A Tribute to the Memory of

Sven Markelius and Uno Åhrén



by Eva Rudberg, PhD. Dr. Tech. architect, associate professor and former researcher at *Arkitekturmuseet* (museum of architecture)

Royal Swedish Academy of Engineering Sciences (IVA)

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Presented at the 2017 Annual Meeting of the Royal Swedish Academy of Engineering Sciences

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The Royal Swedish Academy of Engineering Sciences (IVA) is an independent, learned society that promotes the engineering and economic sciences and the development of industry for the benefit of Swedish society. In cooperation with the business and academic communities, the Academy initiates and proposes measures designed to strengthen Sweden's industrial skills base and competitiveness.

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Foreword



Each year the Royal Swedish Academy of Engineering Sciences (IVA) produces a booklet commemorating a person whose scientific,

engineering, economic or industrial achievements were of significant benefit to the society of his or her day. The person to be recognised in the booklet must have been born at least 100 years ago. The Commemorative Booklet is published in conjunction with the Academy's Annual Meeting.

This year two architects, Sven Markelius and Uno Åhrén, are being honoured for their groundbreaking achievements in urban planning and the development of Swedish functionalism. Both men helped create numerous well-known buildings and contributed fresh ideas on how cities should be planned to achieve attractive living environments. Among Sven Markelius' creations are the Helsingborg Concert Hall, a number of well-known single-family homes and Sverigehuset (Sweden House)

Björn O. Nilsson President of the Academy

at *Kungsträdgården* park in Stockholm. He planned suburbs such as Björkhagen, Högdalen and Vällingby while serving as urban planning director in Stockholm. He was also an active debater, including with Uno Åhrén and others in a radical pamphlet they published called "acceptera" (accept). Uno Åhrén took the initiative to create an urban plan for Årsta Centrum, one of the first neighbourhood centres, which was built based on inspiration from British neighbourhood planning. He had many strings to his bow. In addition to being an architect and urban planner, he was also a designer of furniture and wallpapers.

Through their contributions, Uno Åhrén and Sven Markelius are now considered the main figures in bringing functionalism to Sweden and as such have had had an inestimable influence over urban development in this country.

We wish to extend our sincere thanks to Eva Rudberg, the author and PhD. Dr. Tech., for the extensive and involved work she devoted to this year's commemorative booklet.

Arne Kaijser Chairman of the Medals Committee

Sven Markelius and Uno Åhrén,

pioneers in the new architectural and urban planning ideal in 20th century Sweden

The new architectural and urban planning ideal that emerged in the 1920s in Sweden has been both celebrated and criticised. The era of modernism, or functionalism as it would be called in Sweden, began in the first decade of the 20th century in Europe. The movement was linked to rapid developments in science, philosophy, art, politics and technology in the first two decades of the 1900s.

Functionalism is characterised by fastidious design, emphasising the function and structure of the buildings. Construction in this style typically involved open plan solutions, light and airy room connections, a study of functions, experimental methods, rationality and new materials. In urban planning there was an emphasis on sunlight and green and open spaces as an alternative to crowded urban environments. A social commitment to building better homes in a Europe rife with poverty influenced many architects.

Two central figures in this breakthrough in Sweden were Sven Markelius (1889-1972) and Uno Åhrén (1897-1977). Both men were greatly committed to functionalism and the new urban planning ideology. They were active during a period of sweeping changes in society - from a Sweden where poverty was widespread to the "Swedish middle way" (Swe: folkhem, middle ground between socialism and capitalism) and the welfare state. Both Markelius and Åhrén had an impressive breadth of experience in the profession from designing interiors, furniture, textiles and individual buildings, to urban and master planning. They were also very active as writers, speakers and debaters, and had a strong commitment to housing policy.

Sven Markelius, whose father was a master painter and mother a seamstress, grew up in Södermalm in Stockholm. His surname was Jonsson but when he enrolled at the Royal Institute of Technology (KTH) and realised that there were two other students with the same name, he decided to change it to Markelius. He took the name from the farm named Mark in Östergötland where his great grandfather had been a crofter.

Uno Åhrén's father was active in the Adventist movement and was the editor of its magazine "*Tidens tecken*" (Sign of the Times) in Stockholm. Åhrén himself never had an interest in religion, but the movement's commitment to ethics and society made an impression on him and these aspects came to the fore in his role as an architect. Åhrén's mother died when he was ten.

Thus neither of the two architects had any connection to the profession to which they would go on to devote their lives. Both were skilled at drawing. Åhrén produced impressive oil paintings while still a teenager. Both were also gifted and successful students, but given their family backgrounds, trying to make a living as an artist was not an option.

Sven Markelius

Studying architecture at the Royal Institute of Technology (KTH) was a way of incorporating an artist's freedom. Markelius, who was eight years older than his future colleague, began his studies in 1909 and graduated with flying colours four years later. The architectural style of the time was national romanticism, and it was in the spirit of that era that he entered a competition for students at KTH to design a new student union building. He won the competition the same year as he graduated, 1913. But construction of the student union building was postponed for financial reasons. When a new competition was announced in the 1920s, his entry, this time in partnership with Uno Åhrén, won again, but now in a brand new guise: functionalism.

