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# On Becoming a Modern Architect:

Eero Saarinen's Early Work 1928-1948

Peter C. Papademetriou

The debate in architectural theory and criticism of the past decade has centered around reintegration of a supposed lack of symbolic content in architectural form through, to a large part, a repudiation of its most recent legacy, the Modernist period and specifically the stylistic imperatives of its most obvious manifestation, the International Style. In the period of the late 1970s, while seeking to clarify a definition of this sensibility of Post-Modernism<sup>1</sup>, its theoreticians have at the same time muddied its ostensive catholicity or "inclusiveness"<sup>2</sup> by generalizing the historic moment of Modernism as having been a single thing. The phenomenon was noted as early as 1963 by historian William Jordy that "Inevitably so, where every present realizes itself by repudiating a portion of its immediate past ... although the swelling chorus of approval for the refurbishment of Beaux-Arts ideals threatens to demean still further the achievement of early Modernism ..."<sup>3</sup> What happened in the recent decade has been as gross a reduction of the significant development of architecture from the mid-1930s through the mid-1960s as previously Sigfried Giedion had reduced all the formal diversity which did not fully conform to the stylistic elements of the International Style.<sup>4</sup>

Seen in these terms, the elimination of tradition had been a means to introduce a *Neue Sachlichkeit* ("new objectively") to address what was perceived as the new social context of the 20th Century. However, as Allan Colquhoun noted, "Now it's my belief that beneath the apparent objectivity of these ideas there



Central Railway Station, Helsinki, Finland, 1909- ; Eiel Saarinen

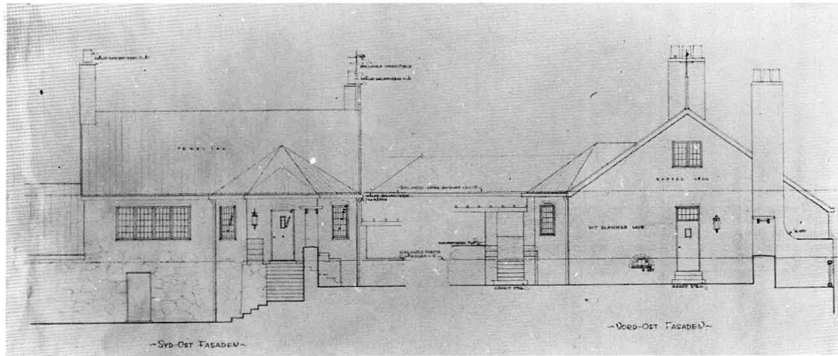
lies an aesthetic doctrine."<sup>5</sup> This bias sought a new image for the new problems of design, buildings appropriate to new uses and generally conditioned by a need for rational functionalism. The Modernist theoreticians, moreover, presented their arguments to sustain their aesthetic bias, as for example, "[Nikolaus] Pevsner was describing what he thought the building should have been like ... (attaching) the word 'Functional' to an appearance of buildings ... (such that) the essence of rationalism is the pursuit of an abstract perfectionism ..."<sup>6</sup> While the avowed goal was "... not to introduce a, so to speak, cut and dried 'Modern Style' from Europe, but rather to introduce a method of approach which allows one to tackle a problem according to its particular condition",<sup>7</sup> the net effect was to codify particular stylistic standards.

Embodied in the hermetic aesthetic of the International Style, Modernism proved to be an easy target, one as readi-

ly replaceable as the historic styles of the late 19th Century. Its critics have equated its failures with its image, and advocated its replacement in turn.<sup>8</sup> However, the recent history of Post-Modernism has likewise indulged in as exclusionary a polemic as characterized its predecessor, bearing witness to a revival of 18th and 19th Century nostalgia,<sup>9</sup> almost as if the 1932 Museum of Modern Art exhibition "The International Style: Architecture Since 1922" was repudiated by the 1975 "The Architecture of the Ecole des Beaux-Arts." As such, Post-Modernism as an historicist aesthetic has come under attack, and, with the decade of the late 1980s, it would seem that the question of architectural expression still remains.

Of the leading American architects of the 1950s, perhaps one of the most enigmatic is Eero Saarinen, characterized at the height of his career as "In many ways the most interesting of the second generation of modern American

architects ... If modern architecture were already an enshrined academy, it might well be that Eero Saarinen would be considered a mannerist and an eclectic ... it seems to be Saarinen's secret that he, more than most of his contemporaries, recognized that the valid approaches to modern architectural problems are vastly more varied than any single-minded approach would indicate."<sup>10</sup> As Henry-Russell Hitchcock noted in a 1962 memorial to Saarinen, "Certainly it is true, however, that the extreme insistence on a sort of modernism in architecture that should be in its every aspect as different as possible from earlier architecture has diminished. Architects today are less afraid of continuity and partial identity in theory, in materials, and in emotional content with buildings of the past than in the twenties. But it chiefly creates confusion, I believe, to call these tendencies 'post-modern,' 'anti-modern' or 'neo-traditional,' however badly some generic name for them has evidently come to be



"Hvittrask", Boback, Finland; photo by Eero Saarinen

needed."<sup>11</sup>

Saarinen holds fascination today because he seems to straddle between a definite commitment to the extensions of the experiments of Modernism with a conscious recognition of the past and the associative allusions of form. As the critic Peter Carter observed, "Saarinen was aware of today's technology in its widest sense and he used its potential as a means of achieving a many-faceted architectural expression within the tradition of the modern masters. To advance the symbolic and environmental content of that tradition he explored special architectural vernaculars for each project ... it precluded the possibility of a personal style, a fact which set him apart from any of his contemporaries."<sup>12</sup>

