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THE COMBINATION OF THE MODERNITY AND TRADITION IN THE WORK OF ALVAR AALTO

POŁĄCZENIE MODERNIZMU I TRADYCJI W TWÓRCZOŚCI ALVARA AALTO

Abstract

The work of Alvar Aalto is one of the best examples of critical regionalism in architecture. The architect respected the tradition and heritage of Finnish architecture goods and transformed it into the modern architectural language. Analyzing architect's masterpieces buildings as well as furniture designs, the Author is going to emphasise both their traditional characteristics and modern influences. Combining these features Aalto was able to create a unique, sustainable architecture that is still modern despite its age.

Keywords: Alvar Aalto, critical regionalism, sensualism, psychology, modernism, scandinavian design

Streszczenie

Tematem artykułu jest analiza architektury Alvara Aalto w kontekście relacji fińskiego regionalizmu krytycznego z architekturą modernistyczną. Dogłębna analiza dorobku życiowego projektanta z zakresu architektury i wzornictwa przemysłowego ukaże korelację tradycyjnych cech designu skandynawskiego z nowoczesnymi trendami architektonicznymi XX wieku. Połączenie to zrodziło niezwykle zmysłowe i oryginalne realizacje, zakorzenione w kulturowym duchu miejsca, z którego pochodził i w którym tworzył architekt.

Słowa kluczowe: Alvar Aalto, regionalizm krytyczny, sensualizm, psychologia, modernizm, design skandynawski

1. FINLAND. THE SHAPING AND SHAPED FACTOR

Finland is a unique country at the crossroads of East and West cultures. One third of its area, reaching the Arctic Circle, is a mountainous glacial land. The rest of the country consists of about 55,000 lakes with the irregular shoreline, rivers, and coniferous and birch forests covering almost 70% of the land. Sigfried Giedion describes the Finnish landscape as a structure *reminiscent of the days of creation when the waters had just separated from the earth.*²

The history of the country is as complex as its landscape – the eternal separation between Sweden and Russia, as well as armed conflicts led to strengthening of the citizens characters.

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² Giedion S., *Przestrzeń, Czas i Architektura. Narodziny nowej tradycji*, Państwowe Wydawnictwo Naukowe, Warszawa 1968, p. 606., translated by the Author

The Finns are famous for their gentleness and kindness. Their superhuman steadfastness got the sonorous name *Sisu*. This philosophy is directly related to the lonely life in vast areas – Finland has a population equal to Switzerland, being 10 times larger in area. *Sisu*'s philosophy, literally translated, means strength, steadfastness, fortitude, combined with courage and pride in stubborn pursuit of purpose, regardless of adversity or physical barriers. Followers of the philosophy of *Sisu* do not resign, and consider failures and unsuccessful attempts as approaching the desired goal.

The combination of these aspects has created a unique relationship between Man and nature. The respect that Finns have for nature translates into their design activities – every step shows respect for the used material – from metal ores, boulders to wood, which is a national good. Numerous armed conflicts that caused unimaginable damages also contributed to this respect. This aspect meant that designers focused on a formal and functional approach to design arts, emphasizing the efficient use of materials. The effects of this, can be seen in attempts to find their own architectural language which, at first, was characterized by a passion for classical forms, most often built of stone (for example, the work of such architects as Lars Sonck or Eliel Saarinen). It is only later that the naturalism of Finnish landscapes came to the fore appeared in the organic forms of the interiors of buildings or designs in the field of functional design.

Despite the fact that the profession of an architect has a great social esteem in Finland – can be a member of the aristocracy – Finnish architects are not be able to feel it right away. The huge damage caused by the wars meant that the government had to reduce the financial resources allocated for housing to a minimum, and for all state buildings that additionally pointed to the well-being of the country, it simply did not have enough funds. This fact is noticeable in the work of Alvar Aalto, who creates factory designs, sanatoriums and small forms of public utilities despite the era of the apparent calm. After years the era of more representative projects starts, e.g. the town hall in Säynätsalo. Despite the restrictions imposed by the history, after the classical period, Alvar Aalto was able to develop his own architectural language – already noticeable in the interior of the library design in Viipuri (1927).