Markelius' success as a student at KTH led to two years of architecture



Markelius' student union building design proposal 1913

study at the "Mejan" art academy. There he was awarded a royal medal for an academic project. Meanwhile he was facing a difficult choice: as a talented baritone he had applied and been accepted to study opera. He decided to dedicate himself to architecture while still keeping his interest in music alive. This is reflected in the theatre and concert hall projects he would later be involved in.

As a new architecture graduate Markelius' first job was with the architecture firm of Ragnar Östberg. While there, he was involved in designing Stockholm City Hall. Later he would work for a number of architects, including Ivar Tengbom, whose architecture firm was the largest in Sweden at the time. He was also head of the carpentry design office for the standardisation commission, the purpose of which was to use standardisation and rationalisation to lower construction costs. He also worked at the urban planning office of the government agency for building and property. Meanwhile he participated successfully in several urban planning competitions in the 1910s and 1920s.

By 1920 Markelius had opened his own firm. In 1925 he won the urban planning competition for *Bygge och Bo* (an or-



Bygge och Bo 1925 ganisation that organised housing exhibitions) on the island of Lidingö, where he also designed ten detached houses. This was an architectural turning point. Many architects had left behind national romanticism in favour of a more classical ideal. Markelius' area on the island of Lidingö is a fine example of this "1920s classicism," and this was also where he made a name for himself as an architect.

The Concert Hall in Helsingborg was, however, his most important breakthrough. It began with a competition in 1925 in which he won third prize, and later another competition. This time he won first prize for his submission, a representation of 20th century classicism, also called Nordic classicism. But the late 1920s saw the rise of functionalism and Markelius adjusted his competition submission to the new style. When the building was officially opened in 1932 it was considered the best example of functionalism in Sweden.

Markelius first encountered the new architecture in 1927 when he won a scholarship and embarked upon a six-week trip around Europe to study airports. He travelled through Germany and visited Walter Gropius, the architect and founder of the

Markelius' Helsingborg Concert Hall 1932



Bauhaus School, Markelius saw the new homes built in the style as well as the famous school building in the city of Dessau. Gropius' modernist architecture and vision of the role of the architect made a strong impression on Markelius and the two men became good friends. He also visited the Weissenhof Exhibition in Stuttgart the same year. This was the first major manifestation of the new architecture at which many renowned architects presented their plans for homes. They included Ludwig Mies van der Rohe, Hans Scharoun, and - not least - Le Corbusier. After Markelius' travels in 1927, he wholeheartedly embraced the new architecture. He had forged many relationships with well-known architects and arranged a trip to Stockholm for Gropius the following year during which the German architect held lectures for Markelius' colleagues. Le Corbusier also made a similar trip to Stockholm.

Markelius' international network of contacts expanded when in 1929 he was the first Scandinavian to become a member of the influential think-tank Congrès Internationaux d'Architecture Moderne (CIAM), in which Le Corbusier was a central figure. Based on a recommendation from Markelius, Alvar Aalto from Finland and Poul Henningsen from Denmark were also inducted as members and shortly thereafter, Uno Åhrén as well. Markelius had met and become friends with Aalto when in 1928 the Finnish architecture student union invited him to give a lecture in Åbo on the topic of rationalisation in modern architecture.

Uno Åhrén

When Uno Åhrén enrolled in the Royal Institute of Technology (KTH) in 1913, Markelius had already graduated. Åhrén had made an impression as a student of technology for his design of a one room flat for the 1917 ideal home exhibition arranged by Svenska Slöjdföreningen (Swedish Society of Crafts and Design) in the new Liljevalchs art gallery in Stockholm. The aim of the exhibition was to promote the creation of well-functioning homes and everyday items for the general public. Åhrén designed wallpaper that was well received at the exhibition and would be reprinted many years later. In subsequent years he won numerous assignments to de-

Åhrén's wallpaper 1917





Åhren's room at the exhibition 1917 in Stockholm

sign furniture and other items, mostly for the Swedish design firm Svenskt Tenn.

Åhrén was introduced to modernism in 1925. This was the year that he and a number of other Swedish architects were invited to take part in a major architecture exhibition in Paris. His interior design in the style that was called "Swedish grace" was a success and won awards. But Åhrén himself was more fascinated by Swiss architect Le Corbusier's L'Esprit Nouveau pavilion which featured the new architecture. He sought out Le Corbusier, one of the most important theorists of modernism, and was probably the first Swedish architect to meet him in person. Åhrén wrote an enthusiastic article in the journal of the Swedish Society of Crafts and Design in which he repudiated the overburdened interior design on display at the Paris Exhibition and instead called attention to Le Corbusier's building, saving: "Here there is no risk of stepping straight into an artistic composition in which one might only disrupt the delicate balance with one's presence. There is room to move, to talk at will about serious topics or to joke; empty walls on which to hang art work, free floor space to group furniture however one has a mind to." His encounter with Le Corbusier's architecture was a turning point for Åhrén. A few years



Student Union Building in Stockholm 1930 . Photo: Karl Schultz

later, Gotthard Johansson, a writer who covered culture for the *Svenska Dagbladet* daily newspaper, would call Åhrén Sweden's foremost theorist in functionalism and "the spearhead of the new movement."

