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Author
Quantrill, Malcolm

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Reima Pietilae: Form Follows Approach

Malcolm Quarrell

The work of Reima Pietilae, neglected for a number of significant reasons, is the subject of our inquiry. Pietilae’s first building, the Finnish Pavilion for the World’s Fair in Brussels, dates from 1957, as a result, for almost the first 20 years of Pietilae’s career, Aalto remained the most productive architect as well as the dominant force on the Finnish architectural scene. This meant that although Pietilae’s early work demonstrated a highly original talent and attracted considerable attention, it was necessarily overshadowed by the Finnish master whose supremacy had been acknowledged as early as 1927.

While Aalto’s work exhibits much variety of theme, it also has a substantial amount of continuity in its preoccupations from the mid-1930s until his death 40 years later. The only real hiatus in Aalto’s output occurred during the period around 1940–1945. In contrast, Pietilae lacked substantial commissions for almost a decade, from approximately 1963 to 1973. This gap in his production of buildings and the fact that not only was he deprived of the realization of his most cogent design of the 1960s—that for the Malmi Church—but also that his success in the competition for the New Delhi Embassy of 1963 was not rewarded with an actual commission until 1980, meant that his forties—often


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an architect’s most fruitful years—produced little architecture. Yet, a close examination of the architect’s intentions, as revealed in the whole body of projects and buildings, shows a persistent pattern of themes and variations similar to those we have located in Aalto’s work; indeed, that is an underlying characteristic in the oeuvre of most outstanding artists.

The building with which Pettirae achieved this breakthrough was the Finnish Pavilion designed for the World’s Fair in Brussels. The Pavilion won in competition in 1957 and was constructed for the 1958 Fair. Pettirae has explained that its concept was inspired by the theories and teaching of Professor Aulis Blomstedt, which in turn built on the ideas of Theo van Doesburg. But in Pettirae’s hands these modular precepts have gone through a distinctive transformation, although in his student work Pettirae experimented with modular ideas that were analogue to those of Le Corbusier, for the Brussels design he removed the modular control from the realm of mathematics and took it bodily into the sphere of spatial experience. In Pettirae’s own words:

My Brussels idea had to do with spatial modulation. It came, of course, from Blomstedt. It was an idea for making Finnish architecture natural and intellectual at the same time. . . . The modular structurization of the Brussels Pavilion shows how one operates with this system artistically.7

There are possible references in the Brussels Pavilion to Aalto’s Sports Hall for the Technical University at Otaniemi (1949–1954), of which Pettirae’s first major commission might be seen as a more specifically modular interpretation. From time to time Aalto’s plans—and in the case of the Otaniemi Sports Hall, also the section—have a distinctly modular preoccupation.7 Aalto’s Otaniem design is, however, fundamentally a structural concept in response to the simple-function program of a single, large-span volume. In
contrast, Pietilä’s plan already embodies the geometrical thrust of a more complex three-dimensional exploration. Pietilä says, however, that “[W]hereas its exterior sculpturalism is logically geometric, its structural system is a compromise.”

Although Pietilä’s Brussels Pavilion had some superficial affinities with Aalto’s Otaniemi Sports Hall, our closer examination shows that Pietilä’s whole conceptual design derives more from his own, experimental, modular exercises than Aalto’s structural solution. In fact, Pietilä’s compositional technique has always been more systematic than Aalto’s, and his attention to the modular basis of rhythm more studied than intuitive.

The exhibition “Morphology and Urbanism,” held at the Pimx Gallery in Helsinki in 1966, revealed this systematic basis of Pietilä’s approach to formal exploration. What he calls his semi-modular “stick” studies (1957–1959) later found expression in the concept of both the Savukumpu Housing at Tapiola (original project 1962) and the design for the New Delhi Embassy (1965), while the more organic studies of urban configurations anticipate the free-form, sculpted envelope of Kaleva Church, the Malmi Church, and the Monte Carlo Centre.

