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Furniture, Painting, and Applied Designs: Alvar Aalto's Search for Architectural Form

By William C. Miller

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Fig. 1. Interior remodeling, church, Viitasaari, 1925. The baldachin on narrow metal columns, light fixtures, and decorative elements are by Aalto. Photograph by the author. (See page 8.)

Alvar Aalto's lyrical, sensuous design drawings poignantly record his process of generating form (fig. 2). These painterly lines, made with soft pencil on tracing paper, expressively describe the emergent, sinuously shaped spaces and forms of his buildings. While capturing the essence of Aalto's architectural production, these sketches could, simultaneously, represent the design of a piece of furniture, a light fixture, or a glass vase. Aalto's furnishings, paintings, and applied designs exhibit an uncanny thematic resemblance to the formal and spatial configurations of his buildings. This similitude, which inextricably links his entire corpus of work, expresses a fundamental condition governing his design sensibilities. These elements were more than mere accents within a spatial setting or decorative ensemble. The design and crafting of a chair, a light fixture, or a glass bowl, was as much an architectural proposition as the making of a building. Engaging in furniture and applied design provided Aalto with the opportunity to explore compositional and tectonic issues at a variety of scales and in different mediums, and this directly influenced his conception of architectural space and form.

The thematic continuity infusing all realms of Aalto's production crystalized during the period between 1927—when he moved his office from the provincial town of Jyväskylä to the cosmopolitan city of Turku—and the death of his first wife, Aino Marsio Aalto,¹ in 1949. These two decades, bracketed by his Nordic classic period and postwar architectural maturity, were the most important in his career. In moving from relative obscurity to a prominent position within the modern architectural avant-garde, Aalto's furniture and applied designs played an instrumental role in the evolution of the unique complexity and thematic comprehensiveness characterizing his architecture.

During his first decade of practice, Aalto worked in a style termed Nordic classicism. Until recently, little was known of this work owing to the lack of inquiry into the classical roots of Scandinavian modernity and Aalto's own depreciation

1. Aino Marsio Aalto, Aalto's first wife, has long stood in the background of discussions regarding his productivity; and only recently has her role begun to be examined. Göran Schildt's first two volumes of Aalto's biography—*Alvar Aalto: The Early Years* (New York: Rizzoli, 1984), and *Alvar Aalto: The Decisive Years* (New York: Rizzoli, 1986)—and Igor Herler's essay, "Early Furniture and Interior Designs" in *Alvar Aalto Furniture* (Helsinki: Museum of Finnish Architecture, Finnish Society of Crafts and Design, and ARTEK, 1984), pp. 14–59, provide essential information about Aino Aalto. The same situation exists with Elissa Mäkinen Aalto, Aalto's second wife, and her role in their practice, from the time of their marriage in 1952 until Aalto's death in 1976.



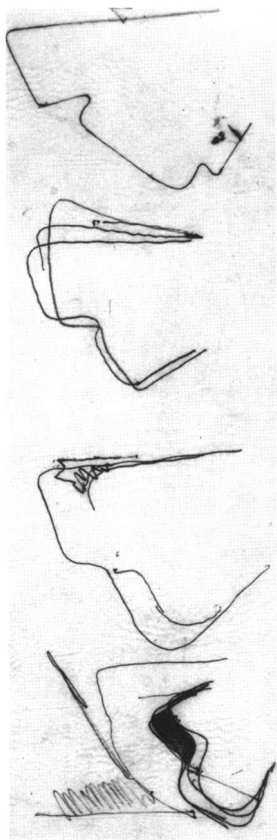


Fig. 2. Sketches for the Essen (Germany) Opera House, 1961–65. Courtesy Museum of Finnish Architecture, Helsinki.

of its value, a situation only rectified since his death.² Suffice it to say, before international recognition was achieved in the thirties, the Aaltos had a substantive body of architectural and furniture production to their credit. Their buildings of the twenties, like those of their Scandinavian contemporaries, were in a mannered classical style composed of simple geometric forms characterized by sparsely decorated surfaces rendered in stucco or wood (fig. 3). Elevations, while divided in a tripartite fashion (base, middle, and cap), received vertical emphasis through a well-proportioned arrangement of solid and void (wall and window). Classical elements, if used, were often exaggerated and non-canonical in their application. Despite classical overtones, these buildings were often asymmetrical in composition, incorporating freely disposed plan arrangements accommodating functional necessities and contextual particularities.

A catholic relationship between the Aaltos' architecture and applied designs existed during the 1920s; furniture and other decorative elements were designed to be stylistically compatible with specific spaces and settings. Exaggeration also played a role in their furniture and decoration. Although influenced by a number of traditional and contemporaneous sources, elements in their furnishings and decoration appear intentionally distorted: legs which were thinner or more boldly profiled than normal, balusters which whimsically modified the conventions of the "split spindle" motif, oddly proportioned knobs and turned pieces, and the addition of idiosyncratic decoration (fig. 1). As Igor Herler has noted, these designs have a "daring versatility and stylistic colourfulness which threatened the limits of 'good taste.'"³ Interiors were often decorated with illusionistically painted scenic wallpaper or classically inspired motifs; abstracted images of masonry rustication, austere picture moldings and door and window frames, and stenciled friezes were among the vocabulary of appointments the Aaltos used. Though stylistically compatible, the interior decoration provided an ascetic setting for the exaggeratedly scaled furnishings.

Beneath this classicist production, with its emphasis on stylistic continuity, run two thematic undercurrents that were to inform Aalto's designs during the 1930s: the influence of painting, and an intellectual and experiential appreciation of the landscape. Aalto began painting in his youth, and while he painted various subjects, Finland's forest and agricultural landscape provided continual inspiration. He emulated Finnish landscape painters like Eero Järnefelt, Pekka Halonen, and Tyko Sallinen, whose compositions were rooted in nature and who were masters at capturing Finland's complex landscape. Early paintings resembled Järnefelt's, while Halonen's and Sallinen's influence became dominant as Aalto matured. Sallinen, in particular, brought to Finnish landscape painting qualities Aalto specifically admired. Reviewing a Sallinen exhibition in 1922, Aalto complimented the artist's portrayal of "primitive Finnish landscape," finding value in the nonromanticized presentations of "the Finnish earth, its wounded landscape, even in its violated forests and its desolate suburban developments." But it was "Sallinen's landscape, with its hills and single curving line dominating the composition of the whole picture," that Aalto found most arresting.⁴

2. Paul David Pearson, *Alvar Aalto and the International Style* (New York: Whitney Library of Design, 1978); Schildt's *The Early Years* and *The Decisive Years*; *Alvar Aalto Furniture*; and Raija-Liisa Heinonen, "Some Aspects of 1920s Classicism and the Emergence of Functionalism in Finland," in *Alvar Aalto*, edited by David Dunster (London: Architectural Monographs and Academy Editions, 1978), Architectural Monographs 4, pp. 20–27.
3. Herler, p. 55.
4. Alvar Aalto, "T.K. Sallinen," *Itälehti*, 30 March 1922. Taken from Schildt, *The Early Years*, p. 150.