2. IRRATIONAL MODERNISM

The beginnings of Aalto's work overlap with the world-dominant influence of international style. Although the architect initially found himself the inspiration in the work of master Asplund, the developing modernism began to exert an increasing influence on him. The historical background is extremely important for the development of Finn's architectural form. World trends show the main directions in which architecture developed. Even though Frank Lloyd Wright already pointed to the human aspect in his house designs in 1900, the European modernist industrialism became so dominant that stripped the architecture of its human aspect. Philip Johnson, describing the international style accurately notes the blurring of the differences between the buildings designed in different places in Europe. Bringing to the fore the function of the building and the form following function have become indispensable starting points for the work of all architects. Despite the fact that Alvar Aalto's work also fits into this trend of functionalism, he was able to find his own rational and functional design language rooted in Finnish culture dominated by factors of organic irrationality.

His journey to Europe acquainted him with the trends prevailing there and allowed him to establish close contacts with modern artists. Aalto treats modern art as *a huge reservoir, which often imperceptibly, feeds his own creativity*.³ His nature was to draw inspiration from everyday phenomena and accidental encounters with people. The architect was able to draw on the achievements of the architects of the time. Alvar picked up aspects that he could use in his own projects, but he was able to consistently combine them with the achievements of the work of Erik Gunnar Asplund and the spirit of Finland. It can be found in every building. This feature clearly distinguishes him from the modernists of that time who broke with the historical achievements of architecture at all costs. His perversity in his interpretation of the style of the 1920s was expressed by single details that he used in his work. He transformed mass production through his own handicraft language, replaced universality with humanism, modern materials, a mixture of Finnish heritage, and gave functionalism symbolic meaning. He created buildings from which it was easy to read individual inspirations – monolithic walls, large glazing in facades ensuring access to light to the building and reflecting the function on the facades.

This is most evident in his first, globally recognized office building of the Turun-Sanomat office building in Turku – modernist features such as: reinforced concrete skeleton, strings of horizontal windows, as well as the roof terrace of the building were combined with the sensual play of the interior illuminated by skylights that create the unique character of the ceiling supported by mushroom tops.

3. THE HUMANITARIAN ASPECT OF MODERNISM

The end of the 1920s brings Alvar Aalto to the greatest fame. The spiritual leadership of the country and the support of the administrative arm allows the young architect to design a Sanatorium in Paimio. A building that Sigfried Giedion mentions together with the Bauhaus building designed by Walter Gropius (1926) and the Le Corbusier League of Nations Pavilion (1927) as one of those that were inseparable from the development of modern architecture. Paimio, a small town near Turku, became a medical center for people suffering from tuberculosis in the end of 1928. Aalto did not design a medical center, but *the promise of a new tomorrow, a symbol of optimism*.⁴ This promise was closed in a modern form of a 6-storey building (Ill. 1). Very important aspect is the location to the southwest and deviation from the main solarium building. The linearity of the composition is evident precisely in the fragment, supported on reinforced concrete columns and closed with a monolithic wall, in the course of horizontal windows, stretching along the serpentine facade. Alvar Aalto also used, loved by Le Corbusier, the terrace located on the top floor, extending throughout the entire building which took the form of a curve (Ill. 2). It was foreshowing an undulating line, often used in later or even parallel projects.