In the case of Kaleva design, the “plan-wall” shape was generated by experimenting with paper forms. Both systems are modular in the sense that they impart an overall rhythmical control to Pietilä’s planning strategies and formal structures. The object of these exercises was not a mere abstract analysis of forms but the provision of a notation to assist the architect in his mastery of formal language. The success of this method may be seen in Pietilä’s sculpture, The Broken Reed, which occupies the focal position at the east end of his Kaleva Church at Tampere and is an authentic part of the architectural totality. The name, which was suggested by the Minister, Paavo Viljanen, is, of course, a biblical metaphor; Pietilä says it is derived from the dead pine kelo, a focus for worship by both Lapps and Finns.

Kaleva Church, Tampere, the original-competition design for which dates from 1959, already demonstrates a marked departure from Aalto’s church interior. It must be remembered that its design had been immediately preceded by Aalto’s most successful church, that for Vuoserenmaa, Imatra (1956–1959), in which he had achieved his most complete “interweaving of the section and the plan shape” and “unity of horizontal and vertical construction.” Thus, the Lutheran Church in Finland had been preconditioned to the acceptance of a plastic plan-form.

Pietilä’s plan-form generates an equally daring treatment of the internal space; the single-volume nave possesses a truly medieval sense of monumentality. In fact, the competition actually called for “a monumental project” as the religious focus for 30,000 residents of East
Tampere. But the apparent massiveness of the “piers”—formed by the concave sections of the external walls pressing in—with simple flat vaults spanning the beams that are slung across the nave, is, in fact, desired by the play of light that breaks across the wall surfaces. Pietilae described his objective thus:

“I tried to achieve a visual weightlessness by using rhythmic and light kinetics of broken line chains in constantly evolving series. It is similar to the quick sequences in organ music. Kaleva Church fights against the traditional idea of wall heaviness.”

The sculptural monumentality of the interior space is in contrast to the shifting forms of the concrete pulpit, where the fine detailing of the shuttering gives an insight to the lively character Pietilae had intended for the exterior. In addition, the wooden sculpture placed against the east window dominates the interior from the moment of entry, literally pulsating with life and reducing the adjacent element of the plain Lutheran cross to an entirely subservient role. Even the design of the organ case in the Kaleva Church, combined with its prominent position on the south wall, makes it more dominant than the cross, which hovers in a sweeping wing as though some great angel guards the choir ramp. In the pervasive liveliness of Pietilae’s interior the cross is virtually a redundant motif; it seems to be superfluous in his image of the Church, both formally and symbolically, as is perhaps confirmed by his use of crosses outside the Hervanta Congregational Center (1979). For, in Kaleva Church, Pietilae has transformed the rhythmic freedom he introduced into the Brussels Pavilion and generated a dance of joy within a framework of appropriate solemnity.

Kaleva Church was a watershed in Pietilae’s development. It quite clearly demonstrated that the time he had devoted to the systematic study of form began to pay dividends in this second, full-size, architectural realization. In this single leap, from the springboard of the Brussels Pavilion he had removed himself from the immediate constraints of Blomstedt’s influence, and, at the same time, had moved closer to Asko. And, just as Asko had connected himself with the mainstream of European functionalist architecture through the Turo Sanatorium building and the Painio sanatorium, so with Kaleva Church Pietilae placed himself closer to the center of European expressionist tradition and measured up at once to the standards established by Gaudi, Steinert, Mendelsohn, and Schurath.

Also, like Asko—who, it should be recalled
had retreated from internationalism after the
Vippast Library and evolved his own highly idiosyncratic
Finnish expression—
Pietila set out to evolve an
architectural language
which, although springing
from the Finnish genius loci,
seeks to make connections
with other cultures. He
constantly searches out
appropriate reference points
in other cultural patterns; yet
the essentially Finnish center
of his own design-integrity
remains firm.