**Fig. 3. Defense Corps Building,
Seinäjoki, Finland, 1925.
Photograph by the author.**

From Sallinen, Aalto became interested in Cézanne's method of composing space. Cézanne, who avoided "Euclidian" space and normal perspective, built his paintings into a comprehensive spatial system by overlaying and juxtaposing multiple sets of environmental fragments and elements upon each other. In the continuous process of reconciling element with whole, Cézanne discovered that solidity or monumentality in painting depended as much on the relationships between individual pieces as on the generalized concept. His process of composing a spatial whole from bits and fragments of the environment, rather than relying on geometric unity, corresponds to the compositional sensibility Aalto evolved during the thirties. Cézanne's intention was to create an order of art corresponding to the order of nature, and for Aalto this would appear a more authentic way to relate his architecture to the natural order than did abstract geometry.

Landscape was more than a subject matter for painting. Aalto's knowledge of the physical and cultural properties of the Finnish environment provided the intellectual and experiential foundation for his eventual appropriation of nature as a compositional strategy for his architecture. The landscape, natural and cultural, formed a continuum constituting an organic system within which architecture actively participated. While his sensitivity to the particulars of the Finnish landscape was inculcated from youth,⁵ Aalto's appreciation of the essential involvement of architecture with the natural continuum is seen in a 1925 newspaper article titled "Architecture in the Landscape of Central Finland."⁶ When writing this, within a year after honeymooning in Italy, Aalto was attempting to foster a Nordic renaissance in provincial Finland (an intellectual tenet of

5. Schildt, *The Early Years*, pp. 22–67, covers this in particular.

6. Alvar Aalto, "Architecture in the Landscape of Central Finland," *Sisä-Suomi*, 28 June 1925. Reprinted in Schildt, *The Early Years*, pp. 206–210.

his twenties classicism). For this reason he drew upon similarities between the Italian landscape and the forests of central Finland to articulate architecture's fundamental interdependency with its larger environmental situation, be it city or country. For Nordic architects during the 1920s, the village-studded rolling hills of northern Italy proffered a vital illustration of an architecture that effectively beautified, civilized, and humanized the extant natural order. Architecture, as the quintessential "human touch" in nature, could impart a civilizing aura to the landscape. In advocating an interactive relationship between culture and nature, where architecture enhanced the particular qualities of a setting, Aalto commented: "What I wish to say is simply that with a few well-placed and forceful accents, the region would take on a distinctive cultural character due to the fact that the landscape of central Finland is made up of sweeping curves."⁷

Landscape and painting converge into two interrelated themes that reach fruition in Aalto's work during the next decade: sinuosity, and nature as a compositional tactic for design. Before achieving their mature expression in his architecture, the impact of these themes is first seen in Aalto's furniture and applied designs.

Moving to Turku in 1927, Aalto enjoyed a modest national reputation; relocating to Helsinki in 1933, he had achieved international recognition. His international stature resulted from four buildings—the Standard Block of Flats (1927–29) and the Turun Sanomat Newspaper Building (1928–29) in Turku, the 1929 Turku 700th Anniversary Exhibition (in association with Erik Bryggman), and the Paimio Sanatorium (1929–33)—and, significantly, from his furniture and applied designs. Aalto's conversion to functionalism, as modernism was termed in Finland, coincided with the move to Turku. His buildings, competition entries, and furniture designs appeared to immediately embrace functionalism's focus on rational technique, serial production, and machine esthetics.

What Turku provided, along with an active architectural community, was connection to Stockholm and the continent. The significance of this rests in the contact Aalto made as a result of his travels. Provided entrée to the continental architectural avant-garde by Swedish architect Sven Markelius, Aalto soon found himself in the company of Walter Gropius, Sigfried Giedion, André Lurçat, Laszlo Moholy-Nagy, Hélène de Mandrot, and Le Corbusier, among others. He nurtured these contacts, for during the Turku years he traveled to Denmark, Holland, France, Switzerland, and Germany; attended the Congrès Internationaux d'Architecture Moderne meetings in Frankfurt (1929) and Athens (1933); and participated in the Stockholm Exhibition opening and the Nordic Building Congress in Trondheim in 1930. In this way, Aalto kept abreast of continental trends and ideas, often holding news conferences or authoring articles, upon his return, to report recent international architectural developments.⁸ Aalto's association with the European avant-garde, coupled with his direct experience of the canonical works of the modern movement, enhanced his leadership position as a functionalist in Finland. His quick mastery of functionalist tenets was wryly commented upon by Hilding Ekelund in 1930:

With the same ardent enthusiasm as the academics of the 1880s drew Roman baroque portals, Gothic pinnacles, etc., in their sketch books for use in their

7. Schildt, *The Early Years*, p. 209.

8. Examples of Aalto's articles and interviews in the popular press during the late 1920s and early 1930s are listed in William C. Miller, *Alvar Aalto: An Annotated Bibliography* (New York: Garland Publishing, 1984), pp. 7–14.



**Fig. 4. Tuberculosis sanatorium,
Paimio, Finland, 1929–33.**

Photograph by the author.

architectural practice, Alvar Aalto noses out new, rational-technical details from all over Europe which he then makes use of and transforms with considerable skill.⁹

The Paimio Sanatorium (fig. 4), a potent symbol of the healthy new world modernism promoted, demonstrates Aalto's mastery of functionalist ideals. Conceptually, it is a clearly articulated set of discrete "functional" elements, expressed, in turn, in the machine esthetic of concrete, stucco, steel, and glass. Moreover, Paimio encapsulates the social programs of modernism: a rational design embracing the health-giving properties provided by sun, light, and fresh air. Despite its machined, industrial appearance, Paimio went beyond the normal conventions of modernist composition. Volumetrically, its discrete elements are not unified geometrically, as in Gropius's more regularized Bauhaus building (1926), but stand as individually configured pieces that collide together in a more haptic way. Here, as in Cézanne's work, unity resides in assembling an experiential, formal whole from diverse, particularly figured elements and pieces.