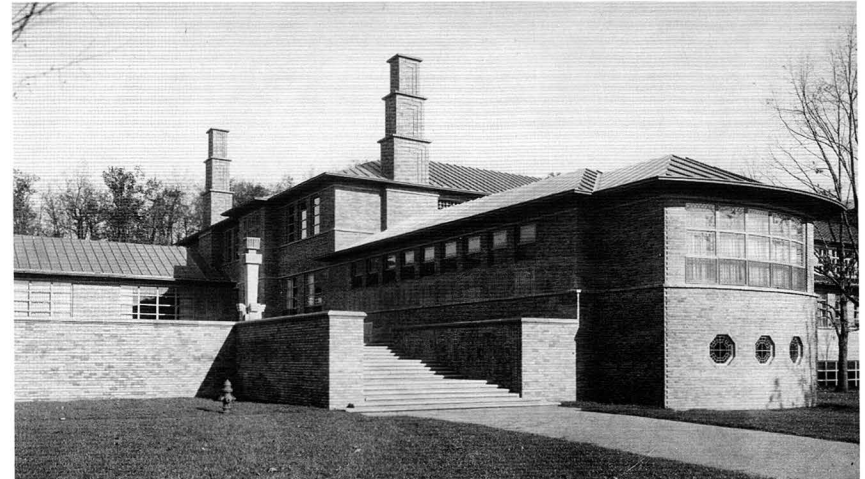
However, unlike Athena being born directly from the head of Zeus, Eero Saarinen did not suddenly emerge as a fully developed architect at age 40. If his talent for formal invention is what in-

trigues us most, then we should know something of the reasons. In fact, the first two decades of his personal career in design were a period of great change, which Saarinen experienced and in response attempted to find his own definitions. The period 1928-48 may be seen as his education, where he sought a reconciliation of the past with his vision of the future.

Eero Saarinen shared his birthdate and career with a famous father, Eliel Saarinen. The aesthetic evolution represented by his period of education was also paralleled by his coming to grips with his own identity in the shadow of his father's fame. Eliel was a transitional figure in Finnish architecture, whose own career initially found expression in a backward look at national traditions mingled with a forward, progressive allegiance to the newest art movements. In 1904, the winning entry for the Helsinki Central Railway Station by Gesellius, Lindgren and Saarinen was



Furniture designs by Eero Saarinen for Kingswood School, 1931



Kingswood School for Girls, Cranbrook, Bloomfield Hills, Michigan, 1929-

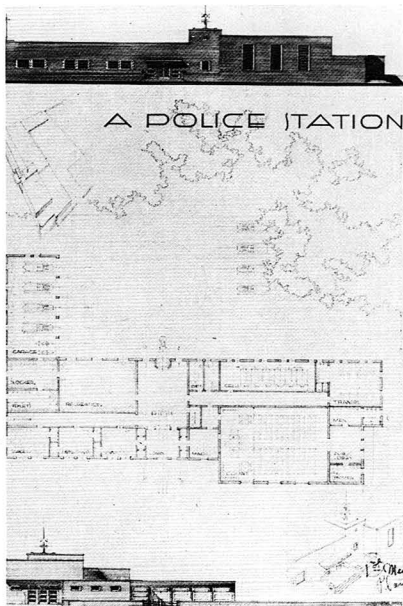
severely attacked by a younger generation which saw no future in nostalgia. Eliel's solo revised design five years later indicated a shift toward the direction of European Modernism, but also had a distinct sensitivity to the existing context, the essence of which was a conservative sensibility. The critical aspect of the conservatism was, as Alvar Aalto noted in 1946, that "Thanks to his honest, logical approach, the usual strife between old and new architecture does not exist in Finland."<sup>13</sup>

Eero was born at the family home "Hvittrask" in 1910, and grew up in an atmosphere surrounded by the arts. With Finnish independence from Russia in 1919 following World War I, the economy cratered and his father had no opportunities to build. In 1922, Eliel achieved international fame with his Second Prize entry for the Chicago Tribune Competition. On the strength of the prize money and possibilities for work, he came to the United States in

early 1923, with the family following in the late spring.

Projects for Chicago, then Detroit and a teaching appointment at the University of Michigan eventually brought Eliel in contact with George G. Booth, publisher of the Detroit News, and resulted in the creation of a collection of educational institutions named Cranbrook in Bloomfield Hills, Michigan. By 1928, Eero, who was then about to enter his last year of high school, began to work in the Cranbrook Architectural Office, completing a small addition and extension to "Hvittrask," which had been partially damaged by fire. With graduation from high school and the onset of the Great Depression in 1929, Eero went to Paris to study sculpture at the Academie de la Grande Chaumiere until mid-1930, continuing upon his return at Cranbrook with sculptor Carl Milles.

In 1929, Eliel began work on the

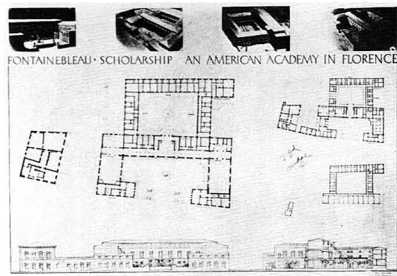


"A Police Station", 1932; Eero Saarinen

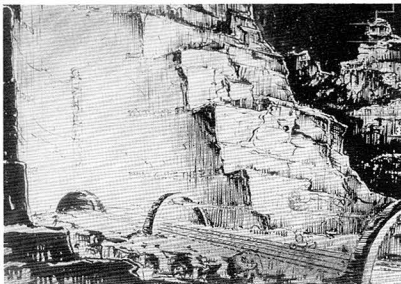


Egypt, 1935; Eero Saarinen (left)

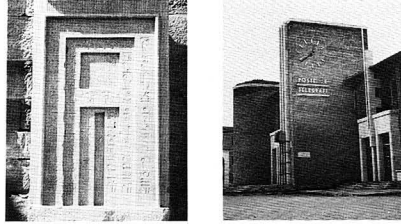
Kingswood School for Girls at Cranbrook, whose simplified massing and sparing use of ornament pulled it aesthetically farther than the earlier Cranbrook Boys School which was more picturesquely composed. Kingswood obliquely synthesizes elements of Art Deco with the feeling of Frank Lloyd Wright. Eero designed several interior pieces for Kingswood beginning in early 1931 — most notably furniture designs which concurrently embraced the most *avant-garde* references as well as the most traditional. His auditorium armchair is a Modernist steel tube frame with cantilever seat in the spirit of Mart Stam, Marcel Breuer and Alvar Aalto. By contrast, the dining hall side chair is a traditional wood frame of natural and pink-painted birch with reproduction linen upholstery.<sup>14</sup> The comfortable coexistence of such a stylistic dichotomy has been part of the critical difficulty of categorizing a "progression" in his formal development.