However irregular a plan
form, a flat roof optically
cancels out those
undulations—has a
flattening effect, in other
words—unless the
irregularities are truly
exaggerated. Pietila
conceived Kaleva Church,
however, as an irregular
twist; its interior qualities
and the external silhouette
are, therefore, inherent in his
decision to impose this
particular control on the
total form of the building.
He explains:
From the distance, driving
up Vapaudenkatu
[Independence Street], you
can see only the Bells of
Kaleva, the Bell Cross;
then a bold silhouette
gradually starts to rise
until it reaches the total
outline of the building;
there is then a moment
when nothing happens
(please note this
moment of unchanged
expressionlessness). From
there on Kaleva begins to
develop. You are walking
through the entrance
green . . . the building
expression disappears, the
elevation has made its
vanishing function to be
received and guided
within.
A church elevation is not
only static or dynamic but:
a choreography for a
symbolic event.

Pietila’s Student Center
at Otaniemi, which has
replaced the old Poli
students’ clubhouse in
Lönnrotinkatu, Helsinki,
coming after the Brussels
Pavilion and Kaleva Church,
is difficult to grasp although
the image of “Dipoli,” as it
was later to be called, is clear
enough. It is not an image
of city and urbanity—but of
forest and nature and of “a
sense of belonging,” a
connection and relationship
between building and place.
Nevertheless, however
tantalizing it is from a
distance, it is rather
overwhelming at close
quarters.

There is no doubt that the
overall concept of the
building is in the grip of
a very strong plan. This
strength derives from a hard
“core” of basic functions
from which soft “feathers”
are put into the terrain. Such a
marriage of a firm baseline
with the exploratory
character of major functions
is, of course, familiar to us
from Aalto’s planning after the
Villa Mairea. In the
Dipoli design the hard core
consists of the nonsocial
and subsidiary functions
at ground-floor level.
These functions are
narrowly partitioned into an
approximately square form
that is split diagonally by the
students’ foyer, which, in
turn, cuts right through the
center of the plan to the
lecture-theater/cinema,
separating out the toilet
functions in the process.

On the principal level (first
floor), the Main Hall, the
8 Dipoli Conference Center. Transmit Excavations.
9 Dipoli Conference Center. Form sketch.
Dipoli is not a terrain building but a copper sculpture... there are three sliding walls casually separating three other halls for multipurpose functions. This set of four halls is a cave sequence of 100 meters. I feel as though I'm standing inside the body of a huge animal! Pietilä's use of varied horizontal divisions in the "Dipoli" fenestration is part of a more complex reasoning behind the organization of the façade as a whole. Of course, this organization could be seen as modular and based upon a semiconventional, proportional segmentation of the entire wall area. But more than that, it is concerned with attempting to dissolve the wall so that it becomes an apatic membrane or skin between internal and external space.

To Pietilä the "Dipoli" context is forest, of which the building is merely part. In this forest context the external wall is not a barrier in the normal architectural sense, but a skin that adapts the building to fit the natural environment, to give the man-made structure a sense of place. The artificiality of a large glazed area is, therefore, systematically broken down by "modular" subdivisions to echo the fragmentary patterns of nature. Thus, the heavy wooden window frames may have a modular basis on the architect's drawing board, but his intention is to create an apatic skin that adapts the built form to the natural context.

More than any other Finnish building of the past half-century Dipoli bridges the gap between those solid bourgeois comforts of national romanticism and the briefer excitement of modern life. "Dipoli" is every bit as gritty as the original Poli building of Thome and Lindahl. "Dipoli" was built with the students' own funds, and clearly Pietilä's design expresses this vital sense of their independence. "Dipoli"... shows the architect flexing his muscles and limbering up for his even more complex routines. As he explains:
I pictured the original granite shield surface on the site as if lifted six meters to form the roof shape of the building. The geomorphic force has, thus, its symbolic agen in Dipoli's landform sculpture. Is Dipoli not an early land artwork? Of course, there are imaginary ways of approaching this imagery in the spirit of the students' lodge, especially that tabooed being Jammeriapartainen Roumomi (the Stubble-Bearded Engineer) whose dwelling was assumed to be in the vaults of the national romantic architecture of the old Poli. I have done my best to attract him to move to Dipoli. His front door has been relocated in Dipoli and the blank wall behind it dedicated as the entrance to his quarters. 

