# AEG & PETER BEHRENS: SYMBOLISM IN THE FIRST CORPORATE IDENTITY DESIGN

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# ABSTRACT

## AEG & PETER BEHRENS: SYMBOLISM IN THE FIRST CORPORATE IDENTITY DESIGN

Some historians called Peter Behrens' designs for AEG as first corporate identity design without a detailed analysis. Another group of the historians claimed that his works for AEG were shaped by only function or machine-aesthetic. Even some of these historians saw Behrens' works as inceptors of functionalism or rationalism in modern architecture. This thesis attempts to fill the gap in literature by analyzing Behrens' works for AEG in order to understand whether his designs formed a corporate identity or not. In order to show the shortcomings of such readings, the thesis explores the symbols that were used in the designs of Behrens, even in his most-functionalist design-works.

The discussion was carried out through analysis of Behrens' and his contemporaries' written and design works, with materials available in *Klingspor*, *Mathildenhöhe* and *TechnikMuseum Berlin* Archives. This analysis is done through a review of scientific management techniques and their reflections in architectural culture and by parallel readings of literature and architecture in Germany at the turn of the century.

As the discussion of the thesis pointed out, Peter Behrens' designs for AEG can be called as first corporate identity design since they have a consistent design vocabulary. While designing for AEG Behrens used scientific management and mass-production techniques in his designs. However these were not the only forces that shaped his design-work. One can see the vestiges of the symbols in his works that are coming from literature and antiquity. The thesis argues that it is not possible to fully understand the architecture of Behrens without understanding symbols. The thesis hopes to make a new reading of modern architecture from a different point of view, which includes a discussion on symbolism in modern architecture, avoiding oversimplification and reductionism present in readings with functionalist focus.

# ÖZET

## AEG VE PETER BEHRENS: İLK KURUMSAL KİMLİK TASARIMINDA SEMBOLİZM

Bazı tarihçiler ve uzmanlar Peter Behrens'in AEG için yaptığı tasarımları ilk kurumsal kimlik örneği olarak göstermektedir. Fakat Behrens'in tasarımlarının ilk kurumsal kimlik örneğini oluşturacak bir dil bütünlüğüne sahip olup olmadığı derinlemesine tartışılmamıştır. Diğer bir grup ise Peter Behrens'in AEG firması için tasarladıklarını sadece işlevselciliğin ve makine estetiğinin bir yansıması olarak adlandırmaktadır. Bu tez önerisi literatürdeki boşluğu doldurmak üzere Peter Behrens'in AEG için tasarladıklarına kurumsal kimlik perspektifinden bakmaktadır. Bu tezdeki tartışma aynı zamanda Behrens'in tasarımlarında işlevselciliğin yanı sıra kullanılan sembolleri açığa çıkararak literatürde pek çok tarihçinin yaptığı yanlış okumayı gidermeyi hedeflemiştir.

Bu tezdeki tartışma için Peter Behrens ve çağdaşlarının yazılı metinlerinin incelenmesinin yanı sıra Offenbach'taki Klingspor, Darmstadt'taki Mathildenhöhe ve Berlin'deki Teknik Müzede arşiv çalışmaları yapılmıştır. Bu kaynaklardan toplanan veriler mimarlıkla edebiyat ve yine mimarlıkla bilimsel yönetim ilkeleri arasında iki farklı karşılaştırmalı çalışma ile tartışılmıştır. Bu çalışmalarla bilimsel yönetim ilkelerinin ve edebiyatın yirminci yüzyıl dönümündeki Alman mimarlığına olan yansımaları incelenmiştir.

Sonuç olarak Peter Behrens'in AEG için tasarımlarının ortak bir dil oluşturarak ilk kurumsal kimlik olarak adlandırılabileceği öne sürülmüştür. Behrens'in tasarımlarında endüstrileşme ile gelen bilimsel yönetim tekniklerinin ve makine estetiğinin yansımalarının bulunduğu fakat bunların tek başına belirleyici olmadığı savlanmıştır. Bu tez o dönemde kullanılan sembolleri anlamadan, Behrens'in tasarımlarının tam anlamıyla kavranamayacağı sonucuna varmıştır. Bu sayede, bu çalışmanın yeni bir modern mimarlık okuması yaparak modern mimarlığı algılayışımızdaki bazı genellemelere engel olabileceği ve hatta modern mimarlıkta sembolizm tartışmalarını da başlatabileceği umut edilmektedir.

*To my family*

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# CHAPTER 1

# INTRODUCTION

> Man only became an object of science for man when automobiles became harder to sell than to manufacture. Jean Baudrillard (2008, p. 72)

Modern man is seduced by companies and surrounded by signs, logos and slogans. Capitalist processes took man as an 'object of science' and started to analyze him in order to transform him into *Homo Consumans.* (Baudrillard 2008) This process began in fin de siécle and the early twentieth century in which 'automobiles' began to be manufactured easily. Artists of the age believed that they could use their art in order to feed industrial processes and improve the life-styles of the people with their art.[1] They believed that they can reach the utopia of harmonious people and tried to understand industrialism and scientific management techniques as tools to disseminate their art. Especially with his works for AEG, one of these utopia ridden artists of the age was Peter Behrens.

Peter Behrens as an artistic adviser designed products for AEG mainly from 1907 to 1914. His designs for AEG consisted of typefaces, logos, printed materials, products and buildings for the company. This thesis analyzes his designs for AEG. Peter Behrens' designs for AEG are most of the time seen as representations of the machine aesthetics or industrial processes. For instance, Nikolaus Pevsner (1936) saw functional directness in his works for AEG. When discussing his works for AEG he claimed that all of his works showed the "same purity of form" that made him one of the pioneers of the modern movement. Similarly, Reyner Banham (1978 [1960], p.83) discussed the Turbine Factory by Behrens, the most famous factory for AEG, as "qualified only by industrial necessity." He saw other factories for AEG as having an "unfinished air" yet exalted the Turbine Factory as the expression of industrial processes. This is one of the common readings of the Turbine Factory in the literature. Adolf Behne (1996[1926]) had a similar reading and called it a building devoted to function. These claims caused an over-simplification of the ideas at the age of industrialism and also resulted in a

[1] However industrial processes turned tables on them and their art became an important tool to seduce people to sell the goods of industry in a Tafurian view.

misinterpretation of modern architecture. One of these generalizations is read in the work of Peg Weiss (1979, p. 62) in which she described Peter Behrens as "the father of twentieth-century functional architecture." While pointing him as a 'father' she reminds us of his apprentices; Walter Gropius, Le Corbusier and Mies van der Rohe who were called later as the forerunners of an 'international style.' However this claim also reads like Behrens was a functionalist architect and gave birth to functional architecture. Henry Russell Hitchcock's (1990 [1958], p. 459) discussion on Turbine factory was similar to these historians' where he glorified Turbine Factory for its use of new materials and added that it does not depend on "decoration of any sort."

On the other hand some historians claimed that there is more than only representation of the industrial processes in Behrens' designs. For instance, Stanford Anderson (1968) finds Behrens buildings for AEG conservative and discusses that Behrens was in between two ideas. First one was *Zeitgeist* and he was willing to represent the spirit of the time through his designs. Second one was *Kunstwolllen* that underlined the individuality of the artist and his will for making art through inward-looking. Therefore, for Anderson Behrens cannot be named as a functionalist. Furthermore he discusses that functionalism cannot be a concept on its own. Rosemarie Haag Bletter (1996) seems to agree with Anderson. She tells that Behrens products for AEG were not "frank industrial expressions" and she discusses that they represent the symbolic expressions of industrial processes.

Industrial processes that created mass-production was an important challenge for the artists in fin de siècle and the early twentieth century. This challenge also showed itself in Behrens career. In 1902 he left Darmstadt Artists' Colony in which he was one of the founders and after five years as the head of Düsseldorf Academy of Arts he became a member of the *Deutscher Werkbund* in 1907. Darmstadt Artists' Colony was mostly criticized for being aristocratic and for giving preferences to symbols rather than functionality. Anderson (1994) shows these critiques as reasons for Behrens to leave the Colony. Behrens's designs for AEG started in 1907 in the same year he became a member of *Werkbund*. There was a need for mass production and *Werkbun*d aimed to fill the gap between designers and industrialists. The idea of the artists was to feed industry by art and to disseminate their art to give a better life to people. Their example was America which had risen in scientific management techniques. Friedrich Naumann, spokesman of the Werkbund, took attention to America by pointing to the need for German artists to understand America. (Dal Co 1990) Peter Behrens seems to fit into

Naumann's description of the artist. In 1918, Behrens explained three steps in order to obtain speed and economy in building process: (1) using rational layouts, (2) the improvement of construction methods and their modernization, (3) to use communal places as much as possible instead of using individual service spaces. (Shand 1934) With these methods Behrens underlined the importance that he attached to speed up the building process and effects of the scientific management techniques that rose in America. This is one of the statements in which we see the influences of scientific management on Behrens. However this should not lead us to see only functional directness in his designs for AEG.

The rise of scientific management and mass-production did influence Behrens' works for AEG in three ways. Initially, conjuncture gave birth to necessity to market the products that factories were manufacturing. There was a need for designers to seduce customers to consume and to adapt the challenge of mechanical production to design. Behrens became an adviser for AEG in order to design everything related with the company from its typefaces to buildings. He used these techniques in order to produce his designs. For instance he adapted his designs in order to be manufactured by interchangeable parts. He did not only use these techniques to improve productivity but also as aesthetic representations that enriched his design perspective.

While looking at Behrens' works through industrial processes there is the danger of oversimplification as we discussed through some historians above. Functionalism or industrial processes cannot be the only forces to lead his designs. Anderson (1987) argues the same and claims that one cannot deprive buildings of metaphors. This is what one can see in Behrens' designs for AEG. Because of the generalizations, all of the architects at that age are seen as 'modernist' and their works are named as mere representations of functionalism. Metaphors are neglected and historians behaved as if they were not existed in the works of the artists of early twentieth century. However there were vestiges of the metaphors and symbols in most of the artists' of the age.

The discussion of symbolism which was an important movement in other fields such as painting and literature is neglected in architectural history. It is most of the time discussed through religious architecture. Since ancient cosmology and number theory transformed into Christian symbols and found their places as building elements through churches. In civil architecture symbolism is discussed under the term of expressionism. Bletter (1981) describes characteristics of expressionist architecture as breaking the rules and abandoning traditional forms. In her article she discusses the use of crystal as

a symbol in German expressionist architecture especially after the World War I. One can come across this metaphor in Bruno Taut's works and even in the manifesto of the Bauhaus. It was the symbol of a new life and frequently used by artists of the age including Peter Behrens.

This thesis is based on three arguments. There are historians discussing works of Behrens as frank products of industrial processes. Building upon the readings of Anderson and Bletter, this thesis aims to discuss this misreading by analyzing Behrens' most famous and functionalist-regarded works. Secondly, Peter Behrens' designs for AEG are hailed by specialists as one of the first corporate identities. (Aynsley 2004 [2001]; Buddensieg 1984 [1979]; Eskilson 2007; Watkin 2005; Ward 2001) However it is not analyzed in depth by specialists as a predecessor of corporate identity design. According to Olins the term corporate identity entered to our lives in 1950s with the New York Consultancy Lippincott & Margulies. Walter Margulies wanted to differentiate his graphic design-work from those of the competitors. (Olins 1995, p. 7) Behrens produced work for AEG mainly in the years 1907 – 1914 which was forty years before the works of Margulies. Therefore the thesis discusses Behrens' works for AEG through the perspective of corporate identity design in order to fill the gap in literature. Thirdly, symbols in architecture are neglected and this is one of the reasons that caused the misunderstandings to call his works as true products of industrial processes. Peter Behrens used symbols in his works for AEG that are coming from arts, mainly literature. Most of these symbols are formed by antiquity and used in arts.

There are three different methods that I used in order to discuss Behrens' designs for AEG. Initially, I used literature review. Literature review was done using primary sources such as Behrens' articles or Frederick Winslow Taylor's 'Principles of Scientific Management' and secondary sources written by specialists. Literature review was supported with formal analysis especially in investigating the works of Peter Behrens both through corporate identity perspective and symbolism.

In addition, correlational studies were done in order to relate Behren's designs with other fields. First one was done between scientific management techniques and Behrens' works for AEG; kettles and Turbine Factory. Discussion in the first part was supported with the case studies. This study aimed to find the repetitive themes in scientific management techniques and investigate their use in case studies. Second one was done between literary works and Behrens' designs. Similar with the previous one I

had a look at Behrens designs' in order to analyze the symbols that were repeating in the literary works.

Lastly, I conducted research on three archives. First one was done in the archives of Klingspor Museum in Offenbach. Peter Behrens designed four typefaces and realized them with Klingspor Type Foundry. Second one was the archive and library of Mathildenhöhe in Darmstadt in order to search Behrens' works in the period of Darmstadt Artists Colony. Third one was conducted in the archives of *Deutsches Technikmuseum* in Berlin since all of the archives belonging to AEG were donated to this museum's archives. The archival research was supported with visits to the buildings designed by Behrens, such as the Turbine Factory and his house at Darmstadt Artists' Colony.

Discussion in the thesis is done through three main chapters. First chapter discusses the formative years of Behrens. It analyzes his career before becoming a consultant for AEG through three organizations. Firstly it investigates Darmstadt Artists' Colony in which he realized his first building; his own house, Düsseldorf Academy of Arts, which was a metamorphosis age between the Colony and *Werkbund* and *Deutscher Werkbund*. At the same year he joined Werkbund, he became design consultant for AEG. After having a brief look at his collaboration with AEG and history of AEG, I analyze scientific management techniques and its representations at the end of the chapter. The use of these techniques was encouraged by *Deutscher Werkbund* in order to enable collaboration between industry and art.

The following chapter analyzes the works of Behrens for AEG in order to understand whether they form a language which is common to all of his designs. Discussion of the chapter is twofold. Initially, this chapter investigates his designs from his buildings to typefaces to understand whether they belonged to the same family or not. Secondly there is a detailed analysis of the Turbine Factory and the kettles, in order to investigate their relation with industrial management techniques. There are three reasons to select these. Initially, almost all architectural or design history books mention these works and they are the most celebrated ones by the historians. Secondly, with the help of these designs I was able to analyze all design fields of corporate identity program of AEG that Behrens worked for including advertisements, printed materials, typefaces, product designs, logo designs and architecture. Thirdly, these works were still reachable and I had the chance to access them which will help me to discuss in detail.

Last chapter discusses the symbols in Behrens' designs. Behrens had close relations with the artists, writers of the age. This led me to look into literature in order to investigate symbols. Firstly, I looked at the work of Richard Dehmel who was a close friend of Peter Behrens and his work *Eine Lebensmesse* which was dated 1893. Secondly, I discussed one of the most influential philosophers of the age Friedrich Nietzsche and his Thus Spoke Zarathustra to which Behrens designed a book cover. Thirdly I analyzed Parsifal of Wagner which was his last opera and criticized by Nietzsche. After analyzing these works I discussed the use of the symbols coming from these works in Behrens' AEG. I also referred to Peter Behrens' other works before AEG in order to find the commonalities with these symbols.

# CHAPTER 2

# PETER BEHRENS & AEG: FORMATION OF A DESIGNER

## 2.1. Pre-AEG Period

This chapter focuses on three important organizations that affected Behrens' design work, Darmstadt Artists' Colony, Düsseldorf Academy of Arts and *Deutscher Werkbund*. Behrens was a member of these two organizations and the head of Düsseldorf Academy of Arts. These organizations had big influences on his career when he was a young artist changing the direction of his career from painting into architecture and design. Rosemarie Haag Bletter (1996), an art historian specialized in German architecture of the twentieth century, finds Behrens' case "interesting" in terms of the organizations that paved the way for his design work.[2] This part will analyze the formation of a designer through the influences of the organizations, which influenced his work. Behrens' career started with an aristocratic patronage, Darmstadt Artists' Colony and then shifted to an industrial organization, *Deutscher Werkbund*. The period when he ran Düsseldorf Academy of Arts was in between his membership to these important organizations and it was a period of metamorphosis stage. In this chapter, I will focus on the impacts of them on Peter Behrens' designs for AEG.

### 2.1.1. Darmstadt Artists' Colony and the Emergence of the Crystal

Darmstadt Artists' Colony grew out of the Grand Duke of Hesse, Ernest Ludwig's ideals on making his region a place where the new art originated. The Colony was founded in 1899 with the encouragements of publisher Alexander Koch and writer Georg Fuchs. The inspiration was given to the Duke by Georg Fuchs with the proposal he published. His text was addressed to the Duke and mentioned the outlines of the

[2] In her foreword to Adolf Behne's Modern Functional Building, Bletter finds the case of Behrens interesting in order to show the change from an aristocratic organization to an industrial one.

“ideal cultural community.” (Weiss 1979, p. 61) The Duke's dream was to make his region the cradle of a new life, which will be formed by the regeneration of visual arts (Anderson 1968). He invited seven artists to Darmstadt, who are also known as 'Die Sieben' [The Seven] and donated 'Mathildenhöhe' a hilly park to construct buildings that will disseminate the new life into the world. (Frampton & Futagawa 1983) These artists were Peter Behrens, Joseph Maria Olbrich, Paul Bürck, Rudolf Bosselt, Hans Christiansen, Ludwig Habich and Patriz Huber, who all majored in different fields of the arts, such as sculpture, painting, architecture and literature.

Joseph Maria Olbrich was the only architect in the Colony. He was one of the founders of the Wiener Secession (Vienna Secession). (Figure 1) His reputation as an architect of Secession perhaps stimulated The Duke to call him to be the architect of 'Die Sieben' and design buildings for Darmstadt Artists' Colony. All of the buildings in Mathildenhöhe were designed by Olbrich except for the house of Peter Behrens', designed by Behrens himself. Behrens was a fresh artist at the time trying to become a designer. He staged the opening ceremony of Darmstadt Artists' Colony.

Figure 1. Secession Building, 1897, Joseph Maria Olbrich, Wien. (Source: Photo by Author)

Figure 2. Behrens House, Peter Behrens, 1901, Darmstadt. (Source: Photo by Author)

Not trained as an architect, painter Peter Behrens designed his own house in Mathildenhöhe, in 1901. (Figure 2) This was his first architectural work, which was

eclectic according to historian Stanford Anderson (1990) and for historian Steven Aschheim (1992, p.33), this house was a “Zarathustrian Villa” located as the “centerpiece of the Darmstadt Artists' Colony.” In the overall design of the house, there were traces of *Jugendstil*, and also signs of Nietzsche's Zarathustra which I will discuss in detail later. His house was organized mainly in two levels. In the ground floor he placed a music room and a dining room next to it. Upper floor contained his studio, rooms for children and bedroom. The music room and Behrens studio, facing the entrance were taller than the other rooms. One can see the dominancy of these two rooms through the façade which are ended by a gable and the ornamental organization of green-glazed bricks.

Figure 3. Opening Ceremony, 1901. (Source: Windsor 1981)

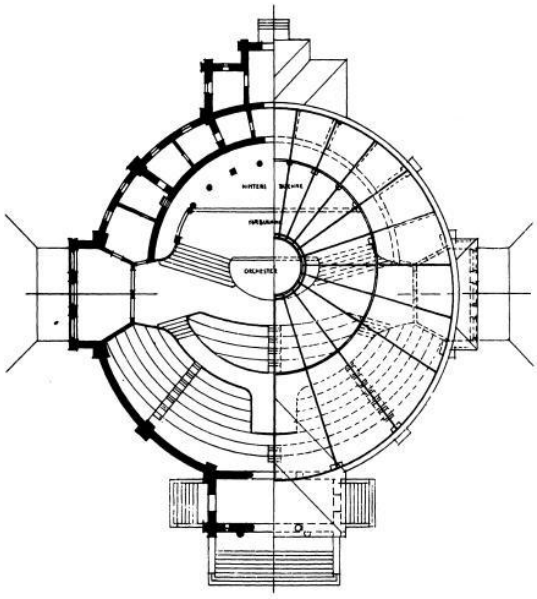

Figure 4. Theater Design for *Eine Lebensmesse*, Peter Behrens,1900. (Source: Anderson 1990)

The opening ceremony 'Das Zeichen' (The Signs) was held in 1901, just two years after the foundation (Figure 3). The ceremony was organized by Peter Behrens and the texts in the ceremony were written by Georg Fuchs. It was held in front of the Ernest Ludwig House. A woman - priestess - with a black cloak was carrying a sign that would bring new life to the world; a crystal.[3] The crystal became a central metaphor in Behrens' thought in the following years. Next to crystal, theatrical performance was

[3] Crystal as a metaphor was taken from Nietzsche as we will discuss later. Behrens used it as a metaphor for the new life which will be fed by the art of the colony. This new life would bring harmonious and egalitarian standards to public which is full with art.

central to the opening ceremony. For Behrens, theater symbolized culture. He believed that the role of the theater in society was significant and it should be located "high on the hill, in the festival hall and everything would be arranged to satisfy our spiritual needs." (Anderson 1990, p. 123) For him theater was a combination of mime, dance, music and words and he took actors to be the priests of words with beautiful gestures. (quoted in Anderson 1990) Similarly, art historian Alan Windsor (1981) takes our attention to the importance of theater for Behrens. Windsor (1981) points to the friendship between Behrens and poet-dramatist Richard Dehmel. Behrens' first building design was done for staging Dehmel's '*Eine Lebensmesse*' [A Mass of Life] in 1900. (Figure 4) Although never realized, the design was a circular-planned monumental theater building that was a also symbol of a new life.

In the ceremony there were all of the elements of theater that Behrens spoke about, including music. The music in the ceremony was by Willem de Haan who is the father-in-law of the symbolist poet Karl Wolfskehl. (Weiss 1979) The ceremony was designed as a total work of art, *Gesamtkunstwerk*[4]. *Gesamtkunstwerk* was based on (an aspect of) designing everything from single chair to whole building. Also Viennese architects and painters were strongly influenced by this concept. (Varnedoe 1986) One of these Viennese architects was secessionist Joseph Maria Olbrich. According to Olbrich:

> We must build a city, a whole city. Anything less would be pointless. The government should give us a field, and there we shall create a world. To build a single house means nothing. How can it be beautiful if an ugly one stands next door? What good are three, five, even ten houses if the street plan is not beautiful? What good is the most beautiful street with beautiful houses if the armchairs inside are not beautiful? No – a field; nothing less will suffice. A broad, empty field; and then we shall show what we can do. From the overall design down to the last detail, all governed by same spirit, the streets and the gardens and the palaces and the cottages and the tables and the armchairs and the lamps and the spoons all expressions of the same sensibility, and in the middle, like a temple in a sacred groove, a house of labor, both artists' studio and craftsmen's workshop, where the artist will always have the reassuring and ordering crafts, and the craftsman the liberating and purifying arts about him until the two finally merge, as it were, into a single person. (quoted in Scaff 1995, p. 72)

The Grand Duke of Hesse seems to have heard Olbrich's voice and gave a small 'world' to him that he could entirely design. With the collaboration of the other artists in the colony he could unite visual and applied arts.[5] Behrens as a fresh artist turning his career to design should have been influenced by Olbrich. In his house at the Colony, he started to unite all arts like an amalgam by practicing architecture and design as well.

[4] It is significant that the term *Gesamtkunstwerk* was first used by Richard Wagner.

[5] These artists saw themselves "as high priests in the service of beauty."(Kruft 1977, p.3) As we will discuss later they taught that they could educate people with their art in order to reach to a better life.

Designing the entire world would be granted also to him when he was asked to be the design consultant of AEG.

Theater was the symbol for culture for Behrens and as the bearer of all arts it led us to *Gesamtkunstwerk*. After the theater, an important metaphor used in the ceremony was the crystal. Anderson (1990) described this metaphor through the transformation of a mere carbon to a valuable diamond under specific conditions. If it is considered that, at that time Germany was one of the leading countries in chemistry this metaphor makes more sense. As a metaphor crystal was borrowed from Nietzsche's book; Also Sprach Zarathustra. (Anderson 1968, 1990; Bletter 1981; Lenman 1989; Schwartz 1996) In Nietzsche's book, crystal was the metaphor for a new life and artists of the Colony used it as a metaphor to symbolize the new life that they could give to the people with their art. The metaphor of crystal, was a reference to Nietzsche, is seen in most of the Behrens' designs including his designs for AEG. As well, the name of the ceremony 'The Sign' came from the last part of Nietzsche's book. Also Bletter (1981) finds a strong similarity between Mathildenhöhe and the cave of Zarathustra which are both on top of a mountain that have strategic locations to see and to be seen by the public. At the end of 'Thus Spoke Zarathustra:

> 'This is my morning, my day is beginning: Rise up now, rise up, you Great Midday!'
> Thus spoke Zarathustra and left his cave, glowing and strong, like a morning sun coming out of dark mountains. (Nietzsche 2008 [1883-5], p. 287)

Ernst Ludwig House is located on the hill like the cave of Zarathustra and with its vaulted portal it resembles the cave of Zarathustra. Another allusion to Nietzsche is done by Aschheim (1992) who sees Georg Fuchs' aim as to externalize Nietzschean unions of life and art. In the ceremony priestess was carrying the sign while she was climbing down the stairs. She was emerging from darkness surrounded by a group of people dressed all in white similar to Zarathustra bringing light out of the dark mountains. She was carrying a crystal to start the reconciliation of art and life. I will return back to crystal in the works of Behrens' for AEG but it is important that the emphasis on crystal is revealed in the works of Behrens in the Darmstadt Artists' Colony.

Darmstadt Artists' Colony aimed to provide the conditions that mere carbon - life- needed in order to be transformed into a crystal. In the case of the new life, this aim was to be accomplished via educating the public through arts. The inscription on Ernst Ludwig House read "The artist will show his world, which never was and never will

be.” (Scaff 1995, p. 11) The artist would show his world and would educate public through his work which was originated neither from the past nor from the future but from today. We clearly see the artists’ desire to expose themselves and their art which is fed by the new age. They believed that they can educate the public and raise their life standards. The Duke was also enthusiastic about the new age approaching and did not want to exhibit the new modern art like a piece in a museum. Rather, new art should be part of the daily life of people. (Jenkins 2007) The education of public through the collaboration of art and industry holds an important place in the architectural historiography which I will also discuss in *Werkbund*'s debates. Just before diving into the debates of *Werkbund* we will have a brief look at the period of Behrens before joining the *Werkbund*.

### 2.1.2. Düsseldorf Academy of Arts: Architecture of Geometry

> How is it possible to consider the Mathildenhöhe a true “document” of German style if its most characteristic qualities are “luxury” and “aristocratic isolation”? Hermann Muthesius (quoted in Dal Co 1990, p. 207)

Some of the contemporaries of Behrens criticized Darmstadt Artists' Colony for its close relationship with aristocracy. Can it be possible for artists, to create work for public in order to educate them, while they put their masterpieces on a hill with the power they got from an aristocrat Ernst Ludwig? Perhaps this sounded a bit unrealistic also to Behrens. That is the reason for Anderson (1968) to note the critiques as one of the triggers that made Behrens to leave the Colony. Peter Behrens did not have a long association with the colony. In 1903 Muthesius, one of the critiques of Mathildenhöhe, and later one of the founders of the *Werkbund*, asked him to run Düsseldorf Academy of Arts. (Benevolo 1979) This period was important to understand Behrens’ architecture for two reasons. First, he worked with important artists of the age while he was in charge of the Academy. One of them was Kandinsky who refused to give lectures at the Academy. Kandinsky and Behrens knew each other from the meetings that they had at the house of the symbolist poet Karl Wolfskehl while they were members of the Munich Secession. The second important figure was J. L. Mathieu Lauweriks, a theosophist architect who appreciated Berlage. (Anderson 1986) He taught classes on composition and geometrical arrangements. I will discuss the relations of these artists with Behrens

in detail in the later chapters when I will start to analyze the works of Behrens with the vocabulary of symbolism.