"An American Academy in Florence"

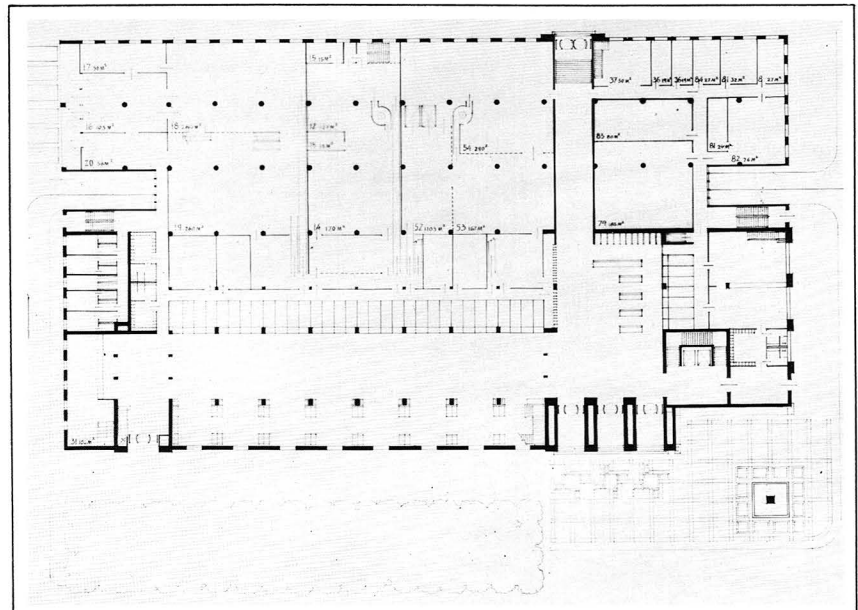


"A Memorial Tunnel Entrance", 1932

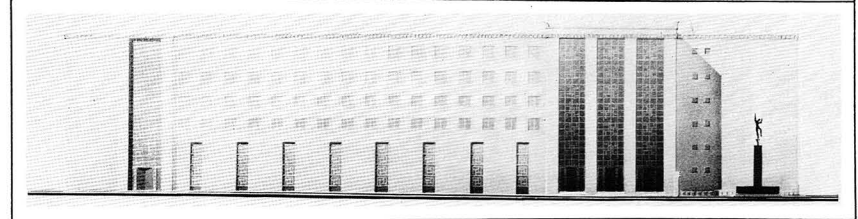


Travel photographs, 1935

The fall of 1931, Eero enrolled in the graduate program in architecture at Yale University, a traditional program in its last days of the Beaux-Arts method.<sup>15</sup> An early First Mention of Eero's for "A Police Station," designed as an asymmetrical plan in a similar style to Kingswood, was criticized for its very modernity by the jury for "The elevation, while diagrammatically good leaves something to be desired in its indication of detail study,"<sup>16</sup> and "An American Academy in Florence" Second Medal of 1933 caused an observation that "His architecture ... lacks finish and Character."<sup>17</sup> Generally, however, Saarinen's projects exhibited a degree of basic *parti* that made them consistently attractive, and his directness was shown in a winning entry for the Spiering Prize for "A Memorial Tunnel Entrance," where "... by simply scooping out the rock in a semi-circle at the tunnel entrance for a great height, and cutting back huge steps in the face of the mountain at either side produced an approach



Competition entry; Helsinki Central Post Office and Telegraph, Helsinki, Finland, 1934



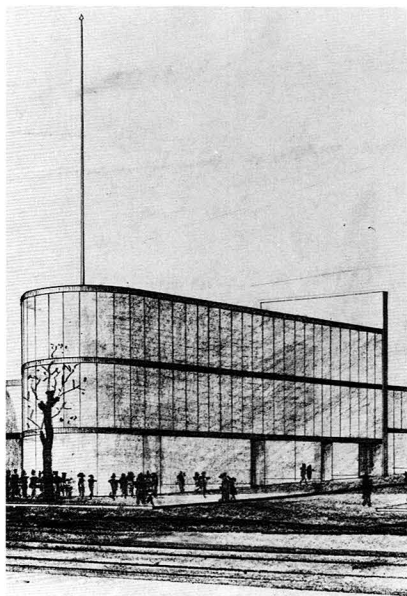
Competition entry; Helsinki Central Post Office and Telegraph, Helsinki, Finland, 1934

monumental though primitive in character and as enduring as the mountain itself."<sup>18</sup> Known by his classmates as "Second Medal Saarinen" for the number of prizes, Eero showed his capacity to work well in a limiting framework, a foretaste of his ability to combine unorthodox design thinking with a conservative context. For his performance at Yale, he was awarded the Charles Arthur and Margaret Ormrod Matcham Traveling Fellowship, and in late 1934 headed for Europe.

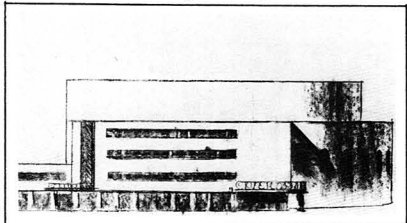
Before he left, Saarinen completed a competition entry for the Helsinki Central Post Office and Telegraph, a project coincidentally sited directly adjacent to his father's train station. His design had a principal facade whose setback corner is a gesture to a bend in the street at the edge of the site, asymmetrical massing in response to connection with the train station beyond, and a repetitive rhythm evoking the regularity of the trebeated structural grid of the interior; Saarinen

placed Third.

