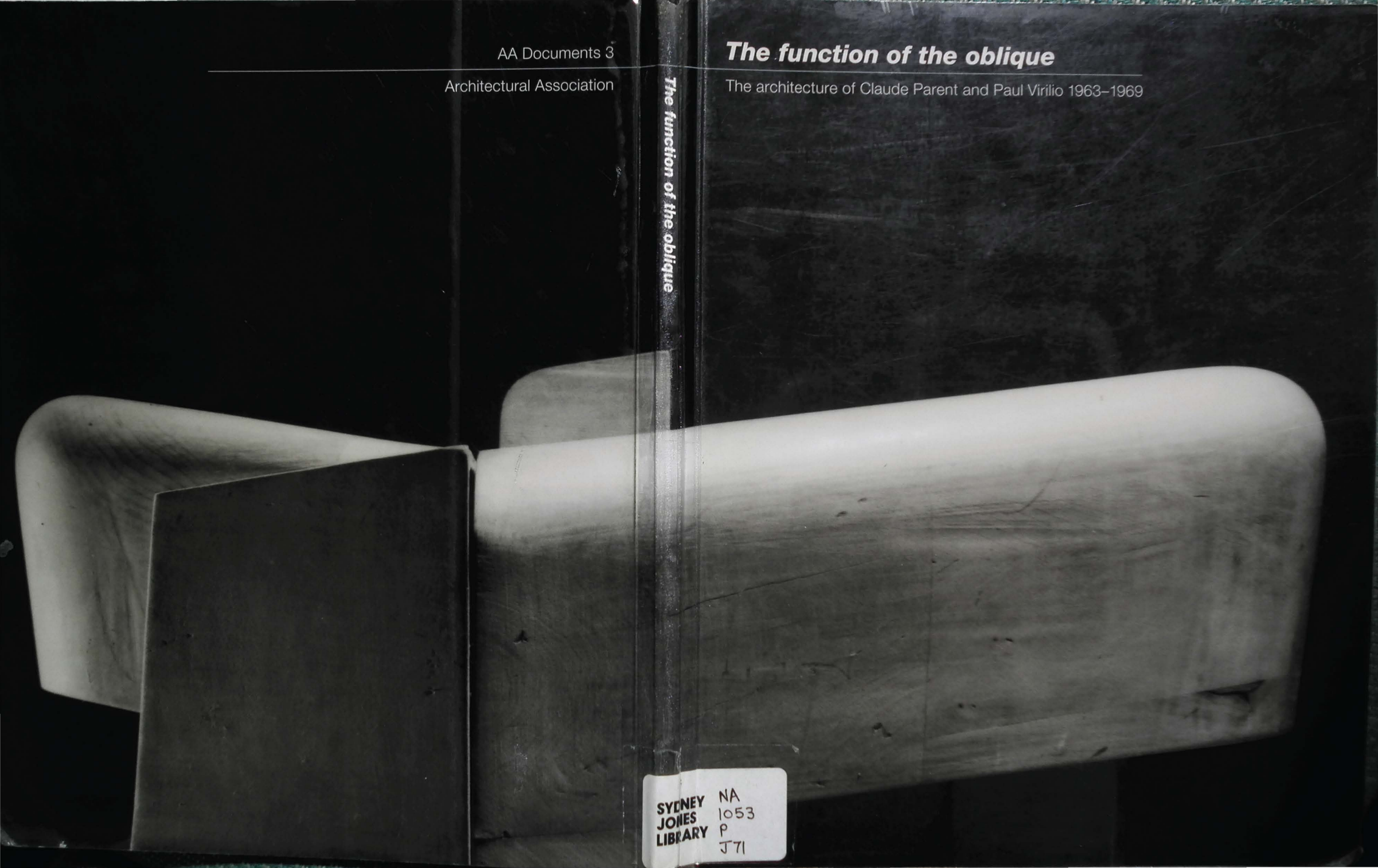
AA Documents 3

Architectural Association

The function of the oblique

The architecture of Claude Parent and Paul Virilio 1963–1969



The function of the oblique

AA Documents 3: The Function of the Oblique
has been initated by the Chairman of the
Architectural Association, Mohsen Mostafavi.

Editor/Translator
Pamela Johnston

Designer
Nicola Bailey, Bailey & Kenny

The photographs are by
Pierre Bérenger: 42, 44, 45, 46, 47, 50 (top),
Gilles Ehrmann: 7, 8, 16, 19, 22, 26, 28, 30,
31, 32, 50 (bottom), 56, 58, 61
Dominique Evrard: 6
Michel Charles Gaffier: 48
Patrice Goulet: 20
Pierre Joly and Véra Cardot: 24, 25, 36, 39,
40, 43

The AA would like to thank Irénée Scalbert,
Jeremiah Sheehan and Mary Wall, for reading
– and much improving – the translations.

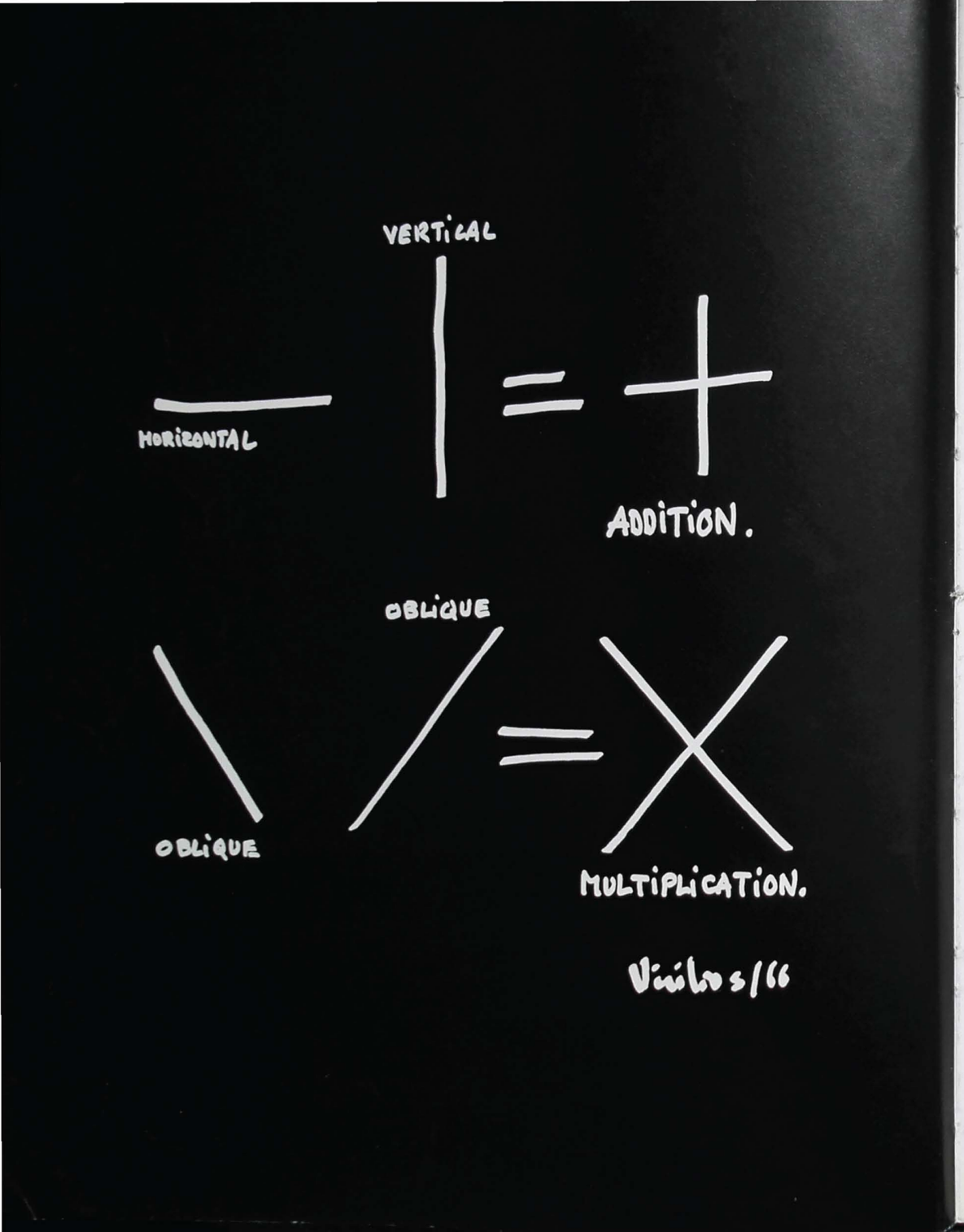
The publication has been produced
through the AA Print Studio with help
from Marilyn Sparrow, Jenny McIvor,
Suzanna Prizeman and Dennis Crompton.

ISBN 1 870890 71 X

Printed by The Pale Green Press Limited

Cover illustration: Model of the church of
Sainte-Bernadette du Banlay.
Claude Parent and Paul Virilio, 1964–6.
Photograph: Pierre Bérenger.

Contents



Introduction

Jacques Lucan

In 1963 Claude Parent and Paul Virilio formed the Architecture Principe group[1] with the aim of investigating a new kind of architectural and urban order. Rejecting the two fundamental directions of Euclidean space, they proclaimed 'the end of the vertical as the axis of elevation'[2] and 'the end of the horizontal as the permanent plane'[3]: Out With Manhattan, Out With Old Villages. In place of the right angle, they adopted 'the function of the oblique', which they believed would have the benefit of multiplying usable space. Their explication of this principle, with its accompanying ideogram, frequently provoked a smile: the crossing of horizontal and vertical results in an addition sign; the crossing of two obliques results in a multiplication sign.

But what exactly was 'the function of the oblique'? For the Architecture Principe group, it was a new means of appropriating space, very much inspired by a *Gestalt* psychology of form, which promoted continuous, fluid movement and forced the body to adapt to instability: 'While the enclosed and the cryptic lie at the origins of this new era of architecture … we must also recognize within the sense of disequilibrium, of vertigo, the second archetype of this art of space.'[4]

Parent and Virilio's experimental and provocative research, which was not without its obscure points, found concrete form in the church of Sainte-Bernadette du Banlay at Nevers (1964–6).

As Paul Virilio himself acknowledges, the church is more an 'engineered structure' than a 'work of art'.[5] Inward-looking, with rough concrete walls and rounded-off corners, it was inspired by the German bunkers of the Atlantic Wall, which were a source of fascination for Virilio.[6] Its massive cantilevers induce a sense of disequilibrium which is exaggerated by the tilting of its floors – a tangible sign of 'the function of the oblique': '…we wanted above all to create an "ordinary place" where experimentation replaces contemplation, where the architecture is experienced through movement and the quality of that movement.'[7]

The purpose of the oblique was to encourage a constant awareness of gravity, bringing the body into a tactile relationship with the building. The qualities of the architecture were to be perceived in a sensitive, sensual manner, as people became free to move beyond conventional spatial situations. Oblique planes were used in a prototype for a luxury apartment, to create ideal surfaces for repose of a nonchalant, sophisticated nature – something which, in 1968, was very much in keeping with the mood of the times. But the approach was developed further with the idea of 'interlacing the oblique'.

Left: Paul Virilio's ideogram of the function of the oblique, from *Architecture Principe* magazine, 3, April 1966.

Above: Fortification on the Atlantic Wall, from Paul Virilio's *Bunker Archéologie*, 1991.

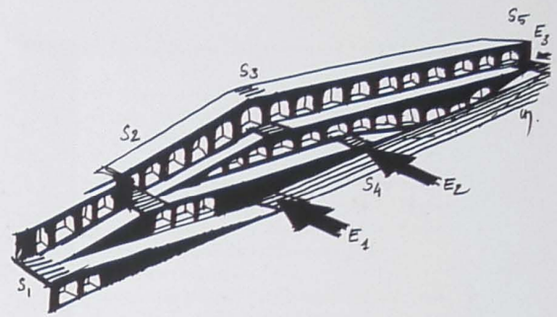
Right: Church of Sainte-Bernadette du Banlay, Nevers. Claude Parent and Paul Virilio, 1964–6.

This engendered, most significantly, the shopping centre in Sens (1970), in which the shops open onto ramps almost 120 metres long, and the French Pavilion for the 1970 Venice Biennale, an 'oblique space' created by Claude Parent in collaboration with a number of artists. By this time Parent was no longer working with Virilio: the month of May 1968 had exposed political differences which spelled the end of the Architecture Principe group. Virilio actively participated in the 'events'; Parent reproached him for this.

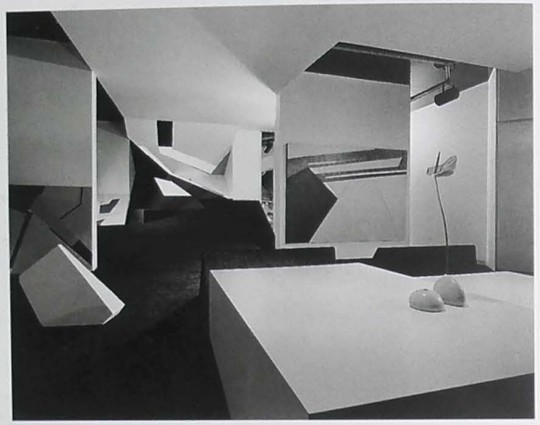
The collaboration lasted, in effect, five years. How far did its influence extend? Let us note, first, that Bruno Zevi followed the group's activities throughout its existence, and in 1973 devoted a special issue of *L'Architettura* to Claude Parent.[9] It also found favour in Spain, and several major features on its work were published in the Madrid magazine *Nueva Forma*, edited by Daniel Fullaondo.[10] In France the influence of the group may be traced through its members' subsequent careers.

While Paul Virilio, since 1968, has focused exclusively on theory and teaching, Claude Parent has pursued the practice of architecture, and has produced numerous buildings that go beyond the exploitation of the principles of the oblique. His architecture is typically wilful and assertive, and at times violent and provocative. The forms are dense, often sculpturally full, stretching the enclosing volumes to the point where an indivisible continuity of elements is achieved. Parent is a virtuoso in the use not only of metal, as in his 'structurally brutalist'[11] student housing in Paris (Maison de l'Iran, 1961–9, with Mohsen Foroughi, Heydar Ghiai and André Bloc), but also of reinforced concrete, which he shapes into massive walls and surfaces that enhance the building's unity and the closure of its form.

At a time when there is much talk of flexibility, openness and mobility, Claude Parent appears to be swimming against the tide in proposing fixed, monumental, almost immutable structures which



Shopping centre, Sens. Claude Parent, 1970.



Right: Bellaguet apartment, Neuilly. Claude Parent, 1970.

Below: The French Pavilion at the 1970 Venice Biennale. Claude Parent, architect/curator, with Andrée Bellaguet, painter; Gérard Mannoni, sculptor; Jean-Pierre Cousin and Gilles Ehrmann, photographers.

resolutely maintain a distance from their surroundings. Such aloofness is ill suited to the realities of large-scale urban development. Indeed, Parent has never built a major housing project, and he has offered little more than utopian visions of the city of the future: 'The only worthwhile method is ... to incite residents to "abandon" existing villages by offering them nodes of urban facilities set at distant intervals from each other."[12]

Yet it is undeniable that he has influenced certain architects, among them Jean Nouvel, who worked for a long time in his office during the late 1960s. In 1973 Nouvel designed a building according to 'the function of the oblique': the Delbigot house at Villeneuve-sur-Lot (with François Seigneur and Roland Baltera). More significantly, however, he has adopted Parent's idea of the architectural form as a closed entity – a disturbing and singular object folding back on itself. This conception is reflected in projects such as his competition entry for the Tokyo National Theatre (1986).[13] As with the church of Sainte-Bernadette du Banlay, the exterior of Nouvel's theatre reveals little about what is unfolding inside; the massive building envelope seems to contain, almost to constrain, spaces that are on the point of eruption.

Parent and Virilio's church and Nouvel's theatre are being exhibited together in the French Pavilion at the 1996 Venice Biennale of Architecture, which takes as its theme 'the fractured monolith', and explores the impact of the architecture-sculpture movement in France.

Notes

1 The painter Michel Carrade and sculptor Morice Lipsi were also members of the Architecture Principe group, but only Claude Parent and Paul Virilio put their signatures to the articles in the magazine which constituted its 'permanent manifesto'.

2 Paul Virilio, 'La fonction oblique', in *Architecture Principe*, 1, February 1966.

3 Ibid.

4 Paul Virilio, 'Instabilisation', in *Architecture Principe*, 3, April 1966.

5 Paul Virilio, 'Nevers chantier', in *Architecture Principe*, 4, May–June 1966. Virilio wrote that the church was 'un ouvrage d'art' rather than 'un œuvre d'art': the French has a ring which is lost in translation.

6 Virilio has devoted two books and an exhibition to the subject of German bunkers. See, in particular, *Bunker Archéologie* (Demi-Cercle, 1991). English edition: *Bunker Archeology* (Princeton Architectural Press, 1994).

7 Paul Virilio, 'Nevers chantier'.

8 'The interlacing of the oblique' – *Entrelacs de l'oblique* – was also the title of a book which coupled Parent's most important projects with his futuristic drawings (Editions du Moniteur, 1981).

9 *L'Architettura*, 208, February 1973, 'Claude Parent', with an article by Ionel Schein: 'Claude Parent ou la nécessité d'être architecte'.

10 See *Nueva Forma*, 25, February 1968; 26, March 1968; 28, May 1968. The projects featured in these issues were republished in July 1968 in a single volume: 'Claude Parent, Paul Virilio, 1955–1968'. *Nueva Forma* devoted further articles to André Bloc and Claude Parent: 50, March 1970; and to Claude Parent alone, 78–79, July–August 1972.

11 The term is borrowed from *Nueva Forma*, 28, May 1968, which described the work as *'brutalismo estructural'*.

12 In *Architecture d'Aujourd'hui*, 138, June–July 1968.

13 For more on the Charleville project, see 'Charleville étude', in *Architecture Principe*, 9, dated December 1966, but not published till December 1977. For the Tokyo National Theatre project, see Jean Nouvel et Associés, Philippe Starck, *Nouveau théâtre national de Tokyo* (Champ Vallon/Seyssel, 1987).

Architecture Principe

Paul Virilio

Claude Parent (left) and Paul Virilio (right) in the 1960s.

I formed the Architecture Principe group in 1963, along with the architect Claude Parent, the painter Michel Carrade and the sculptor Morice Lipsi. Such multidisciplinary groups were in vogue at the beginning of the 1960s, and Claude Parent himself collaborated in several, including the Espace group founded by André Bloc.

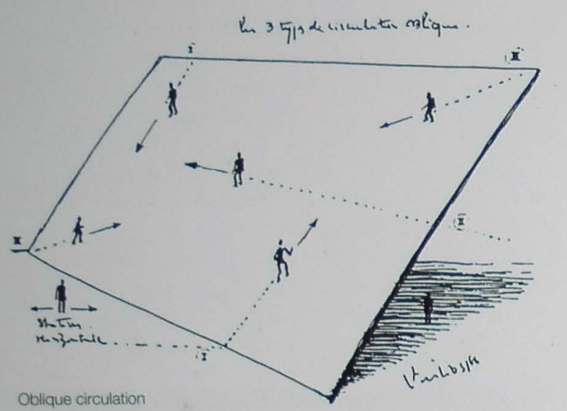
My own research at the time was devoted to the architecture of Second World War bunkers. Since 1958 I had been studying not only the blockhouses of the Atlantic Wall and the Siegfried and Maginot lines, but also the military spaces of what was known as 'Fortress Europe', with its rocket-launching sites, air-defence systems, autobahns and radar stations.[1] This was an archaeological study, and a personal one, motivated by the desire to uncover the geostrategic and geopolitical foundations of the total war I had lived through as a young boy in Nantes, not far from the submarine base of Saint-Nazaire.[2] For me, the architecture of war made palpable the power of technology – and the now infinite power of destruction.

