEIGHT TO
LIFT OVER MACHINES ON
THE ASSEMBLY FLOOR.



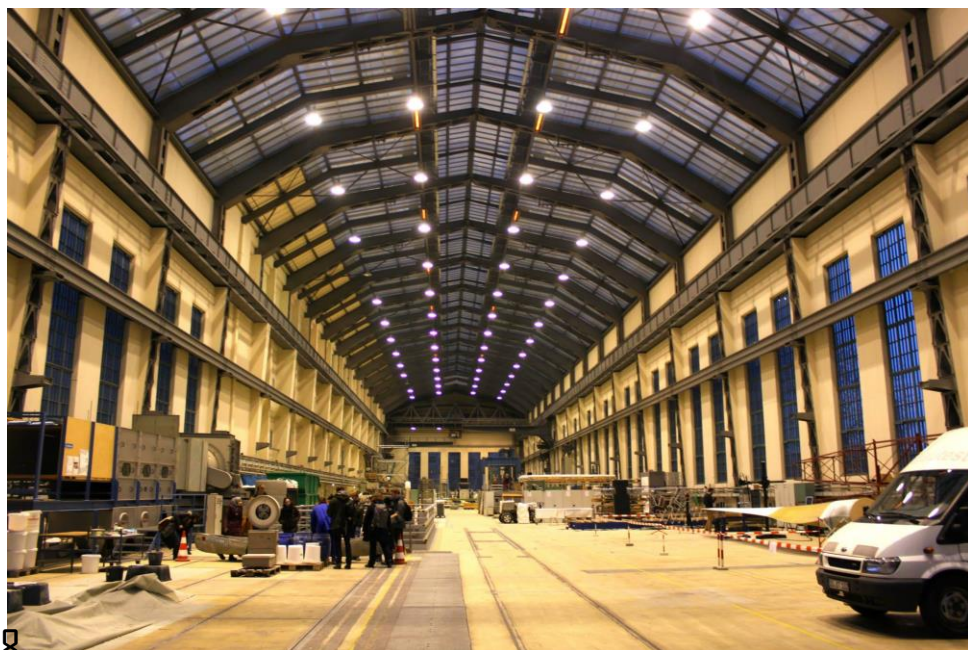
SECTION

RADIAL CRANES AT
REGULAR POINTS ALONG
BOTH SIDES OF THE HALL

MAXIMUM AMOUNT OF
NATURAL SUNLIGHT



Gable



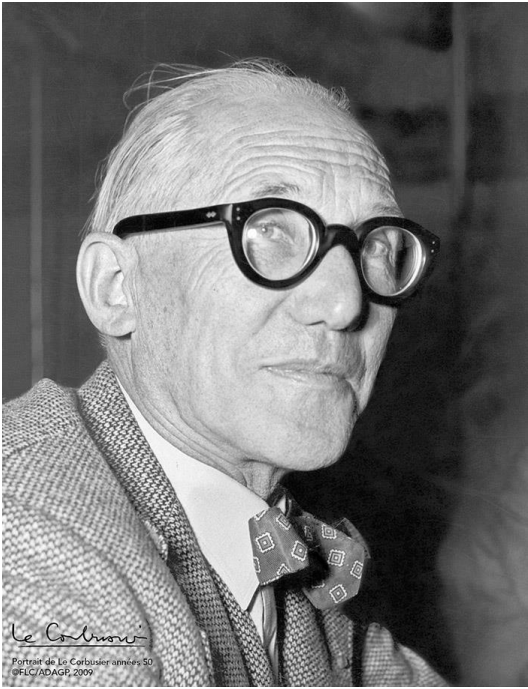
AEG TURBINE FACTORY-ARCHITECTURAL DESIGN QUALITIES

The Turbine Factory was constructed for producing steam turbines and engines. This factory provide ascending the throne of German industry in Global Market. The AEG Turbine Factory became the well-known example of industrial architecture.

This factory is 100m long 15m tall glass, stone and steel walls on either sides located in Berlin.

Diversely to all ideas that Behrens stated, he gave a neo-classical touch to the Turbine Factory with the addition of weighty gables (the gables was transition of fabric structures' vaulted roof to lower part, reference to early pediments) and trabeated columns in the ends.