In both the Brussels Pavilion and the "Dipoli" building the section has the same formal characteristics as the plan. The stepped volume of the Brussels structure, however, converts the modular "stack" exercises into functional form and space, the "Dipoli" volume clearly distinguishes between the vertical enclosing walls and the sculptural roof or "lid." The Malmin Church Competition project of 1967 proposed an integration of plan and section into a monolithic whole. Gone are the modular "steps" that build up the form of the Brussels Pavilion; the vertical enclosing walls of both Kaleva Church and "Dipoli" have also been superseded, in their place the Malmi envelope creates a plastic continuum of walls and ceiling.

Petelius's explanation of its inception is as follows:

Our cat came to rest on the drawing board and lay across the drawing before me. It visually terrorized me into accepting the form language of its own physiognomy for my free sketch form. Missulka was a domestic Finnish cat—gray and striped transversely with darker gray bands. "Well," I said to her, "I accept your shape because otherwise I cannot make this competition." Then I drew a pencil line around the shape of the cat's body fixing its configuration on my plan. . . . Malmi also has another precedent in its idea of 'sorrolakka,' a boulder standing isolated by glacial ice. There are many examples of such rocks scattered around Finland, resulting from a dislocation by ice from their original "mother rock." Malmin Church could express metaphorically this human dislocation.

For the sloping suburban site of Malmi, near Helsinki, he proposed a bold faceted outcrop that owes more to "Dipoli" than does his earlier Kaleva Church,
Aalto’s Imatra Church certainly presents a formal "strangeness" in Aalto’s case, however, the unfamiliarity derives from a semimilitary, bunker-like exterior combined with a somewhat baroque interior. In Aalto’s church the two shells or "skins" are doing different things, but in exterior image is hardly organic. In contrast, as with “Dipoli,” Pietilä sets out in his Malmi project to achieve that marriage of building to site, which creates a close relationship between architecture and nature, making the church a member of the landscape, contrasting to construct a ubiquitous whole.” Thus, the image of the Malmi concept is essentially geomorphic—with the church as well as the chapel and conference room clinging daringly to the edge of the escarpment.

Once again, as in the “Dipoli” design, the supporting accommodation is grouped to provide an anchor for the more adventuados forms that thrust out the rocklike character of the church. In aiming at this natural expression Pietilä may appear to look toward the work of Rudolph Steiner, although the Malmi concept is, in fact, distinct from both the anthroposophic ideal of Steiner and the plastic expressionism of Mendelsohn. Pietilä’s intention, rather, is to echo natural structures, to use an architectural metaphor for rock formations. The section
also offered a cavern-like interior, which suggests a primeval religious space.

Pietilä’s Malmi project promised—through a carefully orchestrated and harmonic progression from plan to section—an interior of great spiritual potential. Not only is the geomorphic form of this design spatially stimulating but also Pietilä’s proposals for introducing natural light into the church at high levels conceived dramatic effects reminiscent of baroque techniques. The exterior forms, with its careful attention to the modeling of the facaded, north (main external) wall, shows just how much Pietilä’s design control had developed since the construction of Kaleva and “Dipoli.” Conceptually, the Malmi Church project represents the high point of Pietilä’s imagery of the 1960s. The geomorphic ideas that originated at “Dipoli” culminated in the forms proposed by the Malmi Competition drawings.

It might be helpful to review the particular ideas and characteristics that contribute to the uniqueness of Pietilä’s architecture. These appear to fall under five broad headings:

- his interest in the creation of symbolic landscapes; his pursuit of underlying or alternative contexts for architecture (as distinct from the more obvious physical and visual frameworks of environments);
- his inclination to overrate an architectural intention in order to increase its imagic force and dramatic power;
- his studied placidity in the use of materials, reflecting both the ‘nature of materials’ philosophy and the impact of new technologies on design (paralleling Wright’s later work); and
- his use of light as a material component in the exploration of space and form (firmly within the Finnish tradition and in continuation of Aalto’s own preoccupations).