³ *Ibidem*, pp. 604–605, translated by the Author

⁴ Pallasmaa J., *Mysłca Dłoń. Egzystencjonalna i ucieleśniona mądrość w architekturze*, Instytut Architektury, Kraków 2015, p. 151, translated by the Author



- III. 1., 2. The Paimio Sanatorium w, source: <https://www.alvaraalto.fi/en/architecture/paimio-sanatorium/>, access: 15.06.2019
- III. 3. The Paimio Armchair, source: <https://www.artek.fi/en/products/armchair-41-paimio>, access: 15.06.2019
- III. 4. The Viipuri Library, source: <https://www.archdaily.com/563568/alvar-aalto-s-restored-viipuri-library-wins-2014-modernism-prize>, access: 15.06.2019

The slogan “form follows function” proclaimed by Luis Sullivan, read by modernists as the design of simple and honest forms, without unnecessary decorations, has been transformed by Aalto. He put a man imposed by the function in the centre of the building, to which the building and its form should adapt not only in the physical, but also in the mental context. Alvar treated the factors that medicine identified as crucial for patients, i.e. relaxation, breathing fresh air, sun and interpersonal contacts. This was emphasized by Charles Jencks (...) *Aalto created a calm, anthropomorphic architecture. In almost every project, he considered it his duty to show how he developed form, taking as a starting point the essential elements of human nature. If it is (...) a huge office building – it crumbles its body, if it is a mass-produced door handle – it gives it a shape adapted to the human hand, etc.*⁵ The building was divided into

⁵ Jencks Ch., *Ruch Nowoczesny w Architekturze*, Wydawnictwa Artystyczne i Filmowe, Warszawa 1987, p. 204, translated by the Author

segments arranged in a way that allow all patients to have exactly the same view of the calm Finnish landscape. The division of the building allowed for better exposure. It helped to avoid the gloomy impression which is characteristic for the hospitals.

The architect, in the spirit of *Gesamtkunstwerk*, designed every smallest detail – from furniture, plumbing, to stair railings, defying for modernists, using a mixture of steel and wood, which natural texture and temperature had a positive effect on the patients' sensory impressions. Unlike cold steel alone, white and the accompanying severity of the interior have been replaced by subdued earth colors. Vibrant colors (yellow, red, green, navy blue and blue) have been used in the building's signage system for easier orientation. Alvar, like Le Corbusier, inspired by Ozenfant and Bauhaus by Piet Modrian, created his own color palette used in the projects.

Every element and principle of his design represents the humanitarian functionalism which the architect followed. The furniture, mentioned above, specially designed for the Sanatorium (Ill. 3), was made together with Alvar's wife – Aino. Treating their form as adapting to human beings meant that they became an addition to the healing process. The special bending of the mold at an angle of 110 degrees was intended to ease breathing. The arch of the armrests facilitated the daily use of the chair. Eventually, the repeated replacement of steel and leather with wood emphasized the sensual expression of the design.

4. UNDULATING FORM

The Library in Viipuri which was built almost simultaneously with the Paimio's Sanatorium, introduced an undulating form to the architect's life. The building, gave Aalto international recognition. The monolithic form which followed the modernist demand was made of two, staggered buildings (Ill. 4). The combination of rationalism, seen in the two-storey building, and organicism, followed by functionalism of interior of the library was the characteristic point of Alvar Aalto. He tried, just like Le Corbusier before him, to resolve the problem of the ceiling. Using such a natural material as wood, which he subjugated years before, has caused that the ceiling obtain a unique face made of the undulating form. It is not the design aspect inspired by Miro's creativity. Giedion described it in the expressive words *narrow stripes of the pine wood shoot up in the air from the floor over lecturers table and bent irrationally along the glass wall*⁶ (Ill. 5). Aalto was notorious for dedication to his work. It was followed by *Sisu* philosophy ingrained in the Finnish way of life. Extended analysis and laborious calculations, allowed him to create a form with phenomenal acoustic properties. The curvy structures ease the sound of the sonic waves that get to the human ear. Creating these forms, Aalto started to design in the organic architectural style.