Saarinen's travel to Europe comprised an itinerary of looking at a broad variety of architecture. Traveling with Carl Milles as well as other Americans, he went to Egypt, Palestine, Syria, Greece, Italy and then north to Berlin, Gothenberg and Helsinki. He looked at buildings from the most ancient to the most current, including the recently completed Italian Fascist architecture. In Helsinki, he worked with Jarl Eklund in renovations and expansion of the Swedish Theater, a commission which Eliel had won in 1916 but gave up after settling in the United States. Drawings dated 1931 had been sent from Cranbrook to Eklund, and Eero acted as a designer, undertaking a great variety of facade studies spanning a range from direct historicist versions to pure International Style. The return to Finland also brought him in more direct contact with changes in the aesthetic temperament of Scandinavian versions of



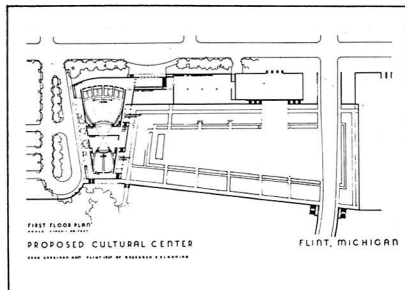
"Forum"/Fazer City Palace, Helsinki



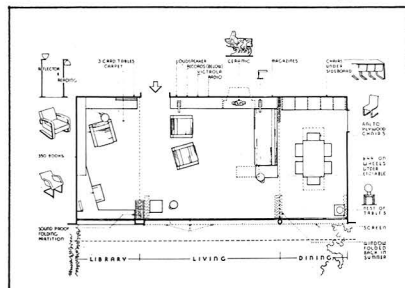
Facade studies, Swedish Theater, Helsinki, Finland, 1935; Eero Saarinen

Modernism through the work of Gunnar Asplund in Sweden and Alvar Aalto in Finland, which he visited. These works reflected a critically non-ideological attitude, one which was more broadly based and which Peter Smithson has characterized (in Aalto's case) as being "... un-theoretical, non-revolutionary and un-heroic."<sup>19</sup> Eero also executed several other projects, including the "Forum," a multi-use center in Helsinki whose curving forms recall Asplund's version of the International Style at the Stockholm Exhibition of 1930.

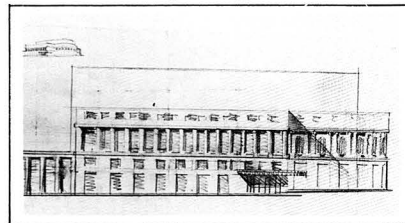
Upon his return to the United States in 1936, Eero Saarinen began a formal partnership with his father for work outside of Cranbrook, in addition to independent and collaborative projects. His first work was done as an architect for the Flint Institute of Research and Planning, producing a comprehensive city plan under the direction of recent Cranbrook graduate Edmund N. Bacon, and within that plan a design for a cultural center



Plans, Cultural Center, Flint, Michigan, 1937; Eero Saarinen

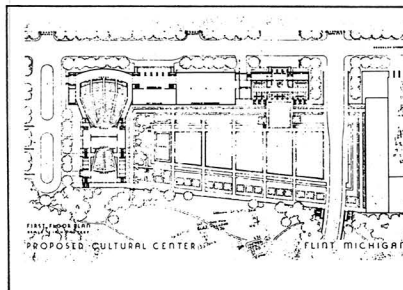


"Combined Living-Dining Room-Study"

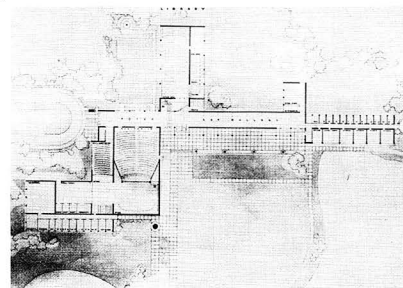


for Flint, Michigan, in 1937. What is interesting about the design is that the *parti* was rendered in two versions: one is more closely akin to the monumentalism of Eliel and the other a "Moderne" version. A small Community Center was also designed by the Saarinens in 1937-38 for Fenton, Michigan, their first building outside Cranbrook. While seeming to exhibit the general aesthetic of Eliel, its "functional" response to its site would seem to have been a contribution of Eero, as its asymmetrical disposition is not unlike his Helsinki Post Office project.

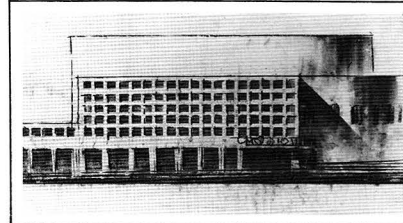
At about the same time, Eero published a project in a 1937 *Architectural Forum* for a "Combined Living-Dining Room-Study," an adaptable interior whose configurations could be changed and furniture easily rearranged, affording different environmental scenarios. Including a few decorative details such as a tapestry and fireplace accessories alluding to Cranbrook, it also specified



Plans, Cultural Center, Flint, Michigan, 1937; Eero Saarinen



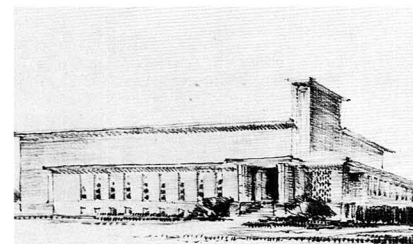
Wheaton College Art Center, 1938



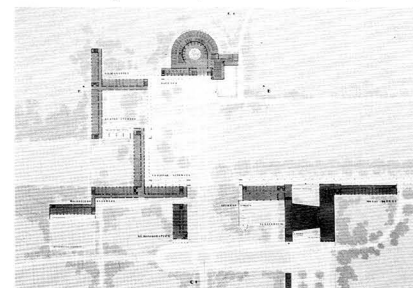
furniture designed by Alvar Aalto. Here was technology in the service of "flexibility," suggesting a casual aformalism in its composition.

In the spring of 1938, Eero Saarinen went to New York City for a brief period. His reputation at Yale had been noted by Worthen Paxton, an alumnus then at the office of Norman Bel Geddes, and Saarinen was brought in to work on the building design concept for the General Motors Pavilion at the 1939 New York World's Fair, to house the "Futurama" exhibition. It was in this two-month intense design charette that Saarinen came in contact with the techniques of the new breed of industrial designers, and saw the use of styling to render design objects with a contemporary modern look. These principles were a particularly American interpretation, and introduced technological expressionism into his experience.