During this period he did not only run the Academy but also designed some buildings. He met with patron Karl Ernst Osthaus, later became one of the members of the *Werkbund* and designed several buildings for him. He worked for Anker Linoleum Company in Delmenhorst (linoleum was the city's major industry.) His designs for the company started in 1905 and continued until 1915 which means that he was still designing for Anker when he was the artistic advisor to AEG. In terms of architecture he designed two pavilions for Anker in 1905 and in 1906 for the exhibitions in Oldenburg and Dresden.

According to Adolf Behne (1996 [1926], p. 105), a later member of *Werkbund*, it was "not yet possible to talk about a real creation of space; there is more reduction than production, more graphics than architecture" in his buildings of this period. Architectural historian Henry-Russel Hitchcock (1990, p. 457) confirms this and claims that Behrens' buildings of this period "look as if they were made of sheets of cardboard." These comments seem right if we think about the works of a fresh artist turning his career into architecture. However this period is important in order to see his use of geometric connotations. At this period he started to work with patrons and companies rather than aristocracy so this period can be called as a metamorphosis stage for him that influenced him to build a bridge between *'Jugendstil'* and 'Art of Industry.'

### 2.1.3. Deutscher Werkbund: Meeting with Power

1907 was the year the *Deutscher Werkbund* was founded by artists, artisans, architects and manufacturers, including Peter Behrens under the leadership of Hermann Muthesius and politician Friedrich Naumann. In the same year Behrens became a design consultant for AEG. Reyner Banham (1992 [1960], p.69) highlighted the importance of the year and named the relation between these two important events as the "two faces of the same coin." According to Banham, they were independent events but complemented each other. Anderson notes the importance of *Werkbund* and the groups' ideas on Behrens as follows:

> It is well known that a major faction of the *Deutscher Werkbund*, notably represented in the work of Peter Behrens for the AEG, sought to unify the most advanced forms of industrial technology within their cultural ambitions. (Anderson 1991, p. 68)

*Werkbund* had considerable power in Germany which enabled them to sponsor the founding of applied arts museums, competitions, exhibitions, and several other cultural events or programs. (Hiesinger & Kathryn 1993) The aim of the organization was to combine art and technique under the guidance of German Culture. (Anderson 1991) Friedrich Naumann in his speech in Dresden identified the problem of Germany:

> Many people do not have the money to hire artists, and consequently many wares are going to be mass-produced; for this great problem, the only solution is, by artistic means, to infuse mass-production with meaning and spirit. (1906 quoted in Anderson 1968, p. 207)

Therefore *Werkbund* worked to form collaborations between artists and manufacturers, in other words to feed the art by industry and vice versa. However there was a conflict between the members of *Werkbund*, namely Muthesius and Van de Velde, on standardization and individuality.

Muthesius, who was the policy maker of the *Werkbund* believed that under the leadership of architecture, all arts should seek to form standardization and types – *typisierung*– in order to feed the industry by art. (Banham 1992) On the opposite side Van de Velde was strict about the *individuality* of design. While Muthesius believed that industrial progress that enabled standardization would pave the way to "universally valid, unfailing good taste", Van de Velde opposed this with a promotion of the individuality of the artist, reflecting the spirit of the age. (Muthesius & Van de Velde, 1914)

In this debate it is hard to understand the place of Behrens especially if we consider that he was still a young artist that is influenced by others rather than influencing them. According to Anderson (1968) Behrens agreed in both theses. However, Adolf Behne (1996 [1926]) thought that Behrens was a great gift for creating aesthetic values which were typical rather than the products of an individual artist that places him closer to Muthesius. Similarly, Reyner Banham (1978 [1960]) claimed that Muthesius played an important role for the consultancy of Behrens in AEG and saw Behrens closer to Muthesius' side. Karl Ernst Osthaus who is the patron of Behrens claimed that Behrens was trying to play the "great mediator" between the two poles. (Windsor 1981, p. 140) This is also clear in a quote of Behrens:

> I must openly say that I am not altogether clear what Herr Muthesius meant by 'Typisierung'. I have, moreover, come to think that a rigid canon should not be understood by it. I have thought of archetypes in art as, for me, the highest aim of any artistic activity. It is the strongest and ultimate impression of a profound personality. It is the conception of an object in its most nature and clear distillation, a solution free from all secondary considerations. The best work of an artist, from both these factors, will always constitute 'types.' It is self-evident that, for example, a

> department store that stands out as a significant expression of such a thing is better architecture than if it takes on the appearance of castle.
> In earlier times, the constant striving for perfection led to, for example, the point where the ground plan of a house could not be better designed than by ensuring that all its aesthetic and functional needs were served. The result was a typical, standardized town house that was repeated with slight variations. It is in this sense that I understand 'archetypal' art. Artistic freedom shouldn't come into it. But the guarantee of artistic freedom must be one of the sacred precepts of the Werkbund's endeavor... (Quoted in Windsor 1981, p. 140)

The individuality of the artist overrides standardization in his writings. But also it is possible to interpret him as the defender of standardization. His relation with power made him to behave as a peacemaker, not to be against to any of the poles.

Similar to Darmstadt Artists' Colony, Nietzsche's thoughts had also influences on the members of the *Werkbund*. They believed that the new life that will be formed by the integration of art and technique can only be possible if it can be taught to public via products of industry. Therefore, "they felt that the work of art must now be removed from its aesthetic, physical, and psychological isolation, even if this endangered the independence of the artist."(Anderson 1990, p. 105) This collaboration between art and industry could be achieved by the shops which were in direct communication with the public. Therefore *Werkbund* organized a conference in 1907 in order to direct attention to the design of the shops. (Lungstrum 1999) Designing shops also required to design the companies that owned them so in a way the age gave birth to the notion of 'brand name' and a 'logo.' Frederic J. Schwartz (1996) emphasized the importance of logo and brand name for *Werkbund* members and concludes that they saw brand-name and logo as a remedy for the problem of integrating culture and economy. Logo and brand name could help industrialists of the age to use art in order to have economical success. According to spokesman of *Werkbund*, Friedrich Naumann, the exaltation of the industry had another benefit besides boosting German export: to restore a social harmony. (Jefferies 1994) In order to create social harmony education of the public was needed. Penny Sparke, a design historian emphasized the education of public in the program of *Werkbund* with these claims:

> (*Werkbund*'s aim is)...attempting to raise the level of taste of the general public through publications and exhibitions; implementing a program of public education, particularly through public lectures... (Sparke 1986, p. 59)

Educating public through the integration of arts and industry is underlined constantly in the writings on Darmstadt Artists' Colony and *Werkbund* which were significant in the development of Behrens' thoughts. And artists believed that this kind of integration would give better and higher life standards to the people. It is important to see the

Behrens' designs for AEG as the educational tools for the public. At this point it is necessary to mention the critique of Venice School.[6] They criticized this statement and claimed that architects' ideas could have been to educate people to give a better life but capitalism turned the tables on them and their art became a mere tool of industry. They taught people to consume more, not to have a better taste. Critique of Venice School is still valid but this thesis will concentrate on Behrens' designs for AEG through a corporate identity perspective, rather than a discussion on the transformation of an artists' utopia.

## 2.2. AEG Period

### 2.2.1. Collaboration of AEG & Behrens

A motor must be like a birthday present! Paul Jordan (Quoted in Putnam 1988, p. 27)

In 1907 Peter Behrens officially became the design consultant for AEG. According to Windsor (1981) Paul Jordan, manager of the AEG, was the person that took the lead for hiring Behrens as the design consultant for AEG.[7] Paul Jordan was only responsible from the factories on *Humbholdthain* in Berlin. Later on, their mutual friend, Walter Rathenau, the son of the founder Emil Rathenau, paved the way for the extension of Behrens' authority to the whole company. (Windsor 1981) In his 1909 letter to Behrens Walter Rathenau was calling him as "*Lieber Freund*" [Dear Friend] and signing as "*Herzlichst Ihr*"[With all my heart, yours][8] (Windsor 1981, p.77) Behrens friendship with Rathenau gave him a great opportunity. He was asked to design a company from its typefaces to buildings. Anderson (1968, p.195) states the collaboration of Behrens with AEG as the "renewal of his interest in Darmstadt." With his position at AEG, Behrens found a chance to reconcile art and industry, and for doing

[6] I am referring to Hilde Heynen (1999) in calling Tafuri, Dal Co and Cacciari as Venice School.
[7] There are different claims in literature about the person took the lead. Banham (1978) names Muthesius as the figure that supported Behrens to be the design consultant. Although Windsor claims that if Cremers was mistaken it would not be hard for Behrens to correct him, so he claims that it was Paul Jordan.
[8] However architectural historian Iain Boyde White (1982) mentions Walter Rathenau's antipathy to Peter Behrens and claims despite that as a businessman Walter Rathenau could not ignore Behrens' talents for AEG as an artist coming from the tradition of the Colony.

this he had the tool that he brought with him from Darmstadt Artists' Colony: *Gesamtkunstwerk.*

Windsor (1981) showed Behrens' designs for Delmenhorst Linoleum Company as important references for his recognition. However his collaboration with AEG started before 1907. (Windsor 1981) He designed the general layout and cover for one of the subsidiaries of AEG before the end of 1906. Presumably these designs with his works for Anker Linoleum Company took the attention of the managers of the AEG.

Figure 5. Gate for AEG, Franz Schwechten, 1896.
(Source: Buddensieg 1984[1979])

Franz Schwechten, one of the most famous architects of Germany, was an adviser to AEG before Peter Behrens became their design consultant. He was famous with his designs, with historicist themes such as churches and he was the favorite architect of both Emil Rathenau and Kaiser Wilhelm II. However son Rathenau was calling his designs as kitsch. (Windsor, 1981) Franz Schwechten designed some factories and principal buildings for AEG, gate on Brunnenstrasse (Figure 5) and a logo. (Windsor, 1981) His designs for AEG were limited mostly with architectural pieces and did not deal with the other design fields of the company except for a logo that was attached to the gate. As Anderson (1968) states most of the products at that time were designed by 'Werkmeister's of AEG.

Johann Kraaz was another historicist architect who built some factories for AEG that had Gothic vestiges. Like Schwechten his works for AEG were limited to the

architectural pieces and both of their works were gradually demolished in order to increase the capacity and they were rebuilt by Behrens. (Windsor 1981) As I will discuss in the forthcoming chapters Behrens' was the first designer given the honor to design all products for AEG. One of the first things that he contributed to the design language of AEG was the typefaces. He designed several logos, advertisements and printed materials. His first task at the AEG was to design an arc lamp which will be discussed later; also he designed several buildings for AEG. Before starting to investigate the Behrens' designs' for AEG, a glance to the history and people in charge of AEG will help us to put things in their proper places.

### 2.2.2. History of AEG

*Allgemeine Elektrizitäts Gesellschaft* (AEG) was founded as 'Deutsche Edison Gesellschaft' (DEG) in 1882 in Berlin by Emil Rathenau, which was producing light bulbs with the patent of Edison. After 1887 the company took the name AEG. (AEG History ND) By 1907, with the American General Electric Company (GEC), AEG became one of the two trusts that shared the world market. It was producing a wide range of products, from big turbines to small electrical appliances. Wolf Dohrn, the business director of the *Werkbund*, noted the products of the AEG in 1909 as follows:

> The Allgemeine Elektrizit*ä*ts-Gesellschaft builds dynamos, turbines, small motors, and electrical power plants for cities, factories, ships, and airships. It manufactures telegraphic and telephone equipment, arc lamps, incandescent lamps, and all the small components of an electrical system – fans, switches, push buttons, and much more. In the diversity of its production, the AEG is one of the most interesting of all large corporations. (Quoted in Dohrn [1979]1984, p. 233)

AEG had a great power in the world market in that era. Even Vladimir Ilich Lenin underlined this in his book *Imperialism* and claimed that according to an agreement between GEC and AEG, "GEC ***got*** the United States and Canada while AEG ***got*** Europe, Turkey and Balkans." (Lenin ND)

Not only was it important for AEG to be one of the leaders in the market but also German government gave great importance to be a leader of industry in the world. Wally Olins (1996, p. 48), a specialist of corporate identity, notes that AEG was the "symbol of the industrial might and ambitions of Germany in the world market." In the same way, Stanford Anderson (1998) takes attention to the opening ceremony of the AEG Pavilion in German Ship Building Exhibition, ordered by Kaiser Wilhelm, in

order to show the importance attached to German products and industry by Germany as an indicator of the growth. In addition, in 1907 architect Fritz Schumacher in his speech for the opening ceremony of the *Werkbund* emphasized the importance of the age for Germany:

> After a century devoted to technique and thought, we see the next project, which Germany has to fulfill as that of the reconquest of a harmonious culture. (Quoted in Anderson 1968, p. 211)

Germany should find the harmonious culture that it lost and this can be done through the synthesis of art and industry. In order to be a leader in the industry Germany and the *Werkbund* saw America and the rising concepts of scientific management as an example and they tried to use these techniques at the factories which we will have a look in detail below.

Business historian Miriam Beard (1963, p. 111) draws attention to the German bourgeois and their approach to arts, which produced "a rare bloom of culture." She continues with giving examples from German businessmen who are intellectuals that were aware of the whole capitalistic processes, such as Rathenau. Beard calls Emil Rathenau as the "Jules Verne of electricity." He "could see far into the future of business, and was fond of spinning wonderful yarns of the years to come." (Beard 1963, p. 116) Although depending on father and son Rathenau's, AEG had professional managerial aspects, which set AEG apart from Siemens which was depending more on family business at the time. (Colli & Rose 2007) AEG was a professional company that was using managerial techniques in a successful way; looking at the market to understand the needs; producing according to these demands and last but not least was conscious of the value of design. Walter Rathenau was as talented as father Rathenau in seeing far into the future and understanding the importance of design in order to compete in the world market.

For success in the international markets, like the Rathenau also Paul Jordan was aware of the importance of design. Rathenau believed that good design was an indicator of higher quality and Jordan noted that:

> Don't believe that even an engineer takes an engine apart for inspection before buying it. Even as an expert, he also buys according to the external impression. A motor must be like a birthday present! (Quoted in Putnam 1988, p. 27)

In a way; AEG's success came from its marketing strategies and its use of design as a marketing tool. Mark Lehrer (2005) an academician in business, claims that marketing strategies made AEG's business more successful than the competitors of the age.

Presumably, Walter Rathenau needed to make AEG's strategy visible, which is based on the whole understanding of the capitalistic processes, scientific management and industrialization techniques. Peter Behrens seemed to fit the bill with his multidisciplinary character, as a painter that is turned his career to design and architecture.

### 2.2.3. AEG & Scientific Management: Inferences from Industrialization

Fin de siécle and the early 20th century Europe was a boiling pot, so was Germany. Being rather late in industrialization – falling behind the British Empire, France and Belgium – Germans were enthusiastic to keep up with the times. For Beard (1963, p. 116) Germany's "whole soul was in production." Industrialization was expected to give Germany back the identity and the power that it had lost. Peter Behrens claimed: "German art and technology will thus work towards the one end: the power of German nation." (Quoted in Watkin 2005 [1986], p. 586)

Franz Reuleaux (1829-1905), a mechanical engineer who was teaching in Berlin Royal Technical Academy, saw America as a model, an example to help increase the national production. (Dal Co 1990, p. 205) Similarly, Adolf Behne (1996 [1926]) mentioned the popularity of Ford's books in Germany and saw 'Amerikanismus' as a rising concept. This ambition which started in the beginning of the twentieth century made its peak in Europe after World War I but nevertheless it started in the beginning of the twentieth century. Herman Hertzberger (2002 [1984], p. 38) a Dutch architect born in 1932 explained this ambition as "the more we get closer to 20th century" we saw a "shift from making art to art of making." This shows the importance attached to process which was also the case for architecture. Therefore Mauro F. Guillén, a cultural sociologist, claims that it is not possible to understand modern architecture without scientific management and mass-production theories. (Guillén 2009 [2006]) Guillén's challenging work interrelated scientific management and modern architecture and contributed to the understanding of modern architecture through the view of managerial techniques. While America gave birth to these theories, it found its wide audience in Europe, and particularly in Germany. In 1907 *Werkstattstechnik* [Workshop Techniques], a journal, came out to disseminate and search for better workshop

management. (Guillén 2009 [2006]) The enthusiasm in AEG to use these techniques is explicit in the statement of Emil Rathenau in 1908: "The study of American methods had deepened my understanding of modern manufacturing processes and served as a pointer to the direction which I was to pursue." (Quoted in Rogge 1984 [1979], p. 105) Son Rathenau, like his father believed in mechanization and claimed that only mechanization "can lead beyond mechanization." (Quoted in Anderson 1968, p. 196) It is not a surprise that AEG was one of the first companies to use scientific management and mass-production techniques. The process started in 1897 and big changes took place between 1904 and 1908. (Rogge 1984 [1979])

Beginning from the late nineteenth century there was a great demand for products. Factories were working with all their might but they were most of the time insufficient to manufacture to meet the demand. There was labor shortage and industrialists needed to find the most efficient way to manufacture. (Stoner et al. 1995) In addition, factories were new to life and they required organization as well as the products that they were producing. This environment stimulated some manufacturers and specialists to seek for new methods to increase productivity. These innovations of fin de siécle and early twentieth century were made by engineers, psychologists and industrialists. Their contributions formed the theory of 'Classical Management.' Classical management consists of scientific management, which concentrates more on the production processes to increase efficiency, and administrative management that is concentrated on the organizational behavior. (Miller, Catt & Carlson 1996; Griffin 1987[1976]) These theories are generally based on the works of the individuals such as Frederick Winslow Taylor, Frank & Lillian Gilbreth, Henry Gantt, Max Weber, Henri Fayol and so on.[9] In addition to management theories, this age also gave birth to mass-

[9] There are still individuals who have contributions on classical management whom I will only mention their names such as Robert Owen (1771-1858) who is an early leader, proposes better conditions for workers which will become as a good output; Emerson Harrington (1864-1945) who makes a distinction between line and staff roles in organizations; Edward Cadbury (1873-1948) who criticizes Taylorism as seeing people like inanimate things and believes in importance of trade unions; and Mary Parker Follet (1868-1933) who believes in the importance of working in groups and integration. (Griffin 1987[1976]; Miller et al. 1996; Stoner et al. 1995) Presumably there were still specialists that contributed to classical management yet I think that the ones we analyzed are adequate to have a general idea of the scientific management that have rise in the end of 19th century and the beginning of 20th century. All these management techniques are not completely outdated; they are still in use with their basic aspects. They are continued by behavioral management in 1930s and management science in 1950s, and so on. (Miller et al. 1996)These theories are sometimes critical of each other but not at all times and this formed a knowledge-base in which one adds to another. What is significant in this theory development process is 'Japanese Team Approach' which is dominant theme in 1980s in management theory. It is a kind of irony of fate; management specialists look at Japan more or less one century after then artists did in 1880s -artists looked to Japan as an inspiration to their art work which we will discuss in chapter 2.

production techniques, which were most of the time discussed together with Henry Ford and his innovations. All these individuals' efforts were based on modernization to increase productivity and their keywords were rationality, functionality and efficiency. (Harvey 1994) While most of these innovators were located in America it did not take time to spread their ideas to all over the world especially to Europe as I discussed before. When looking at functionalism or rationalism most of the historians relate it with the rise of these techniques and analyze the works of the age through industrialization and mechanization.

As Rosemarie Haag Bletter (1996) pointed out, modernism and functionalism became synonymous for many historians. At this point it is necessary to have a look at Behne's description of the term functionalist:

> When the functionalist refers to the machine, he sees it as the moving tool, the perfect approximation to an organism.
> When the utilitarian refers to the machine, he sees it as an economic principle of saving work, power, and time.
> When the rationalist refers to the machine, he sees it as the representative and patron of standardization and typification. (Behne 1996[1926], p. 130)

All related terms which are consubstantiated with modernism in architecture led theoreticians to find modernist architects' inspiration in machine and mass-production. How did modernist architects interiorize the concepts of mechanization? Guillén claims that for modernist architects Fordism and Taylorism had three impacts:

> First, they exhibited a technocratic ideological approach to problem solving inspired by the principles of neutrality, efficiency, and planning. Second, they worked for firms that were deeply committed to scientific management, endorsed and used the most important scientific management techniques in their architectural projects, and took part in organizations promoting the diffusion of scientific management. And third, they interpreted scientific management in aesthetic terms. (Guillén, 2009[2006], p. 19)

While being significant in terms of discovering the relationship of mechanization and architecture, Guillén's work lacks some points while correlating scientific management techniques with modernist architecture. For instance he finds the analogical representation of these techniques in modernist or cubist paintings but he misses the analogical representations of these techniques in architecture.[10] Building upon his discussion, there are five common characteristics of these techniques that had influence on modern architecture and design.

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[10] Guillén also sees the expression of these in the paintings of cubists and like Gilbreth they broke up and recreated the process again in their paintings.

Firstly, use of interchangeable parts and standardization had an important impact on modernist artists. They used interchangeable parts in their designs and they sought for a standardized plan that is fed by movements and dimensions of a person that was applicable to all men. Standardization and interchangeable parts were one of the most important contributions of Henry Ford.[11] In order to speed up the process and mass-production he proposed that components of the whole must be interchangeable. (Jessop 1991) Standardized parts should be precise and could be used in a wide range. This was supported by a moving assembly line and not the workers but the products started to move. Each worker was responsible with one task, used and assembled the same part, which was standardized. Ford introduced his innovations, to his factories and with the same workforce his factories were capable of manufacturing more cars than before. In 1903 he explained:

> The way to make automobiles is to make one automobile like another automobile, to make them all alike, to make them come from the factory all alike, just like one pin is like another when it comes from a pin factory. (Quoted in Sparke 1986, p. 9)

In 1925 a pin-like car was manufactured in the factory in every five seconds with the use of assembly line and mass-production techniques while it took 12.5 hours to produce a car in 1908. (Stoner et al. 1995) When we have a look at Gilbreth's and Taylor's works we come across with the standardization of the movements. They analyzed the workers' movements in order to replace them with the new standardized ones to improve their efficiency. Standardization of the movements and the process showed themselves in the environment as well. Both Ford and Taylor had influences especially in the organization of the factories.

Ford dealt with the plan and organization of the factories in order to make them as efficient as possible. A German immigrant architect in contact with Peter Behrens,

[11] At this point it is also important to mention the work of Canadian Geographer Glen Norcliffe, which is pointing the work of Albert Augustus Pope as the origin of Ford's innovations. (Norcliffe 2006[1996]) Pope Manufacturing Company was producing bicycles and the biggest manufacturer of the world in its time. It started with Columbia Bicycles in 1878. Albert Augustus Pope, who was the founder of the company, was a leading figure and he was the first to use an elevator in his office building in 1892. He was the leader of vertical integration, which we also see in Ford's work. According to Norcliffe, Popeism had six major contributions to industry which were vertical integration, technological innovation, interchangeability of parts, innovative use of advertisements, promoting mass-consumption and development of a corporate culture. Norcliffe also stressed the fact that the essential element of mass-production was interchangeability of parts not moving assembly line. At all events he agreed on the fact that Pope was not as innovative as Ford. He accepted the innovator character of Ford while giving the honor of being the first in mass-production techniques to Pope. Besides these and more important than to figure out the creator of these techniques, it is significant to understand the reflections on Europe created by mass-production and scientific management techniques that rise in America. Europe took Ford as a leader for mass-production and Taylor as a leader for scientific management.

Albert Kahn, was the architect of Ford's factories.[12] (Guillén 2009[2006]) Ford explained his factories as follows:

> One point that is absolutely essential to high capacity, as well as to humane production, is a clean, well-lighted and well-ventilated factory. Our machines are placed very close together – every foot of floor space in the factory carries, of course, the same overhead charge…. The dark corners which invite expectoration should be painted white. One cannot have morale without cleanliness. We tolerate makeshift cleanliness no more than makeshift methods. (Quoted in Behne 1996[1926], p. 104)

Ford's factories are planned in order to achieve maximum efficiency. Like his standardized products, inner organization had standards to increase productivity. Even he believed that a "standardized aesthetic" is necessary in order to convince people to mass-consumption.[13](Sparke 1986, p.10) Architects of the age followed Ford. They were ambitious about manufacturing houses in factories just like the cars of Ford. (Guillén 2009[2006]) While working on his techniques, Ford had support from other specialists. One of them was Frederick Winslow Taylor and he consulted for Henry Ford in order to develop management strategies. (Stoner et al. 1995)

Taylor, like Ford, had an effect on architecture through the inner organization of a factory building/work place in terms of the use of daylight, placing services and so on. (De Jonge 2002) Behrens in 1918 saw Taylorism as a solution to work loss which "will significantly reduce the number of workers or the length of working time." (Quoted in Guillén 2009[2006], p. 29) In addition we see an emphasis on the ideas of Taylor in Behrens' housing for AEG workers. A contemporary of Behrens was telling "men who live in fresh air and well-ordered circumstances are more able to produce the high-quality work demanded of them." (Quoted in Neumeyer 1984[1979], p. 125) When the workers would produce high-quality work with Taylorism, they would 'create' the chance to live in a better world, namely in a utopia.

Secondly, predecessors of classical management ran after a world –utopia– which could be egalitarian and harmonious. This belief found its reflection on architecture and architects thought that their art which could be spread by industry will result in a better world. For Ford and Taylor only industrialization and mass-production could create this utopia. For instance Ford's "5$ Day" was principally aiming to create

[12] He had more traditional design ideas and they were not innovative in terms of architecture as much as Ford's mass-production methods.

[13] This ideal will also give birth to his famous saying in 1909 "The customer can have any color car as long as it is black." (Quoted in Hopp & Spearman, p. ?) However after the market segmentation of General Motors and its chair Sloan's slogan of a car 'for every purse and taste', Ford will swallow his own words and constrains to consider the consumer needs.

more consumers and to avoid high rate of labor turnover. (Dassbach 1991) He offered $5 wage per day which would be given to the most productive and efficient workers, while the normal wage was around $2,34.[14] The aim was to accomplish two things at once, while increasing the productivity he shared the welfare in order to create new consumers that will be able to purchase a Ford T. Similarly, Taylor claimed that with scientific management a happier world was possible. He illustrated a shoe-maker that will earn more and pay more to his worker if he could produce two shoes when his competitor was making one at the same time. This would get along with the cheapening of the shoes, thus workers would be capable of buying shoes to their bare foot. There would be an increase in luxuries of life and this would be available to the whole country. Working hours could be shortened, thus there would be more time for education, culture and recreation.[15] Indeed, in order to achieve these there was a need for 'technocrats' to teach people how they can have a better life.

Thirdly industrial theoreticians believed that in order to realize the utopia they should –as priests of this utopia– educate the people. Ford claimed that with his techniques there would be a virtuous circle of growth. (Murray 2011[1988]) Mass production would raise the wages, since workers would be able to produce more. The price of the product would decrease which would make even workers to be a part of luxurious life; and enable them to consume more. This would increase the demand and thus the capacity would increase. More people would be able to work in the factory and so on. And complementing this principle it was a must to educate people to consume more. Otherwise the system would not work, therefore in order to make it work; mass-consumption should be encouraged since mass-production needed mass-consumption. Taylor and Gilbreth underlined the importance of education. But different than the artists of the age they believed in the necessity of the value of the education of the worker, which would increase the wages. This raise would result in the improvement of the life-styles of the people. Yet the first step to educate workers was analyzing their movements and rejecting their traditional manufacturing techniques. Instead of old techniques they proposed new movements for a certain task.

[14] At the same time his program for "Five Dollar Day" included 8 working hours per day, which made him a predecessor of the eight-hour work day schedule that we use today.

[15] Taylor's utopic beliefs could not justify the critiques of his mentality to see human as a mere part of a machine. However, Taylor claimed that the workload should not be in the level that will be injurious to workers' health.