Aalto's conversion to functionalism had an immediate impact on his furniture. While he was forced to specify furnishings designed by others for his buildings during the late twenties—chairs from Thonet's standard line and Poul

9. Taken from Kirmo Mikkola, "Påspaning efter en nutid" ("Looking for the Present Time"), in *Nordisk Funktionalism* (Stockholm: Arkitektur Förlag AB, 1980), p. 72.



Fig. 5. Wood experiment, ca. 1931. Courtesy ARTEK.

Henningsen lamps, for example—his own designs underwent rapid evolution as his interest turned to serially produced furnishings for everyday use. In making furniture for the Agricultural Cooperative Building in Turku (1927–28), Aalto came into contact with Otto Korhonen. As technical manager of the Turku joinery firm *Huonekalu- ja Rakennustyötehdas*, Korhonen was instrumental in assisting Aalto with the technical development of his designs. Their initial collaboration produced the Korhonen-Aalto stackable chair (1929), and from this evolved a series of chairs characterized by molded curved forms made of laminated wood.

The Folk Senna chair of 1929, based on Gunnar Asplund's Senna chair (1925), introduced a continuous, one-piece molded plywood seat and back that was intended for serial production. Though Korhonen instructed Aalto in molding laminated plywood into curved shapes, the design had handcrafted legs joined to the seat. An upholstered cover was added because, as Göran Schildt observed, the chair “was hard as stone and as slippery as ice.”¹⁰ Attaching the legs remained a problem, so a fixed tubular steel base, capable of mass production,

10. Schildt, *The Decisive Years*, p. 38.



Fig. 6. Paimio chair, 1932.

**Courtesy Museum of Finnish
Architecture, Helsinki.**

was developed. Marcel Breuer's 1928 cantilever chair influenced the next modification: to the molded plywood seat and back, a springy base of thin, continuous steel tubing was added. Aalto referred to this design, which could be stacked, as "the world's first soft wooden chair."¹¹ This chair combined modern serial production with Finnish wood processing technology, a synthesis informing all Aalto's subsequent furniture designs. Aalto now felt confident enough to enter four chair and two table designs in a competition sponsored by Thonet-Mundus in Berlin (1929), though he did not place.

The next problem involved forming a wooden frame or base that would maintain its shape and be capable of mass production. Taking the molded seat back from the 1929 chairs, Aalto studied various frame configurations made from laminated birch. To investigate the shaping potentials of laminated wood, Aalto, with Korhonen's assistance, began a series of experiments or exercises (fig. 5). These laminated wood studies, or abstract sculptures, seem to capture the three-dimensional qualities Aalto found arresting in painting and the Finnish landscape during the 1920s: "the single curving line" of Sallinen's paintings, and the "sweeping curves" of the central Finnish landscape. There appears a kinship with painting in the freedom of line exhibited in these studies and their resultant furniture designs. The sinuous nature of these experiments transforms into the expressive, curved elements seen in the five new designs developed for the Paimio Sanatorium during 1931–32: an armchair, with laminated birch sides bent into a closed curve (fig. 6); an upholstered version of the same design; a stackable armchair with birch legs; an armchair with cantilevered frames of laminated birch (cover illustration); and a table with closed curve, laminated birch frames and a molded plywood top and tray.

11. *Ibid.*, p. 39.

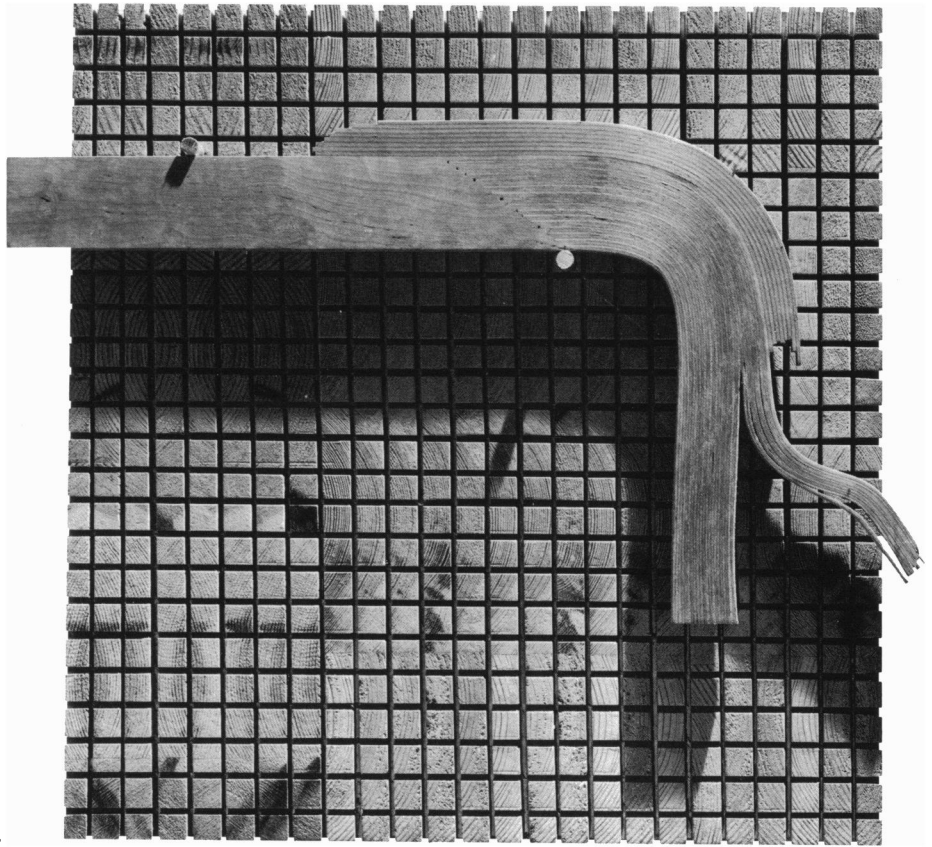


Fig. 7. Wood experiment, ca. 1937. Courtesy Museum of Finnish Architecture, Helsinki.