In my efforts to understand the spaces of conflict, I drew on *Gestalt* theory – the psychology of form and the phenomenology of perception. This approach revealed the extreme importance of the LOGISTICS (and fluxes) of circulation during the Blitzkrieg, and enabled me to realize the effect of the BALLISTICS of different projectiles on the configuration of contemporary military architecture.[3]

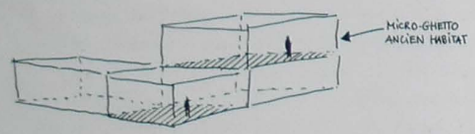
Already during that time, I was exploring in a number of experimental designs the possibility of a TOPOLOGICAL or at least non-orthogonal architecture. I was also working as a painter. I had made some stained-glass windows for churches, helping to execute Matisse's designs for Saint-Paul de Vence and those of Braque for Varengeville. It was through these connections in the domain of sacred art that I obtained the commission for the church of Sainte-Bernadette du Banlay in Nevers, which was built between 1964 and 1966 by Claude Parent and myself.

The Nevers church was followed by projects for the cultural centre in Charleville and the Mariotti house in Saint-Germain-en-Laye, which unfortunately were never built. The Thomson-Houston Aerospace Centre in Vélizy-Villacoublay, however, was successfully completed at the very end of our collaboration, in 1968/9, thanks to the good working relationship that I had with the engineer, Rami-Méziane.

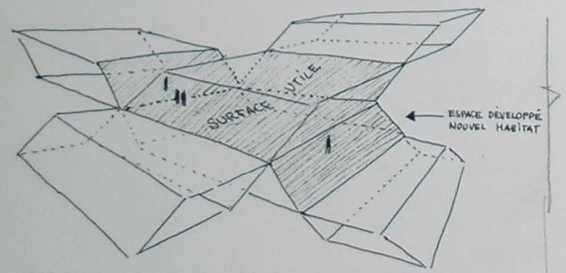
In addition to these projects, it is important to mention the full-scale experimental model of an elevated oblique structure, 'The Pendular Destabilizer no. 1', that we set up at the University of Nanterre. It was our intention to live for several weeks within



Oblique circulation



Habitable stasis



Habitable circulation

this structure, in an attempt to test the equilibrium and habitability of inclined slopes and to determine the best choice of angles for the different living spaces. But the 'events' of May 1968 – which began, as everyone knows, on the campus of Nanterre – effectively put a stop to our *psycho-physiological* experiment.

However, the most important work of the group is to be found elsewhere, in the development of the theory known as THE FUNCTION OF THE OBLIQUE... To elaborate the theory, it was absolutely essential to have a publication, a 'manifesto' – hence *Architecture Principe*, nine issues in total, edited jointly by me and Claude Parent, from 1966 on. That was thirty years ago.[4]

'The function of the oblique' had its origins in the concepts of disequilibrium and motive instability. The idea of using the earth's gravity as a motor for movement inspired a very Galilean utilization of the INCLINED PLANE – a building form in which the horizontal was used only as a means of establishing a 'threshold' between two slopes.

After the HORIZONTAL order of the rural habitat in the agricultural era, and the VERTICAL order of the urban habitat in the industrial era, the next logical (or, rather, topological) step was for us the OBLIQUE order of the post-industrial era.

To achieve this, it was necessary to discard the notion of the *vertical enclosure*, whose walls are made inaccessible by gravity, and to *define habitable space by means of wholly accessible inclined planes*, thereby increasing the usable surface areas. This was, in essence, the principle of HABITABLE CIRCULATION.

In contrast to partitions or vertical walls, which provoke an opposition between *in front* and *behind*, a combination of oblique and horizontal planes would result only in *above* and *below*; surface and soffit. Thus the artificial ground of the dwelling would become a LIVING GROUND enclosing all the various articles that are required for domestic life.[5]

By setting the structure on an incline, and by making every part of the built surface (except for the underside) habitable and accessible, *the range of truly habitable spaces would be considerably increased*, at the scale of both the individual dwelling and the building as a whole, since the vertical facade would also cease to exist.

The objective of our research was to challenge outright the *anthropometric precepts of the classical era* – the idea of the body as an essentially static entity with an essentially static proprioception – in order to bring the human habitat into a dynamic age of the body in movement. In our work, the *traditional stability* (habitable stasis) of both the rural horizontal order and the urban vertical order gave way to the METASTABILITY (habitable circulation) of the human body in motion, in tune with the rhythms of life. The space of the body became MOBILE. The limbs of the individual became MOTIVE. And the inhabitant effectively became LOCOMOTIVE, propelled by the (relative) disequilibrium created by the gravity of planet earth, the habitat of our species.

Oblique architecture thus became a *generator of activity* which used physiological principles to make buildings more habitable. 'It is not the eye which sees', according to the philosopher Maurice Merleau-Ponty, but *'the body as a receptive totality'*.

The typology of the inclined plane, by increasing usable surface space, also preserved that rare and extremely precious commodity: real space, as distinct from the space of the atmosphere or the liquid element of the hydrosphere.

In the work of the group, the 'making of the architectural OBJECT' was superseded by the 'making of the JOURNEY'; the classical building finally gave way to the *bridging structure*, which, through the non-Euclidean geometry of its large inclined arches, allowed the full expanse of the landscape to unfold.[6]

In this regard, I should indicate that the illustrations in the *Architecture Principe* magazine were obviously not of architectural or even urbanistic projects, but were simply statements of PRINCIPLE – concepts intended to outline the theory of 'habitable circulation' (with theory, in this instance, remaining true to its origins in the Greek *theoria*, which means both 'procession' (parade) and 'process').

In conclusion, I would like to mention that my interest in the oblique extended beyond the limits of my collaboration with Claude Parent. After I became co-director (with Anatole Kopp) of the Ecole Spéciale d'Architecture in Paris in 1972, my teaching concentrated on the development of technical research into the organization and the precise morphology of oblique volumes. Several student theses were devoted to this theme, but after a few years the overwhelming difficulties of building an oblique habitat led us to abandon this work, which seemed to offer no practical benefit to young architects starting out in the working world.

Since being forced to abandon the SPACE of the oblique, I have devoted myself to TIME – or more precisely to the diverse phenomena of acceleration in this era of the 'global village'. The focus of my research has shifted from TOPOLOGY to DROMOLOGY, i.e. the study and analysis of the impact of the increasing speed of transport and communications on the development of land-use. But that, as they say, is another story.

Notes

1 See *Bunker Archéologie* (Centre de Création Industrielle, 1975; second revised and expanded edition Demi-Cercle, 1991). This second edition has been published in English as *Bunker Archeology* (Princeton Architectural Press, 1994).

2 See *L'Insécurité du territoire* (Stock, 1976; revised edition Galilée, 1992).

3 See *Vitesse et politique* (Galilée, 1977), p. 16. Published in English as *Speed and Politics* (Semiotexte, 1986).

4 See *Architecture Principe* (L'Imprimeur, 1996), a new compilation of the nine issues of the manifesto magazine.

A critical modernity

Claude Parent

The Modern Movement has left us with two legacies which are of dubious value:

- a proliferation of satellite towns, new towns, dormitory suburbs and large-scale housing schemes that do not fit into the frame of the traditional city
- a cavalier approach to our built heritage.

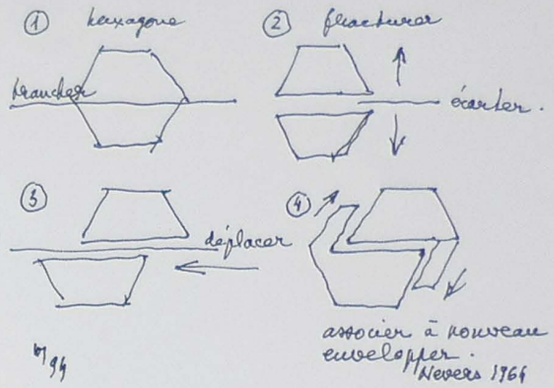
These problems continue to haunt us, prompting us to rethink our ideas and to question whether the architectural ideals of the 1920s and 1930s can continue to serve as our inspiration.

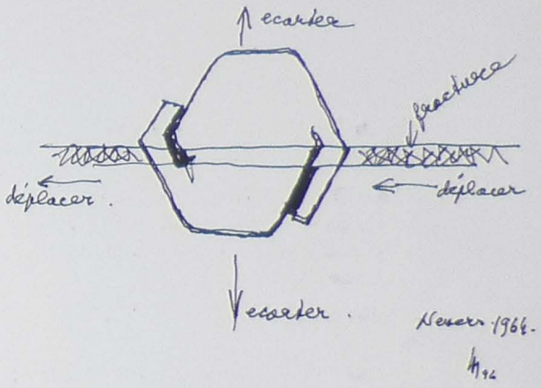
The failure of the Modern Movement can be attributed to its claims to absolute legitimacy, its unbending control over both urban sites and the countryside, its inability to broach self-criticism. Modernism's policy of beginning from the *tabula rasa* – its unrepentant desire for a complete break with the past – has led to the foundering of its entire theoretical basis. Equally, its taste for systematization has corrupted a way of thinking that once was generous and universalist.

There is no longer a coherent basis for architecture. Lines of investigation have diverged; the exchange of ideas has been curtailed. In the absence of any global discussion, the only recourse is to invent anew – or to recover propositions that were rejected in the past. Within this context, architecture is experiencing a cultural revolution which is manifested in:

- the questioning of form as an aesthetic absolute; the rejection of its unchallenged, unchallengeable universal application
- the introduction into projects of an element of contradiction
- the willingness to be self-critical
- the exploration of 'faults' within the continuity of forms
- the appearance in architectural thinking of an element of doubt
- the overcoming of this potentially destructive doubt by a return to coherence.

This strategy of positive questioning is the only means of moving towards a new modernity – a CRITICAL MODERNITY – that will free us from everything which is obsolete and allow us to consider anew the modern architecture of the 1920s and 1930s. In this respect, my work in the 1960s with Paul Virilio, both theoretical and practical, gave some clear signals for contemporary practice in advocating:

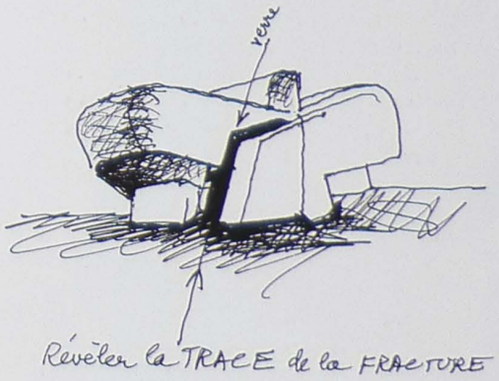




- the mobilization of form
- the use of the fracture
- the expression of disequilibrium in cantilevered masses
- the recurrent sensation of instability
- the use of inclined planes to disrupt the classic orthogonal system.

These elements can be seen as precursors of a critical modernity whose aims are:

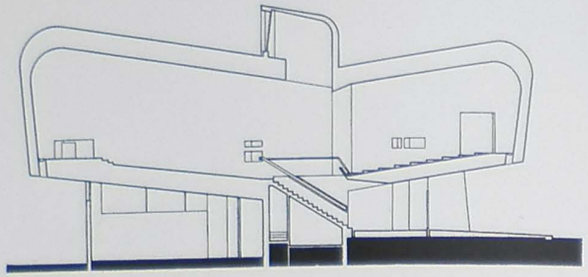
- to avoid an unquestioning recourse to the formal vocabulary of the past
- to maintain significantly better relations with the historical built fabric than Modernism has achieved to date
- to expand the frontiers of memory.

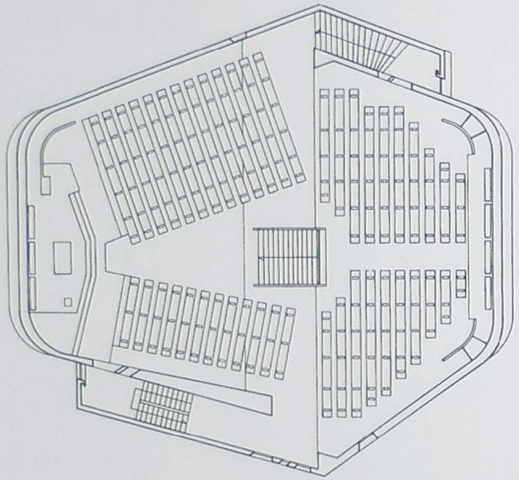


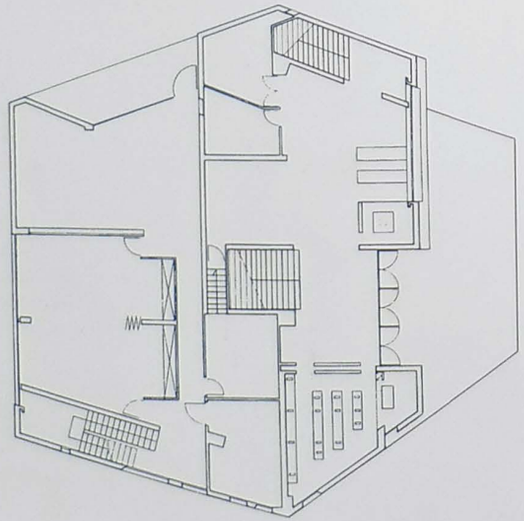
Above: The fracturing of the plan and form of Sainte-Bernadette du Banlay, from Claude Parent's sketchbooks.

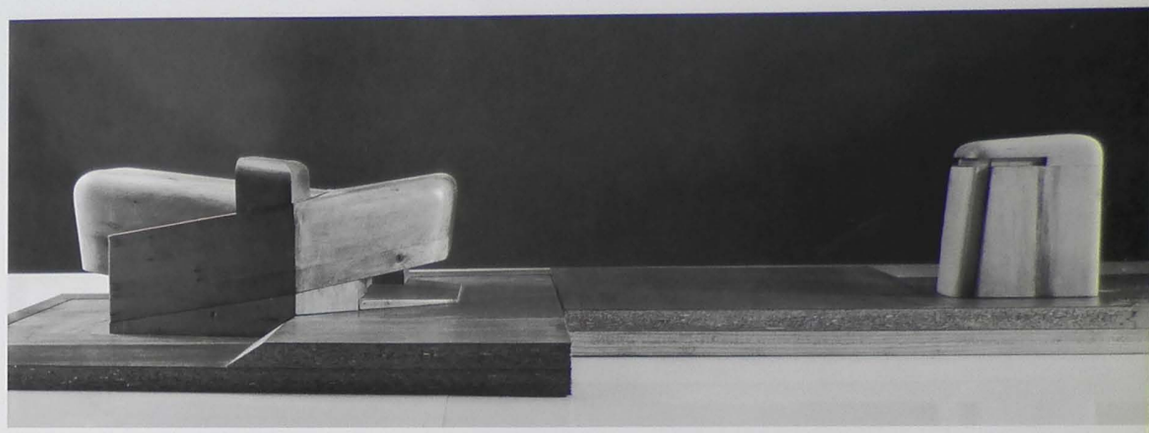
Projects

Church of Sainte-Bernadette du Banlay, Nevers









The church of Sainte-Bernadette was our first venture into the function of the oblique. Curiously, its construction preceded the development of our experimental theories in *Architecture Principe* magazine.

The church has a menacing appearance: its opaque concrete carapace is defensive, even deliberately 'repulsive' in its relation to the surroundings, but at the same time it forms a protective enclosure for the interior, which has been conceived as a grotto, in homage to the life of the church's patron saint.

The sense of rupture from the surrounding context is reinforced by the use of a military vocabulary of architecture inspired by German bunkers. Our decision to apply this language to the form of the church came at a late stage of the project's development, long after we had defined the fractured hexagonal plan, the double inverse slope of the nave, the light slots in the walls, and the side and central entrances.

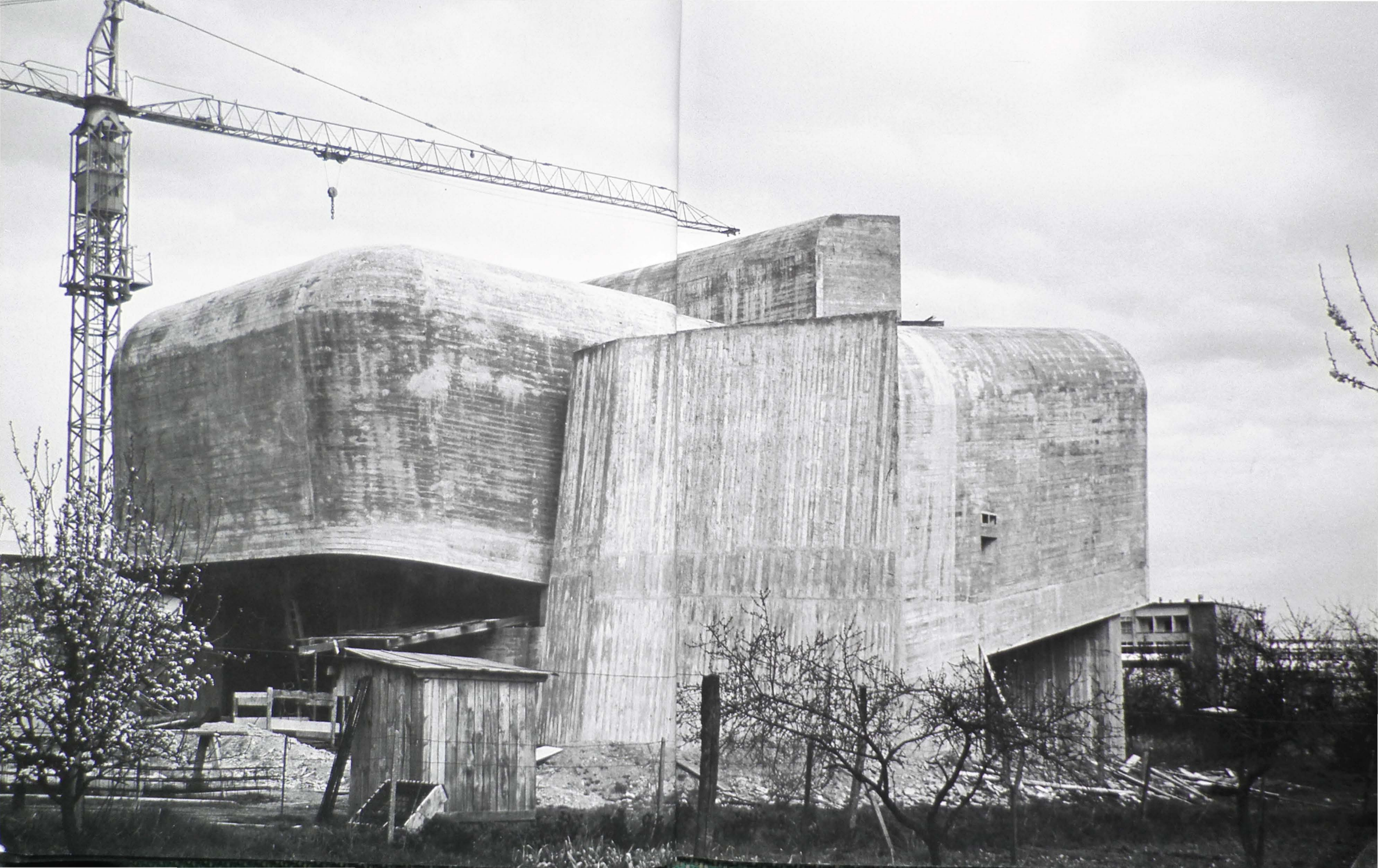
The formal references to bunkers should therefore be seen as a secondary element. In annexing a military vocabulary and stripping it of its lethal functions we were making a conscious effort to play up the drama of the exterior while playing down the connotations of war.