There were only about 300 architects in Sweden in the 1920s and they all knew their colleagues. It was therefore no surprise when Markelius and Åhrén, who shared a commitment to the new architecture, started collaborating. When KTH's financial situation improved and was able to organise a new design competition for the union building in 1928, the two men decided to submit a joint entry. No first prize was awarded because the jury determined that the financial criteria had not been met, but the jury named Markelius' and Åhrén's proposal the winner and it was purchased for SEK 1,000. The architects continued to work on their design and the building was officially opened in 1930.

The union building was one of the first functionalist buildings in Sweden and had clear examples of the features of the new architectural style: flat roofs, well-defined, right-angled buildings with stairwells protruding forming separate spaces, horizontal rows of windows, sun terraces, pent roofs over external steps up to entrances, unadorned light plaster facades and functional interior divisions.

The Stockholm Exhibition 1930 – functionalism's breakthrough in Sweden

The Stockholm Exhibition in 1930, arranged by the Swedish Society of Crafts and Design, marked a major breakthrough for functionalism in Sweden. On the island of Djurgården in central Stockholm various Swedish products were presented: means of transport, homes, furniture, light fittings, printing equipment etc. in light, airy exhibition buildings. The main attraction was the Paradise restaurant. The lead architect for the exhibition was Gunnar Asplund who had overall responsibility and, with his colleagues, was responsible for most of the buildings. Gregor Paulsson was the Director of Svenska Slöjdföreningen and Commissioner of the exhibition. Numerous architects participated, including Markelius and Åhrén. Markelius was responsible for the hospital

The Stockholm Exhibition 1930



section as well as a detached house and a flat, and Åhrén for a detached house and a terraced house. Both men were involved in furniture design and each of them designed a piano.

The home section of the exhibition was an important project. The housing situation in Sweden was problematic; homes were cramped, standards low and rents high. Designing blocks of flats had not been high up on the list of priorities for architects. But this was now more urgently needed than ever. Through their designs for the exhibition, the architects were attempting to present well-planned, functional homes in various price ranges, including the low income bracket. Mar-

Markelius' flat from the Stockholm Exhibition 1930 kelius wrote: "In order to get as much as possible out of a small volume, it is of course important to first establish the most pressing needs; to refine the task through objectivity." This is where the functionalists saw their mission: to study and refine the functions that a home should have, quantify them and create a well-functioning whole. But with limited economic resources available, as was the case for the most inexpensive dwellings, this was actually an impossible task. This was also evidenced in many of the designs presented at the Stockholm Exhibition. The kitchen was often of minimal proportions to allow room for at least two bedrooms and a bathroom within the small





space. Many of the architects would conclude that the housing problem was not a technical but a political one and that a new housing policy was required.

Markelius' detached house at the exhibition was interesting in that the bedroom section had moveable walls making it flexible so that occupants could choose between two, three or four rooms. His flat consisted of three rooms on two floors with a very compact kitchen space.

Åhrén's terraced house was unusual for the day, although there were examples of this type of home in Sweden already. The open plan ground floor of the terraced house was a solution the functionalists fa-



Åhrén´s terraced house, the Stockholm Exhibition 1930



voured if space allowed. The bedrooms were on the second floor. Åhrén's detached house design was for the low-income category. It had a relatively traditional floorplan in which three of the family members were expected to sleep in the living room.

The Stockholm Exhibition was a popular event boasting more than 4 million visits – an impressive number bearing in mind Sweden's total population at the time of around 6 million. It received much praise but also harsh criticism. Gotthard Johansson wrote in the *Svenska Dagbladet* newspaper that Asplund "has shown that it is possible to create poetry as easily in glass, iron and fibre cement as in a classical style through columns and minarets. He has shown that plain cubes and surfaces can be constructed to form a radiant architectonic poem of celebration." The leading art critic of the day, Carl Laurin, also wrote in *Svenska Dagbladet*, but he had a different view: "We are looking at the greatest and most fundamental destruction of the most precious and priceless values in our urban landscape..." A commonly expressed opinion was that this was not "Swedish," despite the fact that the exhibition was produced in Sweden. This opinion echoed the German Nazis' view of modernism in Germany – that it was not "German."

Scientific approach, social engagemen

The criticism prompted the architects behind the Stockholm Exhibition in 1930 to author a polemical pamphlet called "*acceptera*" (accept). In it they argued the case for the new architecture, addressed the perception of it not being Swedish and highlighted the social development issues

The authors of acceptera, from right to left:

Gregor Paulsson, Wolter Gahn, Eskil Sundahl, Gunnar Asplund, Uno Åhrén and Sven Markelius.





they believed to be important: "Accept the reality that exists - only then will we be able to conquer it, to cope with it, to change it and create a culture that is a useful life tool. We have no need for the outgrown designs of an old culture to bolster our self-esteem." The pamphlet was written by Gunnar Asplund, Wolter Gahn, Sven Markelius, Gregor Paulsson, Eskil Sundahl and Uno Åhrén during a week spent in Vaxholm in the Stockholm archipelago and was published by the publishing house Tiden 1931. Wolter Gahn had participated as an architect in the exhibition, as had Eskil Sundalh who was the chief architect for the Kooperativa Förbundet (federation of consumer co-operatives) architectural firm. Uno Åhrén described it as an enjoyable and creative week. He was already one of the most passionate authors on the subject and was also the person who coined the term "functionalism," which much to his dismay became known as "funkis" in Swedish. None of the so-called functionalists actually liked the term because it suggested that this would merely be a new style. They instead saw it as a whole new method within architecture and urban planning based on a scientific and social approach.