Preference for wood furniture resulted, in part, from concerns Aalto had about modern steel furniture and expressed in his 1935 talk “Rationalism and Man”: “We have concluded and we should be agreed upon the fact that objects that properly can be given the label rational often suffer from a notable lack of human qualities.”¹² Aalto criticized modern furniture for appearing “rational” from a production standpoint, yet failing to properly address human psychological needs. The reflectivity and conductivity of metal were among its disadvantages, while wood was a natural material having traditional associations. This critique of metal furniture did not lessen Aalto’s desire to serially produce furnishings. In his own estimation, the most important furniture development was the “bent knee” leg (ca. 1933). A solid piece of birch was sawn open at the end in the direction of the fibers; then thin wood slats were glued into the grooves, and the wood was bent to the desired angle (fig. 7). The “bent knee” leg yielded the three-leg stackable stool with round seat (fig. 8), and a series of chairs with round seats and molded plywood backs of varying heights that initially appeared in the Viipuri Library. During this time, two wooden wall screens were developed—a fixed one, and a flexible, undulating one—along with the laminated triangular shelf consoles, or brackets.

Hoping for increased commissions, the Aaltos moved to Helsinki in August 1933. Though the next several years were a low point in their architectural

12. Alvar Aalto, “Rationalismen och Manniskan” (“Rationalism and Man”), lecture delivered to the Swedish Craft Society, 9 May 1935. Taken from Göran Schildt, ed., *Alvar Aalto: Sketches* (Cambridge, Massachusetts: The MIT Press, 1978), p. 48.



**Fig. 8. Stacking stools from
"bent knee" leg, 1932–33.
Courtesy ARTEK.**

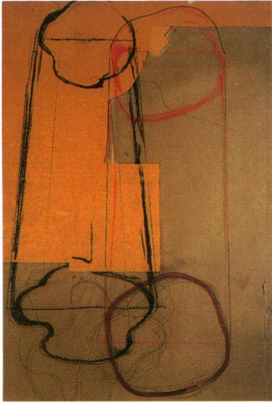


Fig. 9. Competition entry, *The Leather Pants of an Eskimo Woman*, 1936. Courtesy of Iittala Glassworks.

productivity, it proved the opposite for furniture and applied designs. That November, through the assistance of P. Morton Shand, they mounted an enormously successful furniture exhibition in London. The exhibit included wood studies and early examples of the Aaltos' glass designs. As significant works in themselves, wood experiments and glassware became regular features in the Aaltos' exhibitions. The success of the show resulted in Shand forming Finmar to market Aalto furniture in England. The next year, under the auspices of Sigfried Giedion, they mounted another showing in Zurich. Giedion's furniture companies, Palag and Wohnbedarf, had been manufacturing, retailing, and exhibiting several Aalto furniture designs since 1931. The international recognition his furniture achieved, due to these exhibits, resulted in an extraordinary increase in sales throughout the world. But, for a variety of reasons, the Turku factory was unable to meet production and export demands.

The resolution of this situation occurred in 1935, and involved Marie Gullichsen, member of a prominent industrial family, and Aalto's friend, art critic Nils Gustav Hahl. Hahl and Gullichsen intended to open a modern art gallery in Helsinki, but when Hahl found himself an intermediary for resolving the production and export conflict between Finmar, the Turku factory, and Aalto, he perceived a broader opportunity. He introduced Gullichsen to Aalto, proposing the three form a company that would assume responsibility for the production and marketing of Aalto furniture. The result was ARTEK. Since its inception, ARTEK has continued to develop and promote Aalto furniture, in addition to acting as an outlet for modern artistic ideas.¹³ Otto Korhonen and Aino Aalto assumed essential roles in ARTEK too, Korhonen being responsible for manufacturing and technical development, with Aino taking on the managing directorship after Hahl's death in 1941.

The Aalto name became associated with glassware in 1932, when Aino won second place with a stepped-section, compressed-glass tableware series entitled *Bölgeblick* for a competition sponsored by Karhula and Iittala. Placed into production under the name "Aalto," the series won Aino a gold medal at the 1936 Milan Triennale. Alvar's entry in the competition, a set of stackable glasses titled *Karhiit*, intended for use in the Paimio Sanatorium, was purchased but never produced. In 1933, Alvar won second place in a competition sponsored by Riihimäki, with a series of five "nesting" pieces called *Riihimäki Flower*. In the late thirties, this design was revised into the four piece set *Aalto's Flower*. For the 1937 Paris World's Fair, the Aaltos were invited to participate in a competition sponsored by Iittala, Karhula, and Riihimäki. Alvar placed first with an entry entitled *The Leather Pants of an Eskimo Woman* (fig. 9). The irregularly-shaped, curved form of this design was the precursor of his famous Savoy vases (fig. 10).¹⁴ The sinuous configuration of the Savoy vase, and its numerous variations, resemble the undulating shapes that concurrently appeared in the Aaltos' architecture. Like the wood experiments, glassware design provided another opportunity to investigate the crafting of free-flowing, painterly shapes in three dimensional form.

13. For discussion regarding the development of ARTEK see: Pekka Suhonen, *ARTEK: alkua, tausta, kehitys* (*ARTEK: The Beginning, Background and Development*), (Espoo, Finland: Frenckell for ARTEK, 1985); *ARTEK 1935–1985* (Helsinki: Museum of Applied Arts, 1985), *Konstindustrimuseets Publication #15*, 68 pp.; and Schildt, *The Decisive Years*, pp. 121–128.

14. Timo Keinänen, "Glassware by Aino and Alvar Aalto," *Arkkitehti*, no. 8 (1980), pp. 48–54, provides the most comprehensive assessment of the Aaltos' glass designs during the thirties.