But perhaps this explanation is somewhat over-intellectualized: the result of our approach was a building with a forceful presence eliciting the dual sense of fear and wonder that is often deemed a fitting attribute of religious spaces.

The appearance of the church has provoked strong reactions, but in analysis it has more to do with a sculptural coquettishness than with a considered application of the principle of the oblique. The two ideas are unconnected: the oblique structure is quite independent of the formal vocabulary of the bunker. They simply coincided in this single instance because Virilio and I each came to the project with a set of design ideas that we wanted to develop to the full.

The church is important in the history of the oblique because it expresses in sculptural form three key elements: the function of the oblique; our anger with the architecture and society of the time; and the liturgical openness desired by the parish priest, Monseigneur Bourgoin. That is no mean achievement for a project with a budget of 130 million old francs on a pocket-sized site. *CP*

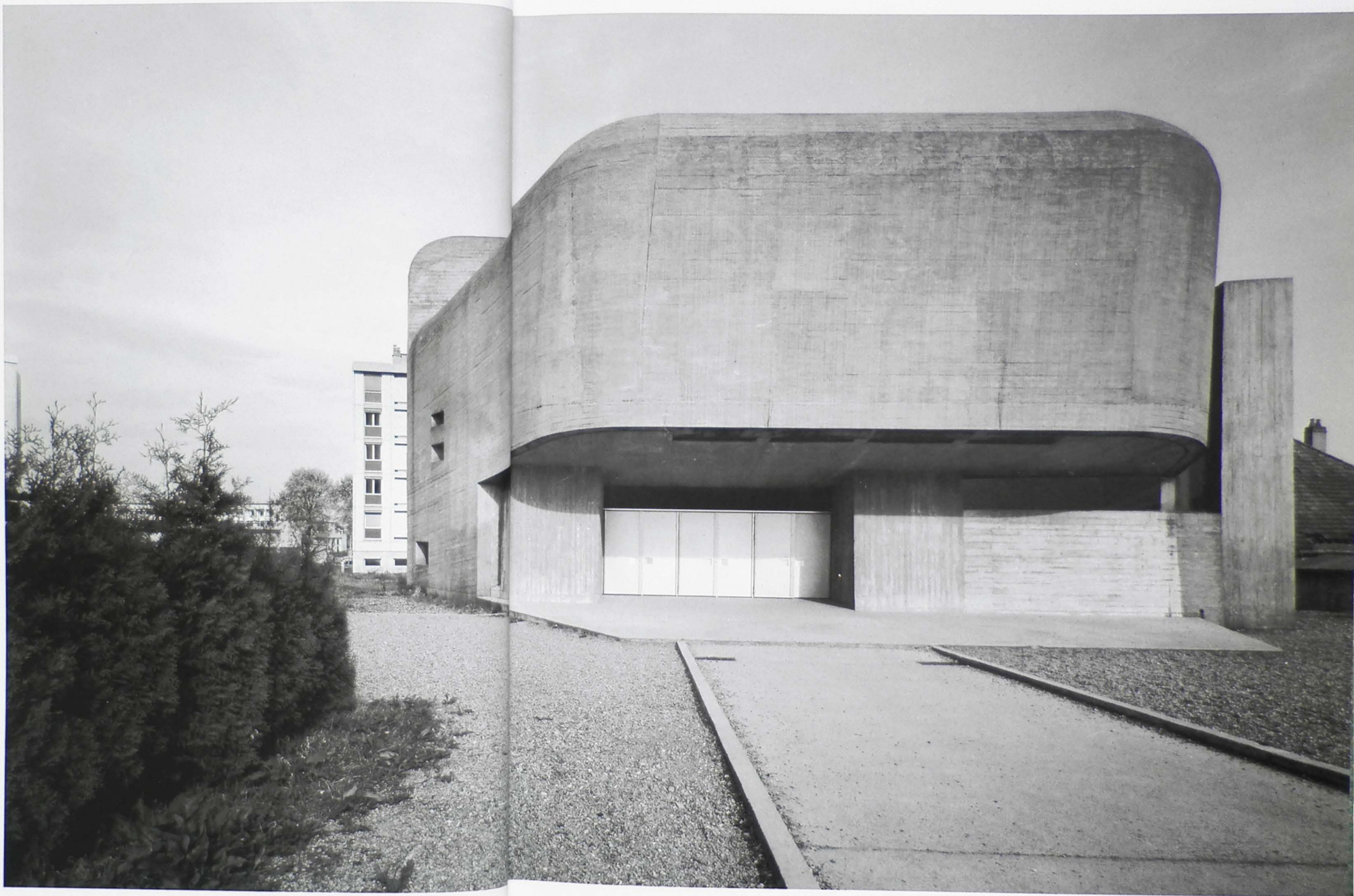
Above and pp. 17–18: Model of the proposed parochial centre of Sainte-Bernadette du Banlay, showing both the church and the (unbuilt) presbytery. Claude Parent and Paul Virilio, 1964–6.

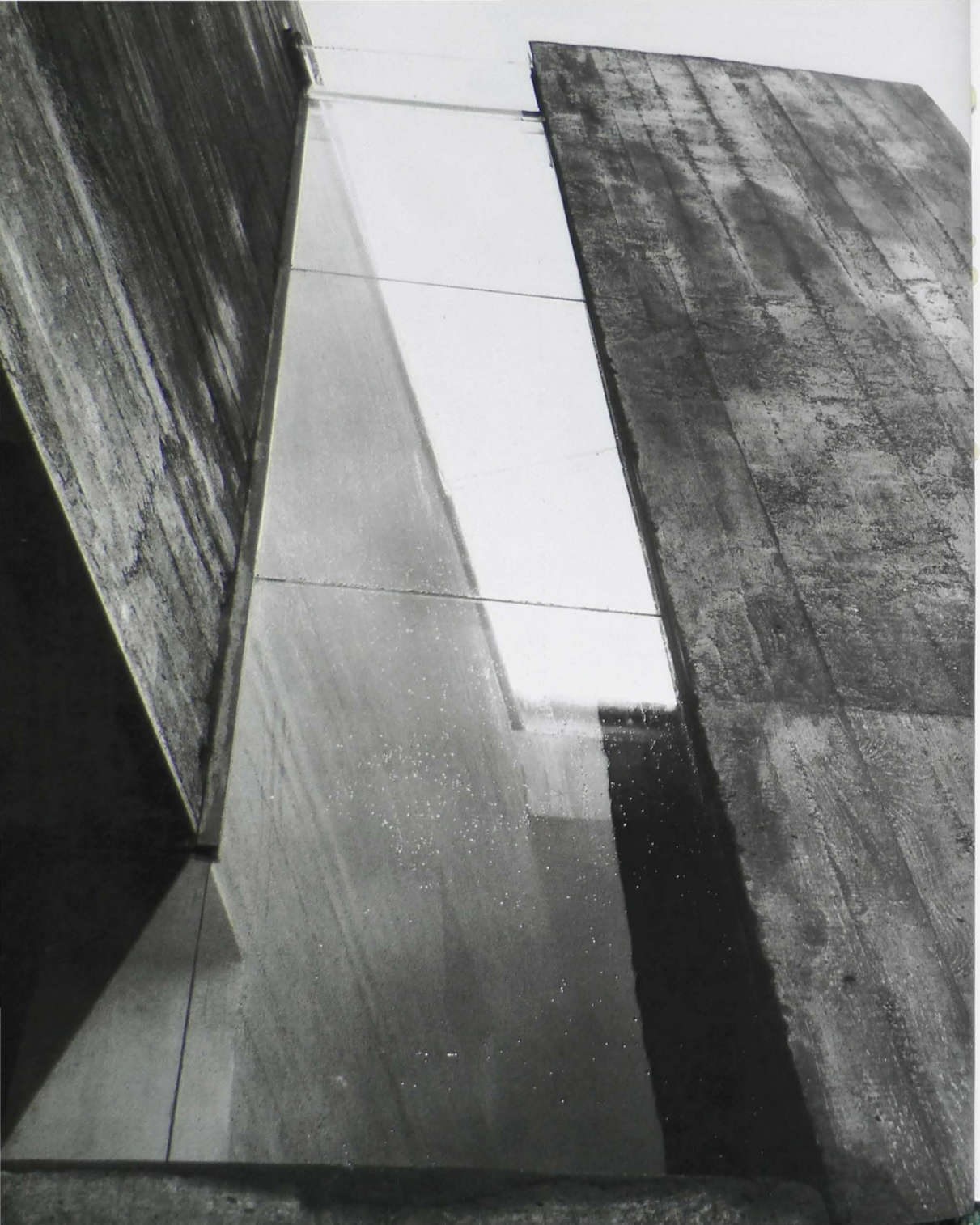


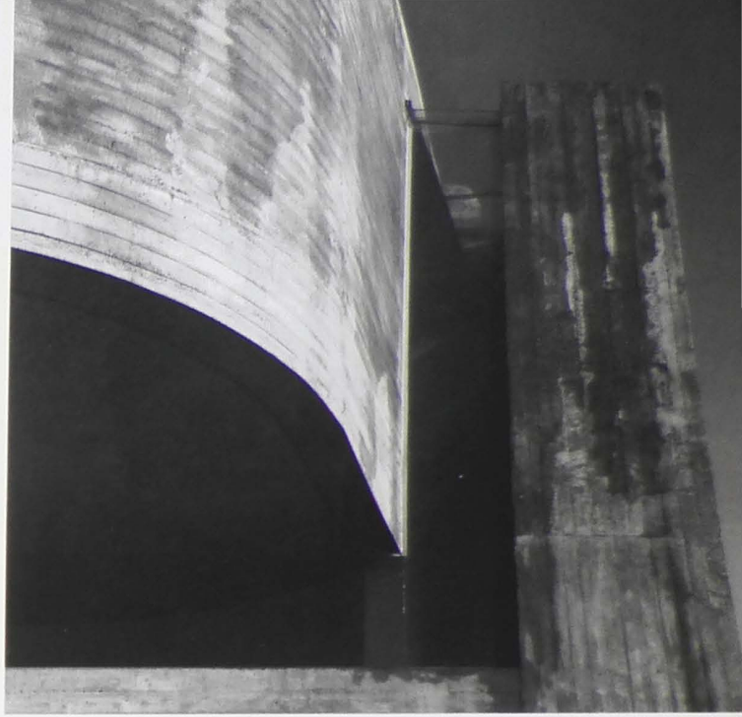
The plan of the church is based upon the interpenetration of two shells, one containing the altar, the other the confessionals. The shells overlap obliquely, creating an ascending central aisle at their juncture. The cantilevered forms are supported by plinths: to the east, below the altar, there is a block containing the meeting and instruction rooms; to the west, below the confessionals, are the baptistery and day chapel.

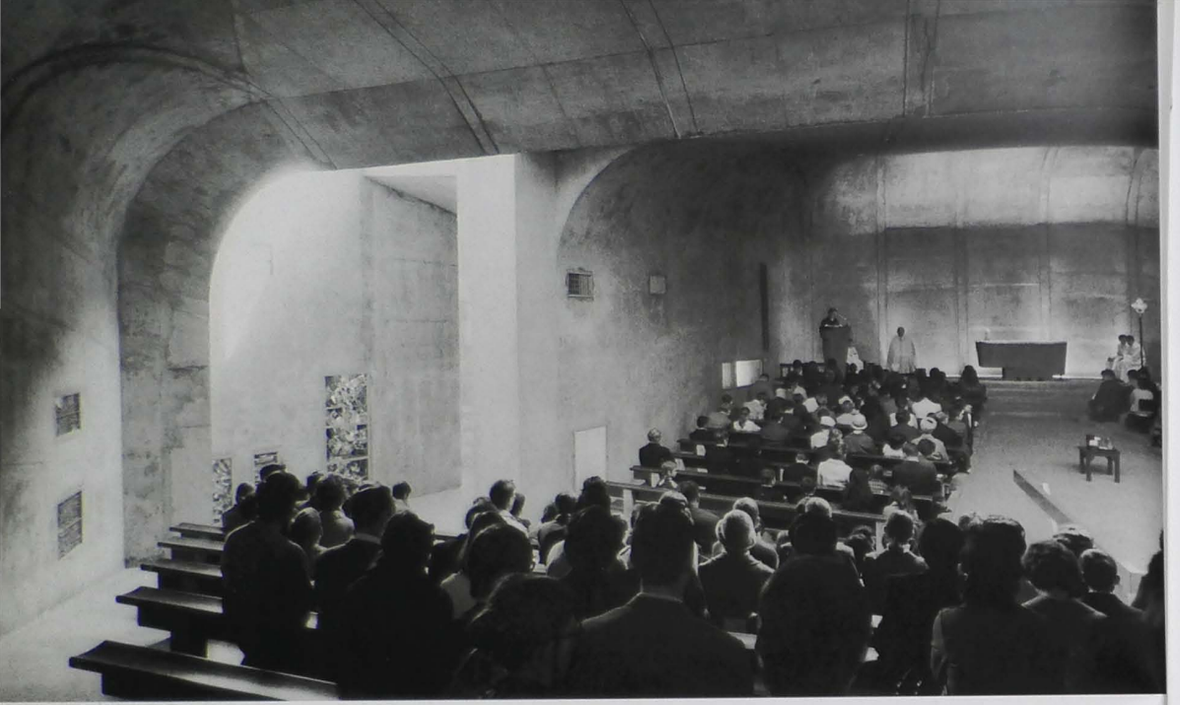
Secondary entrances are located beneath the overhang at the juncture of the two shells. To the north a double stairway leads down to the meeting and instruction rooms, while to the south a single stair leads to the sacristy and baptistery. In the centre, the principal access stair rises up into the middle of the nave, along the east–west axis leading to the altar.

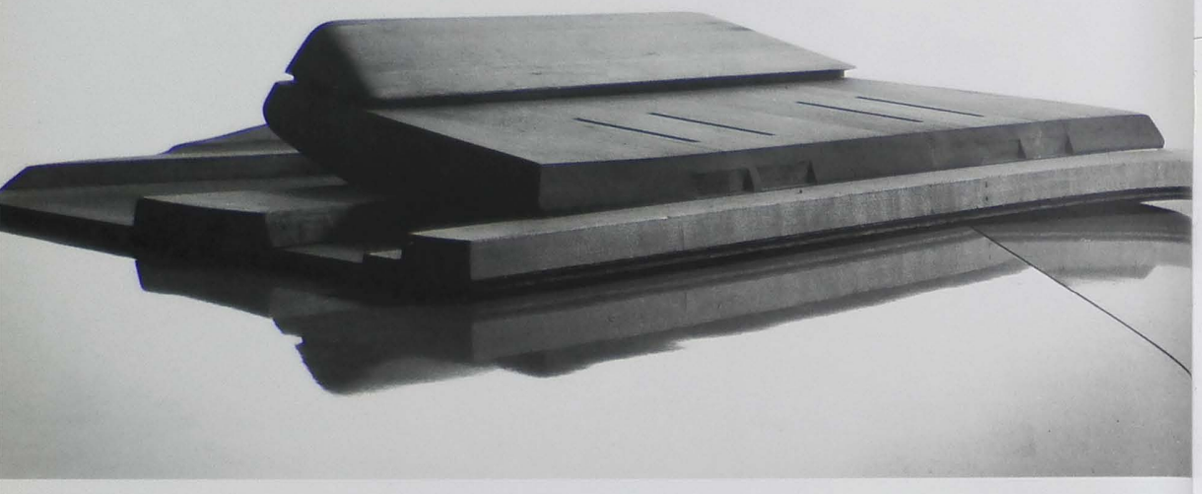
Narrow slots are cut into the floor of the main space and some of the walls to provide a form of backlighting, illuminating the vaults above. Complementary lighting is obtained through continuous vertical fissures between the two detached and overlapping lateral volumes which enclose the nave. A transverse lantern skylight articulates the inversely pitched roofs, emphasizing the ruptured effect. The reinforced concrete is left bare inside and out.