Both Markelius and Åhrén were skilled writers and wrote about the new architecture in daily newspapers and journals such as *Byggmästaren* (where Åhrén served as editor for a number of years), Kritisk Revy in Denmark, Plan in Norway, Fönstret and Morgonbris and in Spektrum's Arkitektur och Samhälle (Architecture and Society). The latter was published from 1932 to 1935 and Markelius was its editor. Spektrum was started by the authors Karin Boye, Gunnar Ekelöv, Erik Mesterton and Joseph Riwkin, and many of their co-authors were fellow members of the socialist organisation Clarté. Numerous other radical groups existed in which Markelius and Åhrén were members. They were made up of economists, architects, writers etc. and were what today we might call interdisciplinary organisations. Both Markelius and Åhrén were also very involved in the anti-Nazi movement and helped Jewish refugees during the war.

1930s buildings – social and technical experiments

Sven Markelius' own home in Nockeby was completed the same year as the Stockholm Exhibition. It had a distinctive functionalist style in the spirit of Le Corbusier. He had also designed a number of other houses around Stockholm, including one for building contractor Olle Engkvist. But his ambitions reached beyond this. The social experiment introduced by Markelius in the 1930s was the "kollektivhuset" (individual flats with common services in the building). He designed the project in cooperation with Alva Myrdal who was working with child and family issues and had





Markelius' house in Nockeby, Stockholm 1930

written articles about the collective housing idea. The idea was to create joint solutions for child-minding, food preparation and cleaning etc. to enable women who wanted or needed to go out to work to do so. There were a few previous examples of blocks of flats with a central kitchen and common spaces. But Markelius developed this further and wrote enthusiastically about the idea. In 1932 *Yrkeskvinnornas klubb* (club for professional women) held a meeting attended by Markelius. The same year he presented a project in Alvik consisting of three ten-storey, 100-metre long,

angled buildings with collective services in the form of restaurants, a library, clubhouse and areas for children. The debate turned violent and he was accused of wanting to split families and separate children from their parents. The project was far too large and controversial for anyone to dare to invest in it. As a result, Markelius went on to design a smaller collective building containing 57 flats on John Ericssonsgatan in Stockholm. Completed in 1935, the building contained a restaurant and dumb waiters to the apartments as well as a day care centre for children.



Central homes prevent divorce?

Markelius' Collective house in Stockholm 1935



People were employed to clean and do laundry. The flats were small – one or two rooms with a kitchen alcove and bathroom. There were two larger flats as well and Markelius and his family occupied one of them. Many radicals moved into the building, including several fellow architects.

Another of his main projects was the *Stockholms Byggnadsförening* (The Stockholm Building Society) building from 1937. Here Markelius had more scope and developed a softer form of functionalism which greatly emphasised materials and design. An affinity with the architecture of Alvar Aalto was clear and the two men, who were colleagues and

Markelius': Stockholms Byggnadsförening (The Stockholm Building Society) 1937



friends, enjoyed exchanging ideas. The *Stockholms Byggnadsförening* building was highly regarded and Gunnar Asplund, a world famous architect and professor at KTH, sent his students to study it.

Developments in aviation generated architectural assignments. Markelius had, as mentioned earlier, studied airports in Europe at the end of the 1920s, and in 1930 he designed a hangar for seaplanes at Lindarängen in Stockholm. Four years later he entered a competition to design Bromma Airport. He submitted a complex proposal, but did not win. Another assignment was the Swedish pavilion at the New York Exhibition of 1939. It was considered a breath of fresh air, particularly the garden section adjacent to the pavilion. To quote an American architect: "Inviting, noble, direct – timeless beauty."

Markelius was the most prolific build-

ing design architect of the two in the 1930s, while Åhrén by 1932 had involved himself in urban planning in Gothenburg. But Åhrén also designed a number of buildings in the early 1930s. Two of his most important projects were completed at that time: a block of flats in Södermalm in Stockholm which was also home to the Flamman cinema, and the Ford Motor Company building in Frihamnen. Flamman was one of the first functionalistic cinemas in Sweden with a light blue interior in which the narrow concrete pillars defied gravity. The ceiling of the foyer had many small light bulbs and the luminosity was enhanced by the shiny metal surface of the walls and ceiling. This was the opposite of the old cinema style which aimed for exoticism and mystery. The Ford Motor Company building had a steel skeleton with glazed facades. The space in which



Åhren's Flamman cinema, Stockholm 1930



Åhren's Ford Motor Company, Stockholm 1931



played as well as the stairwell exuded modernist elegance. (Today the building houses the Stockholm Stock Exchange.) Also in the 1930s Åhrén was commissioned by Sweden's largest housing cooperation, HSB, to design a block of flats and terraced houses.