Fourth, modernist architects rejected the past or tradition like the management theoreticians did. While architects claimed a style without '–ism' and 'neo–' management specialists lay aside old rule-of-thumb methods. For instance Taylor and Gilbreth analyzed the movements of the workers and they replaced them with new movements. They educated workers to abandon the use of their old movements. They increased the productivity with this method. While working as a brick layer Gilbreth discovered that there was not a standard way of brick laying and started to analyze the movements of the task. Like Taylor he and his wife examined the movements, then introduced a simple apparatus and taught them to the worker. (Taylor 1998[1911]) While doing these, they used a camera to record a task scene by scene. Later they put a bulb to the middle finger of the worker in order to examine the flow of hand which made it easier to photograph the motion. (Kijne 1996) Taylor in his paper of 'The Principles of Scientific Management' he explained his theory. (Taylor 1998[1911]) For him developing a science by analyzing workers' movements in order to replace the rule-of-thumb method was the most important principle.

Use of new materials was another way to abandon tradition. With industrial revolution building techniques started to change and architects started to use new materials such as steel that differed from traditional construction techniques. Beside his mass production techniques, Henry Ford was also an innovator in using new materials that are products of industrialization in the designs of his cars, which made them lighter without decreasing their strengths. (Williams et al. 1992)

Last but not least management theoreticians believed in the elimination of the unnecessary elements and glorification of each necessary element. They removed unnecessary parts from their designs/tasks and replaced/emphasized the necessary ones which were crucial for design/task. For instance Gilbreths after their analysis of the movements omitted some unnecessary movements of the workers. At the end they were able to decrease 18 movements just to 5 while increasing production around 200 per cent. (Griffin 1987[1976]) These are the general inferences from scientific management techniques that are common with modern architecture. As we mentioned before Germany was influenced tremendously by these new techniques because of its context.

In Germany, the architecture that we call modernism today was called as '*Neues Bauen*' in 1920s. (Bletter 1996) This new architecture was formed by the architects of Germany who were educated in engineering schools. Until 1903 architects and engineers were the members of the same association. (Guillén 2009[2006]) Bletter

(1996) similarly points '*Technische HochSchule*' or apprenticeship as the education method of architects. It is not a surprise that the architects trained in engineering-based schools were more open to the developments in industrialization. This is also clear in the quote from Naumann where he told that collaboration between art and industry:

> …would raise the value of labor, improve the worker's status, increase his joy in work, and thus reverse the trend to proletarianization hitherto associated with the advance of capitalism. (Quoted in Bletter 1996, p. 5)

The similarity between Taylor's saying is significant in which he claimed that these methods will make laborers happier and he will be able to buy more shoes! This could be done through the collaboration of art and industry. In the beginning of the twentieth century Guillén (1996) called AEG as the most successful collaboration of industry and art. Artur Fürst explained the process of *Edison-Gesellschaft* -later AEG- which stimulated mass-production and consumption:

> "We intend to build power-stations with our capital, and to sell them to independent companies as soon as they have been put into operation, in order to keep our capital constantly available for new undertakings." In this way, new buyers were found for each project. The decision to construct plants was facilitated, so that the number of customer will increase as rapidly as possible. A finance company was linked to the construction company. (Quoted in Wilhelm 1984[1979], p. 138)

The process of creating new customers in order to stimulate mass-consumption and the Fordist vertical integration, which took all kind of productions under one big company, is also explicit in his words.

Design consultant of AEG, Peter Behrens also confirmed that engineer is the hero of the age and other countries envy Germany because of its industry, engineering and organizational ability. In the following part It will be looked at combination of these three elements in his designs. (Behrens 1910) In his account dated 1907, just after being appointed as the design consultant, Behrens explained his aim to produce products that correspond to the machine and machine production, and for him this could be achieved by "concentrating on the exact implementation of the techniques of mechanical production." (Quoted in Buddensieg 1984 [1979], p. 9) However as discussed before, Behrens' interest in mechanical production was far different from the capitalists or industrialists. His belief in the utopia of harmonious society fed by art made him to naively believe that this could be done through industrialization and he claimed that "through the mass-production of objects of use corresponding to an aesthetically refined order, it is possible to carry taste into the broadest sections of the population." (Quoted in Guillén 2009 [2006], p. 22)

Some historians, when analyzing the works of Behrens' for AEG, saw only functional or industrial representation, and the quotes above presumably made them to claim this. However, it will be oversimplification to name Behrens' work for AEG only as the extension of industrial representation. I will discuss this issue through his works for AEG especially via his kettles and Turbine Factory in the following chapter.

# CHAPTER 3

# DESIGNS FOR AEG:
# IN THE SEARCH OF FIRST CORPORATE IDENTITY

Peter Behrens' works for AEG had a wide range from typefaces to factory buildings. This chapter will have a look at his designs starting from his buildings for AEG. Investigations in this chapter will be carried through two different discussions. In general, It will be discussed the formation of the first corporate identity through five design fields that Behrens worked for AEG. Secondly I will look at the influences of scientific management and mass-production techniques on Behrens' works for AEG through two cases, his kettles and Turbine Factory.

Formation of the first corporate identity will be discussed under five different design fields. Buildings that he designed for AEG will be our starting point. Then we will review his product designs. Behrens designed vast number of products for AEG and this was also the case for his advertisements and printed materials. In order to choose among them I tried to discuss the products which had printed materials as well.[16] After printed materials I will discuss his logos for AEG. Complementing with his logos, typefaces will be the last design field that we will discuss.

## 3.1. Architecture: Building for AEG

> The spatial arrangement grows out of the organization of the **production process**. Clear layout, ease of interchange and forward movement of products and unhampered mobility of tools, machines, or trucks require open, uncluttered, well-lit halls. Workplaces should be as well lit and spacious as possible. It is therefore recommended that staircases and elevators be moved to the exterior; this will at the same time make the architectural effect ***more impressive***, producing a long sequence of work spaces inside and on the outside rows of windows picturesquely enlivened by protruding stairwells and elevator shafts towering above the roof. Since light is a prerequisite for **good work**, factory buildings should have large window openings; they should dominate, control the surface of building and lend support in their effect as windows. For this reason they should not seem like large holes in the wall but appear flush with the outer wall, ***giving the exterior friendly*** **appearance**. Peter Behrens in 1920 (Quoted in Behne 1996[1926], p. 107-108, emphasis by the author)

[16] Nevertheless I do claim that the result of the discussion will not change if any other products or advertisements would be chosen randomly.

Taken from Behrens' essay on the artistic value of factory buildings, this paragraph is a strong indicator of how Behrens understood the spatial articulation of the factory. The 'impressive' and 'friendly appearance of the exterior' are important characteristics that define the architecture of the factory from the outside. When he is talking about the organization of the space we can clearly see the influences of scientific management principles. The inner organization of the factory dominates the design of the building but at the end the consequences of this domination leads to impressive and exterior friendly buildings. His idea was not only to represent the mechanization processes nor only to give a mere space to production, but at the same time to create an impressive building. This was also explicit on his ideas about the lettering on buildings which was not a problem of combining two different arts –architecture and graphic design – it was "solely about architecture."(Burke 1992, p. 27) Lettering was no longer decorative, it was a building element such as window or wall and it could be used in order to create impressive appearances. For Behrens, industry was a true child of the period and factory buildings should be the "touchstones of their age."(Anderson 2000, p.111) However, Behrens' aim was not just to emphasize the functional directness of the building, if his buildings were compared with the period's buildings, it could be seen that his architecture was based on more than the expression of the utilitarian aspects of factory buildings. (Anderson 1998)

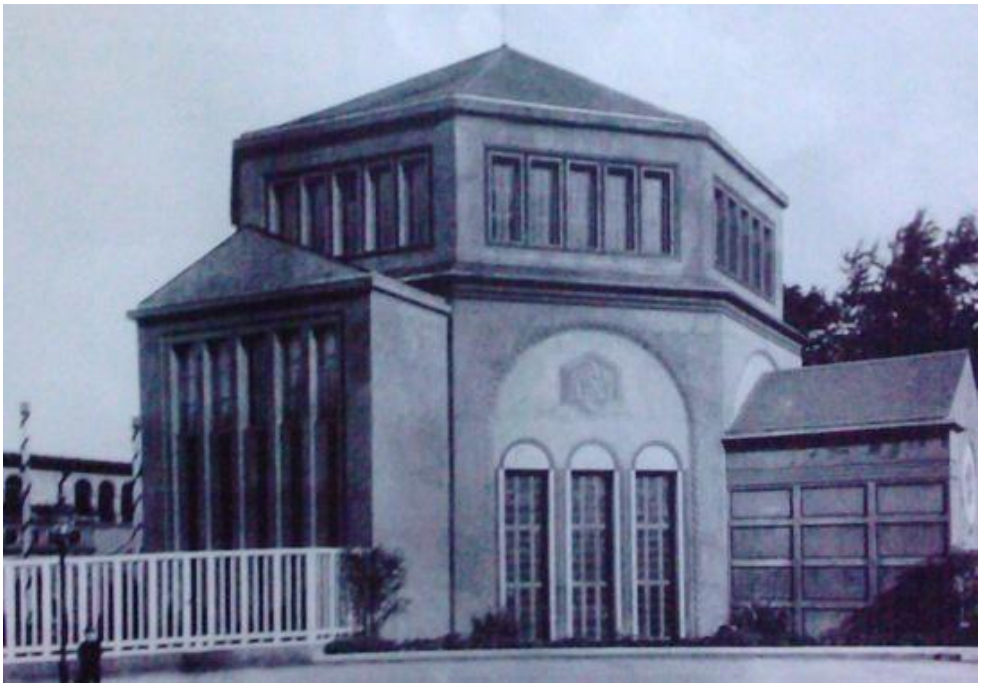

Figure 6. AEG Pavilion, 1908.
(Source: Anderson 1990)

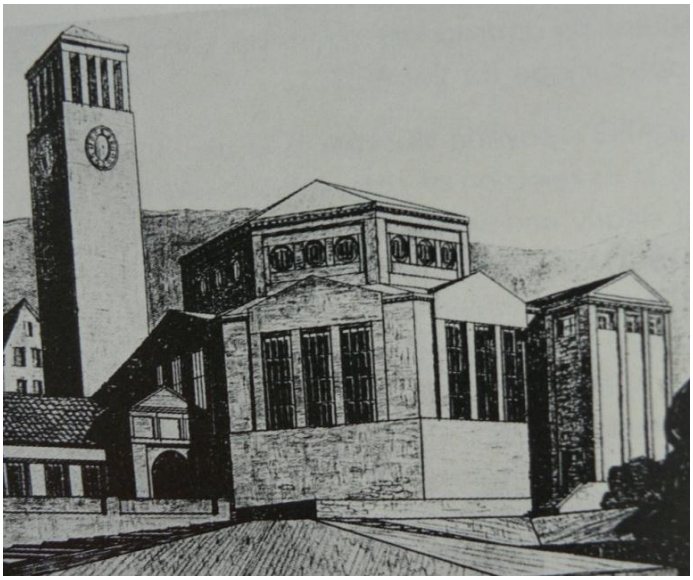

Figure 7. Evangelical Church by Behrens, 1906.
(Source: Buddensieg 1984[1979])

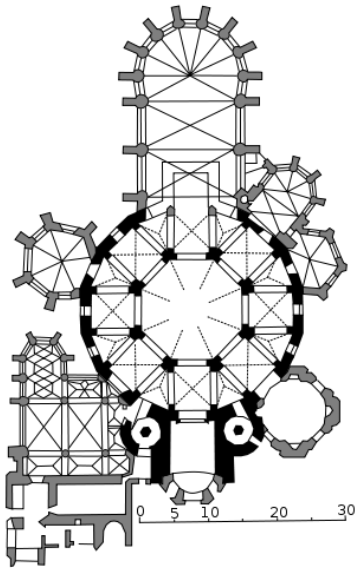


Figure 8. Palatine Chapel in Aachen
(Source: Wikipedia 2011)

The first building he designed for AEG was the AEG pavilion for the German Ship Building Exhibition in 1908 (Figure 6). This was an octagonal building which created a large and high space for the products on display which had a wide range from small products to ship's bridge. It had a monumental appearance with window openings ornamented by Romanesque arches, chapel shaped semi-private sections to the main body ending with pediments. The similarity of the pavilion with the Evangelical Church at Hagen, which was designed also by Behrens in 1906, is significant (Figure 7). This church was from his Düsseldorf Period and not realized but the geometrical articulation of the two buildings were quite similar. In addition both Anderson (1968) and Buddensieg (1984 [1979]) shows the Palatine Chapel as a prototype for the pavilion.[17] (Figure 8) Not only their similarity in plan but also their symbolic meaning is stressed by Anderson (1968). Kaiser Wilhelm II opened the AEG pavilion while Charlemagne celebrated his power in the Chapel. Stanford Anderson (2000) also notes that the building itself was an indicator of the period rather than the products that were displayed in it. If it is compared with the older pavilions of AEG he might be right, but there is another interpretation of this building, which is made through the similarities

[17] Behne also finds a relation of this pavilion with the Baptistery of the Cathedral in Florence. (Quoted in Heidecker 1984 [1979]) In addition Windsor (1981) claims that another inspiration for this pavilion is the San Vitale at Ravenna. Windsor notes that the place of the pavilion designed by Behrens was placed nearby the historicist 'Kaiser Wilhelm Gedachtniskirche' of Franz Schwechten -former designer of AEG.

between the logo and the plan. This building was erected to symbolize the crystal with its octagonal plan, which showed the new face of the company to people, with the hexagonal logos on the façades as well. The symbolism of the crystal was explicitly shown in Behrens' first architectural work for AEG. Nevertheless, the exposition of logo and unornamented façades and strong appearance made this pavilion a good start for his future buildings for AEG.

Figure 9. Turbine Factory 1909-10
(Source: Photo by Author)

The Turbine Factory built in 1909-10 was the most celebrated building of Behrens, which was labeled as ‘cathedral of labor’ by Le Corbusier in 1912. (Figure 9) (Bletter 1996) Anderson notes that one of the executives of the AEG consubstantiated the spirit of the building with the poem of Heinrich Lersch:

> Machines roar in sacred songs
> Factories are godly churches of power. (Anderson 1998, p. 530)

Both of these comments attribute a spiritual character to the building, whereas like Pevsner, also Behne thinks that the Turbine Factory was devoted to function. (Behne 1996[1926]) It will be a mistake to say that there is just a functional directness. There is

not a functional requirement of space that requires this high vault; this is there to give an impression of a monumental appearance. And also the logo was placed on the gable of the vault to strengthen this affect.

For this part of the thesis the most significant aspect of this building is the trademark attached to the gable. Schwartz (1996a, p. 175) interprets the logo as the "rose window" of this *cathedral of labor.* Behrens placed the logo as if it determined the rest of the façade and underlined the logo with an inscription. Burke (1992) implies that the inscription was there from the beginning and cut by a mason but the significant thing is, it looks like that it was borrowed from a "Roman Triumphal Arch or a Renaissance Church" (Burke 1992, p. 29) This building was quite different from the other factories he built for AEG and Anderson adds that this was also related to the location of the building, which would serve as the 'show front of the entire factory complex.' (Anderson 2000, p. 111) Schwartz interprets this feature as "a commercial function that dictates the appearance of the building." (Schwartz 1996a, p. 176) This building is not different from the industrial products he designed, with its logo on the gable; and he did not just attach the logo to somewhere on the building, he designed this building with its vault to put the logo on it.

Figure 10. Workers' Housing 1910-11
(Source: Buddensieg 1984[1979])

Behrens also designed workers housing (1910-1911) in *Henningsdorf* (Figure 10) and other factories for AEG complex in Berlin. These were organized around a

courtyard (Figure 11-14) quite different from the Turbine Factory. Anderson explains that:

> It is characteristic of Behrens that he addressed himself to the understanding mind as well as to practical necessities. For Behrens, this mind worked one way when presenting a street-oriented monument like the Turbine factory and completely otherwise when creating a factory courtyard interlaced and surrounded by practical operations. (Anderson 1998, p. 539)

I agree with the view that “the mind” worked in different ways for the buildings, which were seen by the public. Similarly contemporary architect of the period Paul Frankl when comparing two factories designed by Behrens in 1910, tells that it is hard to believe that the same architect worked in these buildings. (Buddensieg et al. 1984[1979], p. 245) If other buildings are analyzed, which have a courtyard, they are quite different from each other. This contradiction is seen in Small Motors Factory (1910 - 1913) explicitly. (Figure 15-16) Two façades of the building is completely different from each other and in Volta Strasse façade, there is a monumentality and classicism achieved by the repetition of columns, which draws attention to the power of Giant Corporation. On the other hand courtyard façade of the building differs from the *Volta Strasse* façade. One cannot see the monumentality and rather it seems like he did not have the same opportunities or design initiatives while drawing this façade. Nevertheless, he designed unornamented and undecorated façades like he did for other factories that he designed for AEG. He also designed alterations to the old factories designed by with neo-gothic ornaments.

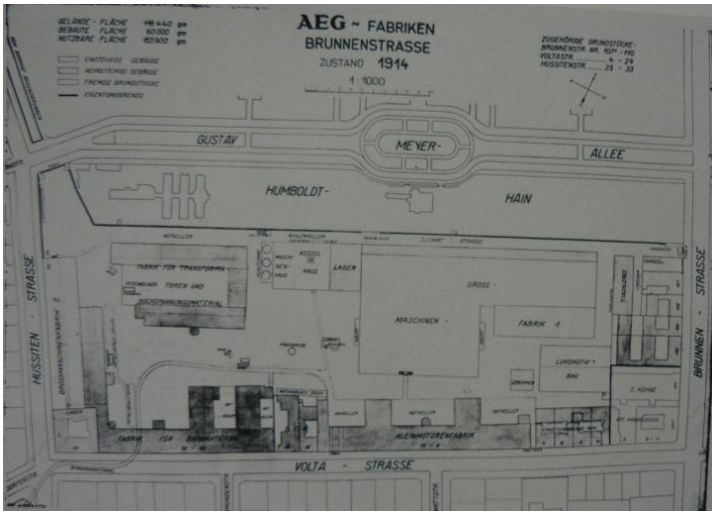


Figure 11. AEG Berlin Complex Site Plan
(Source: Buddensieg 1984[1979])

Figure 12: Alteration to the Façade
(Source: Buddensieg1984[1979])

Figure 13. Railway Factory 1911-2 (Source: Buddensieg 1984[1979])

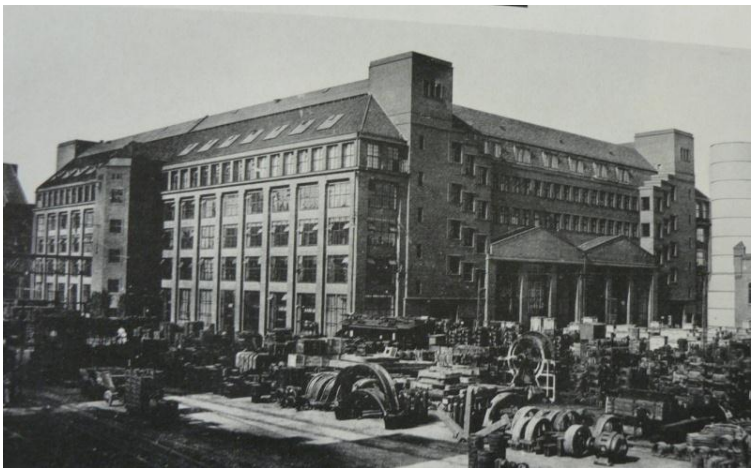

Figure 14. High Voltage Factory 1909-10 (Source: Buddensieg 1984[1979])

Figure 15. Small Motors Factory 1910-3Street Façade. Façade (Source: Buddensieg 1984[1979])

Figure 16. Small Motors Factory 1910-3 Inner (Source: Buddensieg 1984[1979])

Figure 17. Large Machines Factory 1912. (Source: Buddensieg 1984[1979])

Factories were not the only buildings that he designed for AEG. In order to sell its products AEG opened retail shops in 1910. (Figure 18) In that age a new habit started to rise; window-shopping. In 1909 a shop-window exhibition was organized in Berlin and Behrens described the idea as:

> ...a new and most original idea, devised to promote dignified sales promotion...one can measure the amount of interest it attracted by the curiosity of the general public, which almost held up the traffic... (Behrens in 1909 Quoted in Heidecker (1982 [1979], p. 174))

The interest of Behrens on dignified sales was clear which underlined his idea of educating people with the new-art that is supported by industry. He was also aware that the age of competition was at the door and takes attention to the attraction of shop windows. These retail affiliates served as constant advertising for the company because their façades were designed for the display of commodities offered by AEG and also the design of the façade itself worked almost like a billboard. (Schwartz 1996a; 1996b) In his design the shop window was surrounded by the same typeface, Behrens *Antiqua*, and plain marbles carved with the product names and company logo. The shop window's design was kept simple in order to give simple products in a simple environment, which strengthened their effects. Karl Ernst Osthaus described AEG trademark as a move from the beauty of the ***theater*** as a school of beauty to the stage of the shop window that served as an 'educator of Volk.' (Schwartz 1996b, p. 176) This one is obvious in the designs of shops. The curtains on the both sides are open and our actors-products- ready to perform their play. Art products of Behrens aimed to educate public to create a harmonious and egalitarian society that understood the value of art and industry helped them as a director.

Behrens' building façades for AEG that are seen by the public had similar images. He tried to give a friendly exterior impression to his buildings. While doing this, he abandoned the use of ornaments which were vestiges from his Colony period. But this should not give us the idea that he represented only the functional directness or the mechanical processes. I will discuss this through his Turbine Factory with the new vocabulary I derived in the previous part. Nevertheless I cannot override the consistency of his buildings – the ones that are representing the company to the public- for AEG. They had the same sober, strong and reliable affect that made them to speak the same language.

Figure 18. AEG Retail Shops 1910
(Source: Buddensieg 1984[1979])

### 3.1.1. Turbine Factory: Reflections of Industrialization

At literature there are three main claims on Turbine Factory. Firstly, some historians and theoreticians find Turbine Factory as the exact implementation of functionalism and industrialization. Pevsner (1986[1936], p. 203) is one of them who sees only functional directness in this building "which is the most beautiful building erected up to that time." Similarly Reyner Banham (1978[1960]) claims that this building is qualified only by industrial necessity. Hitchcock (1990) draws attention to the use of new materials independent of any ornaments. In the same way, Frampton & Futagawa (1983, p. 152) mentions the transformation in Behrens' career and claims that he finally breaks with the "atectonic decorum." Also some of the contemporaries of Behrens claim that the buildings' design concept is the extension of the functionalism. To start with, Adolf Behne (1990[1926], p. 109) reads the building free from ornament and decoration and tells that it is "devoted to function." A contemporary critic Anton Jaumann in 1909 sees the image of Behrens' designs to be free of human hand and as

exact reflection of machine made. Even he considers Behrens hand as a “machine.” (in Wilhelm 1984[1979], p. 143)

Second group of historians and theoreticians like Adrian Forty (2004) sees Turbine Factory as one of the first use of modern materials and surfaces while telling that there is nothing significant in terms of space. In the same way, Ward (2001) rather than calling it purely functional, names it as an inspiration for functionalism. Similarly Wilhelm (1984[1979]) interprets the building in three different ways through its façades. According to her, building has three different expressions in its three different façades and she finds different meanings/expressions in all of these façades. Anderson (1968, p. 57) claims that it is one of the first modern buildings/attempts that used modern materials, techniques and does not put this factory in the category of “frank industrial architecture” nor “dignified place of work” which is the third group of claims on this building.

Third group of historians or architects interprets the building as a symbol or a monument. It is most of the time consubstantiated with Germany’s power in industry and a symbol of this power. (Lucie-Smith 1996) For the business manager of *Deutscher Werkbund*, Wolf Dohrn (1909, p. 236), this is a building “in which the technological spirit of our [the] age will find a model, a monument.” Similarly, Le Corbusier calls the building as “cathedral of labor.” (Quoted in Bletter 1996, p. 22) Swiss historian Peter Meyer calls building as the “sacred glorification of the machine” which is merely “idolatry”. (Quoted in Anderson 1968, p. 45) Another contemporary critic Mannheimer (1910, p. 242) calls it a “steel church.” Gropius when talking about factories of Behrens interprets them as “monuments of sovereign strength, commanding their surroundings with truly classical grandeur.” (Quoted in Guillén 2009[2006], p. 59) In the same way Giedion (1967[1941], p. 479) reads this building as an important attempt to put factory building as an architectonic problem and calls this building as “the dignified place of work.” There are different claims on building and it is hard to call this building as the mere representation of the industrial processes. There are elements of the building that reflects mechanical processes but at the same time it has elements that are symbolic, which will be discussed later.

Anderson (1968) claims that Behrens was “ill-prepared” for the factory with his background and he needed an engineer to support him, who was Karl Bernhard. This collaboration with an engineer was also one of the factors that caused this building to be interpreted as a reflection of function and industrialization. Arthur Fürst appreciates the

building and tells in a Fordist/Taylorist way that with Turbine Factory no one has to "descend dark stairs into the murky depths." (Quoted in Buddensieg 1983[1979], p. 59) Interior volume of the factory is light and machines are well placed in this spacious place. Similarly, Osthaus draws attention to spacious space and with the help of this no foremen can have a nap – or in terms of Taylor; soldiering – which can be easily seen by the masters and tells that "All lies under the eyes of the controller." (Quoted in Windsor 1981, p. 93) This characteristic of the factory made it easier to control the workers in a Taylorist way. One can also see the representation of the industrial processes. That is the reason for Buddensieg (1984[1979]) to point to the manifestation of production processes in the building and to call this building as just a cover for the machines.

Before Behrens, the factories were with "dark courtyards, narrow passages, blind windows, and low dark rooms" which made them "more prisons than the places of productive work." (Behne 1996[1926], p. 106) Behrens seems to design a Taylorist and Fordist factory in which workers can work productively. In the same way Behrens himself was aware of these and claimed that factories should be as light as possible, therefore windows should be more dominant than walls, in order to have that many windows it should be designed from steel and glass as much as possible. (Behrens 1910; 1920) Therefore his idea for the Turbine Factory was to "bring masses of steel together and to disperse them everywhere." (Quoted in Windsor 1981, p. 89) Similarly he explained his criteria to design factory building for AEG in 1920:

> …the placement of the building. It has to follow the scale of the production process. The location of railroad tracks is crucial to the siting of the building…interior layout. The spatial arrangement grows out of the organization of the production process. Clear layout, ease of interchange and forward movement of products, and unhampered mobility of tools, machines, or trucks require open, uncluttered, well-lit halls… (Quoted in Behne 1996[1926], p. 107)

The impacts of scientific management techniques are clear in his statements which can also be seen in his statement on office buildings in 1925:

> …It was developed that the smallest room required was one to contain only one desk, at which six persons could work. This is, in a way of speaking, the unit of the building, the single cell of the whole body. Exact measurements were made of the surface of the desk, of the depth of the chair, and of the room required to permit one to pass between the chair and the wall. The distance from the windows and the radiators beneath them was determined, as well as the space required for the typewriter tables for letters and documents…(Quoted in Anderson 1968, p. 359)

He goes on to explain the distances between doors and passages and so on. This quote contains many influences of Taylorism and Fordism even to the effect that one can think of this quote as Taylor's or Ford's. It is clear that he used scientific management and

industrialization techniques as a starting point to his design and Turbine factory was an early example that contained influences of these techniques. This made it easier for him to extend the factory to 330 meters while it was originally planned to be 200 meters. (Rogge 1984[1979])

These statements of Behrens presumably made some historians to see only functional directness in his designs but he does not claim that function can create *Kultur* on its own. Therefore he tells that one cannot claim that "the creations of the engineers are in themselves already elements of an artistic style." (Behrens 1910, p. 213) He believed it is an "aesthetic fallacy to believe that beauty can be derived solely from technical principles, from the exact fulfillment of function." (Behrens 1910, p. 215) That is why architecture was the "art of building" for him and was "the creation of volumes and its task is not to clad but essentially enclose the space." (Windsor 1981, p.23; Forty 2004, p.258) Although he supported the use of steel and glass as architectural elements, it is wrong to design something completely made of iron like Eiffel Tower. (Behrens 1910) So what are the things that make Turbine Factory which is more than iron framing and functions? In terms of the external appearance there are three main elements of the building which are generally discussed in literature.