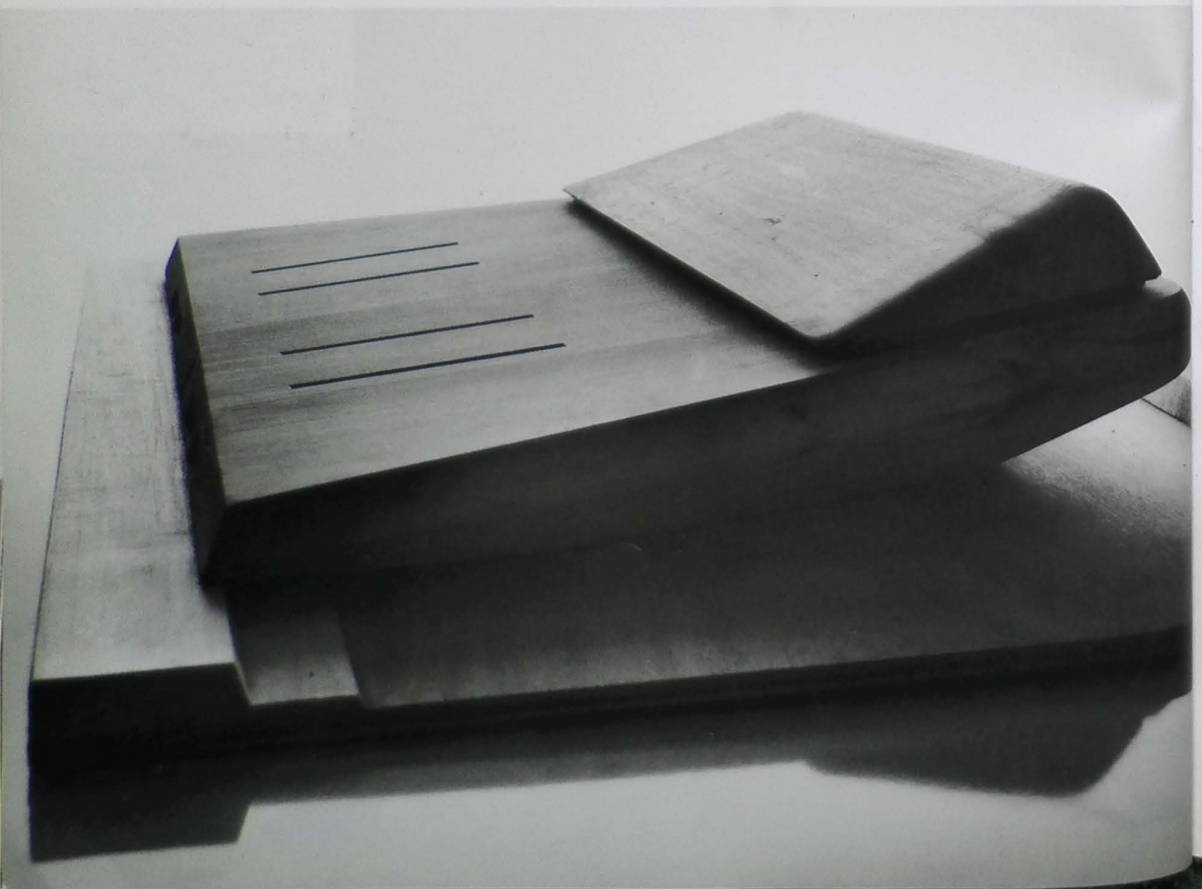










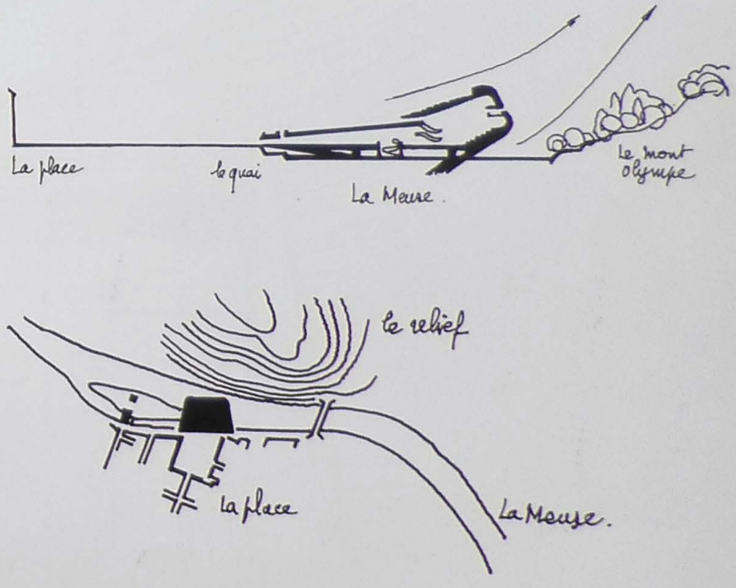


Projects

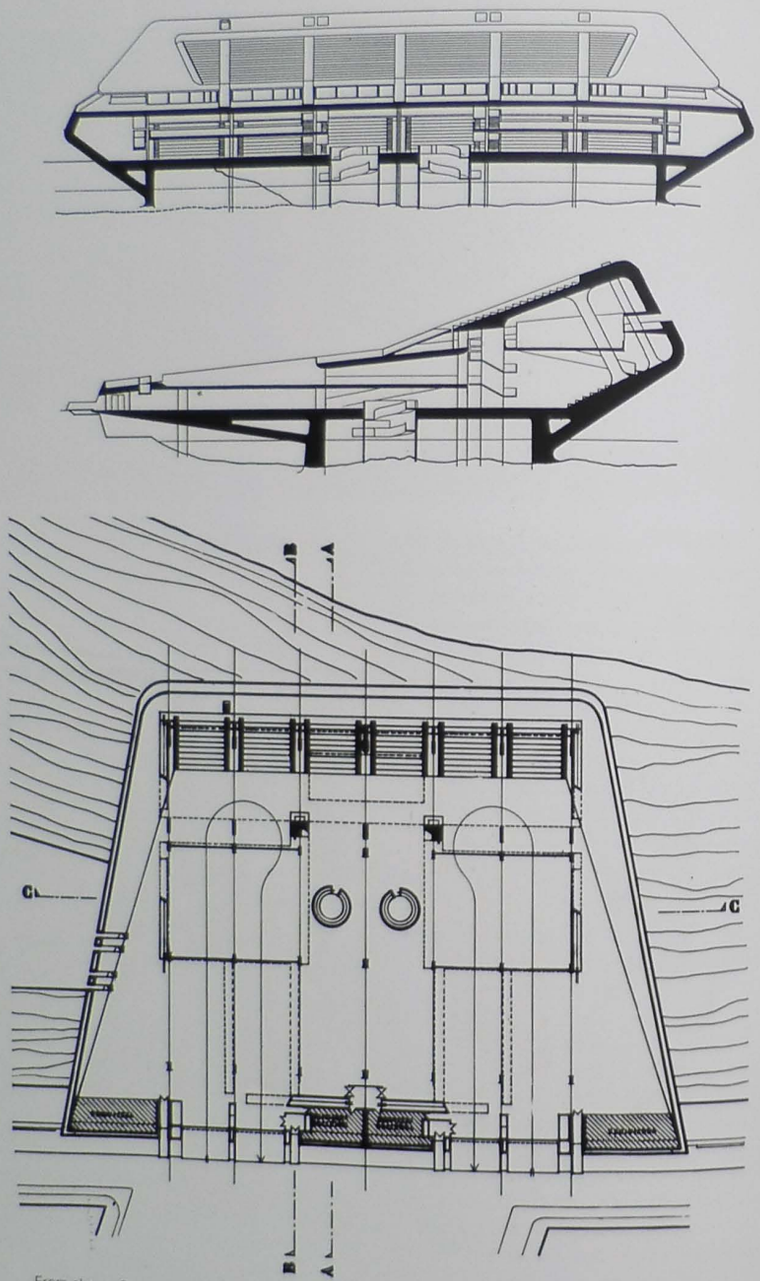
Charleville cultural centre

The Charleville cultural centre is an obliquely sliced concrete shell enclosing more than 10,000 square metres of usable surface space. The facilities are arranged over several levels that are tied together by a system of ramps and stairs. The roof of the main enclosure – a continuous sloping ramp – slides into the base of the oblique upper terraces, and serves as a stage for open-air spectacles and informal gatherings. An urban square extends down the slope from the terraces, forming a backdrop for larger events.

Below the outdoor terraces, a sheltered upper deck overlooks the restaurant level, which is itself suspended within the internal volume. A series of steep stairs link the restaurant to the exhibition spaces below, and open onto two levels of performance space that can be tied together or isolated as required. The reinforced concrete casing, the outer edge of the restaurant and the upper bridge are all punctured with inlets and fissures which provide natural light or points of access. Openings cut into the base of the structure allow barges on the River Meuse to sail right up to quays which are connected with the building by a pair of spiral ramps. The creation of such an uninterrupted flow between exterior and interior is a key advantage of the principle of inclined planes. *CP*



Above: Site plan and sketch showing the relation of the cultural centre to the river Meuse and the form of the urban square. Claude Parent and Paul Virilio, 1966.

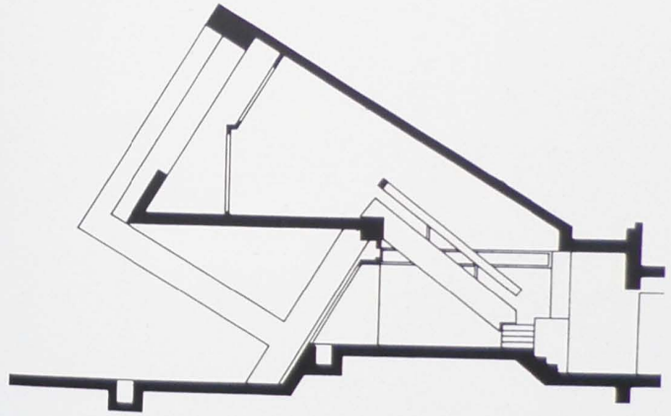


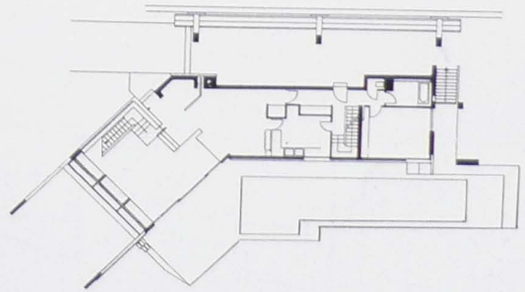
From above: Section B–B, section C–C, ground-floor plan (quay level).

The overall form of the Charleville project is in no way 'figurative'. It is not nautical, despite its setting, nor aerodynamic, despite its profile. Rather, it is carved out of the capacity of the interior.

Until now, capacity has played a minor role in determining architectural form except, of course, on the general level of scale. The importance assigned to the protective role of the external envelope has totally overshadowed the CAPACITY EFFECT. The resulting emphasis on the purely technical aspects of architecture (load-bearing, support) means that in essence buildings are merely the 'scaffolding' of their contents. Technical concerns have been raised to the level of poetics – a tendency that has been encouraged by engineers and extended by the development of the steel structure. Thus the framework and the materials attached to it – whether stone, wood or metal – have been unduly emphasized. The use of poured materials, concrete or plastic, will completely alter this situation, transferring to the exterior a positive imprint of the volume inside. By doing this, and by making all surfaces continuously usable, the long-standing opposition between interior and exterior will be largely neutralized...

The general form of the building has been developed concurrently with a stratification of the levels of use. Abandoning the convention of the facade as a barrier, we have inverted the floors, and occasionally even rolled them back on themselves, in order both to refine the spaces and to exploit their full height. Out of this strategy there has emerged a wing-like section of leading and trailing edges. *PV*





Drusch house, Versailles

The morphology of the function of the oblique can be traced back to the Drusch house. The main element of the house,a cube turned on its edge, contains a living space on three levels. The cube seems to be toppling off its base, giving a palpable sensation of movement, although it is in fact secured by a concrete footing. *CP*

Drusch house, Versailles. Claude Parent, 1962–3. Ground-floor plan and section through living space.

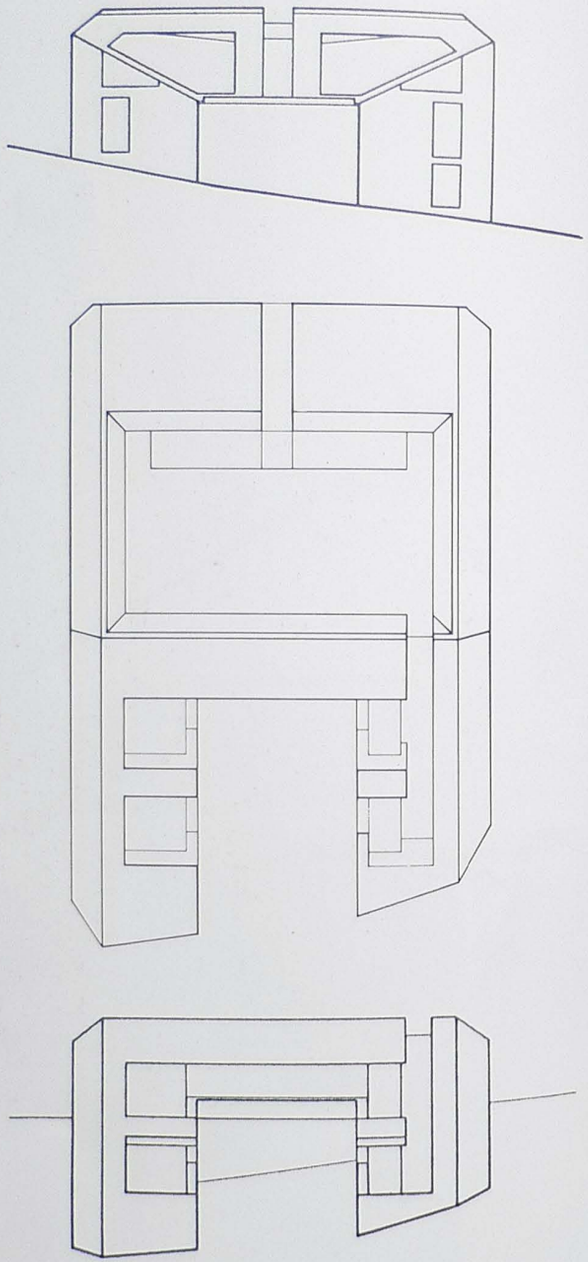
Mariotti house, Saint-Germain

We undertook this study for a house on a site in Saint-Germain at the request of the owner of a small building firm, a man named Mariotti. The project got as far as the building permit stage.

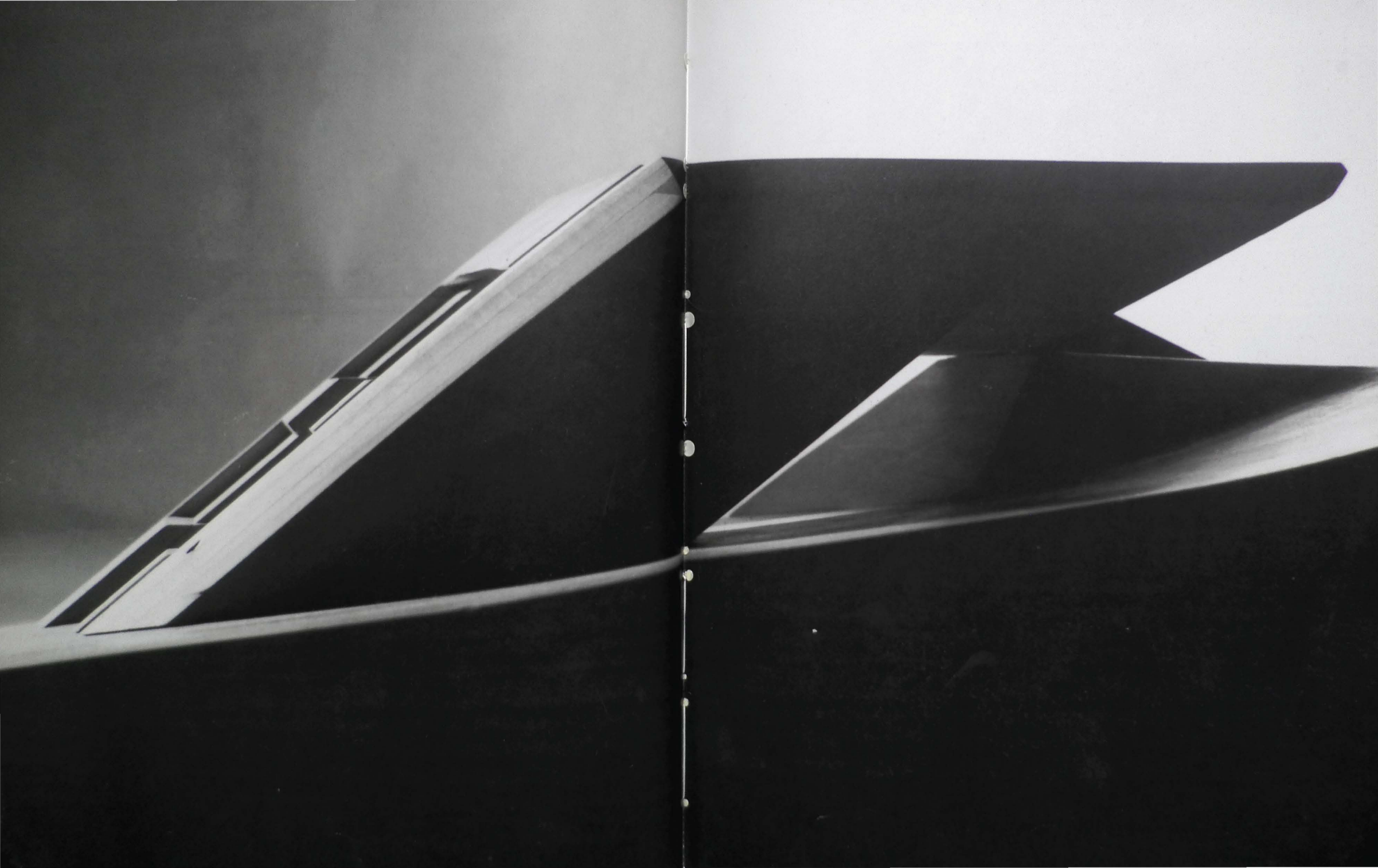
The house straddles the small, sloping site like a bridge. It is possible to walk across the entire expanse of its inclined facades, as well as along its terrace and its third point of contact with the ground (the access ramp to the rear). Mariotti was the first house to be designed on the oblique. *CP*

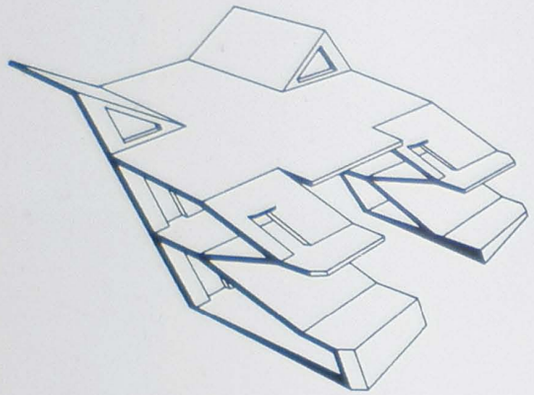
The micro-ghetto of the traditional habitat is transformed into a freely accessible interior landscape by the mobilizing function of the oblique, which removes all impediments to movement – the fixed partitions and the random clutter of furniture. The underside of the oblique forms an isolating screen which fully serves the needs of privacy, allowing the whole of the upper surface – the living part – to be devoted to the activities of the inhabitants. The sense of dynamics is heightened by the diversity of the forms, materials and colours of the household equipment, which is always practicable, and incorporated into the built structure. The wing-like floor plane integrates different supply and equipment circuits at each stage of its elevation.

The Mariotti house expresses the principle of habitable circulation. *PV*



Mariotti house, Saint-Germain. Claude Parent and Paul Virilio, 1966. From above: Front elevation, roof view, rear elevation. Opposite: Access ramp to the terrace.