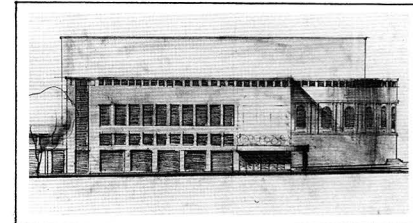
While at Bel Geddes' office, Saarinen



Community Center, Fenton, Michigan,



Goucher College Campus Plan, 1938



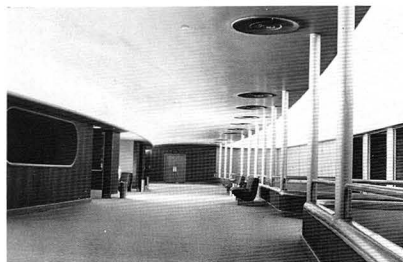
undertook an independent entry to the 1938 Wheaton College Art Center Competition, placing Fifth with a design that contained more conventional architectural expression with a stretched pinwheel *parti* whose "... handsome elevations were found suitable in scale and general character,"<sup>20</sup> with basic program elements clearly articulated in plan and general massing. With his return to Cranbrook, Eero entered a second competition in 1938 with his father for a Campus Plan and College Library at Goucher College. Several of the new generation of architects at the Cranbrook Academy of Art joined the team, such as Ralph Rapson. While the Library facades continue the themes of functional expression given to conservative form, the overall plan combines subtle symmetries with more Modernist implied spatial definition and extended spatial continuities. The Saarinens achieved national recognition by placing Second.

It was after 1938 that the Saarinens began to be known outside of Cranbrook. The previous year, Eliel Saarinen had begun work on a master plan for the summer home of the Boston Symphony Orchestra, the Berkshire Symphonic Festival known as "Tanglewood." As a result of continuing involvement with Serge Koussevitzky, the BSO maestro, the Saarinen name was suggested to a group in Buffalo, New York, engaged in undertaking a new Music Hall. The Kleinmans Music Hall involved a commission already in hand to a local firm, F.J. and W.A. Kidd, whose Beaux-Arts designs were seen as being behind the times. The apparent ability to produce a progressive architecture that still contained enough traditional references was the reason the Saarinens were called upon to lead in the design. Again, the younger designers developed to design, including Charles Eames who was by that time teaching Design at Cranbrook, as well as Ralph Rapson who was a committed Modernist. The footprint of the building looks very much like a Le Corbusier shape, and while the exterior principally derives from the Saarinen vocabulary, the stepped firestairs are a "functional" element, and the interiors feature pipe handrails and definite "Modernistic" motifs.

At about the same time, the Saarinens were approached by the young Chicago firm of Perkins, Wheeler and Will to become involved in the design of a new suburban school in Winnetka, Illinois. The district superintendent, Carleton W. Washburne, was a progressive educator in the spirit of John Dewey and wanted the Southwest School, known as the Crow Island School, to be a model of his theories. With careful pedagogical programming by Lawrence Perkins, the design reflected a flexible philosophy, articulating individual class units and providing both separate interior and exterior spaces, as well as a classroom unit that facilitated combinations of educational arrangements, from the single child to the entire class. The overall configuration and arrangement of parts,



Kleinhaus Music Hall, 1938-40



Kleinhaus Music Hall, 1938-40

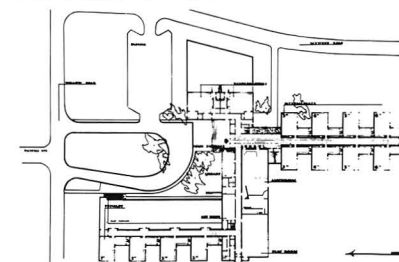
however, also shares a direct similarity to Eero Saarinen's design for the Wheaton Competition and suggests a typological solution for programs of similar components. That is to suggest, "pure functionalism" did not establish the building, and a workable typological solution might accommodate varied programs whose taxonomy was similar.

Cranbrook had Charles Eames and Harry Bertioia as teachers, and Rapson, Harry Weese, Ben Baldwin and others as graduate students. With Rapson and Frederic James, Eero designed an entry to the Festival Theatre and Fine Arts Building at the College of William and Mary, which won First Prize from a field including Stone & Goodwin, Richard Neutra, Hugh Stubbins, Walter Gropius and Marcel Breuer, Harrison and Fouilhoux, and Keck and Keck. A precisely articulated design, it was praised as "... consistent, clean, logical and straightforward throughout."<sup>21</sup> Saarinen's modernist leanings are clear from the centrifugal composition of the ensemble, again in the mode of a loose pinwheel, dramatically engaging the lakeside site — in fact, bridging over a portion not unlike the Weimar Bauhaus, one of the canonical buildings of functional Modernism.