Figure 19. Turbine Factory *HuttenStraβe* Façade
(Source: Photo by Author)

Figure 20: Turbine Factory *Berlichingenstraβe* Façade
(Source: Photo by Author)

The first element is corner pylons, which gave a monumental impression to the *Hutten Straβe* façade. Engineer of the building Karl Bernhard while claiming that everything was determined by functional requirement of the building, at the same time complained about the corner pylons, which were not necessitated by the structure. While he admired the *Berlichingenstraβe* façade as a "masterpiece of steel construction" he found the pylons in the *HuttenStraβe* façade tricky. (Bernhard 1911) (Figure 19) He claimed they dominated the effect of the building and showed building as a reinforced concrete building. The pylons are inclined as Behrens stated in 1910 "They are also given the same sloping angle as that shown by the windows." Some historians and architects find the vestiges of ancient temples in this building. For instance architect Paul Frankl in 1910 writes that "The originality of the façade lies in the fact that the wall is slightly inclined inward, distantly reminiscent of an Egyptian temple." (Frankl 1910, p. 246) Similarly historian David A. Watkin (2005[1986], p. 585) sees these pylons as the "battered pylons of Egyptian or Mycenaean architecture." At first glance it could be seen as the functional necessity of the structural framework but it is interesting to hear from Bernhard that this inclination was the choice of Behrens.

Second element that I will discuss is the repetition of pillars which is seen explicitly in *Berlichingenstraβe* façade. This façade is quite different from the façade of *HuttenStraβe*. (Figure 20) In this façade the pillars are exposed in a repetitive way which are carrying the cranes inside the building. Between the pillars, the windows are also inclined like the gable. They are horizontally divided into three parts. On this band the opening is vertically divided again into three-parts. The pillars are connected to concrete bases with beautiful and exaggerated hinges. Hinges consist of three leafs which are facing each other. Windsor (1981, p. 91) interprets these joints as giving "…a sense of drama to our impression of the whole force of the building being brought down and concentrated on this small point before our eyes, where we can simply touch it." In a sense they are the symbols of the building and exposed on the eye level by placing them on a high base which is again a choice that can be done by an architect. In this way Behrens emphasized the hinges by placing them before the eyes of the visitor walking next to the building.

The third element is the gable which is also criticized by Bernhard. According to Bernhard "Although it [Turbine Factory] has attracted much comment in the world of art, the author [Bernhard] condemns the use of a reinforced concrete casing on the gable

ends for reasons of artistic truth." (Figure 21) Bernhard finds it untruthful and contradictory to use reinforced concrete casings for the building which is constructed with steel. However the casings together with the gable and pylons cause the building to look like a reinforced concrete building. Behrens told that function only cannot create *Kultur* and this was the reason why he used other elements which were not functional in the design. Vault is extended from the façade which makes the window to be attached to gable perpendicularly. In reality it is not extended from the façade but inclined corner pylons give the pediment-like impression to the gable. Façade under this pediment is organized again in three partitions and window as a 'flush' is symmetrically balanced by corner pylons. The flush window itself is divided into three horizontal and seven vertical parts. In order to stress the tripartite façade and leave it symmetrical two-storey part in which other side halls are located lags behind. It looks almost like another building located next to Turbine Factory. The extension of the gable is also explicit in the *Berlichingen Straβe* façade and Bernhard calls the horizontal beam which ties pillars to each other as a "cornice." After tripartite geometry it is significant to see a term coming from the vocabulary of ancient architecture.

Figure 21. Turbine Factory Joint Detail of Gable, Pylon, Steel Pillars and Lintel
(Source: Photo by Author)

Figure 22. Turbine Factory AEG Logo and Inscription on the Gable
(Source: Photo by Author)

On the gable Behrens does something innovative and engraves the hexagon logo of the company. (Figure 22) Osthaus calls this logo as the only ornament of the building. (Osthaus 1910, p. 239) I will discuss the connotations of the logo in the following part as I will see the analogies of bee-hive, chemistry and crystal. In addition Eskilson (2007) reads the logo relation to the effects of Japanisme with its repetition of three times the same hexagon in a bigger hexagon. In the logo Behrens uses the same font that he designed for AEG. It is also interesting to come across with the same logo for NAG which is purchased by AEG in 1902, that manufactured car as a subsidiary company of AEG. (Figure 23) I think that crystal symbol which I will deal with mainly in the fourth part is the strongest symbol that he used in his designs for AEG. In terms of the representation of the industrial processes and mechanization building seems to succeed in many ways. Behrens designed a factory that enabled workers to manufacture in Taylorist and Fordist way. Behrens ran after a utopia like Taylor and Ford and believed that capitalistic processes will give a better life to people especially if the artists would succeed to use their art in harmony with industry. In order to create this

utopia he believed in importance of educating people. All his designs were the tools to educate people to new art. He gave extra attention to the buildings that are seen by public and used them as advertisements of AEG. He glorified the necessary elements of the building and exposed them in an attractive way, yet he did not quit using some motifs that stem from symbols in his works.

Figure 23. NAG Logo
(Source: Buddensieg (1984[1979])

## 3.2. Industrial Design: Products for AEG

Peter Behrens was capable of designing things in all design fields with his multidisciplinary background. As a painter turned architect he was a proponent of the idea of total work of art and was experienced almost in all kinds of design work. He was experienced in product design as well and in 1898 he designed glass bottles for mass production and in the same year he also designed different types of wine glasses for a firm. (Pevsner 1989 [1968]; Windsor 1981) With the experience he had from these, he designed several products for AEG. It was not a surprise that these products are called as 'types' in the *Werkbund* debate. In the yearbooks that were published by *Werkbund* between 1912 and 1915, products of Behrens for AEG were included to expose what was achieved. (Pevsner 1989 [1968])

Designing a product for a giant corporation such as AEG was harder than designing glasses for rather smaller firms. There were many variables to consider and one of them was consumer behavior. Peter Behrens was aware of this and he talked about the buying behavior of the consumers in an article of 1909. According to him educated consumers were looking for a better design and in order to find it they were going from one shop to another. On the other hand uneducated ones could be seduced by any kind of object. (Rogge 1984 [1979]) There is a similar argument in Adolf Loos' famous essay in 'Ornament and Crime,' which he wrote around the same time, in 1908. Loos claimed that one cannot accuse a Papuan for tattooing himself because he is not civilized, thus ornament is the demonstrator of the uncivilized people. But the intellectuals of society have chance to take pleasure from other arts such as opera or theater therefore it is a crime for them to buy or appreciate ornamented products. Like the Papuan he lets also the shoe-maker to put his art-work on his shoes. The only pleasure for him is ornamenting shoes so he has right to use ornament otherwise he will be unhappy. All in all, ornament is not a crime for uncivilized or uneducated people; in fact they are in need of ornaments. That should be the reason for AEG to continue to produce its ornamented designs when Peter Behrens was designing the products that were the products of the *Zeitgeist*. This was also the will of Walter Rathenau whose vision was to produce products according to the market necessities.

Behrens' designs were pretty different from the earlier designs of AEG and according to Alan Windsor (1981) AEG managerial board found it worthwhile to change the manufacturing process. With his designs AEG succeeded two things; decrease of manufacturing costs and increase of sales. It was reasonable for manufacturing costs to decrease because of the platonic geometries but what makes people to buy unornamented ones? First reason was the lowered prices which made people to afford the products easier than before. Secondly, at that time mass produced products, which had the appearance of hand-made were disdained as cheap. (Buddensieg 1984 [1979]) Hand-made products were valuable as they were produced by handcraft, which made them unique and valuable like the shoes of the shoe-maker. If consumers would buy the same products which had hand-made appearance to a lower price they were not as valuable as before. They were not unique, not expensive and therefore not a status symbol anymore, just an imitation of the hand-made. Therefore hand-made should stay as hand-made and should give pleasure to the craftsman while creating it. Industrial products should not imitate hand-made products. Last but not least, one of the factors

that stimulated consumer was the simple aesthetic of the new-designs by Behrens; however efficient marketing strategies and changing taste of classes were as well important to understand the market success of Behrens' designs.

In the official web site of AEG and in other sources Peter Behrens is most of the time presented as the first industrial designer. Sparke (1986) claims that it is not possible to call him even an industrial designer because of his architectural background. Anderson (1968) and Windsor (1981) call him as the first 'major' industrial designer that devotes special care to product design. In the discussion of being the ‘first designer’ art historian Edward Lucie-Smith (1983, p. 99) gives honor of being the first industrial designer to a British designer Cristopher Dresser (1834 – 1904) and he calls Behrens as the first “house-designer.” Nevertheless Behrens was the first to design the corporate world of a giant company and to create a design language for that company.

Michael von Dolivo-Dobrowolsky who was a contemporary of Behrens, one of the most significant engineers of the AEG and the director of the appliance factory, divides products into three categories. First ones are the products that help other products to work, or produce other products such as thermometers, motors and et cetera. Second ones are for the ease of public such as arc-lamps or power plants and so on. Third group of products are the ones used at homes such as kettles, fans and so on. (in Buddensieg 1984 [1979]) The first two category are not so much influenced from the buying behavior of the consumers but the last category in which Behrens designed vast numbers of products were directly related with the consumer preferences, and in the third category there was the need to seduce consumers more than the former. This category is also the most important category to disseminate AEG's corporate identity.

In their book *Landmark of Twentieth Century Design*, curators of European Decorative Arts at the Philadelphia Museum of Art; Hiesinger and Marcus (1993) describe the concept of industrial products designed by Behrens as follows:

> AEG set an influential precedent for contemporary design, revealing the basic parameters of the quest for ‘modern’ comfort: the desire to create household objects – in his instance, electrical products, which still frightened many people- characterized by a utilitarian ease of operation resulting from rational study as well as a pleasing appearance devoid of embellishment. (Hiesinger 1993, p. 79)

Hiesinger and Marcus call Behrens' products for AEG as the products that are unornamented and products of a rational idea. Similarly, Pevsner (1975 [1936]) call them as showing the same purity in form, like his buildings for AEG. Architectural historian Adrian Forty (2000) name them as 'types' in the discussion of the *Werkbund*. I

will elaborately discuss Pevsner's and others' assessment of Behrens' products as ‘completely rational’ through cases, but now it is time to have a general look at the products that are designed by Behrens, in order to seek for a consistency between all his designs.

Figure 24. Behrens' Arc Lamp of 1907 (Source: Anderson 2000)

Figure 25. Engineer's Arc Lamp (Source: Anderson 2000)

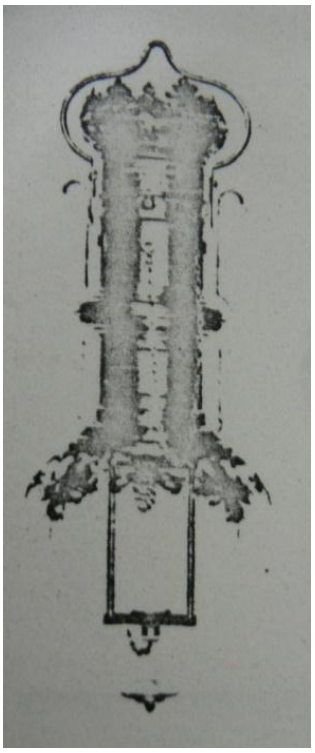

Figure 26. Ornamented Lamp (Source: Anderson 1968)

Arclamp (1907) was the first design of Behrens for AEG (Figure 24) and it was a “touchstone for his reputation as the first industrial designer.”(Anderson 2000, p. 113) However, before Behrens' arrival to AEG there were two different styles of arc lamps in the catalogs: one that was basic and straight with its form (Figure 25) and the ornamented one (Figure 26). Behrens’ lamp was different from the basic one with its details, jointing and character. Behrens’ design had a beauty harmonized with the honest nature of the product. It did not deny the technical characteristics of the lamp but used them as tools for beauty. Wolf Dohrn stated that the arc lamp of Behrens was a “cooperation in which the engineer became half an artist and the artist half an engineer.”(Buddensieg et al. 1984 [1979], p. 237) Peter Behrens himself explained his design for arc-lamp in 1908. According to him housing of the lamp should have an:

> aesthetic requirement; it should remove from the viewer's sight the naked, barren electrodes and conceal these in what should preferably be a pleasant form. (Quoted in Anderson 1968, p. 258)

Pleasant form is a form based on geometrical orders. There is a similar claim by Behrens in 1909, where he seeks for a simplification in order to have “clear proportions” not “rich ornamentation.” (Windsor 1981, p. 95) Similarly, Arthur Fürst, who is the biographer of Emil Rathenau and an industrial historian, writes on arc lamp of Behrens in 1910:

> Behrens' beautiful, sleek lamp cost no more to manufacture than the richly ornamented model of the Werkmeister. This provides a classic proof that the concepts of beauty and expensiveness are by no means synonymous, and that the artist can also find a place in the world of mass production, whose watchword and battle cry is the word “cheap!” (Quoted in Buddensieg et al 1984[1979], p. 241)

Fürst's comparison of Behrens' Arc lamp with the ornamented ones is reasonable. However, I find Anderson and other specialists' comparison on the engineer-designed one and Behrens' a little bit exaggerated due to the fact that there is not a great difference that sets them apart. Nevertheless, Arc-Lamp was a good start for his basic and unornamented designs for AEG. There were still reflections of 'classical forms' such as the stepped sections of the upper cover and curves of the bottom reflector, which I will discuss in the next part through the kettles of Behrens.

Figure 27. Table Fan (1907) in MathildenHöhe Museum (Source: Photo by Author)

Figure 28. Kettle (1909) in MathildenHöhe Museum (Source: Photo by Author)

Behrens' table fans were designed in the year of 1908 (Figure 27). If it is compared with the earlier models the simplification of its geometry and its beautiful form is explicit. Behrens also added an elegant protection to house blades. Nevertheless the fundamental change is more on the engravings of the surface. Behrens used a simple surface of cast-iron and tombac plates. Yet, the stepped section of the bottom plate that included the motor with a curve was repeated.

Another design of Behrens was his kettles (1909) for AEG. (Figure 28) According to Schwartz his kettles, which were the most famous of all his designs, reflected ‘a certain house style.’(Schwartz 1996b, p. 130) In the same way Adrian Heath et al. (2000, p. 105) in his book concentrating on '300 years of Industrial Design' emphasize the *eotechnic* nature of these kettles which are not completely different from the traditional ones that are not working with electricity. [18] His kettles will be discussed thoroughly in the next part but the use of classical forms is explicit in these designs, and they were used in order to make these *neotechnic* products more acceptable to the people. Their eotechnic nature emphasized their certain house style and with this character consumer would embrace the new products. Beside these, the parts were standardized and interchangeable, which was crucial to AEG and also to Germany in order to regulate technical measurements which were the signifier of the use of mass-production and scientific management techniques. (Hiesinger 1993, p. 17)

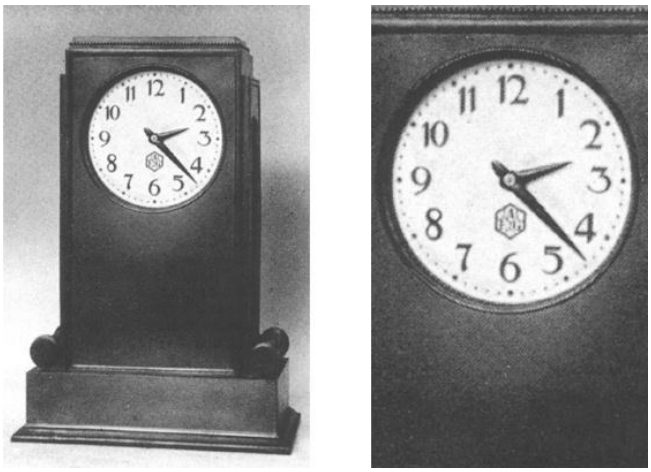

Figure 29. Mantlepiece Clock, 1910
(Source: Schwartz 1996a)

[18] Eo and neo are the terms contrast to each other; eo is described as ‘characterized by the early appearance.’

The mantelpiece clock of 1910 was another product designed by Behrens (Figure 29) characterized by its formal simplicity and minimized ornament: a logo and knobs at the juncture of body and base. (Schwartz 1996a) He placed the logo right above 6 o'clock under the center where the arms of the clock were attached, Behrens added emphasis to the hexagonal logo and the communication of this logo with the public. Although during these years he generally used simplified logo of AEG in prospectus designs as the main logo, Behrens' interest in this crystal logo was still valid.

Figure 30: Toaster by Behrens
(Source: <www.ebay.com> 2009)

The AEG toaster had the same logic of simplicity, minimized ornaments and a logo. (Figure 30) This time the logo was seen at the base of the product. In order to give a handsome appearance to product, he used romb-shaped gaps, which remind us of the crystal metaphor. However these openings were at the same time functional in the sense of economical necessities. This process decreased the amount of steel that is used, which decreased the costs while giving a 'friendly' appearance. Its box was designed with the same idea like his other designs, to convey the solid, reliable message of the AEG. Its plain white surface created a simple backdrop that enhanced the logo's emphasis and therefore of the company.

All his designs had the same simple image which makes his products speak the same design vocabulary and this differentiates them from the competitors in the market. If it is compared with the older products, ornaments are abandoned and the emphasis is more on geometry. He rejected the use of adornments and instead he told that he tried to give an "impersonal character" to his ornaments. These corresponded to the use of pure

geometries and to use classical vocabulary. (Behrens 1909, p.209) Like his graphic-work for AEG, his products created a solid reliable company effect. His designs used the mass production techniques and he interpreted them with the abstract geometries of the products. On the one hand they were the products of AEG, which gave them individuality and differentiation in the market and on the other hand they were the true children of modern industrialization techniques. However it is a misreading to say that his designs were determined only by function and techniques. This kind of misreading is also done for the buildings that he designed for AEG that is discussed above and will also be discussed again through his kettles for AEG.

### 3.2.1. Kettles: Reflections of Industrialization

Behrens' kettles are one of the most famous of all his products that he designed for AEG. In this part I will have a closer look at the kettles, which are already introduced in the previous part of this thesis. While discussing kettles I will discuss the typefaces and the brochure designs for AEG. I will start with a literature review and then with the help of formal analysis I will seek the correlations between these works and scientific management and industrialization techniques that I investigated in the former chapter.

There are two different claims on the kettles of Behrens. In the first group they are seen as reflections of industrialization. To start with, Tafuri & Dal Co (1979) claim that Behrens turned to types rather than uniqueness and his products are reflections of the standardization. Nikolaus Pevsner (1986[1936]) reads kettles -like Behrens' buildings- as beautifully proportioned pure forms and having the sobriety that limits the design to simple forms. Stein (1995) agrees with Pevsner about the pureness of the geometric forms and adds that they are the products of German functionalism, machine technology and serial production. Buddensieg (1984[1979]) tells more or less the same and claims that Behrens gives form which complements their nature and means of mechanical production. Similarly Anderson (1968), with some hesitation agrees and adds that Behrens did 'little' to alter the excellence of utilitarian design.

Second group of claims see beyond functionalism. Penny Sparke (1986) accepts that they are types and they are products of rationalism, mechanization and standardization, yet she also sees vestiges of *Art Nouveau* and tradition in the kettles.

Similarly industrial design historian Edward Lucie-Smith (1983) sees the imitation of Arts & Crafts in the hand beaten metal of the kettles. He also claims that there is a struggle between the practicality- appropriateness and an expressive-symbolic form. I agree with these and like the case for his Turbine Factory, expression of scientific management and mass-production techniques does not cover all design ideas that Behrens had, while designing his kettles.

Figure 31. Brochure for Kettles, 1909
(Source: Archive of *Deutsches TechnikMuseum*)

I will start the discussion with the brochure for kettles. (Figure 31) Behrens designed a typeface which is unique to AEG and used this typeface for his corporate identity design for AEG. This typeface is the third typeface which is called Behrens *Antiqua* came before Behrens Medieval. At this point it is appropriate to have a look at the meaning of *Antiqua* as a typeface. Typographer Robert Bringhurst, (2008[1992]) correlates *Antiqua* typefaces with *Roman* typefaces. According to him *Roman* means Renaissance, since these typefaces were interpreted and used by Renaissance artists. He also adds that *Antiqua* has close association with medieval forms but despite the name these typefaces stem again from Renaissance. It is significant to choose *Antiqua* family in order to design a typeface for the corporate identity program of AEG since Behrens has used Renaissance forms in his AEG designs. According to Behrens *Roman* script is "one of the most beautiful of all common scripts." (Quoted in Heidecker 1984[1979], p.

167) He did not understand the exaggerated forms of Rococo which were not simple and readable. (Windsor 1981) It seems that he succeeded to design a typeface which is readable and simple with Behrens *Antiqua* and it is important that ancient types are one of his inspirations for designing a typeface for AEG.

In the general layout of the brochure one can see the dominancy of the geometrical proportions. Vertically there are three main zones. All zones are surrounded by double lined frames. In the first zone name of the product and the designer Prof. Peter Behrens, are written. Central zone which is approximately five times the dimension of the heading and the footer contains kettles in again three main zones. In the first one there is a square in which the kettle is placed with a circle surrounded by two frames. Under the kettle the type-name of the product is written and at the bottom the varieties of the products with the prices. In the last zone of the brochure the name of the company without abbreviation and the class which these products belong to are written. Horizontally in the central core of the brochure, there is again tripartite division in which three different types of kettles are placed. In the central section Behrens placed the kettle with its hand beaten metal finishing.

As mentioned earlier Behrens was influenced by J. L. M. Lauweriks whom he worked together with in Düsseldorf Academy of Arts. Theosophist Lauweriks was known with his geometrical system and he believed in eurhythmics, a term which came from ancient Greece that connotes movement, order or proportions of the body and its relation with nature. (Henderson 1999) Similarly Dutch architect Hendrik P. Berlage mentions the triangulation, which is the main theme from ancient Greece to Gothic architecture. (Henderson 1999) Tripartite geometry in his printed materials for AEG is one of the common themes. Generally he starts with the name of the product then creates a dominant zone for the product in which he places the abstract representation of the product and to the footer he places the name of the company, which is also the case for his brochure of kettles.[19]

[19]As a number, 'three' has symbolic explanations one of which is symmetry. We see three partite elevations in Neo-Greek buildings or in the revivals such as Palladio's houses. In the center we generally see the entrance with the pediment on it and according to the center, left and right wings are located symmetrically. In the brochure of Behrens in the center we see the hand beaten one which is called as traditional while the side kettles are from plain metal. It is not a surprise to find the reference to ancient Greece as the underlying idea of his geometrical arrangements. We will discuss these vestiges in his works for AEG in detail in the last part of the thesis.

According to Meggs & Purvis (2006[1983]) it is possible to configure 216 different types of kettles with the help of different variables theoretically but only 30 of them were in the market. There are three main shapes for these kettles and various finishing and sizes. This is possible with the help of the standardized and interchangeable parts. This is also proof for Anderson's claim (1968) that Behrens' kettles are not only determined by function. If only function was enough to design a kettle then there would not be three different forms and different. At this point it will not be wrong to claim that some historians are 'more royalist then the king' since Peter Behrens never claimed that only function can determine the form. In 1907 he tells this in 'Art in Technology':

> There is no longer any doubt that the future of industry also has an artistic dimension, and that our age calls for the type of the product that is most responsive to this dimension. In the realm of the applied arts, our age calls for Industriekunst. (Quoted in Buddensieg et al 1984[1979], p. 208)

Artistic dimension always has an effect on technology, depending on the individuality of the artist. Behrens also tells that "purely human fulfillment of functional and material needs" and nature cannot create "*Kultur*" on their own. (Anderson 1968, p. 231)

In order to make people part of the culture, through his corporate identity design, Behrens did not want to "pursue anything tremendously new." The logical way was to develop the products "out of the current taste of the period." (Quoted in Rogge 1983[1979], p. 118) He succeeded in introducing his products to the public with their 'not tremendously new' shapes. His kettles are in between modern and traditional. In general, tripartite geometrical system is readable in the design of kettle. (Figure 32) The lid which is combined with the crystal cut surface of the upper body is the first zone. Hand woven type handle is attached to this upper part with its geometrically ornamented knobs. The silhouette of the handle of the cover resembles a small ancient Greek vase. Central body is an octagon in plan which has 1:1 proportion in each side and height, and it is composed of eight squares, one of which contains the plug in one third of the center. The bottom part is reaching to a circular base with the stepped sections which reminds us of the ancient Greek details. When one looks from the top there is only the octagonal shape of the kettle. This makes it a clear octagon which is one of the geometric shapes connoting to a crystal, placed on a Greek inspired base. (Figure 33) His obsession with octagonal forms is also obvious in his logo and advertisements that he designed for AEG.

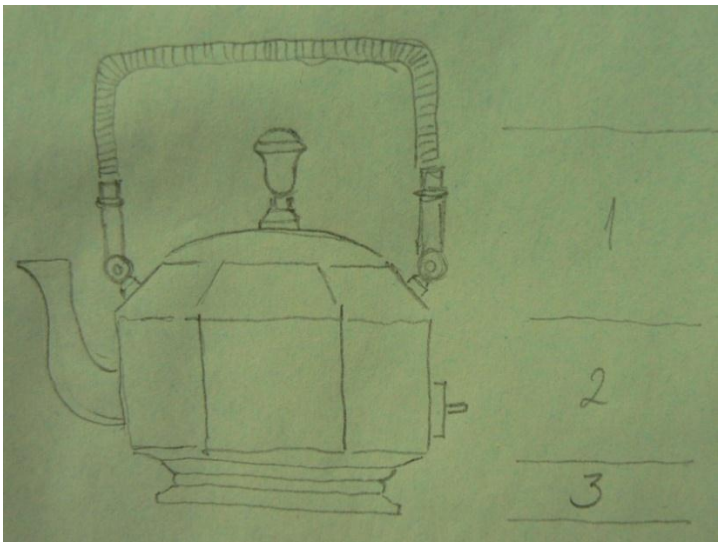


Figure 32. Sketch of the Kettle
Museum (Source: Sketch by Author)

Figure 33. Kettle in the Design
of Ghent (Photo by Author)

Behrens' kettles were one of the most important tools of Behrens on the way to realize the utopia of harmonious and egalitarian society. They used all advances of the technology and it was possible to manufacture different kettles with the interchangeable parts. However, it is hard to claim that Behrens rejected past and abandoned to use elements that were not derived from scientific management and industrial organization techniques.

## 3.3. Advertisements and Printed Materials

> From now on the tendency of our age should be followed and a manner of design established appropriate to machine production…in the logical application of these intentions, the company also attaches great importance to the artistic and typographic design of all its publications. Peter Behrens in 1907 (Quoted in Hiesinger 1993, p. 44)

In his statement above, Peter Behrens emphasized the importance of the artistic and typographic designs of company's publications. This emphasis was consistently reflected in materials published by AEG such as brochures and advertisements. Before going through the discussion of his advertisements and printed materials, it is important to have a look at the background that shaped Behrens' design work for advertisements and printed materials.