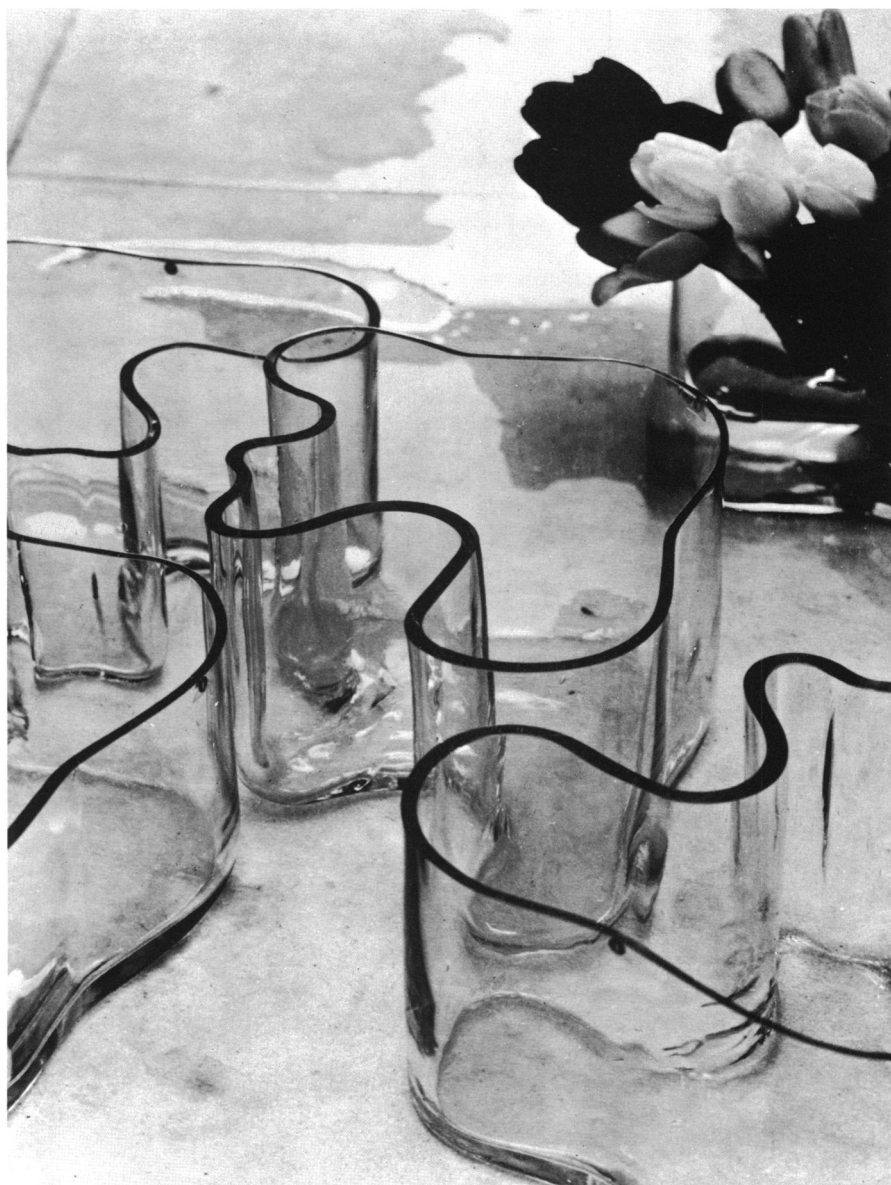


Fig. 10. Savoy vases, 1937.

**Courtesy Museum of Finnish
Architecture, Helsinki.**

With the Viipuri Library, completed in 1935, Aalto's functionalism began to wane. Here, in the undulating wooden ceiling of the lecture room, the influence of applied design becomes manifest (fig. 11). The flowing shape of the ceiling thematically captures the sinuous vitality witnessed in Aalto's furniture and glassware.¹⁵ The next year, the Aaltos' house in Munkkiniemi was finished. Though exhibiting the collage-like composition of elements seen in Paimio, it is the tactile, traditional, material vocabulary used for the house that is of interest. Stone, whitewashed brick, and wood cladding—incorporating common vernacular details—contrast the machine imagery of the early thirties. These

15. On the importance of the Viipuri Library see: William C. Miller, "From Viipuri to Mount Angel: the Evolution of the Library in Aalto's Work," *Architectural Association Quarterly* 10, no. 3 (1978), pp. 30–41; William C. Miller, "A Thematic Analysis of Alvar Aalto's Architecture," *Architecture & Urbanism*, no. 109 (October 1979), pp. 15–38; and David Pearson, "The Legacy of Viipuri," *Architectural Design* 49, no. 12 (1979), A.D. Profile 25, pp. 6–13.