New urban planning ideal

The new architecture encompassed a new vision for urban planning. Although the main inspiration came from Le Corbusier, the many residential areas built in Berlin during the Weimar Republic designed by

Åhren: Example of urban planning 1928



architects Walter Gropius, Bruno Taut and Martin Wagner were also influential.

The new urban planning required residential areas to be light, airy and spacious and have green spaces. The quality of individual homes was important as was sunlight being allowed in - preferably from two directions, east and west. The importance of sunlight was emphasised as a means of combatting the dreaded tuberculosis. The buildings in the innercity areas were built so close together that the flats were often dark. The idea now was to place the buildings in a parallel formation with green spaces in between. In 1928 Åhrén showed how it was possible, using the same amount of land as for the cramped city blocks, to achieve the same amount of living space in rows of low-rise buildings with space in between. His ideas had a strong influence on the expansion of suburbs, especially in Stockholm. Most of the suburban blocks of flats were three or four storeys high.

Both Markelius and Åhrén entered urban planning competitions in the 1920s and beginning of the 1930s. Markelius' 1927 plans for Kristineberg in Stockholm show his transition from more traditional blocks of buildings to open plans and large green spaces. He shared first prize for his proposal. Åhrén and some of his colleagues presented a urban planning proposal to HSB with the motto "*Hus i park*" (Homes in Park) in 1932. It included a proposal for blocks of flats with vari-



Markelius' design proposal for high-rises at Gärdet, Stockholm 1928

ous depths and layouts. In his new plans for Gärdet in Stockholm in 1928, Markelius refined the idea to include residential buildings with either twelve or twenty floors. He also allocated a large part of the area as parkland. The proposal was of course controversial and when the Gärdet buildings, designed by architect Arvid Stille, went up in the 1930s, the more traditional style in terms of symmetry and monumentality prevailed, even though the blocks of flats were eight storeys high and detached. Åhren's submission to the competition involved plans where low-rise residential buildings of varying heights were grouped together, but the proposal did not win a prize.

The new urban planning law adopted in 1931 contained many objectives that coincided with the functionalists' desire for open city plans. The law stated that city districts should be planned as whole entities, that land use plans should not merely include streets and city blocks, but space for parks, sports fields etc., and that industrial and residential areas should be separated with "protective" space in between. Many of the provisions in the new law were based on existing hygiene and safety requirements which the functionalists developed further. But these requirements were developed at the cost of the quality of cities in which buildings, streets and squares provided compact areas with character. The many low-rise residential building plans produced in the interwar years in Sweden offered high quality in the form of green spaces and unspoiled nature, and in particular small, but wellplanned flats. There was, however, little scope for variety. The new urban planning came to resemble dogma.

Uno Åhrén the urban planner

Uno Åhrén shifted his focus from theory to practice when in 1932 he became first city engineer and later city planning director in Gothenburg. He helped to reorganise and expand the urban planning office and the work carried out there. During his tenure in Gothenburg several older plans for the city were reviewed and traditional city blocks were replaced with open lowrise buildings. Examples of this are Övre Johanneberg and Bagaregården. There was also a proposal to tear down the old wooden buildings in the Haga neighbourhood and replace them with buildings in the new style, but these plans were never implemented. To create better homes he commissioned studies on suitable types of buildings, linking them to land transfer requirements - an idea that would later be developed through new legislation.

Åhrén wanted to produce a master plan for Gothenburg - a cohesive vision for the city. Master plans had been produced from time to time in the past, but it was not until 1947 that building law and statutes were established and the municipal authorities were required to produce cohesive plans. Åhrén was a pioneer in the area and in 1937 a master plan was created for the Lundby neighbourhood in Gothenburg. The city purchased land and planned for strong growth and expansion. The idea was to find a way to apply a new urban planning idea - the linear city which had an industrial zone along a river, a residential zone running parallel to the north and an open park area in between. This idea, which had been developed and used in the Soviet Union, involved separating the residential area from noisy industries while also shortening commuting times. Åhrén would take on master planning assignments many more times in his career.

Åhrén remained at the helm of urban planning in Gothenburg until 1943. During his tenure he welcomed numerous young architects who came to the urban planning office to further their education. Urban planning programmes were still very limited at KTH. He also had ambitions to educate the public. While in Gothenburg he held lectures for 55 different associations and organisations, ranging from housewives associations to trade unions and local preservation societies. He was also one of the people behind the Sociological Society in Gothenburg. Sociology was emerging as a subject to study in Sweden at the time. Åhrén wanted to promote research that could be used in urban and community planning contexts.