Figure 34. The Kiss (1898) in Mathildenhöhe Museum
(Source: Photo by Author)

I had a brief look at Darmstadt Artists' Colony and *Deutscher Werkbund*, which are important in order to understand Behrens' design work. At the same time there were other forces that affected Behrens such as magazines. As Eskilson (2007) pointed out *Art Nouveau* found its voice through magazines. One of them was *Pan*, which was published by art critic Julius-Meier Graefe in 1895. It was the first magazine that tried to disseminate *Art Nouveau*.[20] Besides *Art Nouveau* related materials, Nietzsche's portraits, paintings, sketches and sculptures were frequently published images in *Pan* between 1890 and 1914. (Asschheim 1992) Nietzsche was the spiritual leader for German artists including Behrens, in whom they found the source of creation of their new life, new 'Kultur' that was fed by industry. Peter Behrens contributed to *Pan* with one of his famous woodcuts *'Der Kuss'* [The Kiss] in 1898 [Figure 17]. (Windsor 1981) There is something striking in this woodcut which can be a sign for Behrens' future work. His signature is reduced to an overlapping of 'P' and 'B' surrounded by a rounded

[20] Its name came from an ancient Greek God; half human-half goat *Pan* who symbolized music, creativity, poetry and Dionysian sexuality. (Eskilson 2007)

rectangle.[21] This figure is merely a logo rather than a signature. It is also interesting that the typeface he is using is similar to *Roman* typefaces that he used for his theater booklets. As a rather early work of Behrens, the typeface is more austere than his first typefaces.

*Jugend* was another important magazine, which is published in 1896 by Georg Hirth who admired graphic design. *Jugend* as a magazine was quite important which gave *Art Nouveau* its name as *Jugendstil*. It was a weekly magazine that had distributed 200.000 copies per week and its cover was designed by a different artist in every week. Peter Behrens designed some graphic outlines for *Jugend* as well and get acquainted with the artists of *Jugend*. (Meggs & Purvis 2006 [1983])

Posters and designs that were published in *Pan* and *Jugend* had two-dimensional images, simplified typefaces and flat colors. This simplification was dominantly affected by Asian motifs. During the late nineteenth century, trade and thus communication between Asia and Europe formed a cultural collusion between two continents. (Meggs & Purvis 2006 [1983]) Especially Japan took the lead in this cultural collusion. Several books were published on Japanese art and ornament.[22] Abstraction, simplification of scenery, flat colors, use of silhouettes, use of single female figures and figure & background relationships were common elements of Japanese posters. These were also the elements in which one can come across frequently in the works of *Jugendstil* designers. (Aynsley 2004; Meggs & Purvis 2006 [1983]) Similarly, Eskilson (2007) mentions the importance of *Japonisme* that influenced *Sachplakat* [object-poster], which was based on clarity and notes that this influence initiated the future advertisements. Advertisement started to become a necessity and at that time *Werkbund* was eager to support Reklamekunst [Advertising art] to provide commissions to member artists. (Stein 1995) In the beginning of the twentieth century, advertisement became a sine-qua-non for companies in order to seduce consumers and compete with

[21] We can come across with the use of the initials of the names as signatures in other artists' works. For instance Otto Eckmann used a signature with O and E. This was also case for Josef Hoffmann and Alfred Moser. Even historian Patrick Cramsie (2010) call these kind of signatures as one of the first corporate identity example.

[22] For instance, in architecture, Bruno Taut was one of the first European architects who brought Japanese Architecture on scene and wrote on the clarity and beauty of Katsura Palace which is one of the palaces in Kyoto. (Wichmann 1985) While looking at oriental influences on Western Art it will be deficient not to mention Edward Said and his book Orientalism (1978), however for the sake of our research to know that there are influences of eastern and especially Japonese arts on Western Art in fin de siécle will be sufficient.

the other companies. In aesthetic terms these advertisements were strongly influenced by Japanese posters, which was the case for Behrens' works for AEG.

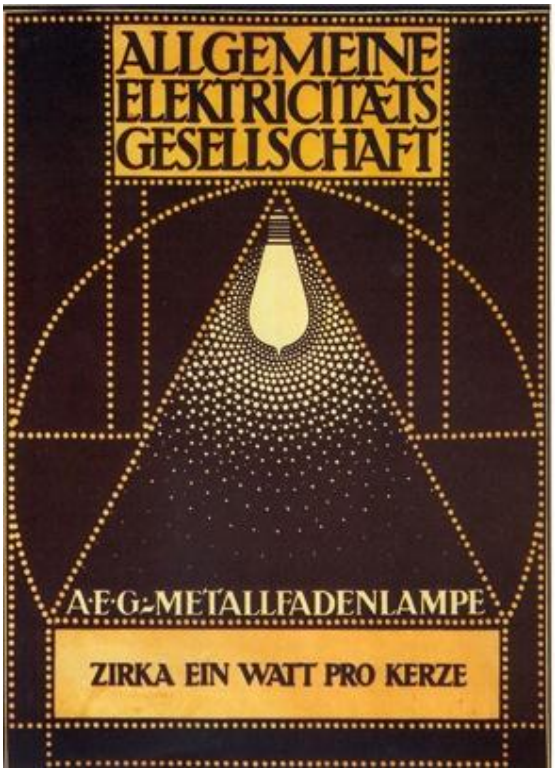


Figure 35. Filament Lamps Poster, 1907.
Archive(Source: Aynsley 2001)

Figure 36. Arc Lamps Poster,1907
(Source: Klingspor Archive)

For the graphic language that defined AEG's corporate identity, Behrens developed a new program based on pure geometrical forms, a dominant graphic object and a solid logo. The preference for such forms highlighted a strong and reliable company. He designed vast number of advertisements or printed materials and also products for AEG. I will begin with his poster and brochure designs for lamps, which was the starting business for AEG and also for Behrens. As I discussed earlier as a company AEG started with producing light bulbs and first Behrens' designs for AEG were also based on lamps and light bulbs. In his poster for AEG filament lamps in 1907 (Figure 35) there is "abstract geometrical forms and lamp like stars against a dark sky suggesting the power of light source." (Hiesinger 1993, p. 44) This poster, which was one of his famous designs, used geometrical arrangements with its impressive colors. Product is depicted with the simplification of images and with use of them as they were just come out from the assembly line. (Heidecker 1984[1979]) Behrens took them and without adornments he just gave a name to them under the cover of AEG. Behrens

created three zones in this advertisement; first zone was placed above the name of the company, which would be a logo later, second zone corresponded to the abstraction of the product with a strengthening effect of bright colors that surrounds *metallfadenlampe* and the third zone included the name of the product with the slogan 'approximately one watt per candle.'

Figure 37. Prospectus Designs, 1910.
(Source: Olins 1996)

Figure 38. Fan Poster 1908.
(Source: Buddensieg 1984[1979])

Arc Lamp poster designed in 1907 has the similar geometric order. (Figure 36) Poster is divided into three zones in which the center zone is dominant and this emphasizes the product. Name of the product and the company AEG is on the top and in the bottom the explanation of the AEG and the city – Berlin – is written. Later on, the abbreviation will be enough to represent the company, as was the case in the design of a prospectus of 1910. (Figure 37) In the prospectus design, he used the stable rendering of the object and "emphatic" use of logos. (Schwartz 1996b, p. 138) These materials were designed later than his advertisement for *metallfadenlampe.* Three zones still exists, but the affect is more simple and strong; at the top there is the logo of AEG – the one still in use today, at the center the product is placed with the abstraction of hexagon logo as filaments of the bulb and at the bottom there is the name of the product but now without a slogan. There is no need for a slogan from now on, the object itself is strong enough to compete in the market.

Cover design for the brochure of table fans was designed in 1908. (Figure 38) Simplified image of the fan and the emphasis done by this image makes the object dominant in the design. The name of the company, the name of the product family and

the abstract image creates three zones in the design. Behrens *Antiqua* is the typeface that is used in the design. Colors are flat and there is nothing else than the company and the product to destruct the attention of the viewer.

Behrens' brochures for AEG (1909) were one of the earliest of the period. (Figure 31) Like all his designs there is again austerity in graphic organization, emphasizing the varieties of the products and a strong trade-mark which guarantees the quality and reliability of company. Consumer will find at least one product that answers his/her expectations. There are lots of different products with varying shape, size or finishing and the charts under the items show the varieties of the kettles designed by Behrens.

Figure 39.Advertisement for Slave Clocks, 1910.
(Source: Buddensieg 1984[1979])

The advertisement for slave clocks which were set according to pendulum - master - clocks was designed perhaps about 1910. (Figure 39) Time and timing became one of the most important elements of the industry which was directly related with efficiency and manufacturing as we discussed. When we come to his poster designs, simplified drawings and use of geometry is common. Hexagonal logo is still used in the poster for the clocks even in the background of the slave clocks. This time the poster is divided into two parts and then the upper part again into two parts. Horizontally and vertically three-partitioned layout is supported by geometric motifs. The text provides information about these clocks which can be used in anywhere, are low-cost, have low energy consumption and are accurate.

Gabriele Heidecker (1984 [1979]) who is analyzing the publicity materials of AEG mentions two different methods that he uses. In the first method Behrens depicts objects in a simplified and painterly style with a three-dimensional effect. In the second method he represents objects without shadows, creating a two-dimensional effect. In this case objects are reduced merely to a symbol. Attention of the consumer is taken by the geometrical arrangements of the layout and rectangular forms are the most frequent forms that are used in his designs. These plain geometries rather than dominating the object that is expressed support the objects' austerity and create a simple background.

All his designs are based on a geometric composition, which is reminiscent of Lauweriks' work. Objects are reduced to two dimensional images with strong contrasts, or silhouettes that emphasize the product and the company. They are represented without their environments in order to highlight the strong and reliable effect of them. His publicity materials seem to be inspired by *Japonisme*, with the flattened and bright colored designs. He used the same typeface as we will discuss in the next part, which made all of them to speak the same language with the help of geometric orders and simplified representation of the images.

Behrens' designs for AEG depend not on the artistic and stylistic expression of the object but the simple exposition of the object. Rather than giving an artistic impression, its focus is on the object: a reliable, strong object. Meggs & Purvis (2006 [1983]) mentions three linchpin elements which will take its place in corporate identity programs half a century later which are: a logo, a typeface and a standardized layout of elements, which are truly realized in the Behrens' designs for AEG. I started with his advertisements and printed materials and will continue with his logos and typefaces in order to explore the consistency of this linchpin trio.

## 3.4. Logos

Schwartz (1996a) notes that brand-name commodity and its logo was the solution to the problems of the age; to the relation between culture and economy. When Behrens designed his first logo for AEG, Scheffler – one of the members of the *Werkbund*– called it as a new sign [Zeichen] that reflects bourgeois enterprising spirit. (Schwartz 1996a) According to Schwartz *zeichen* means more than a sign or mark; instead it "moves the economic work of the company to a kind of cultural work."

(Schwartz 1996b, p. 141) *Zeichen* was a cultural symbol, a reflection of the spirit of the age and at the same time the symbol of the capitalism, a strategy that made people to consume more. In 1909, another member of the *Werkbund*, Wolf Dohrn called logo as the “prevailing spirit of labor” in the article in which he analyzed AEG. (In Buddensieg et al., 1984[1979]) In the scope of logo there is again the glory of capitalism rather than labor and logo helps to disseminate this glory all over the world.

Figure 40. AEG Logo,Franz Schwechten, 1896.
(Source: Buddensieg 1984[1979])

Figure 41. AEG Logo, Behrens, 1907.
(Source: Buddensieg 1984[1979])

Behrens designed four logos for AEG. First one is designed in 1907 which can be called as a simplified version of Franz Schwechten's ornamented logo of 1896. (Figure 40, 41) If these logos are compared there is a great jump from Arts and Crafts to stylistic curves and clear strokes of Peter Behrens. Second one was designed in 1908 and it has more to do with handwriting when it is compared with the first one. (Figure 42) Gabriele Heidecker (1984 [1979]) calls a relation between the founder and the logo. There are similarities with the monogram of Emil Rathenau's certificate (Figure 43) which is designed in the same year and the elliptic logo. By doing this Peter Behrens called the founder of the company and consubstantiated it with the company's logo. In the same year he designed his famous hexagon logo for AEG (Figure 44) and by 1912 AEG had the plain logo with Behrens *Antiqua* surrounded by a mere rectangle (Figure 45), which is still in use today with its strong and sober effect. (Figure 46)

Figure 42. AEG Logo, Behrens, 1908.
(Source: Schwartz 1996a)

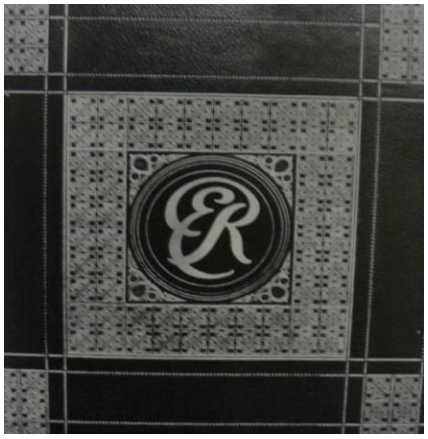


Figure 43. ER Logo, Behrens, 1908.
(Source: Buddensieg 1984[1979])

Figure 44. AEG Logo, 1908.
(Source: Schwartz 1996a)

Figure 45. Rectangle Logo in 1912
(Source: Cramsie 2010)

Figure 46. AEG Logo Today
(Source: <www.aeg.com> 2011)

The hexagon logo of AEG designed by Behrens is the most celebrated logo of AEG. Paul Overy (2007) who is an art and architecture historian confirms Scheffler's interpretation of this later logo and notes that the hexagon logo is an "apt symbol of the

power, the longevity of AEG and in addition the power of capitalism." (Overy 2007, p. 18) Schwartz (1996a) tells more about the hexagon logo and its allusions. The diamond symbol was first used by Behrens in the opening ceremony of the Colony exhibition titled '*Ein Dokument Deutscher Kunst'* (1901) as the symbol of a new life. Diamond created an analogy to the honeycomb alluding to the diligence of bees. It had also similarities to the chemical symbol of the benzene-ring – was an important discovery of the period. Although these symbolic explanations might be important to understand the logo's significance, the 'idea of creating a logo' itself has far more importance in understanding AEG's corporate identity. He designed four different logos which were quite different from each other. The last one is still in use today. Its current use proves its success in giving the message that company wanted to spread. This might suggest that not only Behrens but also AEG found the representation of its identity in this logo. When there was no talk of belonging to a corporate culture, Behrens felt a need for a logo, which will be consistent with the products and whole environments that he designed for AEG. Not only had he designed a unique logo for AEG but also a unique typeface in consistency with the other designs for AEG.

## 3.5. Typefaces

Nikolaus Pevsner (1987) writes about Peter Behrens' shift from the Colony's *Jugendstil* to *Wekbund*'s industrialism and shows his typeface design as a proof of this shift. According to Pevsner change was complete with his design and all curves were turned into straight lines and simple curves. Beginning from 1902 Behrens designed 4 typefaces, which were Behrens *Schrift* in 1902, Behrens *Kursiv* in 1906, Behrens *Antiqua* in 1908 and Behrens Medieval in 1914. (Aynsley 2004) In 1902, Behrens stated the importance he attached to typefaces as follows:

> One of the most eloquent means of expressing style of any epoch is through letterforms. After architecture, they probably give the most characteristic picture of a time, and the best evidence of the state of a nation's spiritual development. (Quoted in Burke 1992, p. 20)

According to Behrens it is possible to understand the spirit of the age -Zeitgeist- through letterforms. In the beginning of the twentieth century the dominant typeface was black-letter in Germany which was referring to the medieval ages or Gothic scripts. In comparison with the *Roman* typefaces they were narrower, the distances between

letters and lines were closer, therefore when the viewer looked at the text written with black-letters, saw a darker image in general. (Eskilson 2007) In order to reflect the spirit of the time Behrens' interest was more on *Roman* typefaces rather than Gothic scripts.[23] (Aynsley 2004) Similarly, graphic design historians Philip B. Meggs & Alston W. Purvis (2006[1983]) take our attention to the theater booklet of Behrens from his Colony period, and name it as one of the first use of *Sans-Serif* typeface (in the family of *Roman* typeface) as a running book text. (Figure 47) Behrens' interest in typefaces stimulated him to design a typeface and after having troubles in finding a type founder, he found *Klingspor* Foundry which was eager to produce new fonts. (Meggs & Purvis 2006 [1983])

Figure 47. Theater Booklet, Peter Behrens, 1900.
(Source: Windsor 1981)

Figure 48. First Page of Behrens *Schrift* Catalogue
(Source: Klingspor Archive)

Behrens' first design was Behrens *Schrift* in 1902. (Figure 48) Stephen J. Eskilson (2007) author of Graphic Design: A New History names this typeface as a modification of black-letter with *Roman* type's clarity. All letters are elongated, they are narrow and tall. The proportions of x-height and apertures have rectangular proportions which make letters narrower. These proportions remind us of *Jugendstil*'s rectangular

[23] I argue that Behrens related all of his designs somehow with antiquity and choosing a *Roman* typeface rather than Gothic scripts is the consequence of this preference. We saw these kind of vestiges as well in his other designs for AEG and last part of the thesis will deal with these preferences.

(narrow and tall) posters and in my opinion it has still vestiges from *Jugendstil*. As a typeface it has more to do with handwriting. *Serifs* are unilateral and they emphasize the effect of handwriting and give typeface a calligraphic character. Only in‘t’ there is a reflexive *serif*, which can be called as bilateral, but while looking at it one can easily recognize the flow of the stroke. As a type it was celebrated by German Government and it was used as the typeface in 1904 World's Fair in USA. (Eskilson 2007)

Figure 49. First Page of Behrens *Kursiv* Catalogue (Source: Klingspor Archive)

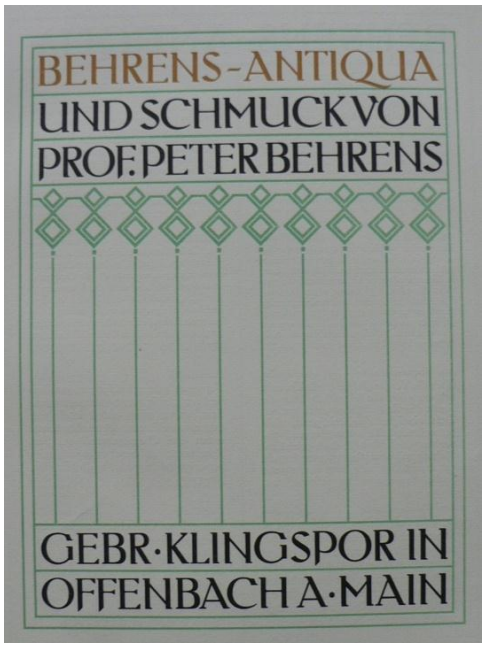


Figure 50. First Page of Behrens *Antiqua* Catalogue (Source: Klingspor Archive)

Behrens *Kursiv* came in the year of 1906. (Figure 49) As the characteristic of the *Kursiv* type, it is a running type and it gives the impression of handwriting. (Avis 1965) *Kursiv* type with its characteristic recalls Behrens' writing on typefaces in 1902 after his Behrens *Schrift*:

> One takes in a typeface, when reading properly, as one sees the flight of a bird or the gallop of a horse. Both are pleasant, graceful phenomena, without the observer remarking the shapes of individual limbs of the animal, or a momentary position. It is the line as a whole, and this is fundamentally the same with type. (Quoted in Burke 1992, p. 36)

Like *Schrift*, proportions of x-height and apertures are similar and letters fit into narrow rectangles rather than squares. As I mentioned before, serifs are flowing and with their flows they remind us of *Jugendstil*'s curves. It is closer to handwriting that the flow of the stroke like a 'gallop of a horse' can be followed.

Behrens *Antiqua* is the third typeface that he designed in 1908 (Figure 50) before his last typeface, Behrens Medieval (1914). For most of the historians, Behrens *Antiqua*

is the most complete and most admirable of his typefaces. (Burke 1992) This was the typeface that is consubstantiated with AEG and made AEG one of the first firms that had its own “copy-righted lettering.” (Eskilson 2007, p. 102) J. Aynsley who has a book named Pioneers of Modern Graphic Design, shows extensive use of Behrens *Antiqua* as a contribution to AEG's image which is based on a clear and sober appearance. Similarly Meggs & Purvis (2006 [1983]) think that Behrens achieved three goals by Behrens *Antiqua*; differentiating AEG from competitors, constructing a universal image and implying a monumental character that calls quality and performance.

*Antiqua* is a typeface which has kinship with *Egyptians* and *Clarendons*. (Avis 1965) *Egyptians* and *Clarendons* are mostly called as the typefaces under the same family. Both of them have very slight differences between thick and thin strokes. While *Egyptian* is a product of the interest of Egyptian history and hieroglyphs, *Clarendon* is a general name for *Victorian* typefaces. (Bringhurst 2008 [1992]) It is significant that Behrens selected *Antiqua* family to design a font for AEG which has attributions to Egyptian letters and also the typeface of the leader country of industrialization; British Empire. There are also similar connotations with his interest in *Roman* types. I will discuss Behrens' interest in classicism also in the following chapter. But beyond these, forming a typeface for a company is the first step in creating a corporate identity. Behrens designed a typeface and used it on all of the products of the company, which set AEG clearly apart from its competitors in the market. Behrens *Antiqua* evokes a consistent language between products and makes all products belong to the same world.

## 3.6. Behrens’ Designs for AEG: First Corporate Identity Design

> [the term corporate identity] ... became standard and everyone was using it, regardless of their work involved the reorganization and re-presentation of a major multinational company attempting to manage and create a new idea of itself for all of its audiences, or whether it was a letterhead for a tiny software house. (Olins 1995, p. 7)

There is the 'reorganization and representation of the major multinational company' in Behrens' work for AEG more or less 50 years before the creation of the term. If we leave all the factors aside that affected Behrens while designing the products and look at Behrens' designs in terms of their consistency and their relationships there is a clear kinship between all his designs. As a first step he designed a typeface Behrens *Antiqua*, which will help the designs to speak the same language. He created logos for the

company that put all designs under the same roof and one of them is still in use today. In his graphic works he used a clear and abstract graphic language, the typeface and the logo that he designed for the company, which drew attention to product and company. His products are children of industrialization and set the firm clearly apart from the competitors with their clear and unornamented designs, which are carrying the logo with great dignity. His buildings for AEG that were representing the company, had the same logo and same basic geometries which made them to belong to the same giant AEG family.

When there is no talk of belonging to a corporate image his designs truly speak the same language and complement each other. It is obvious that all his designs underline a strong and reliable company, which is using the modern industrial techniques. We saw that his designs belong to the same language and to my view there is something more than exposing the strong and reliable effect of AEG; a symbolic dimension to his designs. One of the underlying ideas in his corporate identity is the 'education of public' as I discussed in the previous chapters. Like his friends he believed that his designs were capable of educating people to have a better taste which would give them a better life. They believed that a better life – utopia – was possible and this could be created by the education of public through industry.[24] Furthermore he used interchangeable parts and standardization and exposed them as aesthetical elements of his designs.

These three commonalities with Fordism and Taylorism presumably made most of the historians to see only functional directness in the Behrens' designs for AEG. However Bletter and Anderson see more than functional directness. Bletter (1996) claims that Behrens' works are symbolic expressions rather than expositions of functional directness. She criticizes the theoreticians that see Behrens as a proto-modernist. Similarly Anderson (1968, 1993) finds Behrens to be conservative in his designs rather than a functionalist and sees a "representational pseudo-saclichkeit" in his works. Anderson finds two ideas that are intermingled in the Behrens' designs which are 'Zeitgeist' and 'Kunstwollen.' According to Anderson, Behrens is convinced that spirit of the time can only be reflected through the expression of the will of the artists. In addition Anderson (1987) claims that functionalism by itself cannot be a concept and

[24] As we discussed industrialists' and artists' aim were different. While artists' aim was to spread their art with industry, industrialists were in the search for manufacturing and selling more with the support of art.

it is impossible to deprive buildings of metaphors. This is reflected in the Behrens' designs. Behrens himself attached great importance to functionalism and industrialization however never claimed that they were sufficient enough to determine forms. In 1929 (p. 227) Behrens claimed that "materials in themselves can never determine aesthetic values." Discussion on scientific management and industrialization had similar results. Other two inferences that is distilled from these techniques are rejection of the past, rejection of ornaments and glorification of each necessary element. I see the glorification of necessary elements in his designs which make theoreticians to see pseudo-sachlichkeit in his work. However I doubt the rejection of past and abandonment of ornament in his designs as I discussed in the previous chapters. This suspicion paves the way to the third part in which I will seek symbols and vestiges of past in his designs.

# CHAPTER 4

# PETER BEHRENS & LITERATURE: IN THE SEARCH OF SYMBOLISM

## 4.1. Literature & Antiquity

> Art was Raphael and Hans Makart, and what did a factory have to do with Raphael and Hans Makart?! Adolf Behne (1996[1926], p. 106)

As I discussed through the comparative work between scientific management techniques and architecture Peter Behrens' designs for AEG embody more than merely functional directness. Anderson and Bletter saw the symbolic exploration of the machine in his designs. To them Behrens used these techniques with abstraction and expressionism. They claimed that this expression was one of the reasons for the monumental and sober appearances. However I argue that there was more than the expression of the aesthetics inspired by the industrial processes in Behrens' designs. Therefore this part of the thesis will discuss the symbols that are hidden in the design language of AEG.

In order to examine the symbols our discussion will be twofold. Firstly, I will conduct the research through the relations between literature and architecture. What stimulated me to look at literature is the symbol of crystal which was prominent in Darmstadt Artists' Colony. Following the lead of Rosemarie Haag Bletter (1981) this part of the thesis will discuss the symbols in Behrens' works through three literary works. First one is *Eine Lebensmesse* (1893) of Richard Dehmel who was a close friend of Peter Behrens. I will also analyze one of the most influential philosophers of the age Friedrich Nietzsche and his *Thus Spoke Zarathustra* which was dated 1883. This work had tremendous effects on architects, writers and intellectuals of the period including Dehmel and Behrens. Thirdly, I will discuss Parsifal of Richard Wagner that was the last opera of Wagner adopted from an Arthurian Romance *Parzival* written by Wolfram von Eschenbach. Although there is not a direct connection between Parsifal and Behrens, I think that it was not possible that Behrens was unaware of this opera. This opera made Nietzsche to write his paper 'The Wagner Case.' While analyzing these works I will

have a brief look at the plots and then will discuss the symbols that are common in these works.

In addition to these three works which I identified to be important for Behrens, I will sometimes refer to *Hypnerotomachia Poliphili* (1499) and *House of Fame* (1380). It is hard to find a direct relation between these works and Behrens. However both of them are quite well-known works, especially *Hypnerotomachia Poliphili* and more importantly literary works are built upon each other and they belong to a canon which makes them to use the similar motifs. Therefore the motifs in these works are repeated in the later works.[25]

Secondly, I will discuss the symbols that are coming from antiquity. This part will mostly deal with geometry and numbers. It will investigate the meanings of some geometrical shapes and numbers through Antiquity and Christianity in order to understand their use in Behrens' works. Behrens was in close relationship with the artists of the age. As a painter turned designer he had the knowledge of all of the art fields such as poetry, painting, architecture, theater and so on. This also led me to look at other art works in order to find references. After discussing the symbols coming from literature and antiquity, last part of the thesis will be in the search of the symbols that are used in Behrens' works.