The building has rectangular and circular forms besides those features it has long, large windows in order to obtain daylight to inside of the factory. In the interior of the factory the free space was created by the steel carrier system that escape the building from weighty and bulky look.



LE CORBUSIER



MIES VAN DER ROHE



ADOLF MEYER



WALTER GROPIUS

He had students and assistants who had become well-known architects such as Mies Van der Rohe, Le Corbusier, Adolf Meyer, Jean Kramer and Walter Gropius who is the first director of Bauhaus.



Walter Gropius & Fagus Factory



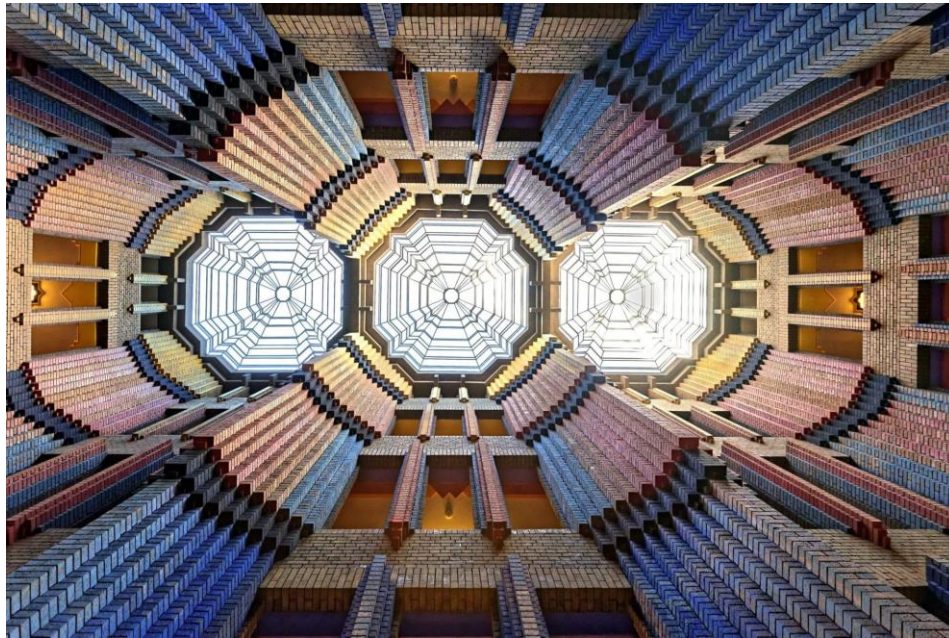
The impacts of Behrens on his students can be shown with Fagus Factory example designed by Walter Gropius and Adolf Meyer which was inspired from the Turbine Factory for AEG.

Although the students of him were influenced by him, in their later works, they got varied from their educator Behrens. In that sense, they got rid of the neo-classical effects and authenticity.

Gropius argued that 'the exterior of the building should reveal the construction logic'. In some cases at Fagus Factory shared the thoughts behind with the AEG Turbine Factory such as the use of steel components, high glasses and rectangular plan.



Headquarters of the Hoechst AG. Architect peter behrens, built in 1920-1924. © AKG/East



Interior of Hoechst AG headquarters, ceiling view. Photo courtesy of Stern

Peter Behrens also involved in the construction and design of Technical Administration Building in Höchst. Since he has a experiences in the constructions of industrial and governmental buildings, he was accepted as an architect of this official building.

He reflected the brick-expressionism in the interior and exterior content.

Brick-expressionism come to exist at the same time as the 'New Objectivity' with Bauhaus Architecture.

The base of the New Objectivity rely on the dynamism of expressionism and use of glass.



From 1922 to 1936 Peter Behrens take an invitation from the Academy of Arts Vienna as a teacher. He became the head of department of Architecture at the Prussian Academy of Art Berlin.

Besides the academic mission that he undertook, he also kept practising architecture. So he became an architect of his British clients from Northampton, UK. Clients requested a house from him that became a opportunity for him to express modernism in residence for the first time (New Ways).

The similarities of this residence with the early buildings of Behrens as Turbine Factory can be given as large metal framed windows and steel construction system. It also has flat roof, white walls and symmetrical façade.