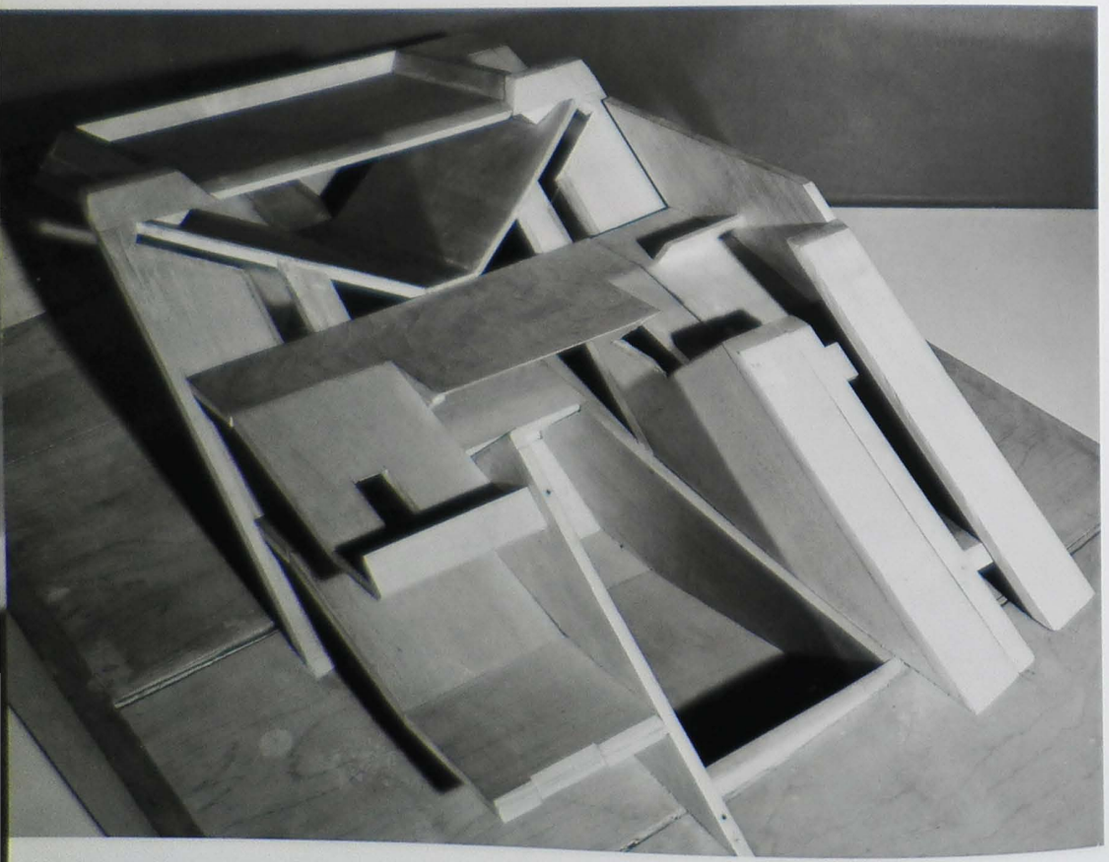


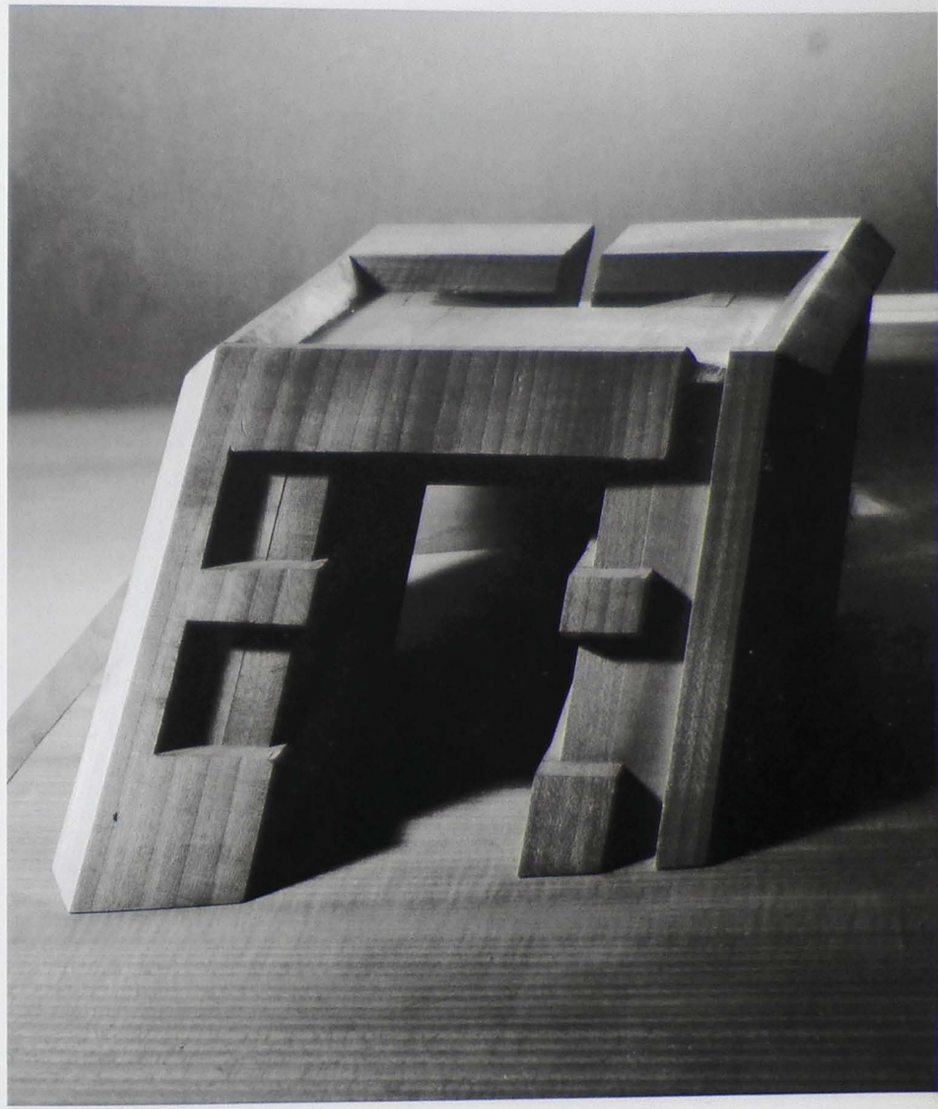
Mariotti house, Saint-Germain.
Claude Parent and Paul Virilio, 1966.

Opposite page: Model view of front elevation: the central portion of the facade is glazed.

Right: Interior perspective illustrating the principle of habitable circulation.

Below: Study model showing how the structure straddles the sloping site.





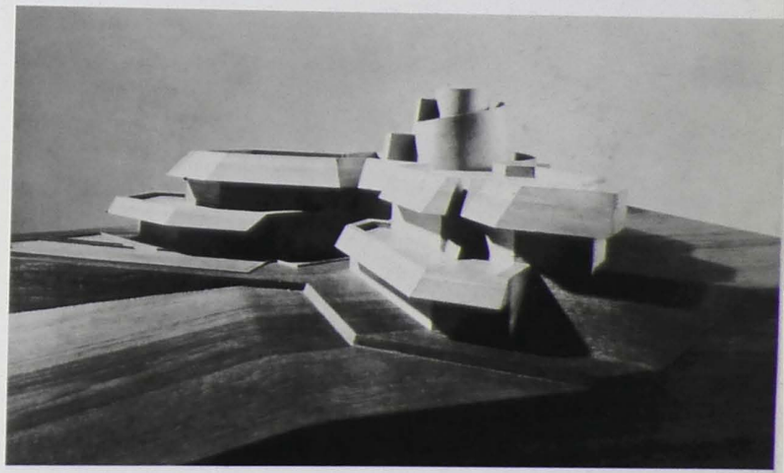
Woog houses

Monsieur Woog, a young, capricious and indecisive Swiss millionaire, the king of the electric toothbrush, came up with the idea of building for himself the house of the century. He devised a programme for a magnificent site on the shores of Lake Geneva, and consulted a minimum of ten architects. Woog didn't see any point in limiting himself. He *invented* the age of consultation: since then the State has quite happily carried on with the process.

The submitted projects were all quite beautiful. Ionel Schein devised a transparent glass cage that displayed the organic guts of the interior. Jacquemain proposed a splendid tower that curved outwards at its summit. Another architect, from Los Angeles, created an underground structure with observation bubbles peeking out of the hillside...

For my part, I produced three studies exploring the spatial possibilities of the oblique, which perfectly suited the theme of the house. Woog wanted to have a single sweeping vista of the whole of Lake Geneva (a familiar possessive impulse), but at the same time to remain down to earth (in the bucolic sense). His brief stipulated that the house had to rise upward in a series of terraces from ground level up to a height of fifteen metres. This apparently impossible requirement was an inspiration to me as well as the other architects. *CP*

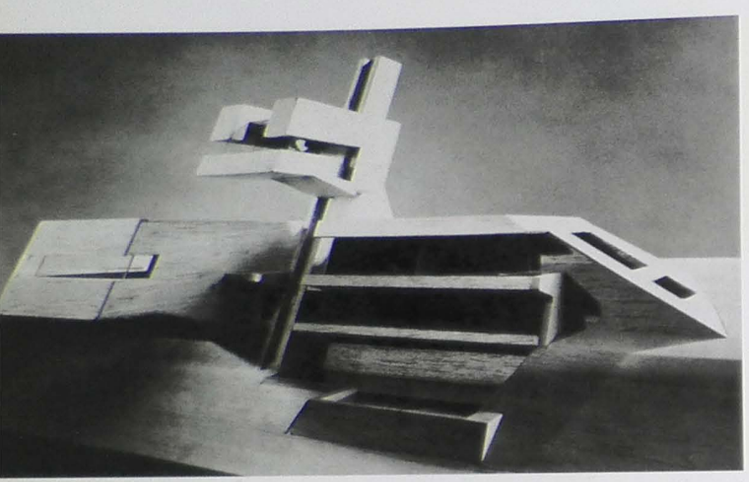
Left: Woog no. 2. Claude Parent, 1966–8.

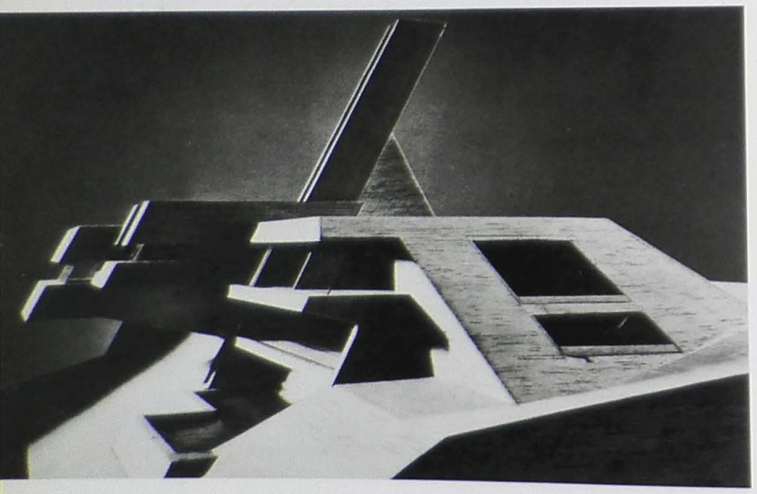


Woog no. 1

Woog no. 1
Traditional

A central (spiral) ziggurat containing the owner's art collection and living spaces rises to the full maximum height of fifteen metres. Around this pivotal oblique are arranged two horizontal planes of living space. The architecture expresses respect, tradition, calm...



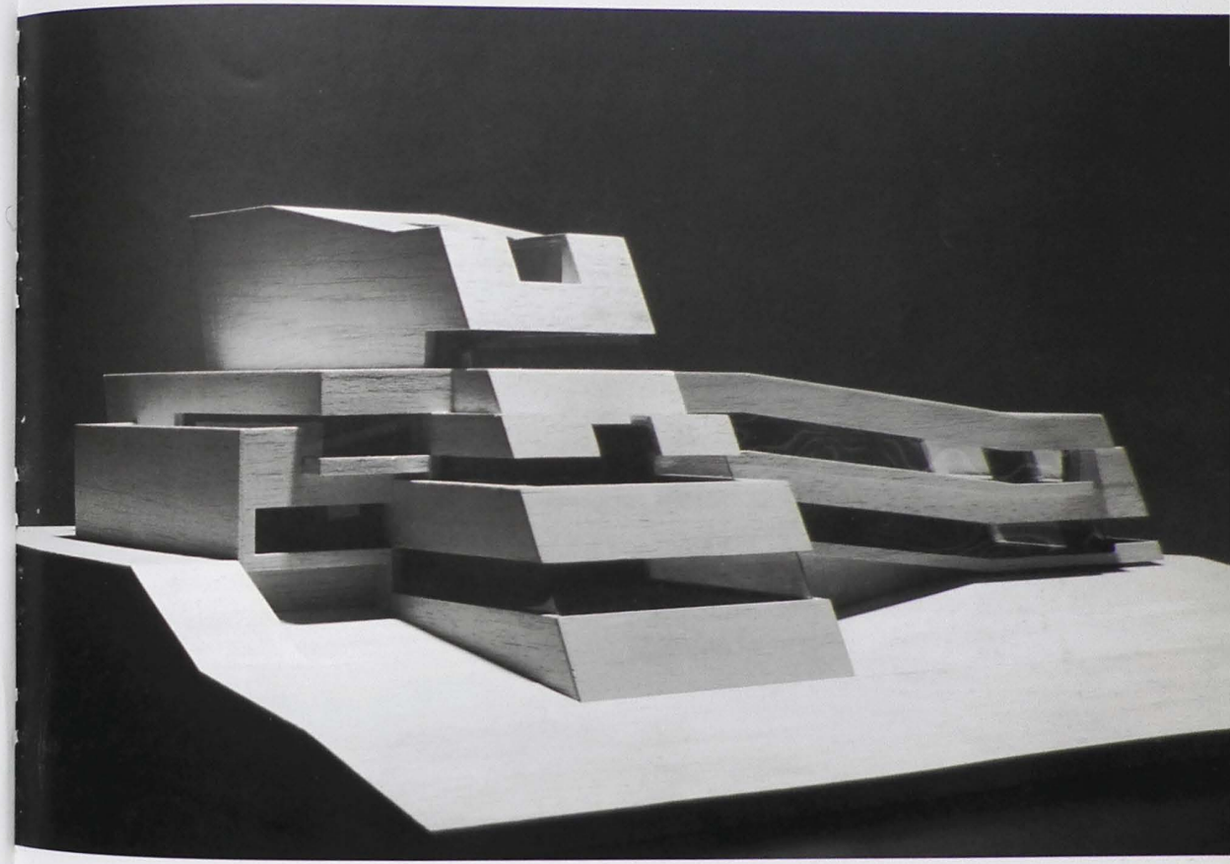


Woog no. 2

Mobile

One part of the house, made up of two ramps, detaches itself from the base of the construction and ascends a track along a huge sloping ramp of concrete. When fixed at the top, it provides 100 square metres of suspended, isolated space.

A slow, almost imperceptible movement animates this enormous block of concrete. A crazy arrangement. The poetry of defiance.



Woog no. 3

Double ascension

This is my favourite of the three schemes – a helmet, or mask, with black holes gaping on to the countryside.

Two sets of ramps, placed at right angles to each other, converge at the core of the house. In one wing are the bedrooms, set on gentle eight degree slopes between two galleries. In the other wing is the living room, on a steeper, twenty degree slope. At the junction of the two wings there is a marvellous space, rich and complex.

Of course, the dream had to come to an end. Monsieur Woog, after all this fuss, wisely settled back into his old place.

Interview with Claude Parent

Irénée Scalbert and Mohsen Mostafavi

We would like to learn more about your collaboration with Paul Virilio. How did it come about?

We had a mutual friend, the painter Michel Carrade, who was always saying that we should meet, but somehow we never got around to it – until 1963, when Virilio came to buy an apartment in Paris. He had found one, and even signed a contract on it, when he saw a building going up on the nearby avenue du Maine and decided, in an instant: '*That's* where I'm going to live.' This was strange, because at that stage the building consisted of two storeys of concrete, nothing more. It was my first big project. Up to then I'd done only individual homes, exhibitions, little things like that. Virilio found out from Michel that I was the architect, and he asked to meet me. Our collaboration was set in motion by a shared passion for architecture.

Yet Virilio did not have any architectural training.

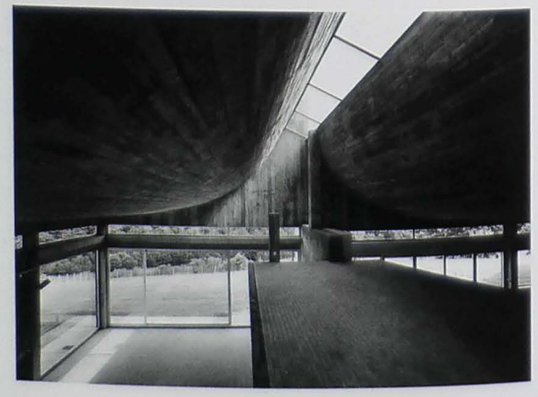
When I first knew Virilio, he was a painter of stained glass. He knew an extraordinary amount about his craft, but he also had a real instinct for architecture – an instinct reflected in his impulsive decision to buy that apartment.

Left: The architect's sister, Nicole Parent, demonstrating movement on an oblique plane.

Our decision to work together was sealed when I took Virilio to see two other projects then under construction: the Drusch house in Versailles, and the Bordeaux-le-Pecq house in Bois-le-Roi. The Drusch house had a particularly dynamic form – a cube turned on its edge, to create a visual disequilibrium. I hadn't conceived of it in intellectual or philosophical terms. I simply wanted to make a house that appeared to be on the point of toppling over. The other house, with its curved forms, also had a sense of movement, and in it Virilio sensed the idea of 'emergence'. There is a French word, 'surrection', which describes this exactly: the architecture seems no longer to be rooted in the ground, but rather to be erupting out of it – almost as if the ground itself was lifting up to make the form.

These two buildings represented the culmination of an interest in the dynamics of form that had developed during my ten-year collaboration with André Bloc. It was Bloc who instigated my true education as an architect. When we met, I was a young malcontent at the Ecole des Beaux-Arts; he was the editor of *Architecture d'Aujourd'hui*, with contacts all over the world. Bloc introduced me to the painters and sculptors in the Groupe Espace. I met Del Marle, Léger, Delaunay, Baertling, Hartung, Pol Bury and many others who were involved in Neo-plasticism and Geometric Abstraction. They

Bordeaux-le-Pecq house, Bois-le-Roi. Claude Parent, 1963.



had an enormous influence on my work, as they opened my eyes to the idea of a dynamic geometry.

At the same time, Virilio had discovered another version of the architecture of disequilibrium through his study of the bunkers and fortifications of the Atlantic Wall.

Thus our collaboration fused two independent approaches to the same theme.

Once you'd established this common theoretical ground, how did you proceed to work together in practice?

To begin with, Virilio was a discussion partner. He used to accompany me when I was invited to take part in a debate: we'd give a joint response to questions. After a while, he began coming to the office for a few hours each day.

As a pupil?

No, as an equal, though he was almost ten years younger than me. He brought a couple of jobs into the office: the church of Sainte-Bernadette and the Thomson-Houston Aerospace Centre. We worked on these projects together. I was responsible for drawing up the initial designs and plans (he lacked the technical know-how), but then we'd have frequent meetings to discuss how the project should evolve, what revisions should be made, and so on. That's how we did it.

So would you say that you were propelled into a marriage of convenience by the commissions that Virilio brought into the office? He wasn't an architect. He needed you to complete the projects.

Virilio had an admirable, and legitimate, ambition to make architecture, and he contributed to the projects in a very real way. It was Virilio who said that we should put a slope on the floor planes of the church. When he made this suggestion, I realized to my dismay that I had succeeded in disrupting the internal spaces and structure of the Drusch house, but not the primary plane of reference – the floor. The challenge of working together on a real, concrete project inspired a fundamental breakthrough – the first application of the function of the oblique.

It seems that the church of Sainte-Bernadette allowed you to synthesize the experience that you'd gained at the Drusch house with the vertiginous qualities of the tilted war bunkers that Virilio had studied.

The military vocabulary of the bunkers dominated our early projects – the church, as well as the cultural centre in Charleville. Virilio saw the bunker as the apotheosis of twentieth-century architecture. He was the bunker specialist; he had photographed thousands of them, up and down the Atlantic Wall. And his enthusiasm was infectious. I began to realize that this was a splendid form of architecture. I liked the continuity of the forms, the sheer size of the concrete shells, the way they responded to the landscape. Some bunkers also have a sense of movement. If you look at them for long enough, they seem to be advancing towards you – like tanks. Together, we decided to use the military vocabulary of the bunkers to initiate a formal dialectic.

What exactly were your attitudes towards the military and the war?