### 4.1.1. *Eine Lebensmesse,* Thus Spoke Zarathustra and Parsifal

Richard Dehmel (1863-1920) was an influential writer in Germany. In his poems one can detect the influence of other authors, such as Nietzsche's or Jacob Burckhardt's and yet his work influenced the work of others such as Jan van Gilse and Arnold Schönberg.[26] The subtitle of *Eine Lebensmesse* (1893), takes our attention; *Dichtung für ein festliches Spiel* [Poetry for a Festival Play]. This poem was composed to be performed at the Colony but it was not realized. In order to perform the poem, plan of the theater for *Eine Lebensmesse* contained a shallow stage to unite actors and the

[25] This is also the case for these works. For instance, House of Fame has direct references to Ovid's (BC 43 – AD 18) *Metamorphoses.*

[26] At this point it is important to remind that a lot of musicology departments are established in Germany after becoming an empire in1871 and is seen one of the solutions in order to create an identity for German nation. (Berger 2004) Most of these composers are in the search for identity and they used literary works as influences. One of the composers of this poem was a Dutch composer Jan Pieter Hendrik van Gilse who composes the poem that we will discuss; *Eine Lebensmesse*. This composition is performed in the concert of Municipal Orchestra in Hagen in 1910. Another poem of Dehmel 'Verklaerte Nacht' was composed by famous composer Schönberg as a string sextet. (King 1970)

audience.[27] (Anderson 1990) Poem consists of eighteen different parts. It starts with the *Schicksal* (Fate), which repeats several times in the poem. Old men, a virgin, group of fathers, a hero, and an orphan are the ones consisting the chorus and each tell a part of the poem. Rather than using names in the poem tellers Dehmel used type-names to show that they were everybody and nobody, a reference to the book of Nietzsche.[28]

Friedrich Nietzsche's *Thus Spoke Zarathustra* (1883-1885) was one of the most influential books of the fin de siècle and the twentieth century especially in Germany. Although Zarathustra mentions that he is not 'the mouth for their ears' and does not expect to be understood in his age, the book had a great influence among intellectuals. Work consists of four books; in the first one Zarathustra deserts his home when he is thirty and lives in a cave in the mountains for ten years with his eagle and serpent. After ten years one morning he decides to meet humans again and to disseminate his knowledge. In the second one he goes to an island and in the third one he comes back to his cave. In the fourth book Zarathustra gets old; he again leaves his cave wanders around and comes back to his cave to have the last supper with the people he saw on the way. At the end of the book Zarathustra shines like a morning sun which is similar to the last act of the Parsifal in which Grail shines and enlightens people.

Richard Wagner started to compose his last opera in 1855 and it was finished in 1882. His opera was based on the Arthurian Romance of Wolfram von Eschenbach. It takes the journey of a naïve knight Parsifal and his search for the Grail as a plot. It consists of three acts, in the first one Parsifal finds the castle that Grail and the spear are kept. *Amfortas* the king of the Grail is wounded because the spear is stolen by a magician called *Klingsor*. In the second act Parsifal continues his way and Klingsor tries to deceive him to obtain the Grail. In the third act he comes back to the castle and becomes the king of the Grail.

There are several symbols that are repeated in these works. Starting with the crystal they will be discussed separately. Creators of these works did not express the symbols exactly with the same words or terminologies; rather they used similar images.

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[27] Ancient Greece had an important effect on Dehmel. Alan Windsor (1981) points to Jacob Burckhardt who had studies on ancient Greece. With Behrens they discussed the notion of relief stage which was coming from Greek origins. This plan-type gives importance to the movements which are done horizontal to the audience. Since audience cannot catch vertical movements which are done perpendicular to the audience shallow stage underlines the parallel action of the performers.

[28] Nietzsche calls Thus Spoke Zarathustra as *Ein Buch für Alle und Keinen.* [A Book for All and None] Like Niezsche's book for everyone and noone Dehmel used types to address everyone and did not give name to them which made them noone.

Nevertheless they constitute isotopies that led me to group them in five common symbol categories.[29]

Crystal is one of the most important symbols that are repeating in these literary works.[30] One cannot find crystal literally in all of these works but authors used isotopies that can make the reader understand references to crystal. There are many references to luminous qualities of crystal. For instance in Parsifal, Wagner describes Grail as a crystal chalice.[31] In the final act when Parsifal becomes the king of the Grail, "the grail glows with light; a halo of glory pours down over all." (Wagner 2007, p. 44) This is one of the main characteristics of the crystal. It has the capacity to shine and convert daylight into the colors of rainbow. In this respect we come across with the shining effect of crystal in Zarathustra. When he is leaving the cave in the last part of the book just after having his 'last supper' – an allusion the Grail – he tells: "This is my morning, my day is beginning: Rise up now, rise up, you Great Midday! Thus spoke Zarathustra and left his cave, glowing and strong, like a morning sun coming out of the dark mountains."[32](p. 287) Another characteristic of crystal is its transformation from coal. In the third book of Zarathustra the kitchen coal asks to the diamond "Why so hard? Are we not after all close relatives?" (p. 181) This is a transformation that requires the fulfillment of certain conditions. In his poem, Dehmel as if replying to Nietzsche's question, tells that all the powers are in us, even the power to "convert stones."

With its two important characteristics crystal is used as a symbol for a new life. It is formed from an ordinary coal and it transforms an ordinary light into beautifully colored rays. In all of the works crystal is used as a symbol of transformation; transformation of one life into a better one. Crystal as the stone also has the power to give life. Wolfram von Eschenbach (13th Century) in his Parzival which is the source for Wagner's, describes the grail as a stone which is kept by a lady:

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[29] I found the same symbols even in *Hypnerotomachia Poliphili* and *House of Fame*. Not to interrupt the flow of the text I will mention the symbols at these works at footnotes.

[30] When we look at the poem of Chaucer, House of Fame, protagonist finds himself in a glass temple. And when he goes to House of Fame which is in an island, he has difficulties in describing, but at the end he calls it a 'rock of ice.' Similarly in Colonna's work, Poliphilo finds lots of diamond or octagonal shaped buildings. In addition queens that he met are wearing diamond necklaces which have the symbols of Jupiter or eagle. At the end he finds himself in the fountain of Adonis which has an octagonal pool.

[31] Wagner's Grail is a crystal cup which is a combination of two medieval works which are inspirations for his opera. In Chretien's Perceval, Grail is described as a chalice and in Wolfram's as a stone. (Gruenler 2008)

[32] There are also some more metaphors of cyrstal in Nietzsche's work. For instance, when Zarathustra goes to Land of Culture he describes this place as, his eyes are never seen "anything so colorfully sprinkled."

> It is called *lapsit exillis*[33]. By the power of that stone the phoenix burns to ashes, but the ashes give him life again. Thus does the phoenix molt and change its plumage, which afterword is bright and shining and as lovely as before. There never was a human so ill but that, if he one day sees that stone, he cannot die within the week that follows…The stone is also called the Grail.[34] (Wolfram 1961, p. 251-252)

So this is what we see in these works, that their work contains references to change life which associated with the symbol of crystal.

When Wolfram is describing the female bearer of the Grail, tells that she "should preserve her purity and renounce all falsity."(Wolfram 1961, p. 129) A woman, bearer of the Grail is the second symbol that is used.[35] In all of the works woman is an important figure. In some works purity of woman is stressed which was a reference to a virgin, with the implication that only pure woman can give birth to a new life. For instance in *Eine Lebensmesse*, there are lots of figures and both of them seem equal but when virgin talks it is obvious from her speech that she is the source of a new life. She is the symbol of spring and she will give birth to a new life which will grow in sunshine.[36] Woman in these works are mostly partners of a meeting rather than individuals and described as a partner for a man. Zarathustra, in the fifteenth speech of the third book talks to life which is a feminine character. At last they find each other; they are "a couple of true good-for-nothings and evil-for-nothings." (p. 198) Third book ends with repetition of these lines: "Never yet have I found the woman from whom I wanted children, except for this woman whom I love: for I love you, O Eternity! *For I Love you, O Eternity!*" Zarathustra wants children from this woman which are the signifiers of a new life and also Nietzsche's concept of 'Overhuman.'[37] Meeting of man and woman results in a different way in Parsifal. Quite contrary to Wolfram's, the bearer of the Grail is a male character named Amfortas. But when Parsifal is tried to be deceived by the magician Klingsor, Cundrie a cursed woman, seduces Parsifal. At the time Cundrie kisses Parsifal he suddenly remembers Amfortas the king and realizes the magic. At this instance woman figure is instrumental in helping protagonist to 'enlighten' and have the Grail. In

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[33] Translators Mustard & Passage, claims that this phrase can be interpreted as "Stone from heavens" or "it fell from the heavens" or it can "correspond to the philosopher's Stone." (Wolfram 1961, p. 251)

[34] In their introduction to Parzival of Wolfram, Mustard & Passage (1961) discuss that Grail in the romances is always kept in a castle not in a church, by a king not by a priest and most of the time is carried by a female character also they tell that it never took a place as a Christian relic.

[35] In the House of Fame hero finds himself in the temple of Venus and he goes to House of Fame which is in charge by a queen. Poliphilo come up with two queens and the first one give guides to him in order to find the temple of Cytherea.

[36] In addition at the end when chorus refers to the thing which is not over people, not around people but in the people, they use the feminine article 'die.' "Warum suchen wir Dich/die du in uns bist"

[37] Overhuman is a a goal that man should use to reach. Nietzsche explains man as a rope between beast and overhuman and his aim in life should be to reach Overhuman.

all of the works, woman is bearer of a better life. She has the capacity to give birth, since man cannot create new life on his own.

In the final act Cundrie sprinkles Parsifal with the water from the "sanctified stream" when he comes back to castle to be the king of the Grail. (Wagner 2007, p. 37) In all of the three works there is always a relation with water. This is the third symbol that I will discuss. The metaphor of water is mostly described through a lake or sea and closely associated with the 'island.'[38] They are typical places for utopia and an escape from reality, in which you can create a world independent from surrounding environments, a world that is sufficient enough to itself. For instance, in *Eine Lebensmesse* hero wants to leave with the virgin and he wants to get a ship to the place that he wants to go. It should not be a surprise to see this place as an island which you can go by a boat.[39] Island is clearly described in the beginning of the second book of Zarathustra, which is called as "isles of Blest where my [his] friends are dwelling." (p. 72) Similarly, Wagner uses water as a lake and places the castle of Grail nearby this 'sanctified lake.' The places which are important in these works are located on or nearby water so it is used as a symbol to differentiate the real world from the utopias of the writers. This symbol has close affiliations with the idea of dream which will be our fourth symbol.

The world which can supply a new life to people is the dream of authors. While water is physically placing borders between real world and the utopia of the writers, dream is differentiating the places through abstraction from the real world.[40] Dream is told by old man in *Eine Lebensmesse.* The soul of the human is a child and he hears fairy tales from his mother in which he dreams himself in a fantastic world and gets surprised when he sees how the life grows from death.[41] A mother – a woman – is telling the dream to his son and makes him to believe in a fantastic world. This place is the dream of the author as Nietzsche proclaims in Zarathustra "Ah, there are so many things between Heaven and earth of which only the poets have let themselves dream."

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[38] Starting with the House of Fame and similarly in Poliphili protagonists find the main place that they want to go in an island.

[39] This is not the only part that Dehmel uses the symbol of water. In a part, two experienced men advises to an orphan to be strong. After this the 'Only One' invites him to his sea (lake) while another one to his river. After that the first one talks again about his place which sparkles that everyone will go inside with a smile. The other one invites to his stream which is more concrete than the former one, in which one can see dome of the cathedrals, waves, clouds and forests.

[40] House of Fame and Hypnerotomachia Poliphili are completely based on dreams. The protagonists fall asleep at the beginning of the works. All of the stories are the dreams of the protagonists.

[41] This is a close relation with 'Lapsit Exillis' of Wolfram. Like phoenix, life can grow from death with the Grail.

(Parkes 2008, p. 111, 303) The islands are in between earth and heaven, they are utopias.[42] Similarly, when Parsifal come to the castle of the Grail in order to set the difference from the world, Gurmenanz, the knight of the Grail, tells to Parsifal "My son, thou seest / Here Space and Time are one."[43] (Wagner 2007, p. 19) Beside this meaning dream metaphor is also used as a sign to disseminate Zarathustra's knowledge. In the second book Zarathustra asks his disciples to interpret the meaning of the dream he saw. They interpret it as it is time for him to disseminate his knowledge and wake people from themselves.

In order to disseminate his knowledge Zarathustra starts to wander with his guides; serpent and eagle. The last metaphor in these works is eagle/serpent. Eagle is used as the symbol for the guide to reach the utopia.[44] Zarathustra explains courage through eagle. The one who has courage is the one can see and grasp the abyss like an eagle. (p. 251) Similarly, in the first act of the opera, Parsifal kills a swan with his bow, and when Gurmenanz asks him the reason to carry that weapon. He answers that he made it to "drive the savage eagles." (Wagner 2007, p. 17) Those eagles perhaps led him to the forest to find the castle. Since Parsifal is a naïve knight he does not know the difference between good and evil so he could have thought that eagles can harm him.[45] Beside eagle, serpent is used in some works. In Zarathustra, serpent is the second guide. For a dead God it is a good metaphor to use serpent as a guide.[46] Dehmel uses neither eagle nor serpent in his poem but at the end of the poem he describes a tree on which the angel puts the lights on and gives the tree to the children. He puts the lights on the tree which are sparkling but at the same time puts fruits on it. What could be these fruits if they are not apples![47]

Beside these symbols there are also references that link *Eine Lebensmesse* to these two works. The chorus structure is similar with the scene in which Parsifal sees the Grail. Like the choruses of Dehmel this time choruses of younger men, knights of the Grail and Boy's give speech. The actors of the poem and the last act of the opera are

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[42] The House of the Fame is also located in between "heav'n, and earth, and sea." This is almost the same statement with Nietzsche's description.

[43] This phrase can form another perspective in the discussions of space and time in modern architecture.

[44] In House of Fame eagle, the messenger of Jupiter is the guide of the protagonist on his way to House of Fame. As they are going to the house of Fame eagle gives speeches to him. "The eagle, in a long discourse, demonstrates that, as all natural things have a natural place towards which they move by natural inclination…" (Purves 2000)

[45] Wagner underlies this when Gurmenanz asks him the reason to kill the wild swan. Parsifal does not have any reason to tell even so pure that most of the questions of Gurmenanz is replied with "I do not know!"

[46] It is the one that seduces Eve to eat apple from the knowledge tree.

[47] It is also a nice coincidence to find Polia and Poliphilo before taking the boat to Isle of Cytherea, in front of the tree. Priestess plucks three fruits and keeping one to herself gives the others to Polia and Poliphilo.

types more than individuals.[48] When poet gives a name to the characters they will belong to a class. But new life is not in the monopoly of a class, it is for all people and they will have a higher life with the new culture. First lines and the last line of the poem contains *Schicksal* which is a term borrowed from Nietzsche. This makes the poem a direct reference to Nietzsche which is also in relation with *Amor Fati* [Love of Fate]. When he is explaining life which is close to death he tells that it is neither over people nor around people but it is inside them, which is a reference to the abandoning of God and inward-looking. There is also another influence of Parsifal on Dehmel's poem. Like Wagner explains the name of his opera with a second heading as *Ein Bühnenweihfestspiel* [A Sacred Stage Festival Play] Dehmel explain his poem as *Dichtung für ein Festliches Spiel* [Poetry for a Festival Play.] When it is considered that Dehmel is a successor of Wagner this creates another allusion to Wagner which make them to belong to a genre of a Festival Play.

In general perspective, all of the symbols are closely associated with each other. Crystal is the symbol of the new world or life. It is so close to ordinary but there is a nuance that makes it precious. Crystal is transformed from coal and it can transform the ordinary light to sparkling colors. Crystal can be carried by a (pure) woman since she has the capacity to give the new life after the 'enlightened' meeting of man and woman. This new life can take place in a location that is separated from this world. Physically it is separated by water, most of the time as an island and in nonphysical terms separated by a dream from the real world. Finally eagle or serpent is the guide in order to reach this utopia with their courage or enthusiasm to reach knowledge. These symbols are repeated in these works and they create a close relation in these works and make them belong to a canon. In the following part I will discuss additional symbols from antiquity which were used in the Behrens' designs.

### 4.1.2. Antiquity and Crystal

This part will have a brief look at the number theory of Pythagoras and the geometry of Plato's cosmology. These theories are transformed into Christian relics and used in middle ages under the name "Christian Platonism." (Hiscock 2007, p. 9) They

[48] This reminds us of the sixteenth century Italian theater notion of Commedia Dell'Arte which is acted by the performers wearing a mask.

are adapted to Christian symbols – or Christian relics used these symbols – and used in especially religious buildings such as churches.[49]

Triangle, square and circle are geometric forms from Plato's cosmology. He explains world through four elements which are fire, air, water and earth. First three elements are symbolized by triangle based geometries such as tetrahedron for fire, octahedron for air and icosahedron for water which are not stable. Earth is symbolized by cube which is formed by stable squares and universe is symbolized by dodecahedron which is the closest shape to sphere. (Hiscock 2007) Dodecahedron consists of twelve pentagons which is shaped like a crystal.[50] Among our symbols crystal can find its representation through geometry which we will discuss also through Behrens' works.

Crystal can also be represented through a hexagon or an octagon. In a symbolic reading hexagon is the geometric shape of the number six which draws attention to the perfection of creation, since God created earth in six days.[51] Similarly octagon is the geometric shape of the number eight which draws attention to a new beginning. After the creation of the world God rests one day and the eighth day is the day to do new tasks. In Platonic cosmology eight refers to the eighth day in which the journey to heaven starts. That is the reason to build baptisteries in octagon forms in order to emphasize a new beginning. (Hiscock 2007) There are other numbers that embody symbolic representations as well. One as a first number is consubtantiated with God and two which is a deficient number lacking symmetry alludes to the number of woman. Three is an absolute symmetrical number and number of man. Therefore in order to have a symmetrical façade you need three partitions which can lead to tripartite elevation.

There are also three more symbols coming from Christianity that are common also with the metaphors that we distilled from our literary works. First one is the figure

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[49] There are several publishings on this context. For instance Joseph Sauer's book on the symbolism at churches is published at an early date of 1902 in Germany.

[50] In art historian Alois Riegl's work 'Historical Grammar of the Visual Arts' (2004 [1966]) which consists of lectures in between 1897-1899 there is a frequent use of crystalline. Crystalline is the most perfect form in nature, it obeys the rules of nature with its perfect symmetry. It has two important elements which are symmetry and proportion, and together they create the harmony. Riegl sees pyramid and sphere as secondary crystalline forms which are close to crystal but not as perfect as it is. At this point he differs from Plato since Plato is telling that sphere is the most perfect form and forms' perfectness is related with its formal closeness to sphere. Riegl is another important figure in discussing geometrical connotations. According to Riegl the essence of classical arts lies in the balance between crystallinity namely absolute symmetry and organism which is deprived of symmetry. In his theory there are the influences of German philosophers such as Christian Wolff (1679-1754) who mentions the crystalline logic of Greek temples which triggers the Greek Revival in eighteenth and nineteenth centuries. (Schwarzer 1995)

[51] In number theory six is the first perfect number which exactly sums its factors. 1x2x3=1+2+3=6.

of virgin, Virgin Mary the mother of Jesus Christ. Secondly, in Christianity female is represented through water while male through fire. This makes more sense when we think about the water symbol closely related with the woman figure in the literary works. Third one is the symbol of eagle which represents St. John. "John's eagle completed the cycle as the Lord ascending to heaven." (Hiscock 2007, p. 198) This is another characteristic of eagle that strengthens its leading role that we found in the literary works.

Previous part discussed the use of these symbols, yet they are not using many references to Platonic cosmology and number theory. Only in *Hypnerotomachia Poliphili* we can trace the use of geometrical shapes. Poliphilo explains the ancient ruins through exploring the numbers and geometries. This book is important to objectify the symbols with its 174 woodcuts. For instance on his way he sees a marvelous fountain with an octagonal shape, which puts together two of the symbols water and crystal. Another building on the way is a circular planned one which has an eagle on top of it, which symbolizes the universe. After meeting his lover Polia they go together to the Temple of Cytherea by a boat which is placed on an island. When they reach to the island, Poliphili comes across a theater at the center and at the center of the theater the fountain of Adonis which is an octagonal pool. Poliphilo is the lover of the ancient Greece and it is not by coincidence that we find a theater containing a fountain in the center on the isle of Cytherea.[52] Behrens and his contemporaries used theater as an important element in order to give a new life to people. Their reference was coming from ancient Greece which is based on the notion of shallow stage. As we see from this sample sometimes artists of the age and Behrens used these kinds of references, rather than symbols allude, to antiquity since it was seen as the ideal society.

We generally do not come across with a movement called symbolism in architecture; rather it is often related with painting and literature. In architectural history we deal with mostly Expressionism which is explained in other fields as reflecting inner self. Adolf Behne (1996 [1926]) claims that expression, function, movement, symbolism, romanticism and individualism are logically very close to each other which embody a danger that can drive us away from function. This is at the same time related with the main discussion in the German *Werkbund* between the poles of individualism

[52]Nietzsche in his book of Birth of Tragedy discusses the tragedy of ancient Greece through the perspectives of Dionysus and Apollo.

and standardization. While one side is calling for the independency of the artist, the other side calls that 'nature of the age' is industry and artist should obey its rules. Similarly historian Robert Wohl (2002) explains the main theme of art according to early modernist innovators as subjective, intuitive and inward-looking. This is what we will discuss in the succeeding part whether Behrens' inward-feeling is exposed with the symbols coming from arts mainly from literature, or not. Now the question is: Did he use these symbols in his designs?

## 4.2. Behrens' Designs

> Let the light of a star shine in your love. Let your hope be: "May I give birth to the Overhuman."
> Friedrich Nietzsche in Thus Spoke Zarathustra ( p. 57)

Peter Behrens' designs for the corporate identity of AEG are most of the time seen as a challenge when it is compared to his previous or later works. For instance Tilmann Buddensieg (1984[1979]) claims that in his later designs Behrens' was moving away from functional, cubic geometric style that he uses effectively in his designs for AEG. Similarly, when discussing the projects of Behrens, Frampton & Futagawa (1983) see a clear transformation in his works before and after world war and claim that there is not another European architect that this kind of transformation can be traced so clearly. When theoreticians are analyzing his works after 1907, they claim that he completely abandoned his *Jugendstil* roots in designing products for AEG. (Windsor 1981; Koss 2010) On the other hand, as I mentioned before Bletter and Anderson do not call his buildings purely functional and they see pseudo-aesthetic representation of machine in his designs. Building upon this claim, I argue that Behrens uses symbols which are vestiges from his *Jugendstil* roots and we can find them even in his most "functionalist" buildings and products. Starting with his woodcuts, I will have a brief look at his works in a chronological order to seek out the symbols that we identified in literary works.

Before Darmstadt Artists' Colony, Behrens was a member of the Munich Secession which was founded in 1892. This enabled him to meet the authorities and ambitious artists of the age. The motto of the Munich Secession was to allow only "absolutely artistic." (Weiss 1979, p. 19) There were two symbolist movements in the Secession according to Kandinsky scholar and historian Peg Weiss (1979). First one was the symbolist movement led by Stefan George the leading symbolist poet of the age in

Germany who was influenced by the symbolism of France and figures such as Rimbaud, Baudelaire and so on. Second one was the symbolist movement which was guided by Peter Behrens and a friend of Stefan George from high school, poet Georg Fuchs who was concentrated on the revolution of theater. Members of the Secession had regular meetings at the house of author Karl Wolfskehl. Since Stefan George was the host at the house the group later called as "Stefan George Circle." Peter Behrens was one of the visitors of this house and he had close relations especially with one of the members of the Secession, Kandinsky who would be later invited by Behrens to teach in Düsseldorf Academy of Arts. Kandinsky as a young painter organized several exhibitions under the heading of "Phalanx" in Munich and Behrens contributed to some of them with his works. According to Kandinsky geometric organization was the characteristic of all arts and he made references to ancient Greece in one of his exhibition posters for Phalanx which symbolized utopian social ideas. The Greek name 'Phalanx' meant a line or array of battle, and Behrens was one of Kandinsky's fellow soldiers in the war. Their aim was to create a new world fed by art and their inspiration was ancient Greece. [53](OED, 2011)

Figure 51. Behrens' Cover Design
(Source: Klingspor Archive)

Figure 52. Sturm, Behrens, 1896.
(Source: Windsor 1981)

[53] Kandinsky did not accept the offer of Behrens for teaching in the following years but it is interesting to see the influence of Kandinsky on Behrens; just after Kandinsky accepted women to his exhibitions and schools, Behrens as well opened the doors of the academy to women. (Weiss 1979)

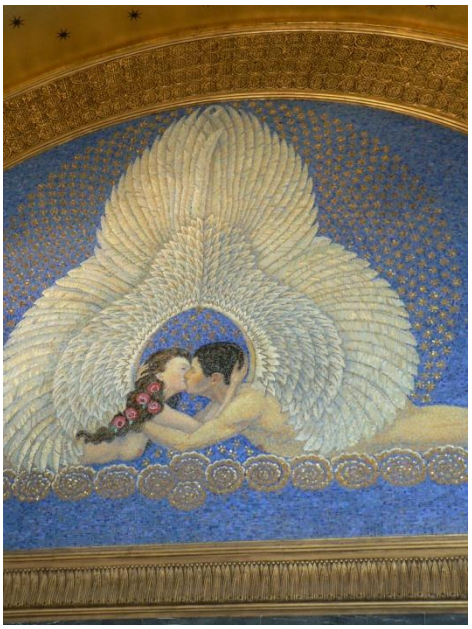

Figure 53. Kiss Mosaic of Olbrich in Wedding Tower (Source: Photo by Author)

Figure 54. Ex Libris of PB (Source: Klingspor Arhives)

Another figure which was important for Behrens was the poet and playwright Otto Erich Hartleben whose portrait was done by Behrens in woodcut. In 1896 Behrens visited Italy for the first time with Hartleben and afterwards he spent his summers in Italy until the death of Hartleben in 1905. In one of the postcards Hartleben sent a quote from Thus Spoke Zarathustra of Nietzsche to Behrens. (Windsor 1981) Nietzsche was an influential philosopher for artists of Munich Secession, and Behrens designed a cover for Nietzsche's book for Turin exhibition in 1902. (Figure 51) Crystal image and his geometrical composition were dominant in the cover even it can be called as a 'bible' with its sober and magnificent appearance. This time crystal is represented with triangles and they are illuminating the name of the book with their arrays.[54] Behrens also designed a dining room for Hartleben which contained Hartleben's portrait made by Behrens himself and Behrens' another woodcut "Sturm." (Windsor 1981) (Figure 52) In the woodcut we see a strong eagle even capable of creating wind to bend the trees of the coast. Eagle is flying over a wavy sea and the coast with trees is at the background which is presumably the coast of an island; a place for utopia and eagle is the harbinger

[54] Crystal is a great metaphor of the age especially if Bruno Taut and Crystal Chain Letters, which was manifested as Glass Pavilion in the 1914 Cologne *Werkbund* exhibition. In her article historian Bettina Zoeller-Stock (2000) draws attention to the relation between writer Paul Scheerbart and Bruno Taut in order to point to the literary origin of the crystal metaphor that is coming from literary symbols. Bletter (1975) also discusses Scheerbart and his affects on architectural fantasies through Taut's crystal and glass utopias. It should not be a surprise to see Scheerbart as a figure who is interested in theosophy like Behrens' close friend Lauweriks. (Whyte 1985) Author of the 'Glasarkhitektur' Scheerbart believes that glass/crystal is a sign for a hopeful world, which can even overcome the war. (Zoeller-Stock, 2000)

of this utopia. At this woodcut of Behrens there are two symbols that are coming from literary works. First one is eagle which is a guide both in Zarathustra and in House of Fame. Second one is the water and island. In the colony the idea to disseminate a new life was represented by Behrens through these two symbols, as a harbinger coming from a utopia.