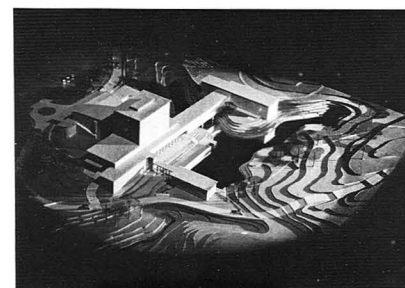
If any moment can be identified that



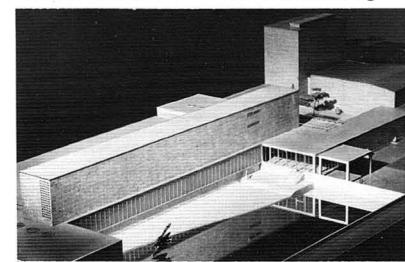
Crow Island School, 1938-40



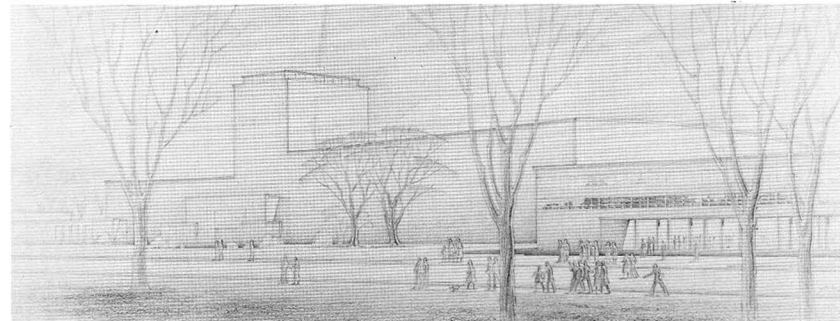
Crow Island School, 1938-40



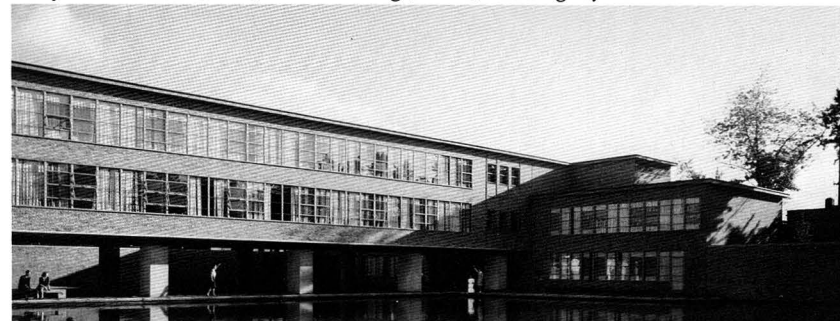
Festival Theatre and Fine Arts Building



Smithsonian Gallery of Art, 1939



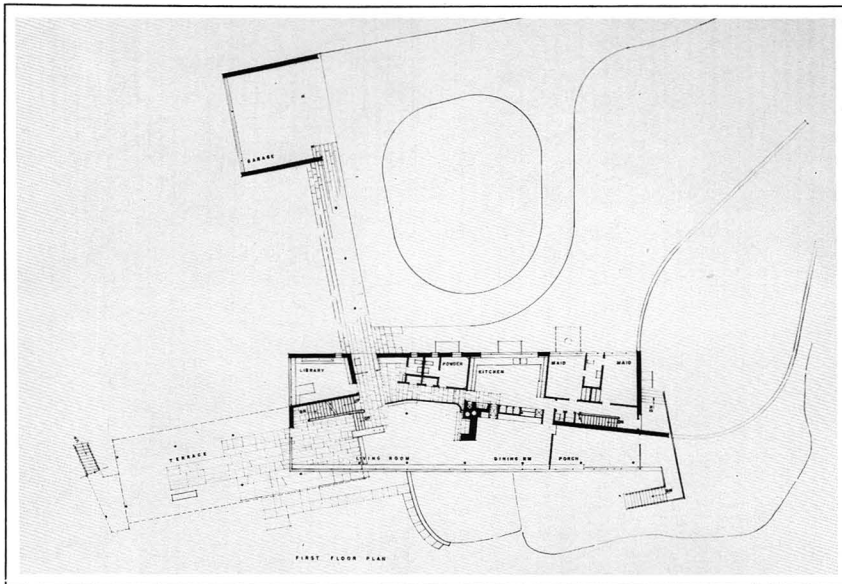
Study for Hall Auditorium, Oberlin College, 1942; drawing by Eliel Saarinen



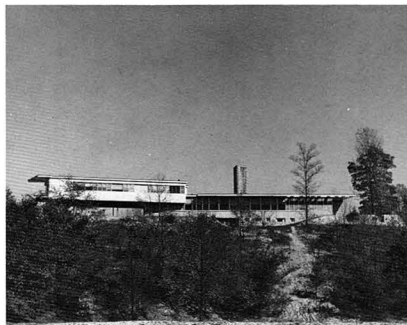
Educational wing, First Christian Church, Columbus, Indiana, 1939-42

broke the Saarinen's identity exclusively with Cranbrook, it was the sensation of their winning First Prize in a two-phase national Competition for a Gallery of Art for the Smithsonian Institution. Over 400 entries were narrowed to 10 by a jury that included representatives of important Capital institutions as well as pro-Modernists Walter Gropius, George Howe, John H. Holabird and Joseph Hudnut. For the more progressive spirits, the selection of the Saarinen project was that "The great virtue of the

winning design, aside from the technical excellence of its solutions ... shows beyond the possibility of denial that the monumental tradition of Washington can be given appropriate expression, and new vitality, within the framework of modern architecture"<sup>22</sup> and the "The Future of a strong, courageous American architecture seems to lie in the direction of the Smithsonian rather than that of [John Russell Pope's Beaux-Arts] National Gallery."<sup>23</sup> Working with Charles Eames and Ralph Rapson on a team



A.C. Wermuth House, Fort Wayne, Indiana, 1941-42



"Organic Design" First Prize chair, 1941

which included his brother-in-law J. Robert F. Swanson, Eero closely arranged functional areas, but clearly and separately articulated them, pursuing a strategy of resolving relationships rather than a predetermined formal image. In fact, a degree of aformalism was suggested by certain components open to future expansion. Motifs such as long, horizontal expanses of glass, precise thin-walled, contained volumes, and open, flexible spaces organized by a consistent module suggest clear



Eero Saarinen (right), 1939

Modernist affinities, but the aesthetic treatment includes applied decoration, a careful balancing of the volumes, the formal element of a reflecting pond and a degree of monumentalism and dignified restraint.

The continuing influence of the younger designers may also be seen on projects such as the completed First Christian Church (also called Tabernacle Church of Christ) in Columbus, Indiana, of 1939-42, where the classroom block is



Opera-Concert Hall, 1940-41



Model of Center Line, 1941

raised on *pilotis* and features horizontal strip windows, or a project for the Hall Auditorium at Oberlin College of 1940-43, whose functional massing and bare expression (with the same features) were repugnant to the college faculty who wanted more conformity to the campus' Romanesque Revival of Cass Gilbert. Eliel Saarinen was by this time prepared to defend functional planning given articulation in architectural form and stated, "Personally I feel that forced symmetry in the case at hand is of no esthetic value."<sup>24</sup>

By 1940, Eero Saarinen had moved closer to the developments of the new architecture. In late 1939, he and Charles Eames created an exhibition of faculty work for the Cranbrook Academy of Art based on a lightweight, tensile system and featuring the floating planes and visual superimposition of images in space such as in Modern painting. They both demonstrated their faith in the physical strength of the system in a famous photograph kneeling on a panel supported by wooden dowels.

In late 1940, Eames and Saarinen began experiments in the use of lightweight fabrication of molded plywood and modular construction of furniture for a design competition organized by Eliot Noyes at the Museum of Modern Art, "Organic Design in Home Furn-

ishings." The development of plastic form shown in the Eames-Saarinen winning entries stands in contrast to the more typically "rational" European designs from the late 1930s. They not only were to be themes continued in the later work of both designers, but in a sense also related Eero's interest in sculptural form to his more free-form designs of the 1950s.