Åhrén made another of his important contributions while in Gothenburg in 1932. He worked with Gunnar Myrdal, the internationally renowned economist, social democratic member of parliament and later Minister for Trade, to develop an initiative to study housing conditions in the city. They wanted to influence the housing policy debate. Ernst Wigforss, the Minister of Finance in the social democratic government, was receptive to their ideas and by the following year the two men presented the results of the study. They showed that living conditions were extremely cramped and that rents were high. The two men believed that it was essential to start properly planning housing production. Their report was published by the Kooperativa Förbundet printing house under the title "Bostadsfrågan såsom socialt planläggningsproblem" (The housing issue as a social planning issue), enabling the ideas to reach a wide audience. Their relationship with Gustaf Möller, Minister of Social Affairs who was considered "the father of Sweden's social welfare state", led to a new, important commission of inquiry being formed. Minister Möller asked if they would like the name of the commission to reflect the combined housing/social approach. Myrdal and Åhrén agreed. This marked the beginning of comprehensive and extensive work by the commission that would continue until 1947 and result in a new housing policy in post-war Sweden. Myrdal and Åhrén were ex-officio members of the government's housing community commission, "Bostadssociala utredningen".

Neighbourhoods and community centres

During the war years and afterwards the idea of neighbourhood units developed among urban planners. The functionalists



were engaged in the housing issue and this led to discussion on what residential areas should contain. They took a self-critical look at the residential areas built in the 1930s. In his 1942 book, Architecture and democracy, Åhrén wrote: "The assumption was that all flats should have plenty of sunlight. Residential areas were therefore planned so that low-rise buildings were lined up in a row. But we were forgetting two important things. Firstly, these areas tended to be uniform and boring; there was very little emphasis on creating an environment in which people would be happy. Secondly, we planned the area as if it were only a matter of placing a certain number of people in a certain number of flats. We forgot that beyond merely having an abode, people had various ways of interacting and living together. We overlooked the need to arrange buildings in groups around central areas where people could interact, where there would be playgrounds, club houses, a place for study circles to meet, assembly rooms, libraries, cinemas etc."

The inspiration for the idea of a neighbourhood and community centre came from England, where self-sufficient "new towns" were being planned and divided into smaller neighbourhoods and centres in the outskirts of London. The idea was to move residences and workplaces out of the innercity areas and at the same time create efficient small communities.

In Sweden most of these were smaller

suburbs close to city centres. They would include meeting halls and municipal and commercial services.

Uno Åhrén was given the opportunity to put his ideas into practice when in 1943 he was appointed head of *Svenska Riksbyggen* in Stockholm. This was a company started in 1940 at the initiative of trade unions in the construction industry to boost construction activity which had been at a low ebb during the war years. The head office, located in Stockholm, was a hub and support centre for technical expertise. The company also arranged for loans and local associations were created around the country.

A long-term residential construction programme with specific objectives requires planning. Åhrén's aim during his time at *Svenska Riksbyggen* was to get the municipal authorities to produce five-year residential construction plans. The Government's housing community commission, in which he was a member, was thinking along the same lines.

Concrete plans, based on Åhrén's ideas, were produced to expand the Stockholm suburb of Årsta. *Svenska Riksbyggen* had obtained land on which to build homes. Åhrén saw an opportunity to apply the neighbourhood and community centre idea. He conveyed his ideas to the municipal authorities and was commissioned to develop a proposal for a social centre in Årsta. He used a new planning method by involving sociologists in the



Årsta Centrum, Stockholm 1954

process to conduct interview surveys on housing and living conditions and to find out what leisure interests people in Årsta had. He also produced a draft of plans for a town with small neighbourhoods consisting of homes, playgrounds and assembly halls for the young and old.

He turned to architects Erik and Tore Ahlsén to design the larger centre. The brothers created *Årsta centrum* as an architectural whole with a theatre, cinema, library, meetingplaces/assembly halls, shops and offices with municipal services – all gathered around a central square. The school was in a separate area outside the centre. Plans for multiple buildings for various purposes in the smaller neighbourhoods never materialised but were instead replaced by the larger common facilities in the central area. Work began in 1943 and Årsta centrum was officially opened a decade later. Since then the age demographic and needs have change. But the social ambitions and the somewhat challenging colour scheme of the buildings was a milestone in Swedish urban planning history. Visitors still come to see the results today.



Community planning 1944

One of the most important papers Åhrén authored was "Ett planmässigt samhällbyggande" (Planned community building). It was annexed to the Government commission's final report in 1945. In it he summarised his vision for community planning - from plans for neighbourhoods and centres to his master planning objectives in which he saw an expanded role for architects. He advocated for limiting the growth of metropolises and recommended building smaller and medium-sized communities. His vision centred around the social aspects where plans were based on studies of people's needs and habits. A government urban planning commission (Stadsplaneutredningen) was in progress alongside the housing community commission. Åhrén was not involved in that, but the ideas he outlined in his paper on the commission. The urban planning commission resulted in master and regional planning being introduced into law. The location of workplaces and homes was an important aspect, and society's control over land was a key issue. It was important for the municipal authorities to be able to establish long-term goals for where, when and how buildings should be built, and this was made possible when the municipal plan monopoly became law in 1947. This clearly limited land development opportunities of private land owners. The new law also established that the supply of homes was the responsibility of the municipal authorities. There were other committees of inquiry relating to urban and community planning in progress at the time. The Land Committee (Markkommittén) referred to Åhrén's work in Gothenburg and to his papers. Åhrén participated in a municipal cooperation committee and a committee formed for the reorganisation of the urban planning agency. He was an authority in this area and helped to produce the new legislation.