The undulating form exemplifies the remarkable connection between Alvar Aalto and his homeland. A sense of belonging to Finland is *an internal source of energy that always enlivens his work*⁷, which can be compared to the bond that linked Picasso with Spain. The main

⁶ Giedion S., *op. cit.*, p. 616, translated by the Author

⁷ *Ibidem*, p. 604, translated by the Author

source of inspiration for that form, clearly was the Finnish landscape with an endless number of lakes which wavy coastline was above and beyond emphasized by dense coniferous forest. The shape of the lakes is easy to see in Savoy's vase, designed in cooperation with Aalto's wife for Iittala. Unusual way, that architect took to find vase form, resulted in a remarkable shape. The same, which his father plotted out in Alvar's childhood, on the cartographic maps of Finnish lakes. The architect manifoldly accentuated beneficial influence of the organic lines and forms on human psychology. That was emphasized in *Gesamtkunstwerk* of Sanatorium in Paimio, particularly in undulating form of Paimio's furniture and in posterior projects, in a form of ceiling, inner wall or even bearing wall.



- Ill. 5. The Viipuri Library, source: <https://www.archdaily.com/563568/alvar-aalto-s-restored-viipuri-library-wins-2014-modernism-prize>, access: 15.06.2019
- Ill. 6. The Villa Mairea, source: <https://www.alvaraalto.fi/en/architecture/villa-mairea/>, access: 15.06.2019
- Ill. 7., 8. The Säynätsalo Townhall, source: <https://divisare.com/projects/317793-alvar-aalto-nico-saieh-saynatsalo-town-hall-1951>, access: 15.06.2019

The issues of the Viipuri Library were insufficient for Alvar Aalto. Advancements of the undulating form are demonstrable in Finnish Pavilion for the New York World's Fair (1939) and MIT Baker House Dormitory (1948). The interior of the Finnish Pavilion providing an exhibition function was complemented by wavy-shaped wall. Lighted by natural light form, was a hypersensual experience for visitors. Moreover, organic shape of the wall was an ideal construction for the exhibition. Its wavy structure turned out to be a great surface to exhibit the large-format photographs and facilitate art reception.

In the second project, MIT Baker House Dormitory, Aalto designed the undulating exterior wall. The building located by the riverside, gave residents a great view of a nature and provided sunlight access to the living units. The Baker House was described by Rasmussen as a fairytale palace, tempting observer with its red, brick-built facade with uninterrupted rhythm and rough nature.

5. THE SENSUALISM

Theoreticians of architecture who analysed the sensual content of Alvar Aalto's projects, regularly invoke its sensual characteristic. The irregular forms, polyrhythmic and multithreading of meanings hidden in architectural forms of Aalto's buildings, give a unique, human character. The texture of used materials and delicate details give intimate ambience and at the same time encourage viewer to coexist with a building. This is an exceedingly important aspect of the connection with nature, exposure of landscape, bursting in the interior of building by the horizontal windows to bring human closer to nature and give multisensory experience. Juhani Pallasmaa emphasizes *Alvar Aalto's work (...) is based on the deep research of human's body condition and the plenty of our instinct unconscious reaction*⁸ what is exposed in Paimio Sanatorium. Human aspect of Aalto's projects makes them the centralizations of the sensorial sensations.

Foregoing aspects can be noticed in Aalto's later project, Villa Mairea, built at the turn of 1938 and 1939. Project compared to *the architectural, chamber music demands necessitate attention to see subtlety of solution, motifs and intentions (...) the way of design of space and special treating of the material*⁹ was a summary of architect's outworked assumptions. Villa surrounded by the forest was made to harmonize and interpenetrate with the landscape (Ill. 6). Its elevation is an example of experimentalism. Black slate juxtaposes with two kinds of wood and a pale white facade of the first floor, providing visual sensations, especially compared with interior. Blend of building materials and its facture escalate the tactile character of the project. Ceramic tiles, arranged with tiny, red tiling which intertwined with a wavy line with wooden floor, give a sense of warmth. The inviting staircase produced from white birch wood is at the same time separated from the rest of home by pale poles designed in irregular distance. It is common to say that the way of the staircase design is the gold standard of architect's talent. In Mairea, staircase is nearly sculptured form which *stream down to the main room (...), announces its attendance but remains in its own identity*¹⁰. Undulating wall is once more used in the hall and is multiplied in single elements of interior. Le Corbusier's oval form is clearly visible in the first floor, surrounded by the terrace. The connection and similarity of the interior and the exterior create a harmony in the building. The forest surrounding the building, which is visible by the windows, was an inspiration for the shape of the columns inside the Villa.