Eero Saarinen was also responsible for a residential commission during this period. The A.C. Wermuth House of 1941-42, designed for the contractor of both Cranbrook and the Columbus church, was built in Fort Wayne, Indiana. Its irregular plan integrates the building to its site, the basic massing and change of materials suggest an Aalto-like articulation of private and public blocks (with a masonry chimney evocative of Le Corbusier's later Marseilles Unite roof terrace), and its details suggest work by Gropius and Breuer contemporary with it.

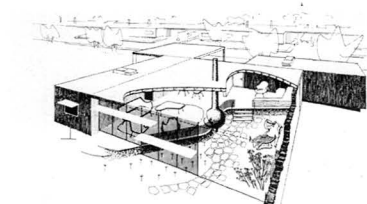
The use of indigenous materials, such as clapboard siding and native fieldstone, in conjunction with modern methods such as reinforced concrete flat plate construction, *in situ* exterior staircase, and modular windows indicate that Saarinen's architecture was even at this time not rhetorically "universal," but rather close in spirit to what Kenneth Frampton has more recently characterized as "critical regionalism." Likewise, Saarinen combined these techniques for the Opera-Concert Hall at Tanglewood (1940-41), which at one level uses the imagery of board and batten barns as it also exploits a combination of laminated wood bow-string trusses with tensile rods to clear-span support a staggered series of roofs defining an acoustical shape.

With the outbreak of World War II, the office changed its name to Saarinen and Swanson. From 1941-42 it undertook Defense Housing and emergency planning work in the Detroit area. Rather than the systematic regularity of CIAM modern housing, the Center Line Com-

munity (Kramer Homes) in Michigan reflects the principles of decentralization Eliel believed was appropriate in the United States, as well as a sensitivity to place-making, with a perceived center focus and modulation of vehicular access by curved and grid roadways. As Eero observed, "If the architect stresses the practical at the expense of the psychological, the result will be barracks ... The problem is to *house* not only an aggregate of people but also to give them *home* and the realities and beauties of community life ... functional barracks ... will be a social danger and a social menace, for they inevitably will turn into slums and breeding places of social discontent."<sup>25</sup> The housing work was an intense and accelerated period and a natural to hold Eero's interest, since prefabrication, standardization, modular construction and rapid erection were all part of the problem.

In late 1941, Eero was also retained by the United States Gypsum Company to propose a theoretical design using its products. The result was a project for "Demountable Space," a Community House that featured a modular building whose tensile-supported roof was hung from a central mast, not unlike Buckminster Fuller's Dymaxion House of 1927-30. The building was an aformal system which could be extended and its facade components reconfigured. Services were handled as "plug-on" prefabricated core elements.

By early 1943, when most building construction had stopped for the war effort, Eero joined the Office of Strategic Services as a civilian consultant at the suggestion of a Yale classmate, Donal McLaughlin. While in the OSS, he also maintained the Washington, D.C. office of Saarinen and Swanson, which had been awarded a contract for housing with the National Capital Housing Authority. The small office, which included young architects John Harkness and Norman Fletcher (later founding partners of The Architects Collaborative), did a number of projects that

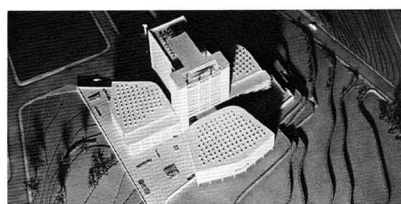


"P.A.C. System", 1943

illustrated Saarinen's personal interpretation of technology's role in Modern architecture.

In mid-1943, Eero and fellow OSS member Oliver Lundquist won First Place in a postwar house design competition sponsored by *California Arts and Architecture* (both Charles Eames and Richard Neutra were on the jury).<sup>26</sup> Its concept was to facilitate a variety of combinations by use of its "P.A.C. System" of pre-assembled component service cores. This fascination with industrial technique also led to the "Unfolding House" of 1943-44, a packaged trailer that could be unpacked on site and also arranged in combinations. In a project sponsored by Pittsburgh Plate Glass in 1944, Saarinen took the idea of a service core a further step; in his restaurant design, a self-contained food unit called "Serving Suzy" (a pun on the "Lazy Susan") brought the services to the customer, perhaps an anticipation of his rethinking the basic problem that would eventually lead to the Mobile Lounge concept at Dulles Airport.

A limited Competition for a Legislative Palace in Quito, Ecuador, brought forth two designs from the office: one by Eliel, the other by Eero. While there are certain basic similarities of *parti*, the differences between them are more telling of the extent to which Eliel interpreted the problem in traditional monumental terms and to which Eero sought a more Modernist image. A Great Hall of Reception becomes a solid volume surrounded



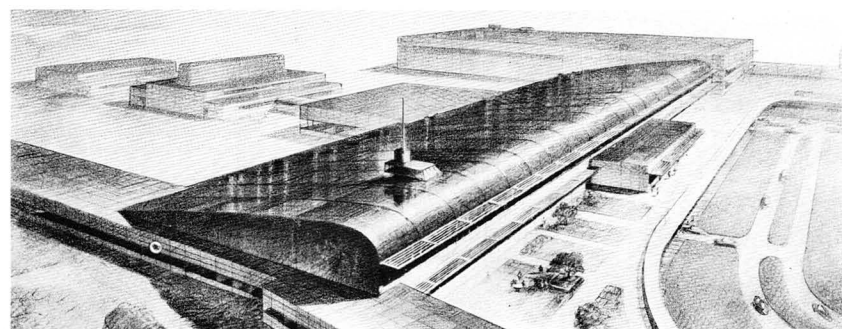
Legislative Palace, 1944

by a lower plinth in Eliel's scheme; the Chambers of Deputies and Senators are ringed by levels of office space to reinforce the compact nature of the base, and a pair of monumental stairs and cascade of pools descend the hill on axis. In Eero's design, a more functional expression articulates the slight differences between the two chambers — accepting their unequal sizes rather matter-of-factly but organizing them much as the "plug-on" cores of his other projects, emphasizing the main volume of the Reception Hall but creating a rear zone of support offices that rises full height on the South elevation, reiterating the image of an office building on its face. The ascent from the hill to the South is oblique rather than axial, and the steps more "naturally" in-

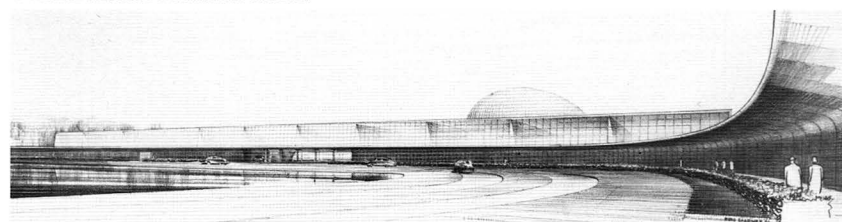
tegrated to contours.