planned community building were used by

Åhrén was able to focus on many of these issues when he became a professor of urban planning at KTH in 1947. This was the first professorship in the subject in Sweden. In addition to teaching undergraduates, he spent a lot of time teaching professional development courses and speaking at conferences where architects and professional urban planners could expand their knowledge in areas such as master and regional planning. Åhrén also produced compendiums on the subject which were not only used in in educational contexts but also by consultants in the industry. One of the more well-known ones was "*Bilstaden*" (Car Town). The complete separation of motorists and pedestrians was the goal. This was based on faith in forecasts and on the assumption that the effects of technical development would only be positive and applied in many uncritical solutions. There was a huge expansion of the subject of urban planning during Åhrén's time. His aim was to have both an overview as well as detailed knowledge – a goal that also reflected the dilemma of urban planners. There was still a shortage of both knowledge and experience of solving the new planning problems at this point.

Alongside his work as a professor, Åhrén had his own firm where he conducted numerous master and regional planning studies. He retired as a professor in 1963 and a few years later he also closed his firm and moved to his cottage in Värmland. He was awarded an honorary doctorate from the Royal Institute of Technology (KTH) and was an honorary member

Bilstaden (Car Town) plans 1960



of SAR, Sweden's national association of architects. But he had had enough of big city life and felt pessimistic about how things were developing. He had always been interested in nature and the outdoors. He also started painting again. Later Åhren was involved in the project "Rädda din stad" (Save your Town) when a motorway and demolition were threating the town of Arvika.

Sven Markelius, urban planning director and architect

Sven Markelius would apply the new urban planning ideas in his role as urban planning director in Stockholm in the years 1944–1954. The two large tasks he had to grapple with were the renewal of the lower Norrmalm area of central Stockholm and the growth of the city's suburbs. Plans to change lower Norrmalm and the Klara area had been in the pipeline for a long time. In the decade starting in 1910 the city had been buying properties in preparation for major clearance work. In 1932 a competition was announced for proposals for lower Norrmalm. It received more than 350 submissions, including ones from Alvar Aalto and Le Corbusier. Many of the proposals included very tall high-rise buildings. None of these would come to fruition. It was when Markelius took over as director of urban planning that the plan to build the five high-rises between Hötorget and Sergelstorg came about. Architect David Helldén at the ur-



Markelius' urban plan model for Stockholm city. Photo: Lennart Nilsson

Hötorget high-rises.



ban planning office was responsible for the concept involving buildings that would ultimately be 18 storeys high. City Commissioner for urban planning, Yngve Larsson, called them "The five trumpet blasts." Markelius would himself design the third of the five high-rises after leaving his position as urban planning director. The transformation of lower Norrmalm is one of the largest of the first generation of modern cityscapes to be built in the postwar years in Europe. It has been criticised for wiping out an old and traditional environment, but it has also been admired for successfully achieving a uniform whole, consistency and architectural rhythm in a new milieu.

Master planning was, as mentioned earlier, quite a new phenomenon in Sweden at the time. Under the 1947 building code municipalities were required to prepare master plans in order to make longterm assessments of their expansion needs, particularly in terms of residential construction. In Stockholm this sort of planning was under way even before the new



law entered into force. Preliminary master planning work in the form of a report called "*Det framtida Stockholm*" (Stockholm of the Future) was presented the same year as Markelius took up his new post. This would later form the basis for the master plan for Stockholm produced in 1952. It was never formally adopted, but would be a crucial document in the expansion of the Stockholm suburbs. It included ideas about neighbourhood planning similar to those of Åhrén. Markelius writes in 1945: "Blocks of flats built relatively close together should be located adjacent to a central area for commerce, social facilities and premises for common leisure and social activities. A belt of parkland surrounding this central area should include space for schools, child day care, playing fields, playgrounds and sports facilities. Outside the parkland belt there would be terraced houses with local, smaller centres that include small grocery shops, garages, small industrial enterprises, nursery schools etc. Single family homes would be located further out in the peripheral areas."

Markelius' ideas were developed into a

Vällingby, Stockholm 1954



master plan. The suburbs were laid out like a string of pearls alongside the planned underground metro system, separated from each other by green areas. This idea of a totality involving a residential neighbourhood with a large central area for services was embraced when Vällingby was planned in the 1940s and officially opened in 1954. The new idea of workplaces, homes and a central service area creating a cohesive whole materialised in Vällingby. The idea of traffic separation was an obsession of Markelius and he believed that terraced houses and detached houses were superior as family residences than blocks of flats. He also stressed that the areas must be large enough to provide enough business for the commercial enterprises and other services.