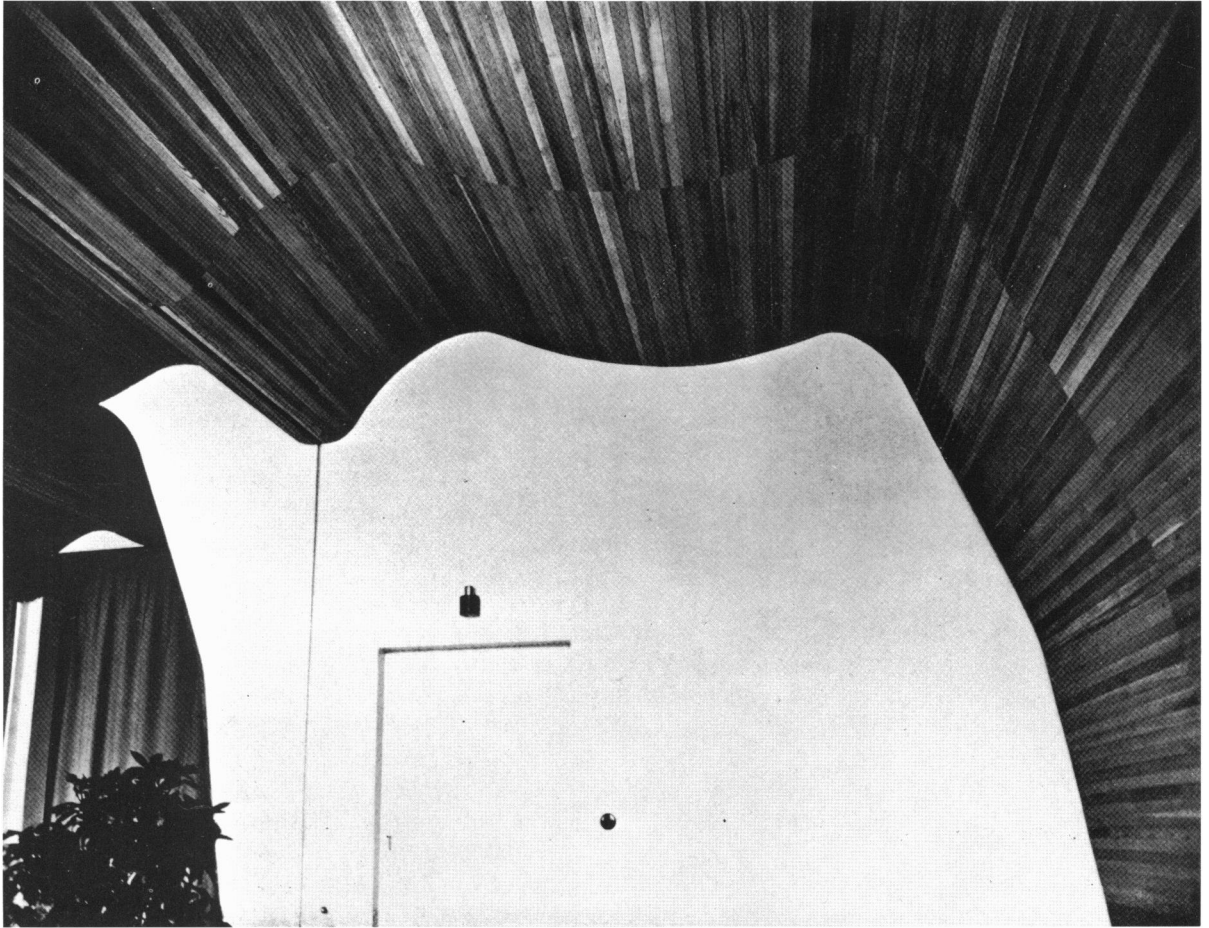


Fig. 11. Viipuri Library, lecture room ceiling, Viipuri, Finland, 1933–35. Photograph by Theodor Nyblin. Courtesy of Museum of Finnish Architecture, Helsinki.

buildings, coupled with concerns articulated in his contemporaneous writings, signaled Aalto's movement away from the industrial techniques of modernism. In "The Humanizing of Architecture," a 1940 essay, he wrote: "Technical functionalism cannot create definite architecture."¹⁶

It was the failure of industrial technique to integrate the individual into the continuum of nature that Aalto found unacceptable. Industrial processes were to be subordinated to humanistic values in Aalto's mind, and such values were defined through the individual's harmonious interaction with the totality of nature. His earlier appreciation of the landscape, and the role architecture assumed in providing a "human touch" to the setting, solidified into a conception of nature as a continuous organic system that included both society and the individual. Nature, characterized by the fact that it is diverse yet efficient, generic yet particular, and irrational yet rational, provided a model worthy of emulating in design. By using such a model, Aalto felt he could revitalize the relationship between nature, architecture, and the individual in a more harmonious, empathetic way than was afforded by industrial technique. In the 1938 lecture, "The Influence of Construction and Materials on Modern Architecture," he stated:

In opposition to the view that sees established forms and uniformity as the only way to achieve architectural harmony and successfully controlled

16. Alvar Aalto, "The Humanizing of Architecture," *The Technology Review* (November 1940), pp. 14–16.

building techniques, I have tried with all I have said here to emphasize that architecture's inner nature is a fluctuation and a development suggestive of natural organic life. I would like to maintain that this is finally the only true style in architecture.¹⁷

The basic element of nature, instrumental to its organic unity, is the biological cell, for the infinite variety of forms and types characterizing nature's diversity evolve from the cell. Constantly commenting on the importance of biological cells and cell structures, Aalto emphasized the variety of forms they produce. In "Rationalism and Man," he proposed an analogy between cell structures and architectural composition:

Nature, biology, is formally rich and luxuriant. It can with the same structure, the same intermeshing, and the same principles in its cells' inner structure, achieve a billion combinations, each of which represents a high level of form. Man's life belongs to the same family. The things surrounding him are hardly fetishes and allegories with a mystical eternal value. They are rather cells and tissues, living beings also, building elements of which human life is put together. They cannot be treated different from biology's other elements or otherwise they run the risk of not fitting into the system; they become inhuman.¹⁸

Variety was what imbued nature with its rich, complex forms, stemming from nature's smallest unit, the cell. The cell was a generic module, a small building unit or element, with unlimited capacity for variation in its shape and configuration. To compose architecture was analogous to the formation of cell structures yielding unlimited opportunities for organization and arrangement. In using nature as a compositional tactic, Aalto's intention was to create architecture achieving the same variation witnessed in cell formations. Only in this way, in contrast to the techniques of industrialized processes, could he create an order of architecture corresponding to the order of nature. Aalto sought the same flexibility and latitude as nature, to compose and configure architectural elements, spaces, and forms. He neither attempted to replicate natural forms nor have his buildings appear as contrived naturalistic things. Rather, architecture provided the humanizing connection between the individual and nature.

The design of furniture and glassware, objects for everyday use, confirmed Aalto's views. Not only could he serially produce these objects from natural materials, but also, ironically, their sinuous, tactile forms contrasted the machine imagery associated with modernism. Moreover, in the continuously molded seat back and closed curve, laminated frames of his chairs, and the undulating containment of his vases, Aalto found his biological cell. Here was the generic module, the architectural unit capturing "nature's infinite capacity for nuance."¹⁹ Capable of unlimited variation—for at differing scales it could be ceiling, wall, space, building form, door handle, or light fixture—this Aaltoesque biological cell provided a thematic foundation for his work. Aalto's architecture, like applied designs, now exhibited more sinuosity in the shaping of spaces, forms, and elements, and more tactility and sensuality in materials.

17. Alvar Aalto, "The Influence of Construction and Materials on Modern Architecture," lecture delivered to the Nordic Building Conference, Oslo, 1938. Taken from Schildt, *Sketches*, p. 63.

18. Aalto, "Rationalism and Man." Taken from Schildt, *Sketches*, p. 51.

19. Alvar Aalto, "The Reconstruction of Europe Reveals the Central Architectural Problem of Our Time," *Arkkitehti*, no. 5 (1941), pp. 75–80. Taken from Aarno Ruusuvuori, ed., *Alvar Aalto 1898–1976* (Helsinki: Museum of Finnish Architecture, 1978), p. 141.



Fig. 12. Entrance canopy, Villa Mairea, Noormarkku, Finland, 1938–39. Photograph by the author.