It was clear by the end of the war that the question of appropriate architectural expression still remained for Saarinen. In 1945, the first designs for the General Motors Technical Center were announced, and although Eliel Saarinen was the architect selected by G.M., there is no doubt that the initial scheme was Eero's. The idea of a continuous canopy connecting all buildings, particularly as a cantilever, is a Modernist version of ideas that were themes in Eliel's work. The only real paradigm available to Eero was from his experience with industrial designers, particularly the imagery he had encountered with Norman Bel Geddes. Consequently, the initial "look" of GMTC appears as an industrial design product, expanding also the fascination with technology that Eero had explored during the war years. It is clear that he sought to express "... a high precision, mass-production, metal industry"<sup>27</sup> and part of the imagery incorporated icons of mobile homes and aircraft wings.

The period of 1945-48 continued the exploration of an appropriate expression, and one final event secured for Eero his clear identity as it ultimately separated him from his father's philosophy of



General Motors Technical Center

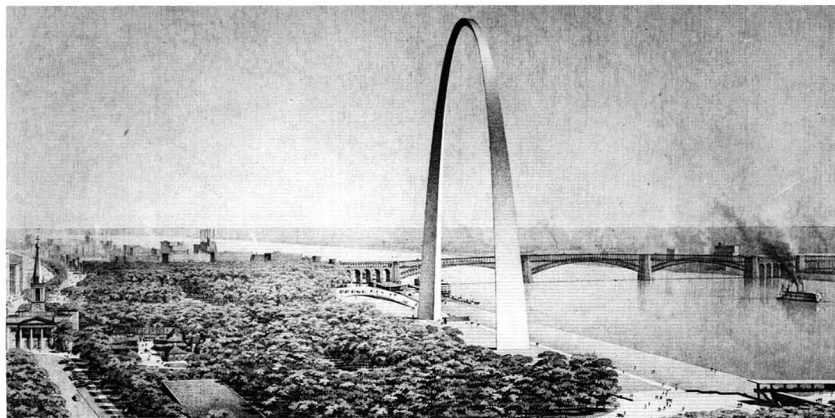


General Motors Technical Center, Warren, Michigan, 1945, early scheme



design. This was the concept of a great stainless steel arch for the Jefferson National Expansion Memorial Competition. It is a matter of historical record that both Eliel and Eero submitted designs to the first phase, and the initial confusion with notification of the winner. However, Eero's concept swept the second phase and produced Modernism's only great civic monument. Its sculptural, plastic form grew out of Saarinen's ease in using freer geometries. Its imagery was literal, recognizing the "sign" value of a "Gateway to the West," and evocative, drawing into itself the scale of the site and significant adjacent buildings. Its sheer size was truly monumental, and possible only with advanced technology, and its stainless steel material was that of the 20th Century.

In 1948, Eero Saarinen entered a new phase of becoming a Modern architect. It was as if he paused to consider from where he had come. In 1948 Saarinen was fortunate, perhaps, to have the critical distance on the ideological and formal manifestoes of the pure International Style, with both one foot in the conservative traditions of his father and the other in the advanced belief in the physical and psychological integration of architectural form through the potential of technology and production.



Jefferson National Expansion Memorial, St. Louis, Missouri, 1948

Perhaps his encounter with Mies van der Rohe, whose current work in the United States pointed to a new direction,<sup>28</sup> caused him to reconsider the experiences he had undergone, and where his architecture could go. In two years, Eliel Saarinen would be dead and a new series of commissions would engage Eero Saarinen's energies. At that time, the General Motors Technical Center would emerge in an entirely new vocabulary, and Saarinen would begin a reconciliation of technology in a multivalent search for form.

In November 1948, Eero Saarinen wrote a Thanksgiving Day thank-you note to Mies, which he observed "... I feel your buildings at Illinois Tech will have a tremendous impact on American ar-

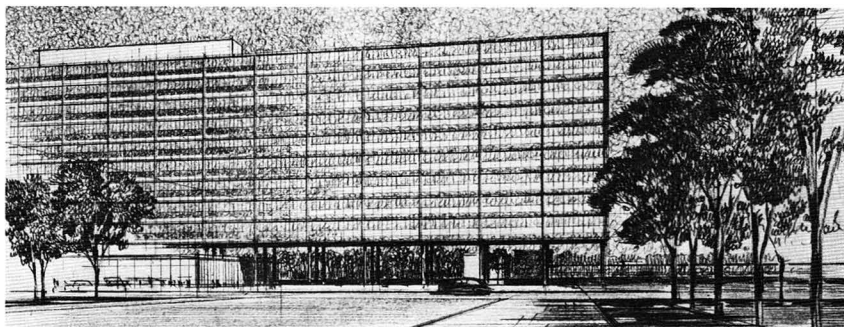
chitecture from now on ... I think it will be a most positive force. The message of complete honesty and integrity which they carry should set off re-examination of values in the mind of many an architect, including my own."<sup>29</sup>

#### FOOTNOTES:

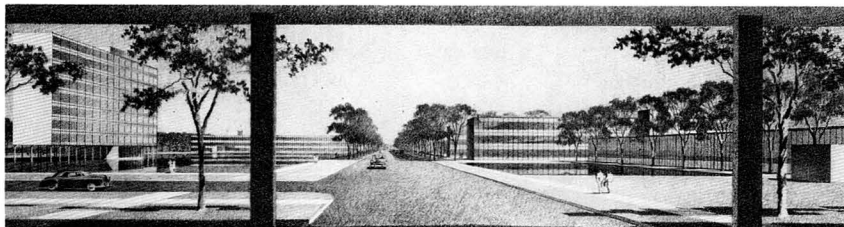
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 Lawrence Lackey  
 Museum of Modern Art  
 Gottscho-Schleisner



General Motors Technical Center



General Motors Technical Center, Warren, Michigan, 1949, second revised scheme