Another woodcut of Behrens "Kiss" is made for again a dining room design, this time for his close friend Richard Dehmel.[55] (Figure 34) In the woodcut of Behrens it is hard to distinguish the sexes of the figures since both of them seem feminine. But the figure on the right side of the woodcut has more masculine lines than the other one. This is the perfect meeting of the man and woman, which can be resulted in the creation of a new life. The important part of this meeting is that it can result in a new life that can be borne by a woman. So in order to attract attention to the fertility of woman Behrens drew the man almost like a woman to stress the consequence of this meeting; giving a new life. As we will remember kiss made Parsifal to realize the magic and by this way he was able to become the king of the Grail. Similarly, there is a representation of a kiss in the wedding tower of Joseph Maria Olbrich of 1908 which is dedicated to the wedding of the Duke. In this mosaic work both man and woman have wings that make them together as a whole which is underlining the 'heavenly' side of the meeting. (Figure 53)

As I discussed in the first chapter crystal and woman symbols are used in the opening ceremony of the Colony which are the harbingers of a new life.[56] Bletter (1981, p. 31) interprets crystal for Behrens as an escape from reality to the world of "artists' own making." In another perspective Anderson (1968) takes attention to the metaphorical relation between carbon and diamond. Art can change the mere carbon into a crystal by adding value to it, which we see in Nietzsche's Zarathustra in the conversation between coal and diamond.[57] One can see the influence of the crystal metaphor in his *ex libris* of 1902, as if he had the power to convert stones into crystal or

[55] His woodcut Kiss has commonalities with the contemporaries of the age. The first one that comes to our minds is Wiener Secessionist Gustav Klimt and his famous 'Der Kuss.' This painting's colors and texture makes design historian Ann Ferebee (1980) to call it as a derivative of Byzantine mosaics. Similarly another contemporary painter is Edward Munch who painted three different versions of "Kiss" which subjects a man and a woman turned toward each other. (King 1970)

[56] Behrens used figure of woman in his vestibule design for Turin exhibition in 1902. In his vestibule two women were the dominant themes and with their wings they were creating the central motif of the vestibule.

[57] Especially in the House of Fame and Hypnerotomachia Poliphili of Francesco Colonna crystal is the representation of the sacred places where the queens are living. They are living in a palace which is like a crystal or at least they are wearing diamond necklaces which are signifiers of her queenship which are described in detail.

he turned into a crystal from a coal. (Figure 54) In addition to these symbols it is significant to see "The Arrival of Prometheus" by Georg Fuchs, an unfinished play of Goethe which was performed in the opening ceremony. In this gala performance Prometheus of the Colonists' ceremony was female and instead of fire (s)he was blessing a crystal to create a harmonious utopia. Only a female could give a new life to the people. In the ceremony, priestess was wearing a cloak like Zarathustra and carrying the 'sign' of the new life that will emerge from Darmstadt. Also Chorus in the ceremony proclaimed according to the text of Fuchs "We have awaited nothing in vain; the sign radiates, the time is here!" which is a theme taken from Zarathustra's last part. (Koss 2010, p. 104) There are also similarities with this ceremony and Parsifal of Wagner which can be called as an influence of Wagner on Fuchs and Behrens. Wagner chose white cloaks for the knights of the Grail. And at the last act Parsifal enters to the stage in completely black armor which was the last act that will make him the King of the Grail.

After looking at the opening ceremony it can be interesting to look at Ernst Ludwig House at the Colony in terms of the symbols. At the entrance of the building Olbrich placed two big statues of a man and a woman which are looking at each other for the perfect meeting. Also he placed two iron female statues perhaps goddesses or muses, just beneath the entrance door. (Figure 55-56) They have wings and in ancient costumes they are carrying a circle adorned by laurel leaves. More than carrying it their intention is to present it to the people who can understand the value of their art and enter from the doors of the Colony. Olbrich was not the only one using references to antiquity. Colony's fresh painter turned architect Peter Behrens designed vignettes for the end of the opening ceremony which had strong influences from ancient Greek motifs. (Figure 57) This vignette rendered a crying woman. She was calling for a new life drawing parallels with the lyrics of the chorus line. [58] When the use of these masks are considered, it should not be a surprise to see this kind of masks in the portal of the Wiener Secession building of Olbrich which have curvy hair like snakes. (Figure 58) When we look at another poster designed by Behrens for the Colony, he glorifies woman this time with a crystal. A woman is holding a crystal while standing on a crystal. She is a noble woman with her crown and this is stressed by the crowns on both sides. The shape of the poster makes us to read painting in a vertical action. Thus, it can

[58] Beside antiquity some specialists also see Egyptian effects on the works of Behrens for the Colony. Koss (2010) finds an Egyptian aura in Behrens' covers for Feste des Lebens. In addition to the Egyptian aura one more time it is seen that the woman figures in these covers as the caryatids of a portal like frame.

be interpreted as she gave birth to the crystal which was inside her and then showing it to people as a new sign, a new life.

Figure 55. Detail from Ernst Ludwig House
(Source: Photo by Author)

Figure 56. Entrance of Ernst Ludwig House
(Source: Photo by Author)

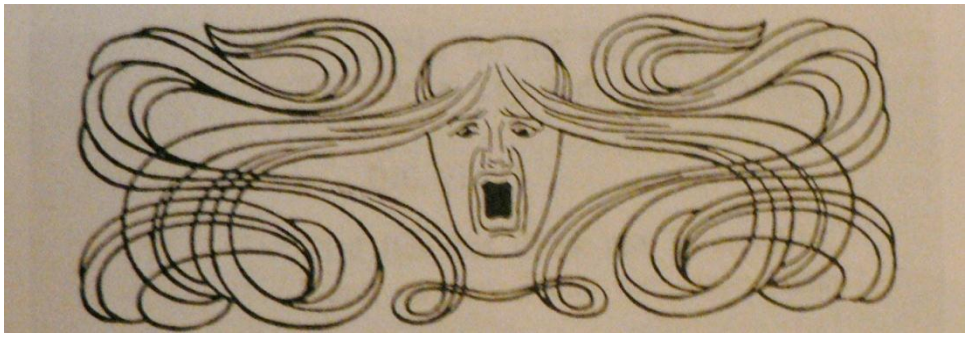

Figure 57. Vignette of Behrens
(Source: Koss 2010)

Figure 58. Wiener Secession Building – Detail from the Façade
(Source: Photo by Author)

Behrens' house for the colony has crystal figures in the music room which is at the center of the house. Music room is the main room of the house which is connected with the others. (Figure 59) Anderson describes the room as follows:

> …in the music room of Behrens's house we find the crystal obsessively present. The symbol generates the decoration of the floor and the ceiling; it is present in the candelabra, music stand, and specially designed piano; ritual figures bearing crystals appear in the inlay of the walls; even the window blinds are perforated to pattern rays of natural light from crystalline shapes. (Anderson 1990, p. 116)

In addition to crystal, there are also eagle motifs in the tiles for the vestibule of the house. (Figure 60) They are stylized and abstracted but in terms of the general context of the house the reference for an eagle is explicit. Behrens used the metaphors coming from literature not only in the ceremony but also in his house. These are the metaphors made Asschheim (1992) to call this house as 'Zarathustrian Villa' as I mentioned in the first chapter. Works of the Colonists were full of symbolism which was criticized by Adolf Loos. According to him building is for users or admirers it is impossible to satisfy both of the sides. *Jugendstil* attempted this but was unsuccessful and sacrificed use for symbolism. (Schwarzer 1995)

In the period between leaving the Colony and becoming an advisor to AEG Behrens worked as the head of Düsseldorf Academy of Arts. In this period he invited several artists to run courses in the academy but at the same time he designed several buildings and pieces for other companies. Anker Linoleum Company which was located in Delmenhorst –linoleum was city's major industry– was one of these companies that he worked for. His designs for the company mainly started in the year of 1905 and continued till 1915 which means he was still designing some products for linoleum when he was the artistic advisor to AEG. One of his first linoleum patterns was a geometric one which contained a square in the center of a circle and was used to pave the Town Hall of Bremen. (Hellmann 2000) (Figure 61) In terms of Platonic cosmology we can read it as macrocosm within a microcosm. This is not the only linoleum pattern he designed for Anker, he designed several patterns in between 1905 and 1912. His designs for linoleum patterns are mostly fed by the geometrical shapes such as triangles, squares and circles. (Aschenbek 2000)

Figure 59. Music Room in Behrens House
(Source: Anderson 1990)

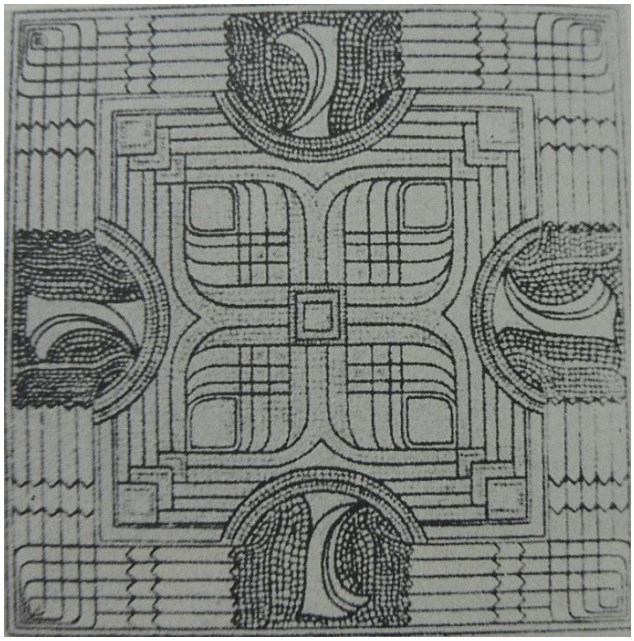

Figure 60. Vestibule Tile of Behrens House
(Source: Asscheim 1992)

Figure 61. Linoleum Design, Bremen.
(Source: Aschenbek 2000)

Figure 62. Linoleum Design
(Source: Aschenbek 2000)

Figure 63. Behrens *Kursiv*
(Source: Klingspor Archive)

Behrens' linoleum designs contained circles and squares which were representatives of the Platonic cosmology and had references to antiquity, as I will discuss in his architecture for Anker. [59] We can see the persistence of these forms in his designs that made him to use the same motifs for his linoleum designs which had similarities to his typeface Behrens *Kursiv*. (Figure 62-63) Beside the linoleum patterns Behrens also designed a logo and brochures for Anker. (Figure 64) However it is hard to

[59] For instance when we look at Celcus Library in Ephesus we see clearly the use of circle in a square as marble paving which can be called as a macrocosm in microcosm.

see the consistency in his designs for Anker. He worked on logo, printed materials, products and exhibition buildings for Anker however in terms of building a consistency it lacks the design vocabulary to make these designs to belong to the same family. Nevertheless it was a predecessor for AEG and paved the way for his corporate identity design for AEG.

Figure 64. Brochures for Anker Linoleum
(Source: Aschenberg 2000)

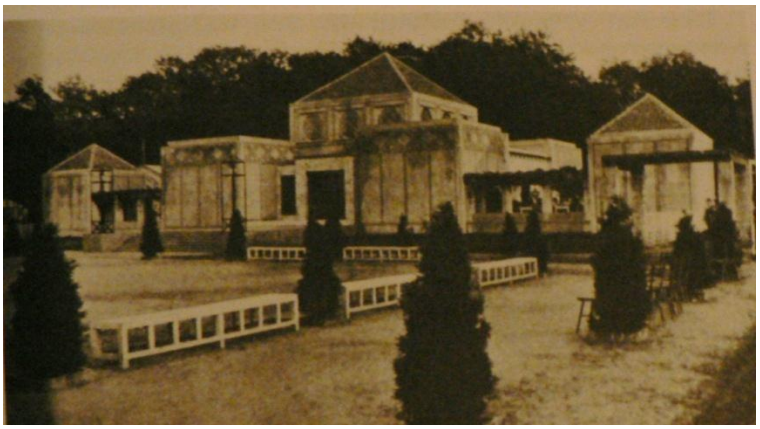

Figure 65. Art Exhibiton in Oldenburg
(Source: Aschenberg 2000)

In terms of architecture he designed two pavilions for Anker in 1905 and in 1906 respectively for the exhibition in Oldenburg and Dresden. As historian Watkin (2005) pointed out, the influence of Tuscan Renaissance especially in his first pavilions. These pavilions perhaps made Muthesius to call Behrens as 'façade artist.' (Wilhelm 1984[1979]) Historian Nils Aschenbek (2000) describes Behrens' pavilions for Oldenburg as follows:

> There is no doubt that Behrens employed the means of classic architecture; in Oldenburg, an acropolis was created with side temples of industry and the main temple of art. The art gallery shows a smooth, almost completely undecorated façade. Only a geometrical ornamentation, painted in black, decorates the squares, intensifies their constructive effect. No doubt the arrangement of the building elements and the geometrical ornamentation were not the realization of a modern concept functionality. On the contrary, Behrens wanted to show that his architecture was arranged virtually according to the laws of nature – the "cubismus" was a conversion of an almost mythic quality. The architecture was to appear as if emerging out of the ground, as if, in a crystalline manner, it had grown out of the requirements of scenery and culture. (Aschenbek 2000, p. 151)

The façades with black and white colored geometrical ornaments make references to Renaissance. His visits to Italy were without a doubt should be one of the reasons. In his art exhibition building he used simple cubes which were representatives of the world. (Figure 65) Façades were ornamented with squares which were designed symmetrically. Three of the buildings were finished with pyramidal roofs which was another element from Plato's cosmology. Main building of the exhibition was adorned by three rose-window like ornaments containing circles in squares like his patterns. There should be little doubt that he was aware of the meanings of these platonic cosmology especially we consider his friends like theosophist Lauweriks and his visits to Italy. It cannot be a coincidence to use rose-window like ornaments for his "temple of art." In his pavilion for Anker holy circle motif gave its place to triangles and he designed a tripartite elevation which is alluding to the number of symmetry. (Figure 66)

Figure 66: Pavilion for Anker Linoleum in Oldenburg
(Source. Aschenberg 2000)

It can be interesting to analyze his crematorium in Delstern (1906 – 1907) which bears similar characteristics with his pavilions for Anker before his second pavilion. (Figure 67-68) More than a crematorium it is a temple with its pediment and rose-window on the gable. Square and circle were the main motifs that he used in this design

and the tower was not that different from the bell tower of the Tuscan Renaissance churches.[60] (Figure 69) In the interior, like the exterior, he used geometrical compositions, elements from Plato's cosmology. It is almost an imitation of the churches in Tuscany. For instance in *San Miniato* of Florence there are similar geometrical arrangements as we come across in Behrens' designs, and it is almost impossible not to claim that he is under the influence of Renaissance style. (Figure 70)

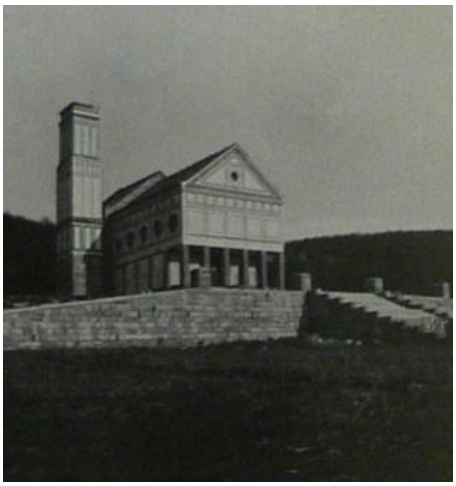

Figure 67. Crematorium in Hagen
(Source: Cremers 1928)

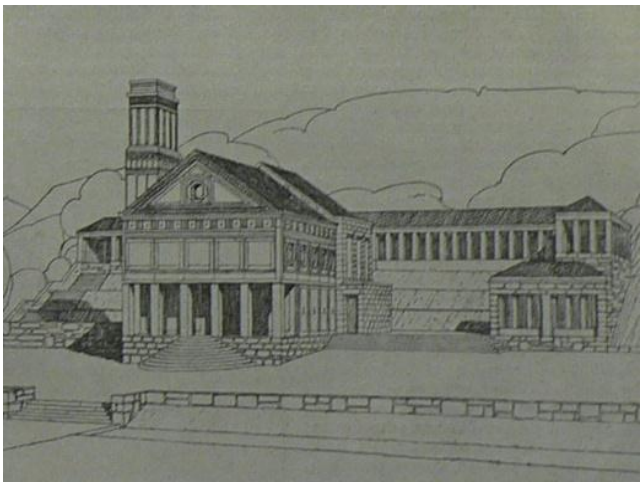

Figure 68. Crematorium in Hagen
(Source: Cremers 1928)

His other pavilion for Dresden embodies similar references. (Figure 71) This time he designed an octagonal building which was finished by a dome on a drum. Four of the edges were extended forming a cross juxtaposed by an octagon. This plan type was not something new for Behrens and the similarity between Dehmel's ideal theater and this pavilions' plan organization is significant. (Figure 72) One of these extensions was designed as an entrance canopy which was supported by ancient Greek columns. Frieze of the building was adorned by squares and circles. Name of the company and logo of it were attached to the building which in a way branded the building a temple of the Anker Linoleum Company. His designs were predecessors for his designs for AEG and perhaps got Paul Jordan's attention to hire him. His designs for AEG have commonalities with his previous designs such as the use of octagon as a symbol which I will discuss again in his pavilion for AEG.

[60] It can be interesting to note that Wagner went to Cathedral of Siena while he was composing Parsifal. Siena Cathedral was one of his "scenic inspirations" (Sternberg 1998, p. 334)

Figure 69. Bell Tower of Siena Cathedral
(Source: Photo by Author)

Figure 70. Façade of San *Miniato* in Florence
(Source: Photo by Author)

Behrens' pavilion for German Ship-Building Exhibition in Berlin which was his first building for AEG was an octagon in its plan like his previous pavilion for Anker. (Figure 6) But this one had more distinct crystalline form when compared with the Anker Pavilion with its faceted lines, its extensions ending with pediments. Rotated squares and three-repetitive Romanesque arches and ornaments in friezes are reminders of Tuscan Renaissance architecture. In the first part I mentioned the similarities of this building with the Baptistery of Florence and San Vitale in Ravenna.[61] (Figure 73) Another reference is Aachen Chapel of Charlemagne. Not only in the plan scheme but also in the geometrical arrangements of the marble flooring there are octagonal shapes.[62] (Fig 74) This pavilion of Behrens was based on an octagonal plan which was the representation of the number eight that alludes to a new beginning. Like baptism was a beginning for a child to be a Christian and it was symbolized by octagon, Behrens did the same for his first building for AEG which alludes to a beginning of a new life, to 'metropolis.' In addition he tried to give a crystalline shape that is involving references

[61] Octagon is used in the Colony as well. An octagonal addition attached to Ernst Ludwig House in 1904 in order to place artists' ateliers in the Colony.

[62] It is significant to see Charlemagne to imitate San Vitale when he visited Ravenna and even took a statue from Ravenna to place in his palace. (Hiscock 2007) His chapel was based on an octagonal plan in order to symbolize the beginning under his kingdom. Not only Charlemagne but also Kandinsky was inspired by San Vitale. He explained the geometric order which was the essence of all arts for him through the mosaics of San Vitale. (Weiss 1979)

to antique/classical architecture which makes the pavilion a crystal that will give a new life to the people.

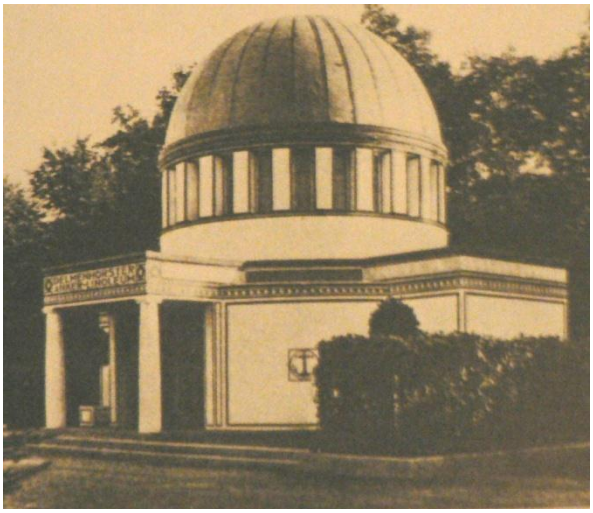

Figure 71. Pavilion for Anker, Dresden
(Source: Aschenberg 2000)

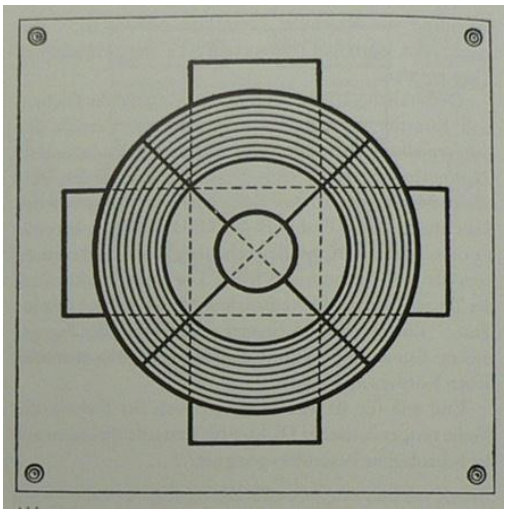

Figure 72. Dehmel‘s Ideal Theater
(Source: Moeller 1991)

Figure 73. Baptistery of Florence Cathedral
(Source: Photo by author)

Figure 74. Octagon Motif in Aachen Chapel
(Source: Photo by author)

Another crystal formed work that he designed for AEG was his kettle which is most famous of all his products. (Figure 28) As I discussed in the second part it is almost impossible not to recognize his references to antiquity. In the same way there are similar motifs in his humidifier for AEG which has the form of a Greek vase and it shouldn’t surprise us to learn from industrial design historian Lucie-Smith (1983, p. 99) that Behrens had a “good collection of Greek vases.” (Figure 75) It is possible to find more references to classical style in almost all of his designs for AEG. Because of these

classical references and neoclassical designs Lucie-Smith (1983) claims that some of the historians doubt that some product designs belong to Behrens. However I claim the opposite, Behrens' design language consists of references to antiquity and symbols. To give another example we can have a look at his toaster again that I discussed in the first part. As we mentioned with being a necessity he used crystal shaped holes for his design. (Figure 30) It cannot be a coincidence to come across with the same crystal in his doors that was designed by him for his music room of his house in Darmstadt. (Figure 76) In the center there is the crystal reflecting its light and spreading its rays all over the door. Also there are similar references this time hidden in an abstraction of geometry which is the essence of classical art as I discussed.

Figure 75. Humidifier for AEG
(Source: Archive of Deutsches Technik Museum)

Figure 76. Music Room Doors of Behrens House in MathildenHöhe Museum
(Source: Photo by Author)

His brochures had the symmetrical order which is obtained by the careful use of geometrical proportions and shapes. Geometrical order substitutes antiquity and again circles, squares, triangles and octagons are the ones that construct his geometrical arrangements as we see from his covers and calendars. (Figure 77) It should not surprise us to see an eagle in the book cover of twenty-fifth anniversary of AEG in 1908. (Figure 78) Messenger of the Zeus is perched on a wall and it is the harbinger of the new age

and at the background we see the chimneys of the factories which will give a new life to the metropolis.[63]

Figure 77. AEG Covers & Calenders
(Source: Buddensieg 1979[1984])

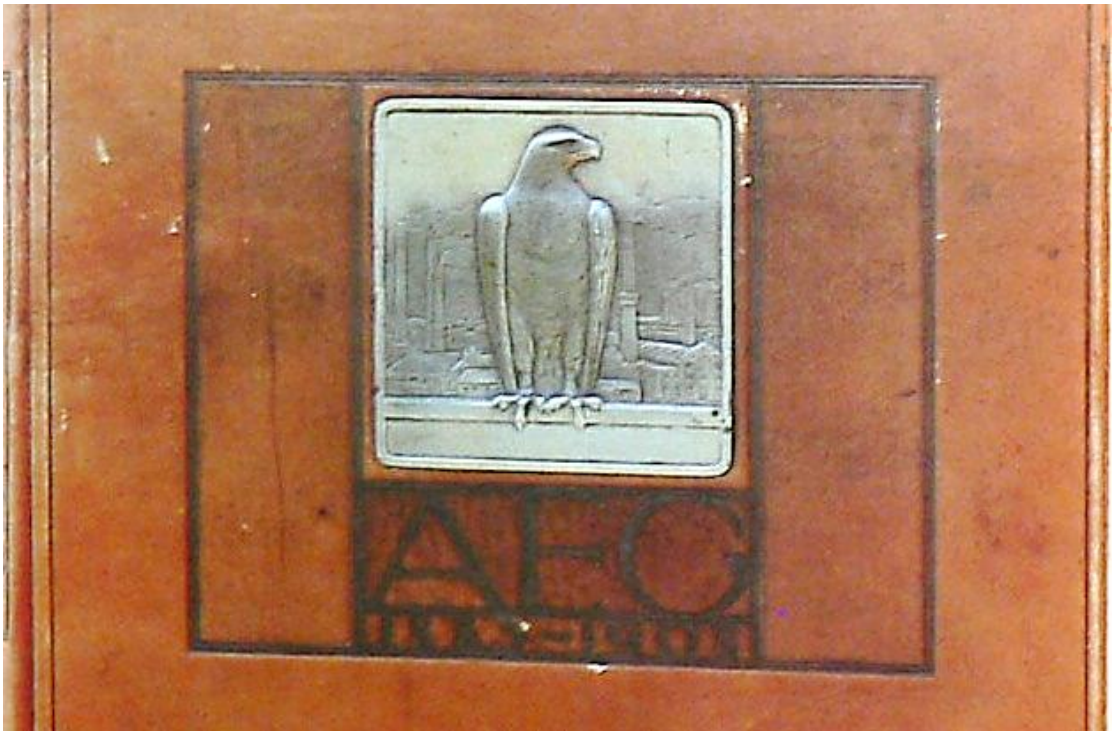


Figure 78. AEG *Festschrift*
(Source: Buddensieg 1979[1984])

Tafuri and Dal Co (1979) claimed Turbine Factory of Behrens gave a new life to metropolis like the crystal of Darmstadt. (Figure 19-20) They also saw some vestiges of antiquity on this building. *HuttenStraβe* façade seems to justify their reading with its classical effect as we discussed before. At the turn of the century when iron was a new

[63] Eagle was used as the symbol of Empires for ages including Germany.

material and discussed in all architectural environments how and where to use it, one of the students of Schinkel, Richard Lucae in 1870 claimed that iron was not an appropriate material for architecture since it lacked the monumentality that architecture needs. (Schwarzer 1995) Behrens seemed to have the same hesitations while using it on the façade of the building and succeeded in giving a monumental appearance to this iron-structured lightweight construction via hiding steel under the heavy corner pylons and the gable. He also attached a crystal as a rose-window to this façade above his inscription carved with Behrens *Antiqua*. On the other hand, BerlichingenStraβe façade was dominated with the appearance of steel and it barely has symbolic motifs. But when we look at the texture of the pillars they follow each other by forming hexagons –like his logo– which are put one under the other. In addition, he divided the façade into odd numbers in order to achieve absolute symmetry.[64]

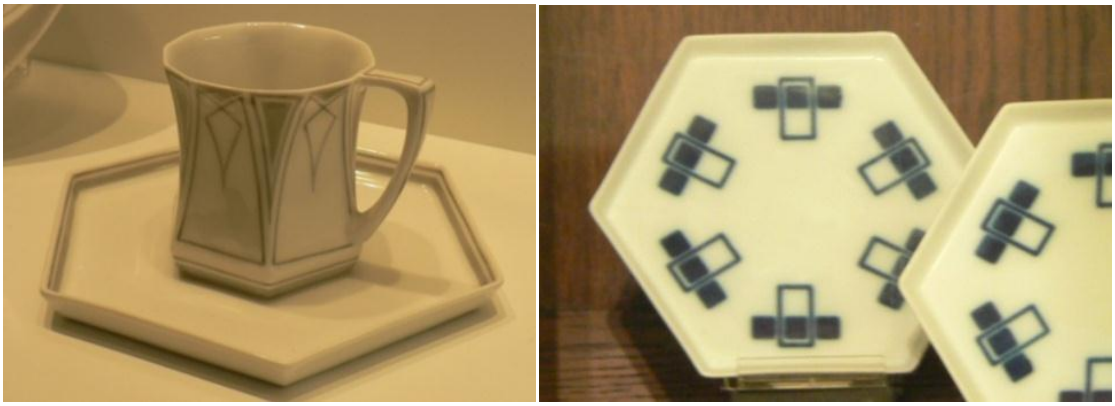

Figure 79: Cup & Plates of Behrens in MathildenHöhe Museum
(Source: Photo by Author)

Hexagon is used in the logo which was repeated again three times in a bigger hexagon. (Figure 44) This is not the only time he used hexagons. Behrens' also designed cups and plates which were hexagonal in shape for his house in the Colony and exhibition room he designed for Wertheim Department Store. (Figure 79) In a symbolic reading hexagon represents six which alludes to the perfection of the creation. Hexagon was one of the geometrical shapes that he used abundantly when he became a consultant for AEG. Hexagon is an important motif also in Colonna's book Hypnerotomachia Poliphili. The fountain of the Venus which Poliphilo reaches almost at the end of the

[64] I also assume that colors of the building are not by coincidence since linen-yellow is the color of the symbol of the cube which represents the world. (Hiscock 2007) For metal work green is selected which symbolizes absolute restfulness according to Kandinsky. He uses yellow as an earthly color, blue as heavenly color and green is the mixture of these and therefore the most restful color. (King 1970) Behrens' intention to create a restful world was represented through these colors.

first book is hexagonal and similarly the fountain of Adonis has a hexagonal shape which is quite similar to his logo for AEG. (Figure 80-81) Even all the shapes in the book of Colonna are bordered with double lines as the Behrens' designs for AEG.