Simultaneously, his building compositions began to achieve unity through casually placed, selectively elaborated elements rather than from geometric abstraction. This tactic embraces the diverse yet efficient and generic yet particular quality Aalto found in nature, as well as Cézanne’s influence. As a strategy, this resulted in a consistent approach to building organization. Conceptually, Aalto often began his building designs by shaping a place—a spatial void—in the environment. This was a civilizing space, in the form of a courtyard or small square, within the continuum of nature. Once place was defined, he positioned specially crafted and figured vertical forms within the composition. These vertical objects, which provided a “human touch” to the landscape, were molded from the ceremonial or honorific activities of the program. These elements received expression through exaggerated shaping and profiling—sinuous, non-rectilinear forms recalling the configurations of his furniture and glassware. Binding objects and place together was a neutral, common building order that housed the ordinary, utilitarian functions of the program. Low, horizontal building masses functioned as a datum, weaving the specialized forms and spaces of the composition together.²⁰

As Aalto’s mature *oeuvre* attests, this simple strategy resulted in an infinite variety of architectural solutions. Just as biological cells combined into the rich profusion of forms found in nature, this strategy allowed Aalto infinite variation in the composition of his building forms. The flexibility this offered was not in dictating a set of results, but in establishing a mode of action. This variety and diversity of form is seen in three major works Aalto designed before 1940: the

20. For discussions on the particulars of Aalto’s ordering sensibilities see: Demetri Porphyrios, *Sources of Modern Eclecticism: Studies on Alvar Aalto* (London: Academy Editions, 1982); Miller, “A Thematic Analysis of Alvar Aalto’s Architecture”; and Schildt, *The Early Years*, pp. 242–259.

**Fig. 13. Interior of living room,
Villa Mairea. Photograph by H.
Havas. Courtesy Museum of
Finnish Architecture, Helsinki.**

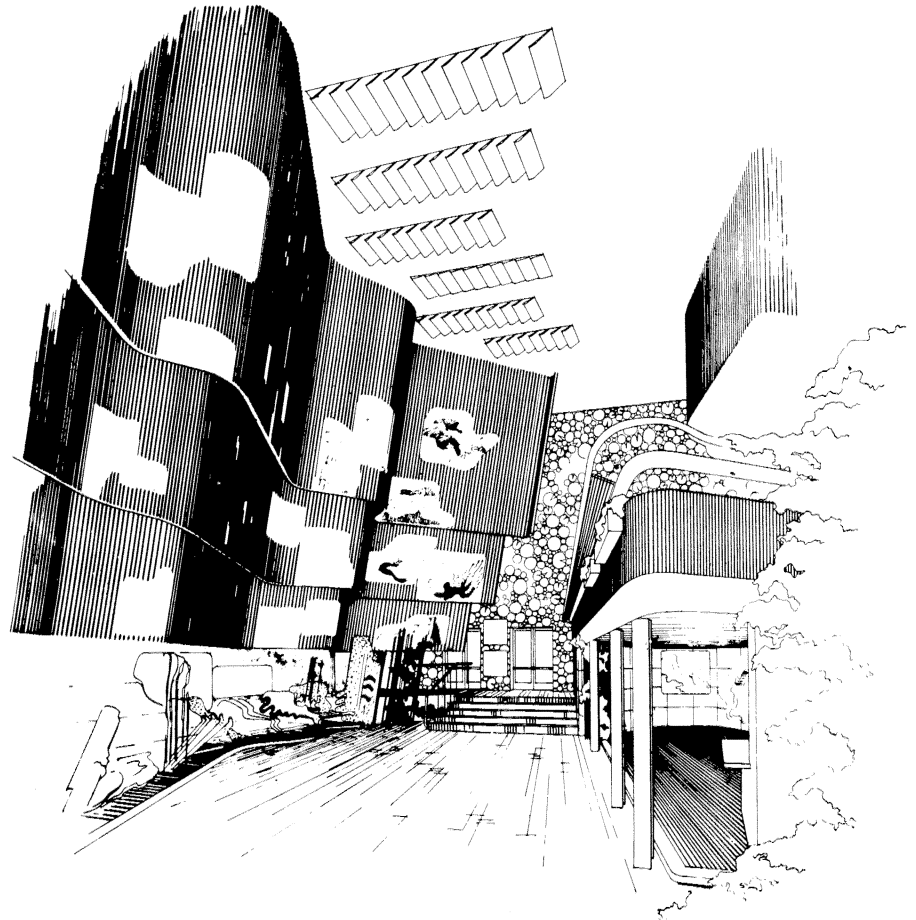


Finnish Pavilion for the 1937 Paris World's Fair, the Villa Mairea for Harry and Maire Gullichsen (1938–39), and the Finnish Pavilion for the 1939 New York World's Fair.

Aalto won both first and second place in the competition for the Paris Pavilion. The unbuilt submission had a great undulating balcony weaving through the scheme; a painterly curve resembling the flowing lines of Aalto's recent furniture and glass designs, and the Viipuri Library lecture room ceiling. The Pavilion as built—a large hall formed about a recessed space, with an *enfilade* of rooms terraced around an external courtyard—was a symphony in wood construction with detail qualities reminiscent of traditional Finnish buildings. In contrast to earlier machine imagery, the Pavilion had a tactile, sensuous material vocabulary that was ruggedly sophisticated. The curving balcony of the unbuilt Paris entry reappeared in the initial design sketches for the Villa Mairea. Though this design was rejected, the final composition of the villa contained a number of curved, figural elements set in a more common order (fig. 12). These figural forms, which defined the major honorific spaces and elements of the dwelling, were executed in wood to contrast the whitewashed walls of the utilitarian spaces. Internally and externally, Mairea abounds in textural articulation (fig. 13); materials are juxtaposed to each other in an incredibly rich experiential ensemble. The design for the Finnish Pavilion at the New York Fair is dominated by a large, curved wooden wall that steps into the space (fig. 14). This continuous undulating surface appears as an unfolded Aalto vase or the molded seat back of a Paimio chair, enlarged to monumental proportions. In New York, the tectonic and compositional influence of Aalto's applied designs have reached their full expressive potential as architectural space and form.