Aalto had an ability to alleviate the austerity and unapproachability of modernist projects with gentleness of used materials. His creative process was complex enough that it seemed to be

⁸ Pallasmaa J., *Oczy Skóry. Architektura i zmysły*, Instytut Architektury, Kraków 2012, p. 82, translated by the Author

⁹ Giedion S., *op. cit.*, p. 630, translated by the Author

¹⁰ *Ibidem*, p. 632, translated by the Author

made of associations and experiments. The architect described his method of work as *I sketch basing on my instinct, rejecting the architectural rules – its very characteristic for abstract art – creating almost childish compositions (...) the main idea, gradually getting its shape, which is a part of the universal substance, helps me to create a harmony from contradiction*¹¹. Thanks to those very effortless sketches, the final visage of the building has sensuality and blends so well with its surroundings. Lyrics in the assortment of materials is dictated by the mindfulness in concept process. Every aspect of Aalto's act has an affect on architecture. Consecutive architecture is made of comprehensive understanding of society needs, environmental aspects and human as individual.

6. TACTILE IMPRESSIONS IN THE CRITICAL REGIONALISM

Alvar Aalto uses different kinds of signals and opposing features of the textures: ragged – smooth, bright – dark. This fact was described by Charles Jencks and Aalto's architecture may be analysed in the context of Colin Cherry's theory of information: *the functioning of the signals is based on the existence of two opposing possibilities which makes doubts in the observer's mind*¹². This is clearly visible in the town hall in Saynatsalo (Ill. 7).

The monolithic, brick form consists of the two buildings: the library and the government building on the U – floorplan. The design is characteristic for “red period” of the architect's career. The building is surrounded by the forest and has a characteristic and surprising interior. The soil collected from the levelling of the hill, was used to fulfill the courtyard. The way to the main hall is hidden in the skew plan of the building. The way goes through the trees and brick wall surfaces. Observing the building from the courtyard, we may have an impression that the whole form is of the one height. Actually, it is just the illusion and it has different height in the different places (Ill. 8). The “contact” of the sharp brick form with the sky is an extremely sensual experience. The open square in front of the building is another opposition to the close interior. The entrance, with huge glass door, is another antagonism to the narrow corridor to the main hall. The dark interiors emphasize the mystical community impression which should be characteristic for such buildings. The interior of the auditorium gives a completely different impression. The room is designed on a hexagon plan. Its height is impressive for the observer. The architect used braces in the shape of fans. That is why he did not need to use construction frames to support the roof. The “touching sensations” of the interiors are the effect of combining dark brick with natural wood and lightening it from the horizontal windows.

The architect transformed the way to the main hall from the normal corridor to the sensual experience. According to Charles Jencks, it is a great evidence for architect's contrary character. The statement is based on the information theory: *the tyranny of the probability makes the expectation which has the democratic features, (...) partially successful, partially lose (...) Aalto consciously created the combination of the similarities to let resist and deform them*¹³. It is a fact that the more probable the contradiction is, the more opposing the experience is.