Pietilä’s desire to fulfill his architectural intentions within the frameworks of symbolic landscapes gives his work a haunting quality that makes it difficult to categorize and almost impossible to describe in the conventional language of criticism. This lyrical quality, which we find in works as diverse in form, size, and imagery as the Dipoli Centre and Liikaa Church, derives its elusiveness directly from the architect’s pursuit of those underlying (alternative) contexts that constitute the deep structure of environmental memory and the psychological framework of existence and evolution. Pietilä often achieves these context-responsive, memory-enriching landscapes with an underplaying of form and effect, generating subtle patterns of organic or formalized order within the material-light balance of interior spaces.

While this subtlety of effect is present in the fenestration of Dipoli, where the window-image is dissolved in the reflected structure of the surrounding forest, by conventional standards that building would be judged to have an exaggerated muscularity. But this apparent “overstatement” must not be understood in the light of such conventions; rather the geological memory and primitive forces of nature that generated its metaphoric content have to be taken into account. Pietilä’s design approach is not standard, and cannot be standardized. This does not mean each new Pietilä building is simply another exercise in originality. The difficulty is in detecting the continuity of intent, rather than of effect, of seeking the contextual connections beneath the surface. This difficulty is exacerbated by the architect’s sheer brilliance of effect—with an astonishing range of light/surface/material/structure propositions in his work during the 1960s alone. If we look at the surfaces of Dipoli, Kaleva Church, and Sovikampa housing, however, we find within this remarkable range of effects a very consistent concern for the surface of a building as a “living” membrane as opposed to a dead skin of dehydrated geometry.
16 Official Residence for the President of Finland near Helsinki. Competition Project (1964): Elevation from the shore, with sections.


19 Official Residence for the President of Finland near Helsinki. Competition Project (1964): View of Model, showing relationship of the Sauna to the Residence.

17 Official Residence for the President of Finland near Helsinki. Competition Project (1964): Entrance Elevation.
In a Pietiläe building, therefore, the materials themselves are not important as expressive components—of the “nature of materials” philosophy—but become instead an integral part of the form-idea, of the surface-structure relationships, of the metaphor, image quality of the whole. But this, the traditionalists would have argued, is after all “the nature of architecture,” i.e., that all materials should be used as parts of a coherent whole. The difference in Pietiläe’s architecture is, however, that the “wholes” that he assembles are modern ones. But his eclecticism is not simply a “collection” of known pieces—at least, not in the sense of what we know and perceive visually. His aesthetics do not consist only of the arrangement of form, space, material, and light: the experiential anderwege is more primal, and, consequently, our reactions to his work are more extreme, our feelings about his buildings more exaggerated. With the possible exception of the Liskula Church, it is difficult to conceive of a Pietiläe building in a mood of quiet reflection. Rather we are quickly drawn into his nets of conceptual complexity and emotional vigor. This process does not usually yield conventional or “classical” aesthetic rewards. Perhaps one of the reasons why Pietiläe’s work speaks in a modern voice is its persistent capacity to disturb our educated sense of equilibrium. This possibly accounted, for example, for Louis Kahn’s reaction to Dipoli: “This is not architecture.”

During the summer of 1983 while on holiday in central Finland, Pietiläe made some modest sketches in preparation for a Finnish competition that he knew would be formally announced in the autumn. This open competition was for the first official residence of the President of Finland to be built since the birth of the Republic in 1918. Those early notional sketches, made while Pietiläe was enjoying his summer vacation in the Finnish countryside, are very much about environmental sensibility, i.e., the natural landscape and the sense of place: And those early thoughts were to prove central to Pietiläe’s highly original solution.

Pietiläe has spoken of the two premises of modern architecture that were formed between 1900 and 1920 and will be worked out during the 1980s: yet in the President’s residence he has chosen to return to his own very private and personal premise of the 1960s. This return has given him an opportunity to reexpose the architectural metaphors that had their origin in Dipoli and reached their optimum potential in the Malmi Church project.