During the forties, Aalto resumed painting, while maintaining his interest in designing furniture and building speciality items. Following the "bent knee" leg came the continuously laminated "Y" leg, and fan-shaped "X" leg. Bent at two 90 degree angles, the "Y" leg was used for stools, tables, and a stacking

**Fig. 14. Interior perspective,
Finnish Pavilion, New York
World's Fair, 1938–39. Courtesy
Museum of Finnish
Architecture, Helsinki.**



chair. The “X” leg, used primarily for stools, is made from sawn “bent knee” pieces and dowelled into the seat. The fan shape of the “X” leg resembles the form of numerous Aalto auditorium and concert hall spaces. Following these developments, only slight modifications to earlier pieces occurred, mostly in the realm of fabrics and finishes. Lighting fixture design occupied Aalto’s interest also. Originally designed for specific buildings, these fixtures, like furniture and glassware, were put into production for use in other projects. As evidenced in his design sketches (fig. 15), light fixtures continue the legacy of themes seen in his architecture and furniture. Other speciality items which exhibit the tactility and sinuosity associated with his buildings include door pulls, rounded ceramic tiles, fountains, and the monumental sculptures for his late works.

►
**Fig. 15. Sketches of light
fixtures, ca. early 1950s.
Courtesy Museum of Finnish
Architecture, Helsinki.**

Aalto’s paintings are abstract and nonrepresentational after 1940, yet appear based upon natural subjects. Curved organic shapes and lines dominate these compositions—albeit some incorporate geometric figures—with thickly-applied paint adding surface tactility. Similarity between these painterly, two-dimensional forms and the tectonics of Aalto’s buildings is more than obvious. An oil painting from 1963 (fig. 16) resembles not only the council chamber profile and coloration of the tile-clad Seinäjoki Town Hall (1963–65) (fig. 17), but also the overall form of the Neue Vahr high rise in Bremen, Germany (1959–62),

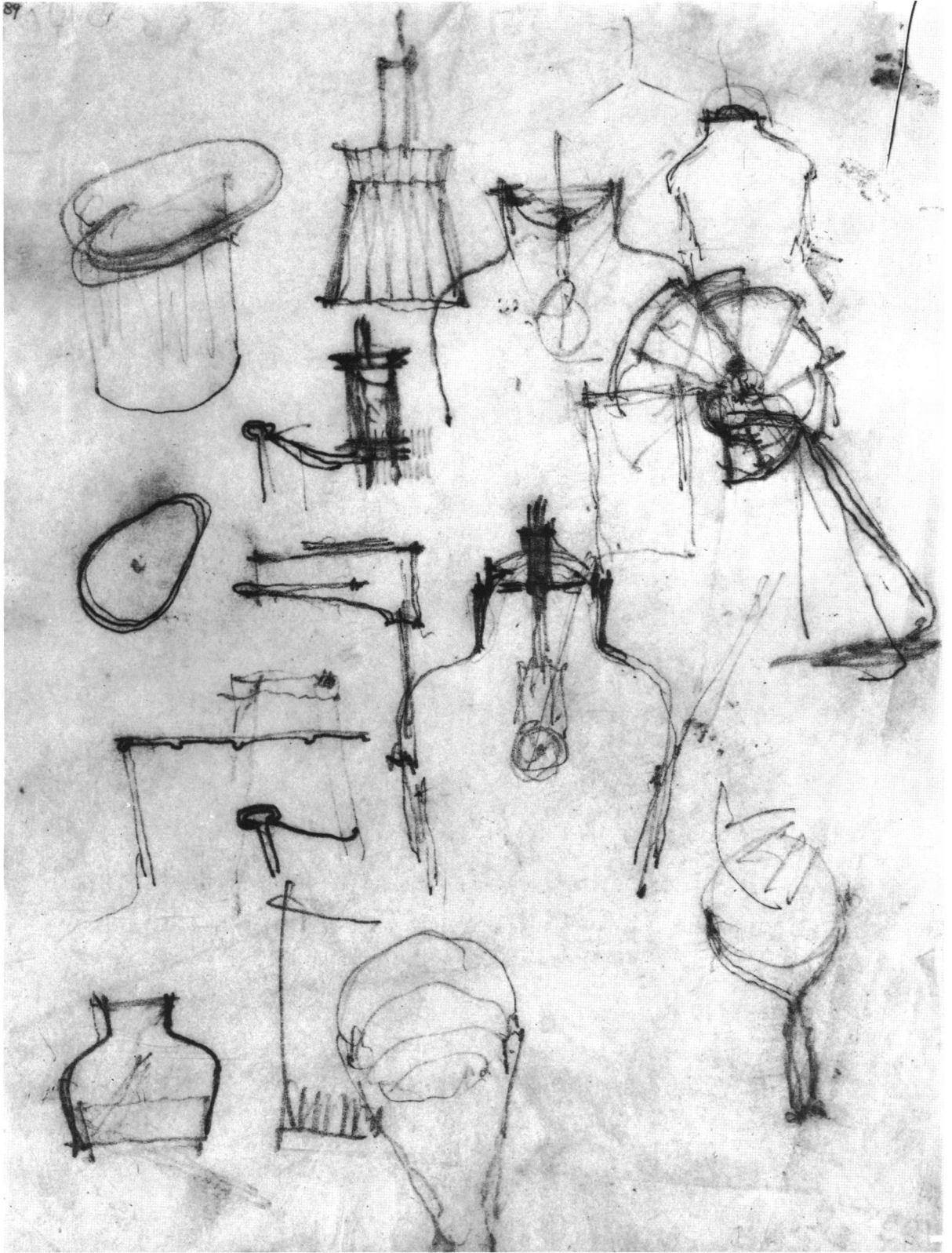




Fig. 16. Untitled oil painting, 1963. Courtesy Museum of Finnish Architecture, Helsinki.

and the expressive volume over the library and meeting room in the Scandinavian House in Reykjavik, Iceland (1965–68). In later paintings, Aalto mixed sand with the oils, adding more texture to the surface of the canvas. Painting had returned to an active position in Aalto's work, providing a mode of studying formal considerations and relationships in the abstract—akin to the role wood studies and glassware assumed as small rehearsals in form-making during the thirties—before being concretized as architecture.

Furniture and applied design, coupled with artistic production, proved essential to the conceptual and thematic development of Aalto's multivalent architecture. Yet despite this role, his chairs, vases, and light fixtures have a power and dignity of their own. Partly, their power resides in the fact that while appearing serially produced, they retain a handicraft quality based upon their means of assembly and making, works never far from the influence of the "human touch." As beautiful objects, they are nonetheless intended for everyday use by the common individual. Like his architecture, Aalto's furnishings and applied designs serve as necessary reminders of our individual humanity and dignity in a world of ever-increasing superficiality. □



Fig. 17. Entry and council chamber, Town Hall, Seinäjoki, Finland, 1963–65. Photograph by the author.

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