Figure 80. Temple of Adonis (Source: Colonna 2005[1499])

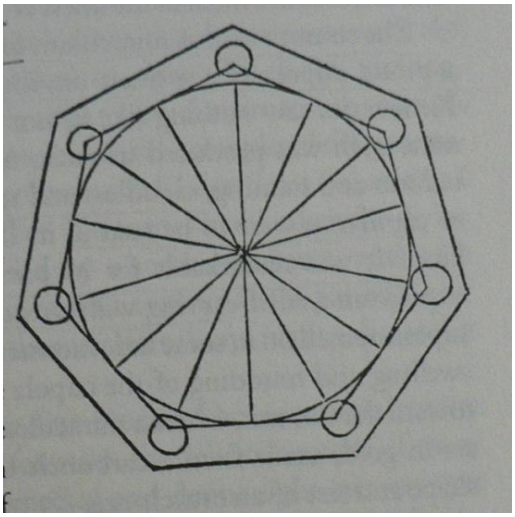

Figure 81. Fountain of Venus (Source: Colonna 2005[1499])

As I discussed before, Behrens designed Behrens *Antiqua* which was rooted from Renaissance and *Roman* fonts. To give an example we can compare this typeface with the typeface in Santa Maria Degli Angeli's gnomon in Rome. (Figure 82) The similarities of the typefaces are prominent which are again references to classical architecture. After his *Antiqua*, Behrens designed his last typeface called as Behrens Medieval. (Figure 83) The symbols that he designed for the typeface which can be used for advertisements, contain almost all the jargon that are coming from our literature such as ships, Greek statues and temples, harps, masks, snakes and so on. For decorations that can be used with his fonts of *Kursiv* and *Schrift*, he designed an image of wineglass which reminds us of the crystal chalice of Wagner's Parsifal. (Figure 84) In addition he designed an adornment for his *Antiqua* which was the typeface of AEG, consisted of circle in squares. He used this decoration in his several brochures or printed materials for *DampfTurbine*, *Bühnenregülator*, *Bogenlampe* and so on. (Figure 85 – 87)

Figure 82. Detail from the gnomon in Santa Maria Degli Angeli (Source: Photo by author)

Figure 83. Decorations for Behrens Medieval
(Klingspor Archive)

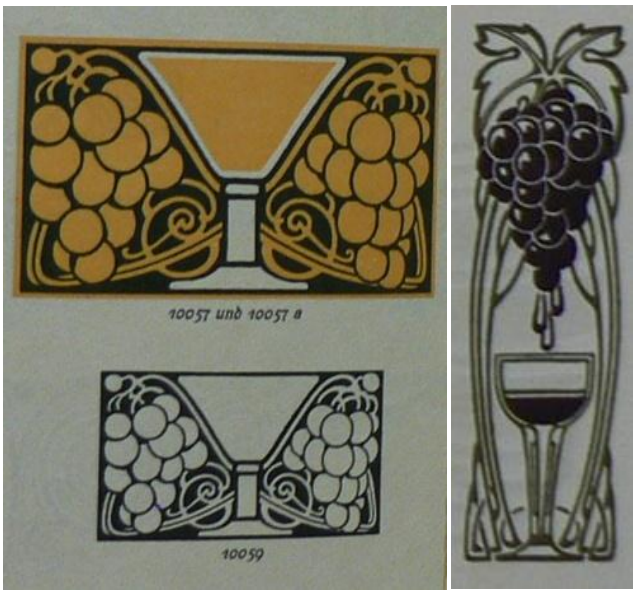


Figure 84. Decoration for *Schrift* and *Kursiv*
(Source: Klingspor Archive)

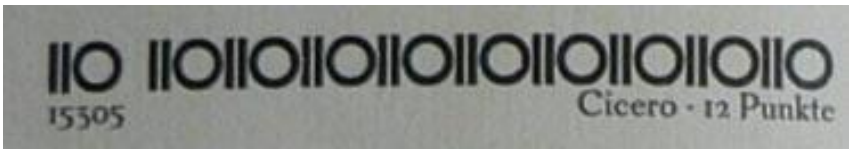


Figure 85. Decoration for Behrens *Antiqua*
(Klingspor Archive)

Figure 86. Cover for DampfTurbine Catalog
(Source: Berlin Technic Museum Archives)

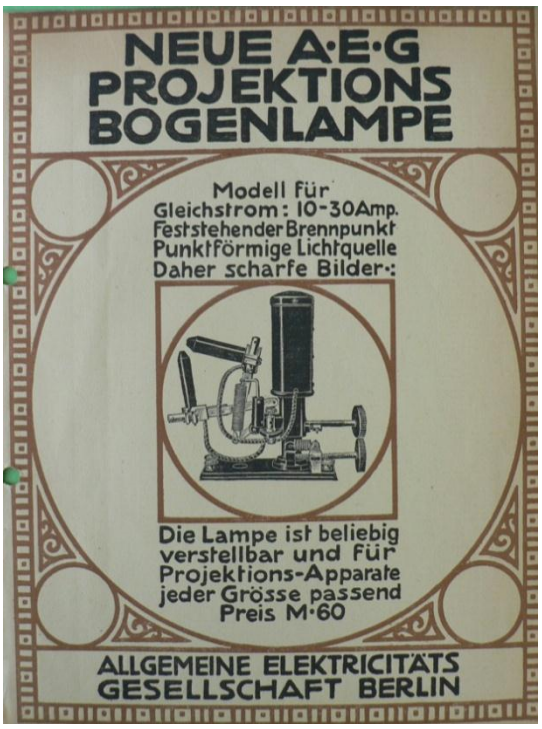


Figure 87. Cover for BogenLampe Catalog
(Source: Berlin TechnicMuseum Archives)

Behrens' works for AEG were generally dated between 1907-1914. There are two works that I want to discuss now. His 1908 poster for MiniaturLampen possibly aimed to attract consumers with the idea of Christmas tree.[65] (Figure 88) There is a golden halo surrounding the tree which attributes a spiritual meaning to AEG. He combined the idea of tree with light which reminds us of Dehmel's lines from his poem *Eine Lebensmesse*. The angel puts the lights on and gives a Christmas tree to the children. There is not the angel at this poster but the tree is sparkling with the lights put on it which will give new life to people.

Figure 88. Poster for MiniaturLampen
(Source: Berlin Technic Museum Archives)

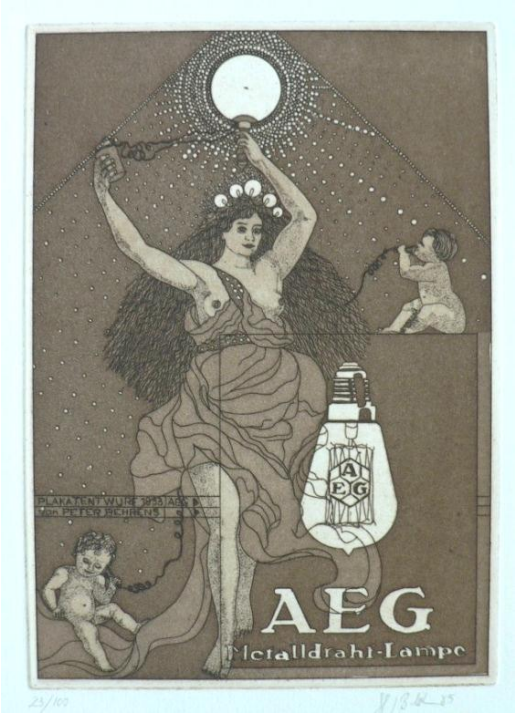


Figure 89. Poster for IctallDrahtLampe
(Source: Berlin Technic Museum Archives)

In his other work dated after his consultancy for AEG one can come across with a woman. This 1933 poster for the lamps of AEG had a completely different language. (Figure 89) Typeface seems common with his previous designs. A woman is carrying the lamp. She is simply an ancient figure exposing her body. This noble lady wore a crown and this crown's diamonds are so abstract that they remind us of light bulbs. She is carrying the lamp at her hand above her head and from this lamp she is illuminating

[65] This advertisement is printed in November 1908. So just before Christmas, Behrens perhaps wanted to seduce customers with the image of the tree.

the surrounding environment. There are two babies talking on the telephone with smiley faces and at the right corner of the page there is the hexagon logo again as the wires of the bulb. Like the crystal of Darmstadt, this time industry is harbingered by a woman and she is carrying a bulb instead of a diamond. Children at the corners strengthen woman's role as a life-giver and at the same time underlines the birth of a new generation that can understand the value of art. New life could be given only by the perfect meeting of art and industry and this will raise the level of the public and will give higher standards to people.

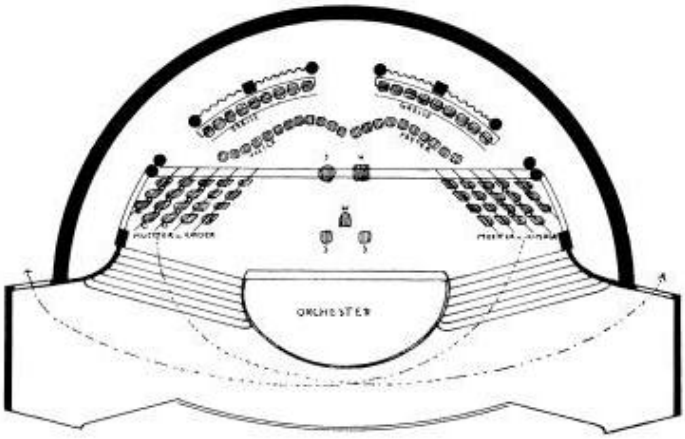


Figure 90. Performance Design for *Eine Lebensmesse*, Behrens, 1900. (Source: Windsor 1981)

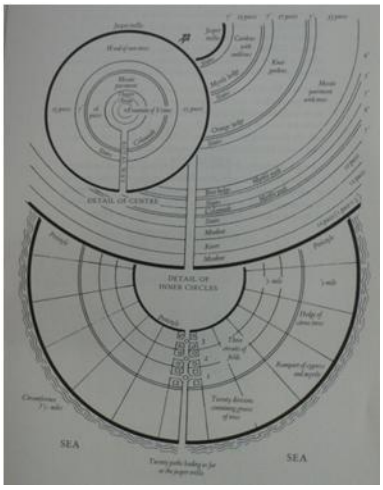


Figure 91. Temple of Cytherea (Source: Colonna 2005[1499])

Behrens' interest on antiquity possibly started with his theater reform which was discussed with artistic intelligentsia of Munich Secession. For instance Wolfskehl claimed that the reform in theater could be done through mystery plays and lyrical dialogues. (Weiss, 1979) In the Colony as I mentioned before Behrens designed a theater and choreography in order to perform *Eine Lebensmesse* of Richard Dehmel. (Figure 4, Figure 90) It is interesting to see the similarity of the plan with the plan of Cytherea which is in the book of the Fame. (Figure 91) Like the island, the plan of this theater does not have any trace of the landscape around. It can be an island by itself, or it can be built to nowhere and everywhere. It is a temple and Dehmel wrote in one of his letters to Behrens: "We will build a temple to art ourselves; it will be sacred inside." (Koss 2010, p. 303) Behrens designed a temple for their art and at this plan he was a defender of the shallow stage or relief stage of Greek theater which is explicit in his plan. (Koss 2010) In addition he writes the following in 1910 'On Art for the Stage':

> It will be a logical sequence of relief ideas which, while beautiful in themselves above all relate closely to the poetry. If they are to make a strong impression, all movements on stage must be lateral, for movement which occurs in the direction of the audience is, optically speaking, without effect. All theater depends by its very nature on this relief effect. This principle has proved its validity since the days of the Greek theater, through the tendency to employ movement in depth has at times prevailed. (Behrens, 1990[1910], p. 140)

Year of the essay is also important since he was referring to Greek theater in the year when he was already in his third year as a design consultant for AEG. Also in 1909 Behrens finally succeeded to stage a play in Hagen; his beloved friend Hartleben's play *Diogenes* which had strong references to ancient philosophy and literature. (Anderson, 1990)

Figure 92. Festival Hall for Cologne Exhibition
(Source: Windsor 1981)

At his later period works such as his buildings for 1914 exhibition in Cologne, his buildings had simple white cubical forms. But it is interesting to see his festival hall surrounding Max Fischer's main hall of exhibition and it is not a surprise to see classical references in his building. (Bletter, 1990) (Figure 92) His festival hall was different than his designs for AEG.

Figure 93. Victory of Behrens in 1896
(Source: Anderson 1990)

Figure 94. Poster of Behrens for Cologne 1914
(Source: Eskilson 2007 )

If we compare his poster for the exhibition with his early woodcut 'Victory', we see that both of them depict a naked male figure carrying a torch. (Figure 93-94) In the early version the male figure is coming from the sea, perhaps from the island of the utopia and bringing the light to human-beings. On the other hand, the poster has a geometrical composition based on Behrens' familiar style. Text area is almost the half of the figure area and text is arranged in three-zones; established by different heights of the texts. The figure is free from curvy lines of *Jugendstil*. Even the horse he is riding is rectangular and stylized. This was a reference to the expressionist group of *Der Blaue Reiter* (The Blue Rider) which was headed by Kandinsky, using riders as a symbol for expressing themselves. The hope of bringing light to human-beings and creating a harmonious utopia was his idea when Behrens was a member of Munich Secession and did not change when he became a member of *Werkbund*. Only the styles were changed without changing the references to antiquity and the dream of a harmonious society. These references were also present in his later designs for the administration building of Hoechst Dyeworks. (Figure 95-96) This time he designed a courtyard lit by three skylights in the form of crystal. In order to support his idea he used the colors of the

rainbow on the surfaces of the bricks which like crystal separating light in the colors of the rainbow.

After designing and realizing his first building in Darmstadt Artists' Colony Behrens described architecture as follows:

> Architecture is called Baukunst and brings together in its name …the art of knowledge, the command of the practical, useful discipline of building, and the art of beautiful. There is a liberating quality in this, when one sees the two concepts of **practical utility** and **abstract beauty** united in one word. (Behrens 1901, p. 207, emphasis by author)

It is obvious that he seeks practical utility with the search of abstract beauty. So it is clear that he did not claim that practical utilities can determine architecture on its' own. He attached importance to the practical utility as much as abstract beauty. After nine years of this statement he tells the following when he was still designing for AEG:

> The contrast between simple machine production and florid design would be very disturbing. The ornament, therefore, should always have a rather **impersonal character**. The so-called **geometric manner of ornament** comes nearest to this requirement. (Behrens 1910, p. 209, emphasis by author)

For Behrens, ornament should not dominate the nature of machine production but rather it should always have an impersonal character. Therefore, the symbols and references to antiquity in his works, even for AEG, correspond to these geometric ornaments.

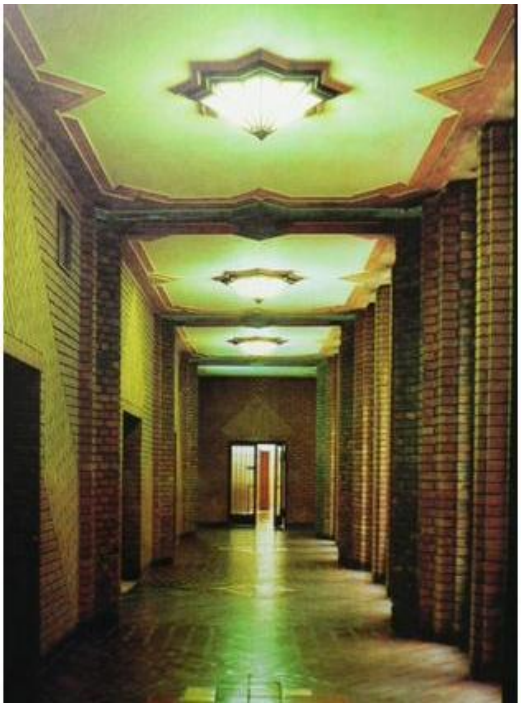

Figure 95. Hoechst Dyeworks Administration Building (Source: Hoechst Dyeworks Catalogue from Darmstadt Archive)

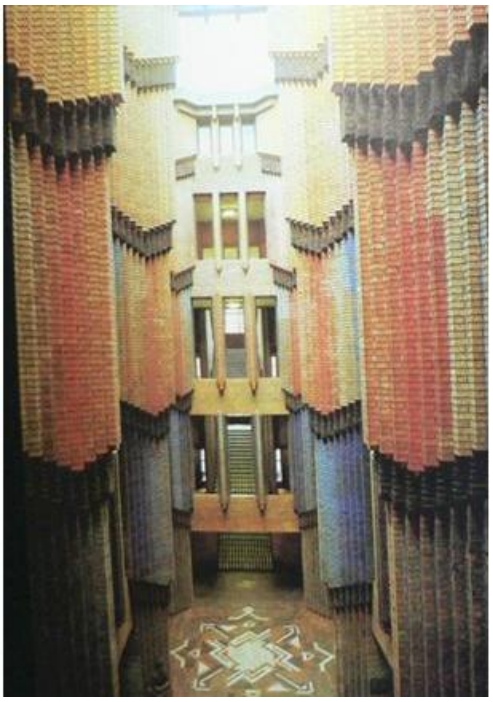

Figure 96. Hoechst Dyeworks Administration Building (Source: Hoechst Dyeworks Catalogue from Darmstadt Archive)

# CHAPTER 5

# CONCLUSION

> All art is at once surface and symbol. Those who go beneath the surface do so at their peril. Those who read the symbol do so at their peril. Oscar Wilde (Quoted in Ferebee 1980, p. 61)

Peter Behrens designed the first corporate identity for AEG from typefaces to products. His designs spoke the same language, which made them consistent and they created a reliable and strong image for AEG. Scientific management and mass production techniques had influences on the Behrens' designs but one cannot claim that these were the only forces that shaped his design. More than these one can see symbols of classical art with an abstracted endeavor and I argue that it is not possible to understand the Behrens' designs for AEG without understanding classical art and symbology. Therefore the discussion of this thesis was threefold, two of which were closely related with each other.

Firstly, Peter Behrens' works for AEG were the predecessors of a corporate identity design, with their four characteristics. Initially, his designs had a holistic approach that covered all of the design fields that were related with AEG. Behrens created a unique typeface for AEG called as 'Behrens *Antiqua*' and used this for all of his designs. He designed several logos until he found the best that was in accordance with the image of AEG – still in use today. He dealt with the design of advertisements and printed materials in order to control the language that AEG spoke with the customers. He was responsible from company's products and designed products for AEG to manufacture. And he designed buildings for AEG. Second, these products spoke the similar language. His designs underlined the strength and reliability of the company, which was an important image for a company that was trying to be the leader of the market of domestic appliances. He used similar geometric arrangements and references that made them to speak the similar language. Third, while designing for AEG he considered the market necessities as well, which was the wish of Walter Rathenau too. At that age ornamented models, which were produced by mass-production, were

despised as cheap and coarse.[66] He recognized this behavior and gave public the products which constituted the elements of a new style. While implementing this new-style his idea was to educate the public with art and to give a better life to the people, like most of the intellectuals of the age.[67] Fourth, his corporate identity design for AEG differentiated AEG from the competitors and paved the way for the market success of AEG. While other companies were not even considering creating a logo, he designed a unique typeface, products and buildings for AEG. Anderson (1968) claimed that his works influenced marketing strategies of their contemporaries such as Olivetti and IBM. Similarly, Ferebee (1980) stated that Olivetti started a similar identity program in 1930s with the inspiration from AEG. For future studies it can be interesting to analyze the works that were done for Olivetti or IBM.[68] This can contribute to our understanding of corporate identity and its history which is neglected generally in the historical studies. Also another research can be done through the contemporaries of AEG such as Siemens in order to situate Behrens' designs and compare their maturity with the products of the companies of the age which were not included in the scope of this thesis. In the extension of history of corporate identity, to compare corporate identity and *Gesamtkunstwerk* can be challenging. As well this can enlighten the transformation of the utopia of modernist architects into capitalistic processes which can be based on the critiques of Venice School.

Secondly, there were influences of scientific management and mass-production techniques in the Behrens' designs for AEG. Functionalism, rationalism or utilitarianism, which were closely associated with the understanding of modern architecture, were closely related to these theories. When historians refer to these concepts they read them through the lens of scientific management or mass-production techniques. This thesis took a closer look at scientific management theories and mass-production techniques and identified five points that influenced modernist architects and designers. First of all, leaders of scientific management and mass-production techniques such as Henry Ford, Frederick Taylor and Frank & Lillian Gilbreth underlined the

[66] Ornament was the characteristic of hand-made models and they were precious since they were done in a long time and they were unique. Yet when mass-produced models imitate the hand-made ones they are not valuable anymore and disdained as cheap.

[67] To remind the discussion, I want to take attention again to the theory of Venice School. Tafuri, Dal Co and Cacciari claimed that the aim of the intellectuals was resulted in a different way. Rather than educating the public with their art to have a better life, intellectuals and artists of the age, created art that industry and capitalist processes used to make people to consume more and more.

[68] Indeed there could be other companies that were using design to represent their identities.

importance of standardization and interchangeable parts. Secondly, like the artists' of the age, leaders believed that they can create a utopia of happy people and their theories can lead people to this utopia. Thirdly, in order to realize this utopia, intellectuals believed that they should behave like the priests of the utopia and educate the people. Fourthly, they should reject the past or tradition and should look forward to the possibilities given by industry. Fifthly, they should reject all unnecessary elements which are not necessitated by the manufacturing processes and emphasize the necessary ones. When I analyzed the works and claims of Behrens for AEG I found the influences of the first three points. He used standardized and interchangeable parts in his designs for AEG. When designing for AEG his idea was to realize his utopia of harmonious world and thought that industry would help him to spread his art around the world. This way industry would help Behrens to educate the people to realize this utopia. And he did his best as a priest of the utopia while designing for AEG. However, while he glorified the elements that are connected to industrial processes he neither rejected the past –or tradition– nor did he abandon the use of the parts that were not originated from manufacturing processes. Some historians called Behrens' works for AEG as the exact representations of the industrial processes.[69] Others such as Anderson and Bletter saw more than the representations of these processes and I built my argument upon their claims. Scientific management and mass-production techniques had influence on Behrens' designs for AEG however they were not the only concepts that shaped his designs for AEG. This finding led me to look at the underlying idea in his designs that formed the third discussion of this thesis.

Complementing the second finding, I claim that Behrens' designs for AEG embodied symbolical meanings. His relationship with symbolist artists in Munich Secession influenced him to use symbols and this was started with the crystal of Darmstadt and developed with the influence of J.L.M. Lauweriks in Düsseldorf Academy of Arts. There were two sources for his use of symbols. First one was literature as I discussed through *Eine Lebensmesse*, *Thus Spoke Zarathustra* and *Parsifal*.[70] There are five repeating themes which are mainly gathered around the metaphor of 'utopia of a better life.' Crystal is the symbol representing the utopia.

[69] Historians such as Nikolaus Pevsner, Reyner Banham, Henry Russel Hitchcock, Adolf Behne saw Behrens' works especially his Turbine Factory as exact representation of functionalism. We discussed all of these and as well other historians' claims in the second chapter.

[70] And also I referred to Hypnerotomachia Poliphili and House of Fame.

Because crystal has the capacity to transform the normal light to beautifully colored rays and it is formed by a transformation from an ordinary coal. Woman as the bearer of the crystal is the second symbol. She is capable of giving new life and creating the new generation that can understand the value of art. This understanding could lead people to the utopia. In literature, writers distinguished their utopia from the real world, physically by water and intangibly by dream metaphor which are the third and fourth metaphors respectively. Last symbol is serpent or eagle which is the guide that leads them to the utopia.

Second source for Behrens' use of symbols came from antiquity. Christian Platonism, which had its roots in Platonic cosmology and in Pythagoras' number theory, was already appropriated in many religious buildings. The symbols coming from these two sources showed themselves not only in his works before AEG but also in his works for AEG. So I do claim that it is necessary to discuss the works of Behrens for AEG with a consideration of symbols coming from literature and antiquity. Symbolism in his work can also remind us of looking beyond functionalism in the works of Behrens' contemporaries. Since it is very likely that there were architects other than Behrens who used symbols and yet categorized as representatives of functionalism. Looking from the symbolist perspective can lead us to the discussions of symbolism in modern architecture and can help us avoid oversimplifications and reductionisms.

When we come back to our discussion of Behrens' use of symbols, there is an important question left unanswered. How can we explain Behrens' attitudes and his different styles in different periods? When someone looks at his buildings in a random order it is almost impossible to believe that they are designed by the same architect. The reason was his close association with power. This made Watkins (2005 [1986]) to explore Behrens' capability to work with different clients with different backgrounds. He behaved according to the needs and expectations of the clients. Similarly Anderson (1968, 1991) makes a more or less similar claim in discussing Behrens' attitudes to his clients. Anderson claims that for Behrens architecture always served the dominant power and even argues that Behrens' goal was not to realize the utopia of harmonious society, but just to celebrate the central authority. I do not fully agree with this statement since I found many symbolic references in all of his works until AEG. It is noticeable that his works change formally according to the central authority or the client he had. But there were repeating themes in his works for AEG as well, which connected them to his previous works as discussed in the thesis.

Joan Campbell (1978) in her book *The German Werkbund* calls Behrens as a right wing opposing the left-wing radicals. She also sees Behrens as a philo-semitic which made him to dismiss an architectural assistant on the instigation of office manager's Jewish wife. However during the World War II she explains Behrens' role as an admirer of Führer and adds that when most of his contemporaries were forced to emigrate, he went back to Germany and continued to work in a prominent position and enjoyed the patronage. All these claims expose that Behrens behaved according to the power. So according to the powerful organization he sometimes used references to antiquity explicitly or used them indirectly with the symbols as I discussed in his buildings and designs for AEG. His references and symbols that he used in his designs for AEG were closely related with antiquity since it was seen as an ideal society which was closer to the harmonious utopia of the artists.

Behrens used symbols or vestiges from classical architecture, but he did not write about them. There may be two reasons for this. First of all, a symbol cannot be a symbol when it is exposed. The essence of symbolism is to make readers find the hidden meanings and sub-texts. Secondly, he always played a peacemaker role and behaved according to the power. He did not make open references to antiquity when he was designing for AEG since the trend was on simplification of the designs and he adapted his designs to the trend as much as he could. He acted according to the power and did what is expected from him. However while serving the power he did not hesitate to use symbols and made references to an egalitarian life. There is no doubt that one can find more vestiges of classical art and symbology in his work, and going beneath the surface should be our task even we do so 'at our peril.'

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