The competition results for the President’s residence revealed that most of the other competitors either were unable or unwilling to address the problem in terms of Pietiläe’s second premise. Almost all the entries selected for prizes, purchase, or honorable mention looked back to an earlier period of modernism—not the exciting experiments of the 1920s—to the more stertorous 1950s, already effectively rejected by Alvar Aalto as early as 1935. The Second Purchase scheme by Kristian Gullichsen and his colleagues characterizes this return to the Finnish functionalist tradition, in a design that attempts to bring urbanity to the rocky seashore but is not at all in the spirit of Aalto’s superb model at Sayykatulo. Only Marja-Rita Norri’s Second Purchase scheme works again the preFunctionalist roots of modernism. Indeed, the situation represented by the entries for this competition would seem to confirm Pietiläe’s image of finnish-day Finnish architects all crowded into the bow of the boat to get a good view of the way ahead, leaving nobody to man the rudder and, thus, steer the craft.

But, perhaps, the greatest disappointment one senses in reviewing the Competition Exhibition at the Finnish Museum of Architecture stems from the feeling that the real nature of the site at Mantyniemi and its prevailing characteristics had been ignored; instead of a Finnish sensibility to environment and to occasion, what had for the most part been substituted was a slick internationalist approach to elemental composition such as one might expect to find today almost anywhere.

The upheaval of Finnish granite is the site base from which Pietiläe’s President’s “palace” grows; yet in this new design the granite shield is not the whole form as in Dipoli, nor are the caved and cavern interiors of Dipoli and Malmi Church appropriate to a President’s residence. Instead, the natural rock escarpment is embellished by a jewelled necklace that flows naturally across the body of the site. The metaphor for this precious symbol of the Finnish State is the crystalline structure of ice and its winter memory in the Finnish landscape—hence Pietiläe’s motto for the project: “Mica Moraine.”

This is not at all a design for a Finnish “White House”: Instead it speaks of the infusion of the rest of its natural metaphor.

When I was studying the model in the Exhibition, a Finnish architect remarked that the form of the detached saunaa did not reflect the spirit of the rest of the composition. Hearing this from a Finn I realized how much the new internationalism has
damaged the roots of Finnish architecture. For the sauna should never be part of a formal composition—if we can allow the ice metaphor its own formality—because it must establish its relationship to its ritual self and to the site. The basic, traditional sauna was originally dug into a boulder and, having a sod roof, belonged more to landscape than to architecture. If we did not know this before, we have certainly known it since Aalto’s decomposition of the sauna and house relationship at the Villa Mairea of 1937. Yet many of the competition designs for the President’s residence placed the Presidential sauna in the basement or cellar as though he were being relegated to a high-density apartment block.

Except for the echoes still present in Pietilä’s poetics, the Finnish language of architecture originally shaped by Aalto seems to have been swallowed up by an international phrase-book standardization. Aalto, it should be recalled, wanted the architect’s relationship to standardization to be only that “of the poet to the dictionary.” Regrettably, also, Pietilä seems to be correct in his assessment that he is only teaching “certain inexpressibles.” Whereas we may not be able to teach environmental sensibility, Pietilä’s work and his defense of his ideas offer us invaluable signposts towards its realization. As the Ancient Egyptians knew well, without his symbolic landscapes man is in every sense impoverished. 19

NOTES
2 In correspondence with the author, June 1983.
3 Quantrill, op. cit., Chapter VI, pp. 140–154.
4 In correspondence with the author, June 1983.
5 Ibid.
6 Ibid.
7 Quantrill, op. cit., pp. 43–91.
8 In correspondence with the author, June 1983.
9 Ibid.
10 In conversation with the author in Helsinki, August 1983.
12 This tradition has been well established in Finland since the mid-1930s. See Quantrill, Aalto and After: Transformations in Modern Finnish Architecture, (Helsinki: Otava, 1986).
13 Competition notes on the “Mika Morzine” project by Riima Pietilä.

Architectural Idea and Composition:

The buildings follow the forms of the basic rock and vegetation of the particular “place”, conforming with them and deriving themes from them. Buildings and nature are a coherent unity.

The architecture emerges from the juxtaposition of the light glass pavilions and the heavy, natural-stone walls. The copper and glass of the windows are composed in a branching pattern allowing the forest to continue into the interior spaces.