I was anti-militarist, though that was more part of my nature than a considered ideological position. Virilio was also anti-militarist, but he did have a certain respect for the power of a collective organization to achieve extraordinary, almost magical results that are beyond the power of an individual. The D-Day landings were for him a remarkable event, not only because they brought liberation, but because they consolidated the whole of the industrial might of the United States in pursuit of a common goal.

He admired that, in the same way that he admired the super-organized Panzer divisions and autobahn system of the Germans.

Many would think it inappropriate to apply a military vocabulary to the design of a church.

For me, designing a church is no different from designing a single-family house, a cinema, or a supermarket: in each case, you have to find the best spatial solution to a problem posed in terms of human activity. I'm not a practising Christian, so I didn't get involved in the metaphysical issues of the church.

But isn't Virilio religious?

Very much so. We got the commission for Sainte-Bernadette through his connections with the church. He had worked on a number of religious art projects, and became acquainted with Le Corbusier during the construction of Ronchamp.

One could make a comparison between the inclined planes of Sainte-Bernadette and those of Le Corbusier's church in Firminy, which was designed around the same time.

It's true that the French architectural press labelled us as 'post-Corbusians', but that is not how we saw ourselves. I think Firminy was a fine, mature work, perhaps Corb's best building, but it did not express the function of the oblique. Corb created the effect of a cantilevered mass, which is not the same thing as physically cantilevering the floor plane.

One element of the Nevers church is very Corbusian – the tiny holes punched through the walls to bring in light. But I really don't like those holes. They weren't my idea, and I never show them in photographs.

You applied the idea of the oblique not just to the church, but to house designs as well. How practical do you think the idea was on a domestic level?

Charles de Gaulle once said that the French were like cattle, meaning that we're content to remain neutral towards our surroundings because we want nothing more than a tranquil home-life. All apartments here tend to look alike. The poor don't have much choice in the matter: they are given a minimum space, with a standard layout. But, for the rich, it's a conscious decision, and they all choose the same set-up, even the same curtains. Our use of the oblique was intended as an assault on this general coziness, this overwhelming neutrality.

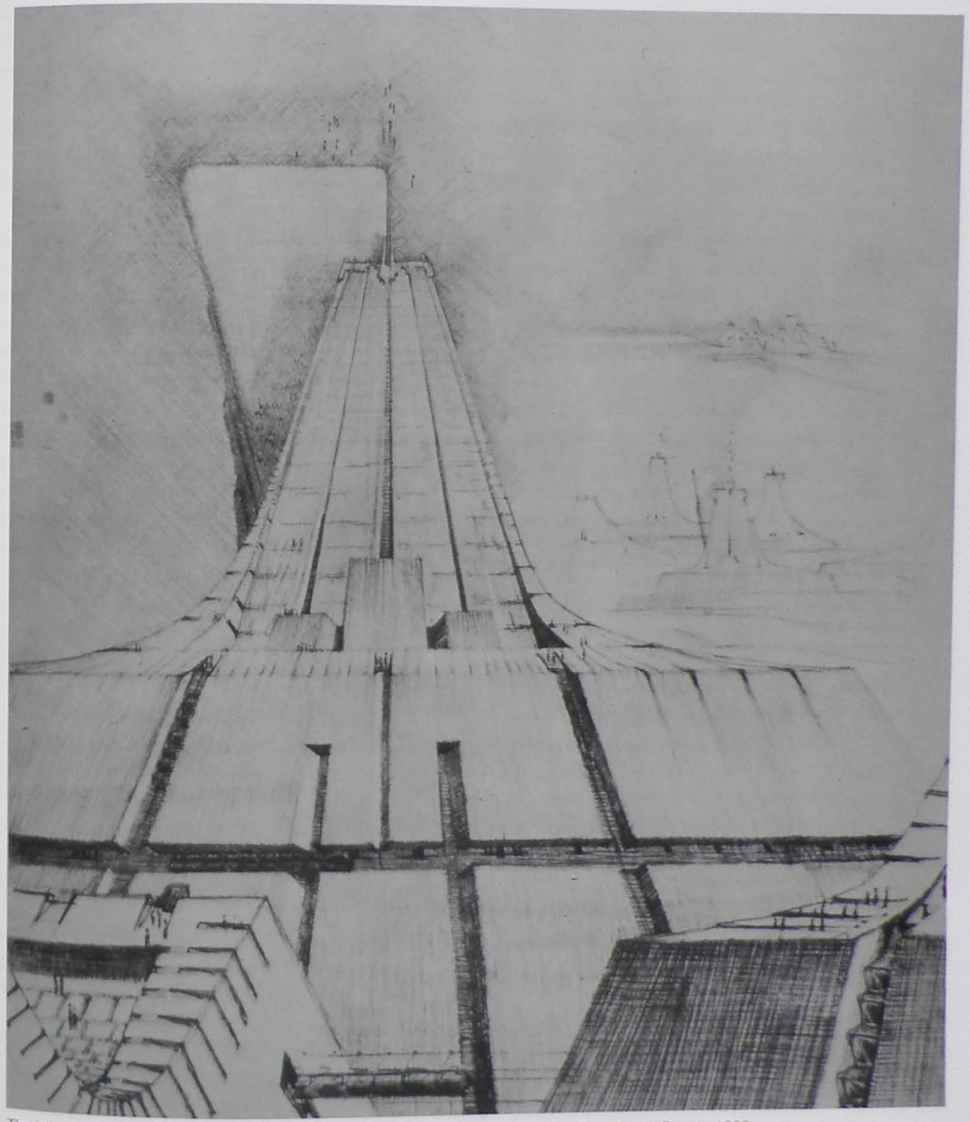
You've also referred to the oblique as part of a 'third order of urbanism'. How might the notion of the oblique transform the city?

In our conception of urbanism, the oblique made it possible to achieve a fluidity of movement, ensuring that the building was no longer a barrier to communication. The surface of the oblique structure was continuously accessible, belonging not to an individual but to the community as a whole.

There's a distinctly utopian flavour to many of your urban projects.

I became interested in architectural utopias around 1954, when I met the sculptor Nicolas Schöffer and learned about his 'spatio-dynamic architecture'. I'm aware now that this work was directly inspired by Moholy-Nagy and the Russian Constructivists, but at the time nobody in France knew anything about those people. In terms of architecture, the country was a closed system.

I got to know other utopists later on, in 1965, when I organized an exhibition at the Salines d'Arc et Senans which included Paolo Soleri and all the Japanese Metabolists, amongst others.



The Waves project – a series of oblique urban structures unfolding like the incoming tide. Claude Parent, 1966.

To me, your approach towards the utopian projects seems rather inconsistent. You were more or less part of a movement in architecture-sculpture which protested against the standardization imposed by industry. But, conversely, your cities were conceived on a huge scale, and seemed to require a vast amount of industry to sustain them. Were the projects mere excursions into science-fiction, or did they have a more serious intent?

Until around 1962, I saw them as a means of making a statement about the way urbanism was being practised. I was searching for an alternative to the relentless advance of the amorphous urban agglomeration. I was saying, 'If it has to be big, it should at least look good.' But at that stage, I didn't take it much further than defining a modern form for these cities.

With the introduction of our notion of the oblique, things became more complicated. I began to be concerned with making proposals that related in some way to the existing city. And I began to find myself in disagreement with my fellow utopists. The final break came with the debate on a project which proposed a huge urban expressway – the grand avenue Charles de Gaulle – slicing through Paris, blocking pedestrian movement. I thought that was crazy, but my alternative proposal – an accessible, sloping structure – found no support among the utopists. So I finished with them, and refused to join the GIAP group (Groupement International d'Architecture Prospective) created by Michel Ragon.

There's one historical point that we haven't yet covered: your collaboration with Virilio on the magazine Architecture Principe. *What motivated you to become publishers?*

When we set up the magazine, we'd been working together for three years on the church at Nevers. We had very clear ideas about what we wanted to achieve – but the architectural press wasn't much interested in them. So we decided to finance our own magazine and send it out free to everyone. It created an uproar. Maymont, for example, came up to me and said, 'You're mad, Parent. You've gone too far this time.' This was rich, coming from the man who had proposed to put floating cities in the Bay of Tokyo.

What was it that upset these people so?

It was the oblique, the idea of putting everything on inclined planes. We might have been forgiven if we had just called the things 'slopes'. As it was, we encountered absolute opposition. The magazine was our counter-attack. I published theoretical projects and wrote articles. Virilio did the same, though his work had a different tone and definite pet themes. Anything on 'habitable circulation' is bound to be by him. His writing took a radical theoretical stance, whereas I was probably more concerned with concrete issues – and more confrontational.

What were the roles of Lipsi and Carrade? They were listed on the masthead of the magazine as consultants in the 'plastic arts'.

Their involvement was minimal. Lipsi made a sculpture for Sainte-Bernadette, and Carrade was supposed to do the church decorations, though he never finished them. They took part in our discussions at the beginning, and were sympathetic to our ideas, but the inclined plane was purely the work of Virilio and myself.

You've described the reaction of your contemporaries to the idea of the oblique. What did younger people think?

As we got closer to '68, we found that the younger, more intellectual students began to see use as belonging to the same camp as the Situationists. The first time this became apparent, I didn't even know what 'Situationist' meant, so I asked Virilio, who lent me a magnificent metallic gold volume printed on sumptuous paper – unlikely packaging for a virulent critique of society. I was impressed, and I suspect that Virilio, who was a great reader, was at the time much influenced by the Situationists as well as other writers such as J. K. Galbraith. Virilio has always had a talent for tuning in to current trends and events and interpreting them in his own distinctive way to give them a new dimension. That, I believe, is the basis of his approach.

Virilio insisted that the general resistance to the oblique derived from a resistance to anything new. In the early days of the automobile, people were afraid that they would suffocate if they went above thirty kilometres an hour. Similarly, it was felt that sloping floors were inimical to mental stability. Our oblique spaces were compared to the prisons of the Bolshevik secret police, which had skewed cells and ceilings so low that it was impossible to stand.

To prove that it was possible to inhabit the oblique, we designed 'The Pendular Destabilizer' – an experimental structure that was raised twelve metres above the ground to isolate it from the outside world. There was no telephone, no post, no means of communication – except for a little hole in the wall that we could talk to each other through. It was a bit like those followers of Saint Simon who used to climb up columns and never come down again.

When did this experiment take place?

It didn't. We'd set aside a month of the vacation to test the structure at the University of Nanterre, but then May '68 came along.

'68 was not at all as I'd hoped. I had expected the movement to go beyond its blanket targetting of established systems and propose a new way of thinking, a new order. I don't think it's fascist to talk about 'order'. To my mind, the word implies a coherence, a system of thinking embraced by the majority of the population. But those involved in the 'events' merely tore everything apart without proposing any realistic alternative.

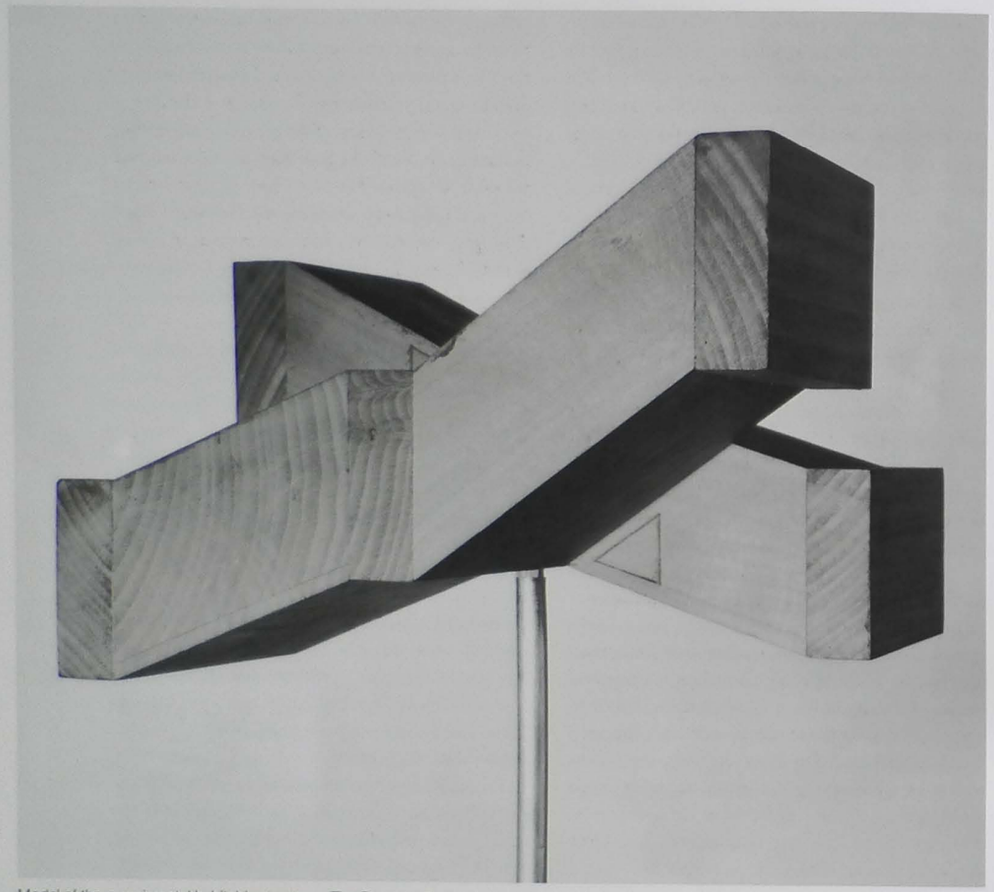
Virilio's experience of the time was very different. He was close to the hub of things. He wrote an article for a special issue of *L'Express* magazine, and he joined the group occupying the Odéon. When I went to see him, I was told that he was now calling himself 'Comrade Paul'. Those people all took themselves very seriously, forming 'revolutionary committees' and 'sub-committees'.

I have no stomach for that kind of thing. It reminded me of the aftermath of the Liberation in the south of France, when bands of fifteen-year-olds got hold of guns and went out looking for revenge. I don't like that mob mentality. It's the same thing in churches: when people come together in large groups, all individual will is lost.

Did Virilio join any particular group?

No, though he was very much involved in the movement as a whole. He said it was something he'd been dreaming of all his life – 1789 revisited. All the same, he was no fool. The day the police stormed the Odéon and drove everyone out with their batons, he wasn't there. He'd gone home to take a bath.

A couple of years later, around 1970, there was a special issue of *Architecture d'Aujourd'hui* covering trends in contemporary architecture. The editor was then Marc Emery; Bloc had been dead for a while. Virilio and I each contributed an article – but we didn't consult each other on the content. I wrote that the function of the oblique was not a political movement; it had no political agenda. Virilio was furious when he read this and he called me up: 'How can you say that?', he said, 'You know how involved I was in '68, how I risked my life, etc., etc.' And I replied, 'There are two of us in Architecture Principe, two of us in the oblique. You can question society



Model of the experimental habitable structure, 'The Pendular Destabilizer no. 2'. Claude Parent and Paul Virilio, 1968.

and challenge the processes of architecture, but I don't see that as politics – not in the sense of the politics of May '68, which were idiotic.'

After that, we could no longer work together. I was upset that the political climate had so corrupted a friend of six years.

What lessons do you think the 1960s hold for contemporary architectural practice in France? Do you think the ideas of the time have had an enduring influence?

The 1960s were a euphoric time for most architects. Suddenly they had the freedom to construct pretty much what they wanted, how they wanted. Yet it seems to me that almost everyone was too busy building to stop and think, particularly about the relation of architecture to the city. The widespread euphoria stifled the ability to respond critically to work. The architectural press described everything as wonderful. Paradoxically there were fewer ideas bubbling around than in the 1950s, when there was very little money but no shortage of enthusiasm or critical reflection.

The 1960s also did little to improve the relation between architecture and the landscape or society. Perhaps the only significant 'advance' was in technology. As the best-known architects were given ever more commissions, they had to find ways of dealing with their burgeoning workload. They soon developed a taste for new technologies, which they applied to the organization of the site and to the industrialization and rationalization of building components. Our best architects today are technocrats.

One final question. After more than forty years of practice as an architect, is there something that you'd still like to achieve?

My hostility to the kind of mass construction that I've just been describing has meant that I have missed out on the opportunity to work on a large-scale urban project. I was excluded from the post-war rebuilding progamme simply because I once said in a magazine article that I would have no part in a social housing movement that was social in name only, and anti-social in reality. I've always been ready to take up the challenge, but have never been given the opportunity – all because of my big mouth.

I would love it if one day some bureaucrat said, 'Let's give Parent a chance to show what he can do with a piece of the city.'

This interview took place in Neuilly in December 1995.

The definition of a critical architecture

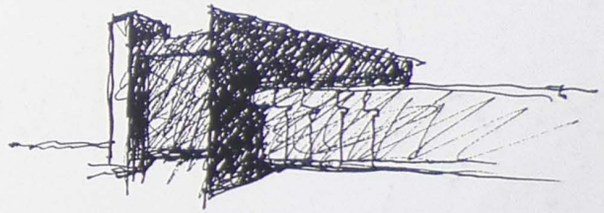
Frédéric Migayrou

Claude Parent is one of the compelling figures of post-war French architecture, yet curiously few critical texts have been devoted to him.[1] Whether there is a 'Parentian' aesthetic remains open to question. The work is characterized not by any style or mode of expression, but by a negation of form, a relentless reviewing of methods and processes, a continual reinvention of vocabulary. It is an architecture of rupture, in which the construction has to respond to the specificity of the event.

Parent came early to practice. He and Ionel Schein were still students at the Ecole des Beaux-Arts in Paris when they were given the opportunity to build their winning entry in the 1953 Maison Française competition. The result was the Gosselin house at Ville d'Avray, whose plan was split in two by a wall.

This distinctive gesture of incision, or fracture, is to be found in all of Claude Parent's work. In early buildings, it served as a device for disrupting Neoplasticist compositional grids: in the Soultrait house (1957) and Mauriange house (1961), parts of the floor plan were rotated 120 degrees from the vertical to create an internal redistribution of space. In later houses, the diagonal was introduced in order to increase the fractures of the plan and add complexity

Bloc house, Antibes. André Bloc and Claude Parent, 1959.

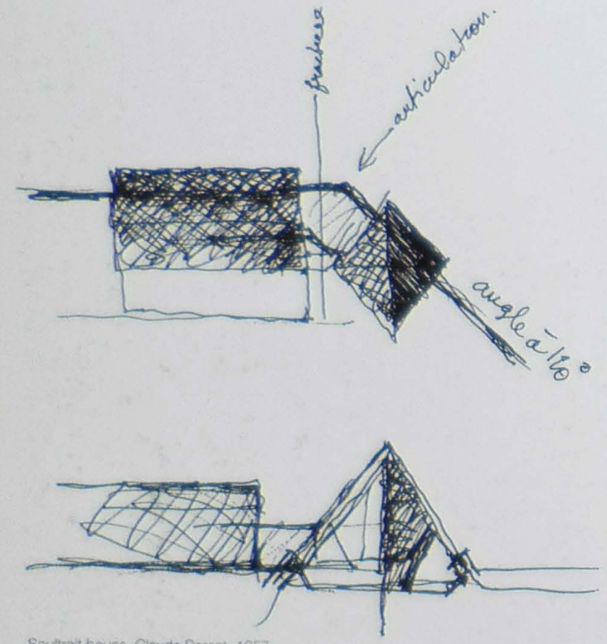


The fracturing wall of the Gosselin house, Ville d'Avray. Claude Parent and Ionel Schein, 1953.