Neighbourhood planning was an expression of a political ambition. It could be seen as a concrete expression and manifestation of Per Albin Hansson's "folkhem" ideas. The suburbs, which were the result of these ideas, were given their own identity and character, and formed enclaves in which nature and greenery were important elements. One frequent topic of discussion, and one of the ideas in the master plan and also in articles written by both Markelius and Åhrén, was that neighbourhoods should create and promote a sense of community. This would remove the anonymity which many believed was present in big cities and which was also believed to be fertile ground for extremist movements. But the main consideration in neighbourhood planning was that residential areas should have municipal and commercial services and community facilities.

The report "Generalplan för Stockholm" (Master Plan for Stockholm) from 1952 is extensive, containing broad but accessible content. Many had participated in producing it, including urban planners, architects, traffic technicians, economists and sociologists. Few reports provide such a clear picture of the principles of the urban planning ideology that existed in Sweden in the post-war years, in which neighbourhoods were designed to have homes, schools, and services, with an emphasis on green spaces, traffic planning and workplace location. This was not only a programme for the expansion of Stockholm, it was also a coordinated instrument for the implementation of the plans. The city's various administrative entities were forced to work together on building the new suburbs. The strength and realism in the master plan gave the city's leaders an opportunity to realise a well thought-out and comprehensive vision. The consensus that the planners and politicians had reached permitted a comprehensive approach to the expansion of Stockholm.

While serving as urban planning director in Stockholm, Markelius also worked on his own projects. The colleague he worked most closely with was Bengt Lindroos. Markelius' own house from



Markelius' house in Kevinge 1945. Photo: Bo Törngren



Markelius' Folkets hus, Norra bantorget, Stockholm. Photo: Lennart Olsson



Markelius' Eco Soc Chamber in the UN building, New York, 1951

1945 in Kevinge became famous and graced the pages of architectural magazines in other countries. *Folkets hus* in Linköping was one of his assignments. It was started in 1941 and completed in 1953. *The Folkets* hus building at Norra Bantorget in Stockholm was a similar project. He had worked on the designs since 1935 but was formally assigned the project in 1945. The building was complex; many functions were to be housed in a limited space. Skilfully, Markelius managed to include a conference room, theatre, restaurants and spaces to meet other local needs as well. In 1951 construction began and it was officially opened in 1960. Markelius also received international recognition, including the highest distinction of being the only Scandinavian architect to be invited to take part the project to build the UN building in New York. Ten architects, five of them from Europe, assembled for a few months in 1947 at the Rockefeller Center in New York to discuss the plans. Among the most famous participants were Le Corbusier and Oscar Niemeyer. Markelius' assignment was to design the Economic and Social Council



Markelius' textile design Pythagoras, 1950ies

(ECOSOC) Chamber in the UN headquarters, which was completed in 1951. Markelius had many talents and he used one of them to design the textiles which would be used in *Folkets hus* buildings in Sweden. His most famous pattern was Pythagoras, originally designed for *Folkets hus* in Linköping, but later also used in several of his buildings. Today this design can also be seen in the ECOSOC Chamber in the UN building.

Markelius retired as urban planning director in 1954. In 1962 he and his successor in that position in Stockholm, Göran Sidenbladh, received the Patric Abercrombie Medal for renewal of Stockholm's innercity area and the Stockholm region, which included Vällingby. The same year he received the RIBA (Royal Institute of British Architects) Gold Medal as well as several Swedish distinctions. In his final years he continued to run his architecture firm, accepting assignments both in Sweden and abroad. One of his final projects was Sweden House at Kungsträdgården park in Stockholm. After the client realised that a marble facade would be too expensive, Markelius experimented and created a surface in which grooves were carved into the concrete to give the building character. Sweden House was completed in 1969. Markelius worked until the end of his life on a proposal for a theatre to be located at the heart of Stockholm at Slussen; it was a source of both happiness and frustration which in the end never materialised.

The pioneers

Sven Markelius and Uno Åhrén were pioneers in the breakthrough of functionalism and the new urban planning ideal in Sweden. They worked as architects and urban planners applying interdisciplinary and scientific methods. They created some of the purest and most expressive examples of buildings in the spirit of functionalism. They analysed methods for studying functions for the purpose of creating good homes. They developed and applied urban planning ideas involving open areas, green spaces and sunlight, based on the vision of "buildings in parks." They



Sven Markelius in Sverigehuset, Stockholm

incorporated neighbourhood planning and sociology in the post-war era city plans. Åhrén helped shape the new housing policy and zoning laws of the post-war years, in which local authorities were given the right to decide where, when and how to build within their municipalities. Markelius developed and implemented the idea of collective housing and created innovative architectural solutions. In other words, they tackled "the realities of the day" as they wrote it in their manifest "acceptera."

The interdisciplinary and broad approach that they both took is unusual today. Residential construction and urban



Uno Åhrén. Photo: Barbro Soller

and community planning have become more complex; architecture firms have become larger and have expanded their focus but individual architects are usually more specialised. The commitment to social issues shown by many of the architects of Markelius' and Åhrén's day; the broad network of contacts in other professions and their ambition to educate, write and debate is not an obvious aspect of the architecture profession today. Today's architects can learn a lot and gain much inspiration from the past to inform the current debate on the quality of architecture and the built environment - both within the profession and in the public debate.

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