The architect's fascination of the tactile details, inspired by Asplund, was used by Kenneth Frampton in the essay about the regional criticism. This criticism was earlier explained by Alex

¹¹ Pallasmaa J., *op. cit.*, p. 82, translated by the Author

¹² Jencks Ch., *op. cit.*, p. 196, translated by the Author

¹³ *Ibidem*, p. 200, translated by the Author

Tzonis and Liliane Lefaivne in 1981 in *Grid & Pathway*. The regional criticism emphasizes individuality of the local architecture and rejects universal and abstract features. It is deeply connected with the spirit of the region and concentrates on the light, topography and local materials. Harwell Harris differentiates two types of critical regionalism: restrictive and liberating. Moreover, Harris points out that regionalism is a manifest of region which does not reject modern architectural ideas.

The architects, designing in the critical regionalism style, must be self – conscious and have a deep knowledge about the spirit of the place. That’s why it is easy to qualify the Aalto’s work to this style. Alvar claimed that there is no difference between national and international architecture. The buildings are always deeply connected with the region where they are raised. Finnish architect always tried to find the way of designing that was not characteristic of the current international style that did not have its own identity. He did not base on *the autochthonic forms of region*¹⁴ He found his own architectural language, which was based on modernism, but connected with humanity and the characteristic features of the region where the building was designed – Finland.

7. CONCLUSION

Individual style of Alvar Aalto’s works was often called “*no modernistic modernism*”. The architect transformed modern designing ideas from the 20th century to his own assumptions. His work is very unique because of the holistic approach to the human, who was always in the center of architect’s attention. Architecture critics claim that Aalto rejected pure functionalism (introduced by Louis Sullivan) and concentrated on human psychological aspects. Architect’s modern language of designing is not rough and cold as modernism but has features which are characteristic of the region.

The simple and pure architectural forms were connected with the curvy structures. This feature is clearly visible in the construction of Sanatorium in Paimio and the interiors of the library in Viipuri. His original psychophysical connection of the building and a human let him gain the international glory. The furniture, designed by Aalto, was always very practical and polished. He developed a special kind of processing the wood that let him create a light, bended wood. The bended wood was very strong and resistant (L-leg (1933), Y-leg (1947), FAN-leg (1954)). He appreciated the delicateness and naturalness of the wood. It was not typical of modern architects who preferred glass and steel which are practical but not faceless.

Aalto always put the human in the center of attention instead of idea. He always emphasized the necessity to understand the human needs, local environment, culture and history. He always introduced individual elements in the buildings (furniture dedicated to sanatorium in Paimio, characteristic stools in the library in Viipuri). The missionary aspect of his architecture was based on the trust in the society and the future of the country. He always believed that architecture is able to influence the observer and his mood. Basing on the sketches, Aalto was able to create sculptural, impressive and sensible designs. The aspect was not only visible in the shapes of the buildings but also in the connections of the materials. The characteristic forest landscape of Finland could be also seen through the window and the building were surrounded by it. According to H.H. Harris: *a region may develop ideas. A region may accepts ideas. Imagination and*

¹⁴ *Ibidem*, p. 200, translated by the Author

*intelligence are necessary for both*¹⁵, it is easy to all of the described features are characteristic for Aalto's work. The characteristic Finnish features are visible in all the aspects of architect's buildings and furniture.

Despite the obvious differences between Aalto and other modern architects, some common features are clear. Long, horizontal windows, monolithic facades are characteristic both for Finnish architect and other European designers. Architectural critics claim that Aalto is one of the most important modern architects, like Walter Gropius, Le Corbusier, Mies van der Rohe and Peter Oud. They also emphasise that Aalto's architecture, like Frank Lloyd Wright's is very human friendly.

Finnish architect did not bend the knee to the paradigm of function and form but used it in another way. He dedicated his buildings to the people instead of subordinating to modern ideas.

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¹⁵ Frampton K., *Towards a Critical Rationalism: Six Points for an Architecture of Resistance* [in:] Foster H. (ed.), *The anti-aesthetic: essays on Postmodern culture*, Bay Press, Washington 1983, p. 22.