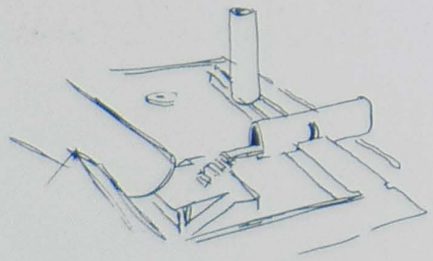
to the relation between programme, concept and built space. Parent cast aside the strictures of functionalism and rationalism in favour of a liberating spatial principle.

Parent's questioning of Modernism was a response to the intellectual climate of the post-war era, and to the ideas of the artist and publisher André Bloc in particular. In the 1930s Bloc had championed the International Style in his magazine, *Architecture d'Aujourd'hui*, but following the war he changed direction, turning first to painting and then to sculpture. In the 1950s he set up a new magazine, *L'Art d'Aujourd'hui*, to promote the idea of a synthesis of the arts, and with Del Marle he founded the Groupe Espace, which explored an abstraction inspired by De Stijl. During this period the language of architecture was redefined by a continual dialogue with sculpture; a new aesthetic was born.

The influence of André Bloc and the Groupe Espace may be seen in the presence of shifted grid compositions of facades and profiles (Pedrizet house,



Soultrait house. Claude Parent, 1957.



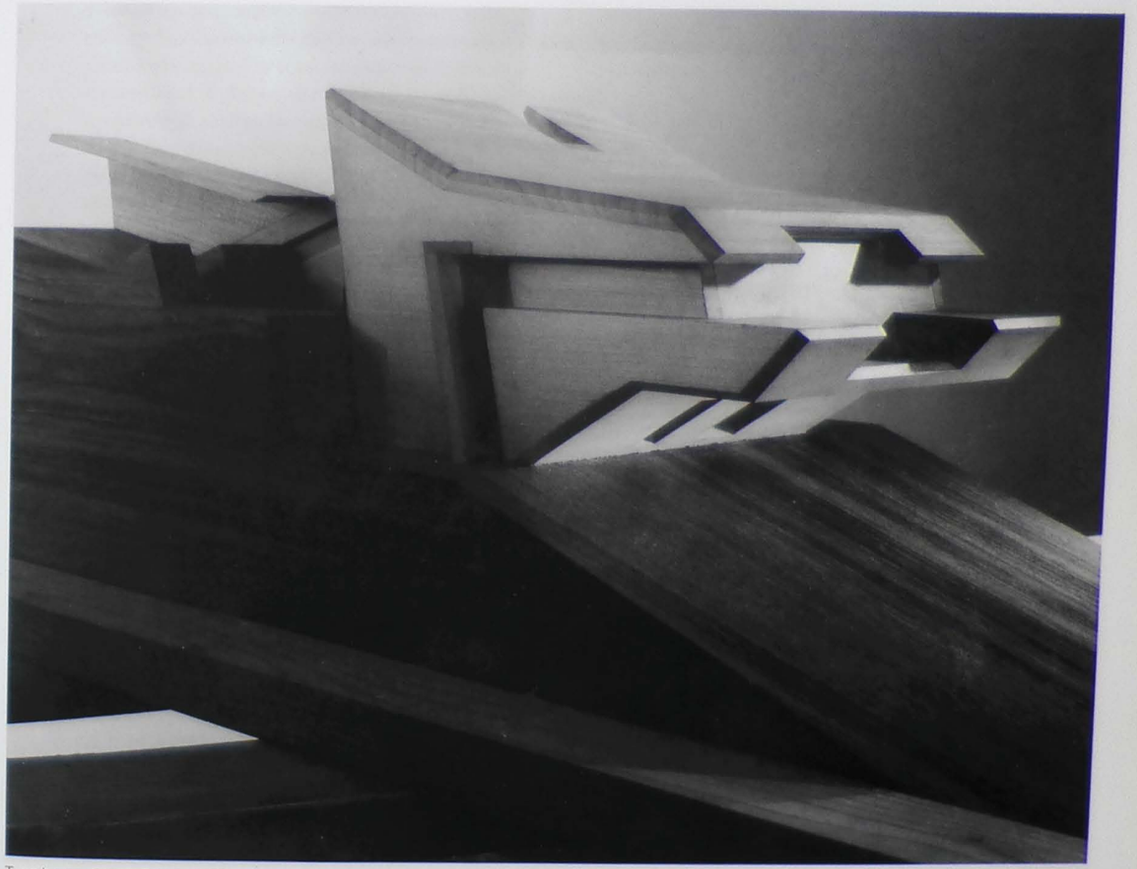
Yves Klein memorial. Claude Parent, 1962.

1955), and the use of superimposed or intersecting concrete frames (Neyret house, 1955, and Parent's own house, 1957). Parent acted as architect for Bloc on three chapels which are characterized by a fragmentation of form, and Bloc in turn painted murals for a number of his houses. However, the limits of their collaboration became clear with the design of Bloc's own house in Antibes (1959). Parent discerned an opportunity to push the dislocation of the modern grid to an extreme, and he proposed to carry the roof structure beyond the mass of the villa, a glass volume set on *pilotis*; Bloc demurred, and asked for the plans to be put back into alignment.

Yet Parent's move towards an architecture of disequilibrium is apparent in an earlier building, the Soultrait house (1957), which has a vast triangular roof structure that seems to rise up, fracture, and then tumble back down to the ground. Parent had progressed from a criticism of internalized geometric space to a dynamic understanding of form.

The impetus for this transition was provided by a member of the Groupe Espace, the sculptor Nicolas Schöffer, who introduced Parent to Neo-plasticism, the Bauhaus and Russian Constructivism, and collaborated with him on a number of projects, culminating in the Spatio-Dynamic City (1954). Schöffer was then investigating ways of translating the concept of spatial dynamism into form. His sculptures, like those of Constant during the same period, incorporated an architecture of motion into a phenomenological understanding of space. Along with Ipoustéguy, Gilioli, Szekely and Di Teana, he was part of a movement in art which explored monolithic spatial volumes.[2]

Parent himself used the sculptures of Mannoni as the starting-point for two architectural projects in 1960, and he undertook further collaborations with artists in an attempt to develop a new approach to the placing of objects in space. He worked with Yves Klein (Architectures of the air, 1958), Georges Patrix (Troyes cultural centre, 1964), Jacques Polieri, Yacov



Tueg house. Claude Parent, 1969.

Agam and Jean Tinguely, among others. But once again it was André Bloc who opened up a new direction for him.

In 1959 Parent assisted André Bloc and Edouard Albert on the Total City project, which was defined by opposing orthogonals (Bloc's contribution) and diagonals (the work of Albert) – an opposition resolved only in a 1963 sculpture by Bloc, which crossed a cube with diagonals. The concept of a cube turned on its edge was subsequently used by Parent as a means of achieving a radical displacement that freed space from the metaphor of the foundation, from the ground itself. The cube was an integral part of two projects of 1963: the Experimental Evolutionary house, which required the participation of its inhabitants, and the Drusch house.

The Drusch house consists of an elongated concrete frame that is split in plan and in volume by a cube (the living space) turned on its edge: the notion of the fracture assumes a truly dynamic quality, as it touches the construction as a whole. In this work Paul Virilio recognized an approach to space that was in sympathy with his own study of political topology – an extensive survey of the German bunkers of the Atlantic Wall that had led him to question whether territory could still be controlled by force.

Through their work together in the Architecture Principe group, Parent and Virilio continued to subvert Modernism's quest for stable foundations. In promoting the oblique – a plane lacking both stability and external references – they were making a radical stand against an architectural culture of geometrical volumes firmly inscribed in space.

In this context, the project for the church of Sainte-Bernadette du Banlay in Nevers (1964–6) may be seen as a built manifesto, for it brought to fruition Parent's investigations into space, and gave concrete, sculptural form to Virilio's idea of a negative, critical aesthetic. The vocabulary of the bunker was intended to create a 'repellent' architecture that would overturn established perceptions and provoke a response from the user, in the same spirit as the work of the Situationists. For Virilio, the bunker expressed fluidity, building without foundation – the Corbusian ideal of the ocean liner. In the church in Nevers, the concrete monolith was combined with the theory of the oblique to reinforce the idea of a dynamic architecture appropriate to modern times. Virilio wrote: 'Each era has its own definition of space relating to the system of geometric references by which a society operates. This fundamental structure determines the basis of "law" and of the different types of appropriation, at the level of both the individual and the population as a whole; social relations being in effect determined by this definition of space.'[3]

Parent and Virilio explored the architectural applications of the oblique in further projects, most notably the Charleville cultural centre (1967) and the Mariotti house (1967). In addition, they used the nine issues of their manifesto-magazine, *Architecture Principe*, to formalize a theoretical position. None the less, their ideas were difficult for many European architects to assimilate – as their polemical reception at the Folkestone IDEA congress of 1966 made clear.[4]

The events of May 1968 signalled the end of the Architecture Principe collaboration, but not of Claude Parent's exploration of the oblique. He designed the oblique Tueg house in 1969, curated an 'oblique' pavilion at the Venice Biennale of 1970, and developed urban projects such as the Inclipan (1974). At the same time he explored ways of using the negating form of the oblique as a tool for social comment: the shopping centres in Reims (1969), Sens (1970) and especially Epernay (1971) may be seen in this light as uncompromising manifestos of a critical architecture. Parent's later designs for nuclear power stations (e.g. Cattenom, 1978) may similarly be understood as an attempt to move towards an irreversible architecture expressive of a society's ability to accept its own contradictions.

However, this somewhat destructive approach has done little to enhance the place in history of a man who has his whole life defended the creative role of the architect within an expanded sphere of participation; who has fought against preconceptions and conformity in order to define – through the act of building – a critical, negating architecture, which embraces risks in the pursuit of its goals.

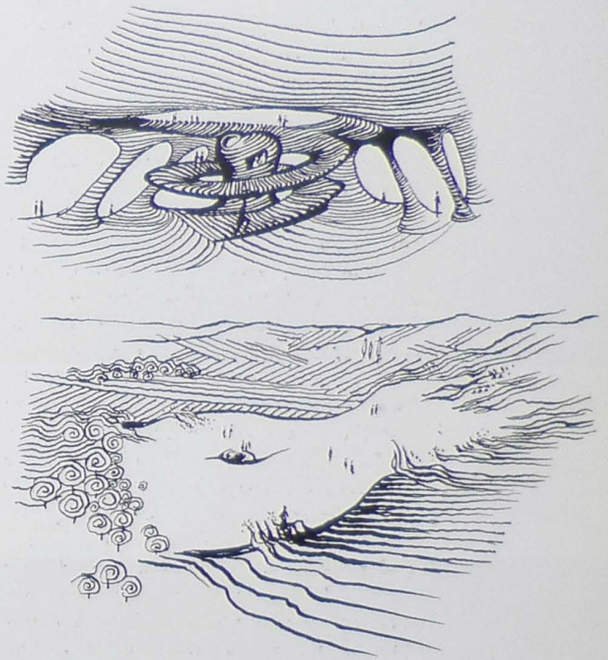
Notes

1 One notable exception is Michel Ragon's critical study of Claude Parent, *Monographie Critique d'un architecte* (Dunod, 1982).

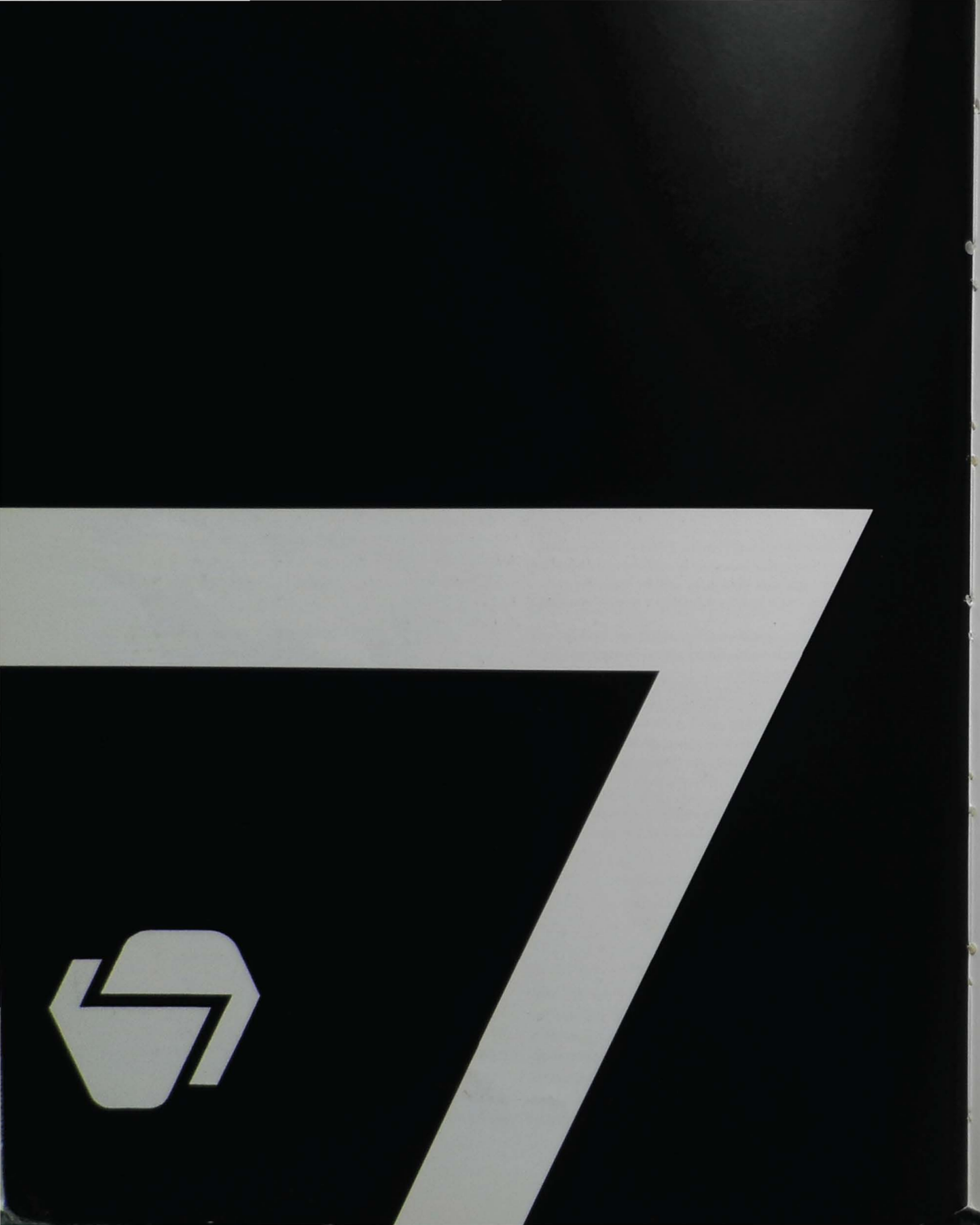
2 Nicolas Schöffer pinpointed the diverging tendencies in sculpture in an article entitled 'L'Art et les mathématiques' (*L'Art d'Aujourd'hui*, 7, 1956), in which he wrote that there were two spatial solutions to a differential proposition containing more than three variables – volumes made of ellipses, similar to those of Pevsner, or monolithic sculptural volumes.

3 Paul Virilio, *Architecture d'Aujourd'hui*, 139, September 1968.

4 'IDEA' stands for the 'International Dialogue of Experimental Architecture'.
[A more detailed account of this 'polemical' reception has been given by a fellow participant in the congress, Dennis Crompton of Archigram:
Parent and Virilio immediately stood out on account of their garb – black suits, in contrast to the psychedelic ensembles favoured by most architects there. They got up on stage, in their black suits, and presented a series of drawings for oblique cities unfolding across the landscape. When they were done, the audience rose up *en masse* and gave them a Hitlerian salute.]



Sacred spiral project. Claude Parent and Ben Jakober, 1984.



Architecture Principe

Texts from the manifesto-magazine

Warning

The state of crisis unfolding in every sphere of human activity, the loss of distinct categories and divisions in the return to a unifying principle, the massive decline in common values and conventions; these are signals of a perhaps unprecedented event.

Throughout history, there have been numerous changes in society, but we have never before witnessed a change in humanity itself. We are now on the brink of such a metamorphosis – a metamorphosis of our consciousness, a disruption of shared perceptions, a radical transformation of the notion of dimensions.

This will be an earth-shaking upheaval – not just the 'change of scale' that was promulgated by early-twentieth-century rationalists, but a complete reversal of meaning. All human activities will be thrown into disarray, and the resulting shock wave will topple, one after the other, the established principles of aesthetics, philosophy and economics.

The transformation of human consciousness is already evident in our behaviour towards the environment, in the growing pressures being exerted on the environment by the tendency towards global uniformity, in the gradual erosion of the pleasures to be derived from the great variety of different kingdoms, species and genera of nature, as these yield to the overwhelming standardizing power of the principal elements: land, space and sea.

Such advanced, definitive totalization necessarily implies a reversal in the hierarchy of dimensions; height becoming length, top becoming edge.

Once the notion of the vertical has been abandoned, a true embodiment of space-time will at last be possible. This crucial act will radically alter the founding principles of the spatial art that is architecture, and singularly amplify its aims and power. The criteria for evaluating a site – the preference for sunlight, the importance of orientation, the requirement for vegetation, etc. – will be stripped of both their traditional bucolic and their newer 'hygienic' terms of reference. The promiscuous concern with the details of a landscape will give way to a cursory awareness of Place. Just as all of man's so-called 'natural environments' have shown themselves to be merely a reflection of primitive superstitions, so too the taste for rusticity will ultimately be revealed as a relic of antiquity.

Urbanism can no longer be solely concerned with the organization of the district and the administration of the city; in future, its only limits will be the elements: continental, marine, spatial. The configuration of these thresholds – the morphology of their relations – will govern all operations. In this respect, present studies of the laws governing space are of considerable interest, because they appear to indicate that urbanism will in future have much more to do with ballistics than with the partition of territories.

In effect, the static vertical and horizontal no longer correspond to the dynamics of human life. In future, architecture must be built on the oblique, so as to accord with the new plane of human consciousness. Any architectural programme that fails to do so will rapidly become useless.

In responding to this direct, ineluctable

psychological force, architecture will be transformed into a truly physiological material, intimately adapted to the needs of the individual. When this happens, it is conceivable that notions of art will coalesce with notions of reality.

The enormity of this phenomenon calls for an immediate renovation of our conceptions of architecture. If this art is to become the great civilizing agent of future societies, it must throw off the passivity that has characterized it until now and take up its role as society's most important tool. If it fails to do so, our familiar troubles will turn into inextricable confusion, and fundamental misery.

Paul Virilio, AP 1, February 1966

Dominate the site

Architecture is not organic; it is designed.

Architecture cannot be assimilated to the object; it is anti-object.

Architecture assembles; it is the very essence of social groupings.

Architecture is not integrated with the site; it remains autonomous, and its relation to the landscape is based upon its quality and size.

In this time of crisis, architecture needs to offer a solution: it has to protect people, help them to survive.

To answer needs, deal with constraints, fight the impossible, architecture has to:

– leave behind existing towns and promote the creation of new urban communities

– dominate the site, become the equivalent of a natural relief

– change its dimensions, become an artificial relief, landscape...

In face of the present uncertainties – in face of anxiety, anguish, collective fear, the rise in violence – architecture has to establish an entirely new way of thinking. It can achieve this by means of two key devices:

– inclined planes, applied to both the formation and the utilization of space

– oblique, cantilevered forms, in which the interior is used for habitation, the exterior for circulation.

Architecture must never be neutral or indeterminate. It must be active; it must continually engage people, draw them into action, involve them in public events. People are essential to the life of the architectural environment (buildings are there to be climbed, conquered).

The basis for the formation of buildings must not be the accumulation, juxtaposition or addition of simple cellular elements. A building's form must be distinguished from the processes of modular agglomeration – as must the study of form. Architecture has to return to the phase of the concept, the principle. Then, by virtue of its dimensions, it will once more achieve monumentality, within a new conception of space.

Communal life will then be integrated with the city, becoming a positive life-force, and no longer the threatening, unpredictable determinant of architectural form.

Architecture will reassert itself. It will become indisputable, undisputed. It will no longer inhabit the domain of the avant-garde. It will *be*. People will recognize it as their own. Other arts will discover in it coherence and reality.

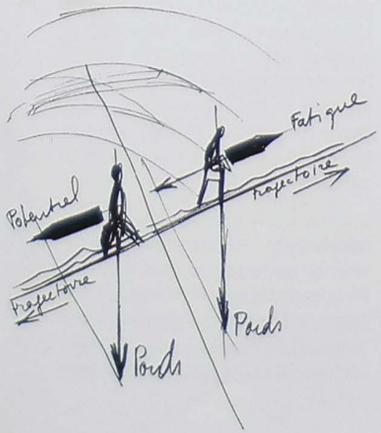
Claude Parent, AP 1, February 1966

Potentialism

Within the built environment there exists an oft-invoked state of crisis. Mankind's indifference to architecture is well known. There have been attempts to remedy this. The method chosen is to 'shock' people by proposing an architecture that is incompatible with their tastes or habits. This jolts them out of their general apathy, but it fails to win them over.

Such are the battles that the various movements in contemporary architecture have engaged in – futile battles, because formal tools very quickly lose their edge in a world that is driven by insatiable consumerism. Thus all theories based upon the invention and application of a particular architectural form have failed.

In order to open up communication, to engage people and ultimately to win them over, it is necessary to draw them into an environment, to make them feel, deep down, that they are becoming part of a universal architecture. 'Potentialism' entails the use of specifically architectural methods to bring about this state of mind, which is characterised initially by receptiveness, then by participation, and ultimately by a sense of belonging.



The first step is therefore simply to promote awareness. The only means of doing so is to elicit such intense 'displeasure' that people are forced into a state of refusal – of REPULSION.

The second step is to supply the means of overcoming this initial response, that is to say, of moving beyond refusal. The newly freed potential of architecture, POTENTIALISM, activates an unconscious mechanism that absorbs people, integrates them into a movement which is of an architectural character.

These two strategies, carried out in tandem, precipitate a second state in which people – unconsciously, without prejudice, without the shackles of a received culture, without scepticism – rediscover the freedom of autonomous behaviour. Thus liberated, they will be able to evolve unconventional means of communicating with and consciously PARTICIPATING in architecture. They will have before them the EVIDENCE of the UNITY of man and architecture.

Claude Parent, AP 3, April 1966

Habitable circulation

We do not yet know how to combine the property of solidity and the property of fluidity. While other disciplines resolved the problem of fluidity long ago, architecture seems to have been paralysed by human movement, powerless to prevent the incompatible forces of motion and immobility from destroying the modern metropolis.

The social phenomenon of mass migrations, the variety of energy sources required by an industrial society or advanced scientific enterprises, even the forces of nature – all are fluid, none has been absorbed by the modern city. In all its manifestations, movement has become the agent of our cities' destruction.

In a world in which everything is transformed – the element into energy, the point into route – it is no longer feasible to separate habitation from circulation. From now on, there will be a confrontation between two fundamental forces: 'MOBILE ARCHITECTURE' and 'HABITABLE CIRCULATION'.

The first of these, while opportunistically incorporating the word 'architecture', in fact shares the aims of industry – and consequently its methods and effects. The second, though it perhaps seems a contradiction in terms, simply returns to the roots of architecture to find a solution to the problems of fluidity.

Civil architecture has been considered for too long solely in terms of its protective role, and its present stagnation is undoubtedly the result of an imperfect understanding of its true nature.

It is no accident that real architecture has often sought refuge in the stairway, the bridge, the barricade or the highway

interchange: these tasks have presented it with a challenge, whereas the dwelling condemns it to a total passivity.

Through the ages, architecture has realized its full potential, its full power, only when confronted by another force – spiritual or material. At the beginning of this century society was not powerful enough to stimulate a civil architecture of true value. And today, weighted down by the mass of the population, civil architecture has become unutterably inert.

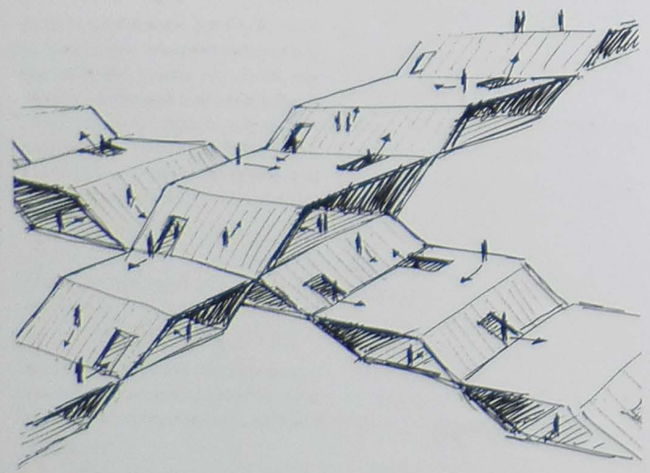
But finally the conditions are ripe for the emergence of a civil architecture, for this spatial art to pass from the private to the public realm and, in so doing, to accede to its true role – the invention of society.

Architecture must no longer be content to accompany, or even worse, to define itself in terms of circulation, for this dissipates its specific character. To bring about change, it is necessary to devise an urbanism in which circulation becomes habitable – an architecture in which an animating oblique function supplants the neutralizing one of the fixed horizontal plane, an architecture in which mankind is propelled by the very profile of its habitat, in which the city becomes an enormous projector, a torrent of every kind of activity, every kind of fluidity.

The problem is one of conflating the two central roles of architecture without getting them confused, as is the case with mobile architecture. For too long we have separated structure and circulation and, while the vertical order has given rise to facadism and has emphasized the visual at the expense of the effective, the horizontal order long ago corrupted architecture by limiting its role to the provision of stability and shelter.

Tomorrow's architecture will essentially be one of circulation: static space will yield to spaces of transfer – the habitat, like the city as a whole, will be mobilized by the function of the oblique.

Paul Virilio, AP 3, April 1966



Mankind uprooted

In this second half of the twentieth century weapons are being massed for an implacable campaign against architecture. This time, the aim is to crush it for ever.

The 'ORGANIZERS' are uprooting people in order to make them malleable, quantifiable, cataloguable, analysable – mere units in a well-meaning statistical exercise that leaves nothing to chance. The intention: to construct, for this uprooted species, a space that has no future because it is founded upon an analysis of the present – a world of easy comfort and consumption extrapolated from the insatiable demands of today. This is the future proposed (and indeed desired) by a defunct power which has abrogated its responsiblities towards the individual, choosing instead to pander to the urges of the masses, who have become mere consumers.

Careers officers, planners, engineers, technical experts, administrators, legal and financial advisers, insurers, sociologists, psycho-sociologists, ethnologists, climatologists, geographers, demographers, decorators and designers – all are carrying out the necessary work of levelling, with a serenity that derives from the certainty that they are acting in the best interests of mankind. These professions are diminishing the role of architects, the last brachycephalics of the species.

But this attack on a discipline whose function is to root – to position – mankind is not being carried out in a straightforward fashion. Rather than line up for a head-on confrontation, the 'organizers' have chosen a more efficient solution – betrayal. They have enlisted the aid of certain key figures, among them architects who, consciously or not, have embarked upon the systematic destruction of their art at the very moment when its practice has sunk to its lowest ever level. By choosing to complain rather than to celebrate the unique role of architecture, such 'spokesmen' are outdoing even the 'organizers'. Under the pretext of revitalizing the discipline, they are injecting it with the lethal (i.e. non-specific) germs of other disciplines.

But we would like to say to:

- those who have been trying for several years to submit architecture to the ends of industry
- those who are standardizing
- those who are demolishing the mass and working furiously against it
- those who advocate the undiscriminating use of purely mathematical structures which are erected under the guise of 'architecture'
- those who want to conflate the roles of architect and engineer
- those who argue for economy in the current narrow, short-sighted sense of the term, who argue for a reduction in the cost price of each element without considering the implications of such an approach for the economy as a whole
- those who submit architecture to the profit notion prevailing in industry
- those who, in order to achieve all this, reduce architecture to being merely the sum of its elements – ideally, a sum comprising industrial elements, in keeping with their admiration for mass production
- those who go on and on about 'human scale'
- those who subjugate both the scale and the intentions of architecture to man, and who see in the provision of 'comfort' the supreme function, the ultimate aim
- those who are so frightened by the responsibilities attendant upon true creativity that they try to be as flexible, mobile, supple and adaptable as possible, which results in an architecture that is neutral, indeterminate
- those who are pushing mankind towards NOMADISM
- those who believe that architecture and urbanism are not so much the preserve of the architect as the product of a concerted study carried out by a multidisciplinary group or team with no creative hierarchy
- those who do not believe in the autonomy of architecture
- those who demand humility of architecture
- those who BETRAY architecture

We would like to say, to all those people: we are MOBILIZING, and declaring a state of war.

Claude Parent, AP 3, April 1966

Structure

A structure is a physical framework that gives support to the mind. Architecture is the structure that links the elements of the universe: land, air, sea and man. Within its physical forms, it sustains the potential to serve as a bridge, as a means of transfer between the mind and the perceived world. This transfer is made possible by the materialization of the notion of Space.

It is the very materiality of architecture which makes it ineluctable. Without an architecture–structure, we would be incapable of establishing terms of reference for the things around us. Without this skill of transfer, we would be cut off from the world. At a time when space exploration is 'abstracting' us from our traditional framework of support, we need architecture more than ever. At present it is the essential condition, the fundamental base that will provide our species with some chance of success in tackling the next stage of our existence: survival.

However, this transfer can only be achieved if there is a conscious engagement with architecture. People have to become more aware, more receptive. The 'POTENTIALITY' of architecture must be revealed, made palpable. The function of the oblique is our only hope of achieving this. The introduction of the VECTORS of tiredness (ascent) and euphoria (descent) combats the neutrality of the users of a place and gives 'direction' to its occupation. The inclined plane ensures that this 'direction' is no longer of necessity restricted to the vertical – i.e. a line perpendicular to the reference-plane of the earth – but is rather a more complex projection combining mass and intention. The com-

manding presence of 'intention' ensures that the mind is engaged by the architecture. People will no longer be able to maintain their neutrality or indifference by erecting barriers of inertia or of familiarity.

The function of the oblique forces a conscious participation by drawing out the 'POTENTIAL CHARGE' that resides within each individual. The elements of this charge will be speculated upon and then analysed and studied through a series of experiments conducted according to rigorous scientific methods.

With regard to the inclined plane, the following conditions can already be adduced:

ACTIVATION / The exercise of choice with regard to a place according to the potential of gravity, with the chosen direction either supplying or consuming energy.

VERTIGO / The condition induced by the loss of the traditional reference-system of the vertical and the horizontal.

CONFINEMENT / A psychological reaction to 'cryptic' interior spaces that offer no direct views of the outside.

DEPOLARIZATION / A modification of behaviour with regard to solar orientation.

CANALIZATION / An exploration of means of visualization through views from above or below, overhanging views, vistas, panoramic views from elevated places.

CONTINUUM / A growing awareness of belonging to a continuous, permanently unfolding architectural environment.

The search for new human elements to the function of occupying a place will always remain open.

Claude Parent, AP 3, April 1966

The mediated city

The function of urbanism is to create mediated structures that establish a link between a portion of the lithosphere and a layer of the atmosphere.

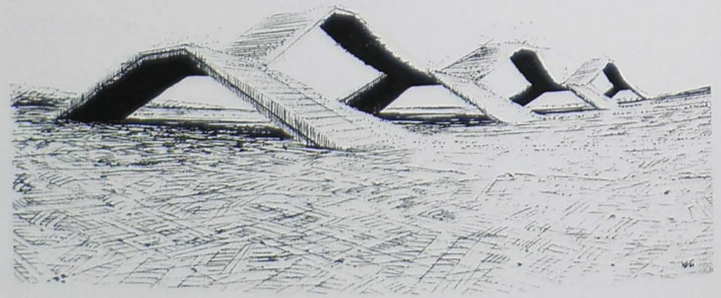
Unfortunately, for the majority of urbanists the word 'elevation' does not seem to suggest anything more than a means of increasing occupation density. To consider a spatial dimension solely as a means of 'stacking' is clearly a scandal. This attitude, perhaps a legacy of archaic rural society, has given rise to an extraordinary situation: dwellings tend to uniformity, regardless of whether they are above or below ground. Remarkably, in the transition from the solid and opaque earth to the transparent and gaseous atmosphere, the standard unit gains no more than window openings.

It therefore seems that we must acknowledge the paradox of a three-dimensional art which up to now has failed to take advantage of its spatial possibilities. The inability of architects to work both above and below the horizon line, two distinct spheres of operation, is undeniable: the proof is all around us.

The ground is still thought of as absolute and anchoring. This conception must be set aside to make way for one in which it is solely the boundary or threshold between two specific spaces, two particular natural states. From now on the ground must be regarded, not as the 'plinth of verticality', but as the 'axis line' of the architectonic operation.

Whereas there are only three options for a building organized along the vertical – 1 rise up, 2 move outwards, 3 shift forward/back – an oblique *surrection* can form a wide variety of configurations, depending on the angles of its slopes and all their possible combinations.

Urbanism should no longer be about setting out on the ground 'bull's-eyes' of urban concentration or conglomeration (the former achieved by an immediate centrality, the latter by an equally immediate verticality). Instead, we need to devise mediated structures that incorporate both habitation and circulation. These would form interlinked assemblages that would develop and spread out over regions, along the vital arteries of a territory, providing a hier-



archy of uses in response to the needs of the time and the populace. Thus ENFRANCHISEMENT would be revealed as the fundamental term of the new urbanization.

At a time when physical constraints are multiplying, when alienation has become commonplace, we must, for the sake of society, use the incline, the curve, and topological or rather TOPOTONIC means to exploit the full potential of space.

Paul Virilio, AP 6, August 1966

Bunker archaeology

The physical evidence of a dramatic moment in modern history is disappearing. Six thousand monuments, stripped of their purpose and cut off from the present, seem now to suggest a mysterious presence.

Using the techniques of archaeology, I have explored the subterranean world of one of the esoteric forms of our times: the blockhouse. The plan of the blockhouse is strangely reminiscent of that of an Aztec temple, while its concealed siting relates it also to ancient Egyptian and Etruscan tombs. But, whereas the pyramidal or circular form of those ancient monuments was a conscious evocation of a sacred symbol, a cosmic image, any such figure in the blockhouse is both implicit and involuntary.

Moreover, the geometry is no longer affirmatory, but eroded, worn. The right angle is reduced, suppressed, in order to make the structure resistant to capture. The mass is no longer grounded in the earth, but centred upon itself, independent, capable of movement and articulation. The architecture floats on the surface of an earth that has lost its materiality.

When I approached one of these monoliths on a beach, it seemed to assume an almost animal form, like a carcass abandoned, kicked over in the sand – the sloughed-off skin of a long-extinct species. And when I went inside I felt a peculiar oppressiveness; the thickness of the walls was palpable. Here was a second envelope, a psychological one that served to heighten certain senses, to shelter certain activities. There were no windows to illuminate the interior, the opening presented only a view of the exterior, precisely defined, as if by a searchlight.

In this survival machine, life was not a neutral force but an exercise in becoming more subtle, more essential.

These primitive structures, an astonishing example of an era's blindness towards itself, have taken on the banal appearance of a mere residue – of a talus which survives only because of the difficulty of demolishing it. Yet they herald a new architecture that is founded no longer on man's bodily proportions, but on his capacity for thought; an urbanism in which the simplified analyses of social conditions are finally transcended, allowing the habitat to be intimately joined with the hidden possibilities contained within the individual being.

Paul Virilio, AP 7, March 1967
(Reprint of an article written in 1958)

Selected bibliography

Collaborative publications

Nine issues of the manifesto-magazine, *Architecture Principe*, were published in 1967 by Claude Parent and Paul Virilio. They have now been reprinted in single volume (éditions de L'Imprimeur, 1996).
Claude Parent Paul Virilio 1955–1968 (Nueva Forma, 1968).
A collection of projects first featured separately in three issues of the Madrid magazine *Nueva Forma*: 25, February 1968; 26, March 1968; 28, May 1968.

Publications on Claude Parent

'Claude Parent André Bloc', special issue of *Nueva Forma*, 50, March 1970.
'Claude Parent', special issue of *Nueva Forma*, 78–79, July–August 1972.
'Claude Parent', special issue of *L'Architettura*, 208, February 1973.
'Claude Parent', special issue of *Recherche et Architecture*, 1974.
Michel Ragon, *Monographie Critique d'un Architecte* (Dunod, 1982).
Pascale Blin, *Carnets de Croquis* (Tempera – Solin, 1992).

Publications by Claude Parent

Vivre à l'oblique (L'Aventure Urbaine, 1970).
Cinq Réflexions sur l'Architecture (Maison de la Culture de Nevers, 1971).
Claude Parent, architecte (Robert Laffont, 1975).
L'Architecture et le Nucléaire (éditions du Moniteur, 1978).
Entrelacs de l'Oblique (éditions du Moniteur, 1981).
Colères (Michel Schefer, 1982).
L'Architecte Bouffon Social (Casterman, 1982).
Les Maisons de l'Atome (éditions du Moniteur, 1983).
Appel pour une métropole nommée Paris, manifesto of the 75.0.21 Group,1988.

Publications by Paul Virilio

Bunker Archéologie (Centre du Création Industrielle, 1975; revised and expanded edition, éditions du Demi-Cercle, 1991); *Bunker Archeology* (Princeton Architectural Press, 1994).
L'Insécurité du territoire (Stock, 1976).
Vitesse et Politique (Galilée, 1977); *Speed and Politics* (Semiotexte, 1986).
Défense populaire et luttes écologiques (Galilée, 1978); *Popular Defense and Ecological Struggles* (Semiotexte, 1990).
Esthétique de la disparition (Balland, 1980); *The Aesthetics of Disappearance* (Semiotexte, 1991).
Pure War (Semiotexte, 1983).
Logistique de la perception (Cahiers du Cinéma, éditions de l'Etoile, 1984); *The Logistics of Perception* (Verso, 1989).
L'Espace critique (Ch. Bourgois,1984).
L'Horizon négatif (Galilée, 1985).
La machine du vision (Galilée, 1988); *The Vision Machine* (BFI, 1994).
L'Inertie polaire (Ch. Bourgois, 1990).
L'Ecran du désert (Galilée, 1991).