THE FIFTH COLUMN

LA REVUE CANADIENNE DES ETUDIANTS EN ARCHITECTURE
THE CANADIAN STUDENT JOURNAL OF ARCHITECTURE

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Imagery and Symbolism

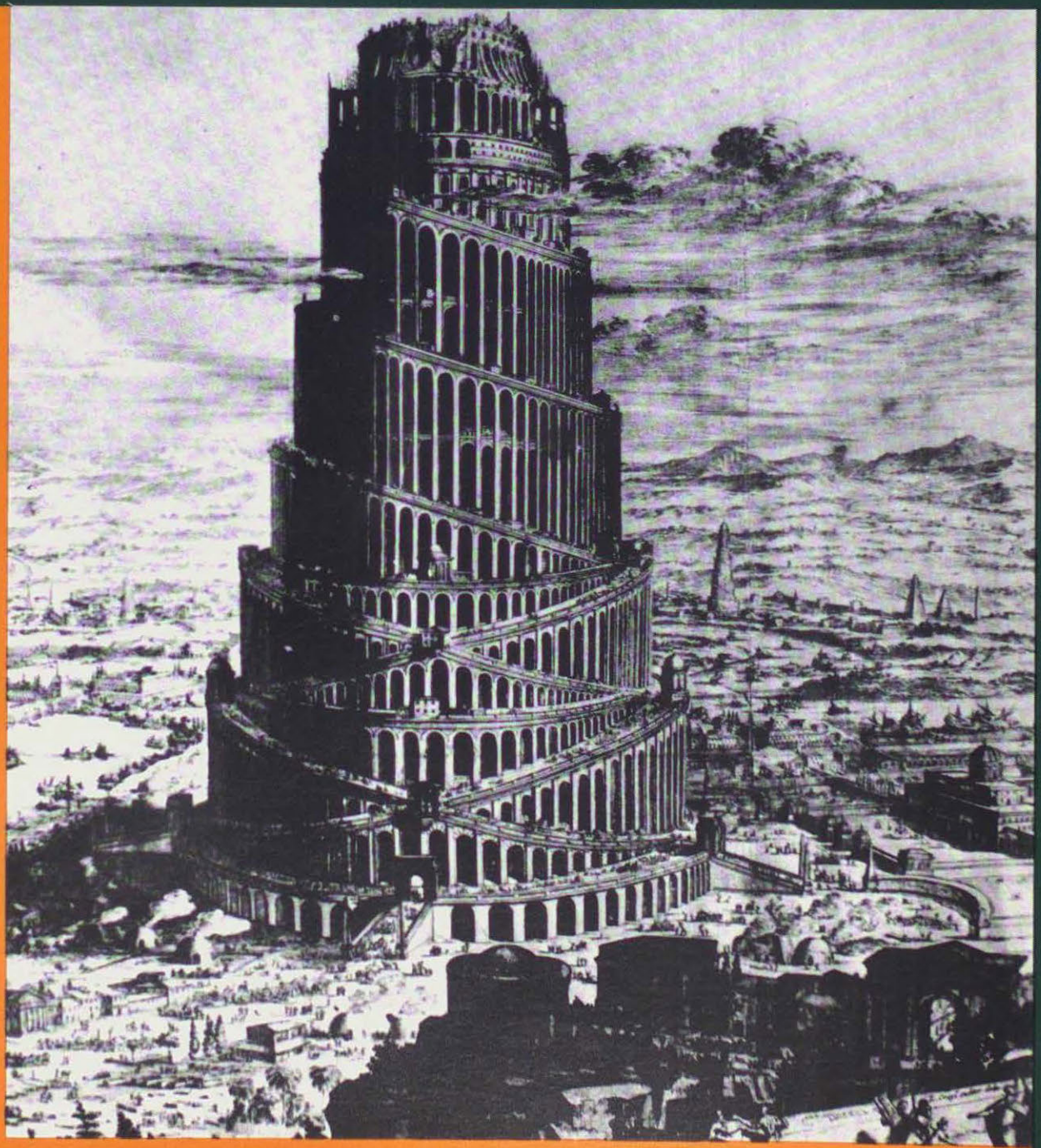

Image et Symbole

The name of the Canadian Student Journal of Architecture, THE FIFTH COLUMN, is intended to be interpreted in a number of ways. First, there is an architectonic reference, the preoccupation with the development of a contemporary order of architecture that is at once respectful of antiquity and responsive to new conceptions of architecture. Second, there is a reference to journalism and the printed column of text. Finally, there is the twentieth century political connotation, an organized body sympathizing with and working for the enemy in a country at war.

These three references essentially define the role of THE FIFTH COLUMN. The magazine promotes the study of architecture in Canada at the present in terms of both the past and the future. It attempts to stimulate and foster a responsible, critical sensitivity in both its readers and its contributors. Finally, THE FIFTH COLUMN provides an alternative forum to established views not for the sake of opposing them, but to make it possible to objectively evaluate them.

Objectives

To promote the study and the appreciation of a sensitive architecture within the architectural community and general population, thereby positively influencing the development of architecture in Canada;

To promote a forum for and to encourage the dialogue between students, academics, professional architects and interested members of the 'lay' population;

To provide a critical alternative to the commercial trade magazines by publishing a journal that originates from the schools, traditionally the vanguard of architectural thought.

Editorial Policies

1. To publish articles by students, academics and professionals and by other interested parties that would otherwise find little opportunity for expression and publication.
2. To publish a series of articles in each issue exploring a specific and relevant theme which contributes to an understanding and a greater awareness of current architecture.
3. To publish articles on the diversity of Canadian architecture as a means of promoting an understanding of these local traditions and their influence on current architectural thought.
4. To publish articles discussing historical influences on the development of architecture.
5. To publish student projects from the various schools in order to stimulate architectural debate.
6. To publish critical reviews of current works of architecture in Canada, as well as outside the country, in order to reflect on and positively influence the development of architecture in Canada.
7. To publish critical reviews of activities, publications, lectures and exhibitions of interest to our readership.

October 30, 1985

THE FIFTH COLUMN (Canadian Student Journal of Architecture)
published March 1988.

THE FIFTH COLUMN, The Canadian Student Journal of Architecture, is a non-commercial, non-profit enterprise whose principle purpose is the study of architecture. We invite submissions of material from the Canadian architectural community. They should be typed double spaced on 8 1/2" x 11" paper. Include a 100 word summary and a one line biography and send in triplicate. All graphic material included should be in black and white and may include negatives, large-size photographs (8" x 10") or posistats. Please note that the material sent will not be returned. Articles submitted are subject to the magazine's editorial requirements. The articles and opinions which appear in the magazine are published under the sole responsibility of their authors. The purpose of reproducing drawings, photographs and excerpts from other sources is to facilitate criticism, review or news journal summary. The Fifth Column is not responsible in the event of loss or damage to any material submitted.

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Le titre de la revue canadienne des étudiants en architecture, "The Fifth Column", a pour but d'inviter le lecteur à l'interpréter à plusieurs niveaux. Le premier niveau suggère une référence architectonique, celle consistant à l'élaboration d'un ordre architectural contemporain à la fois respectueux d'un passé antique et répondant aux nouvelles conceptions de l'architecture. Sur un autre plan, "The Fifth Column" rappelle son oriantation journalistique par sa connotation avec la "colonne" imprimée d'un texte. Enfin, "la cinquième colonne", c'est aussi, depuis Franco, le nom donné aux partisans clandestins sur lesquels chacun des deux adversaires peut compter dans les rangs de l'autre.

Ces trois références définissent dans son ensemble le rôle de "The Fifth Column". La revue a pour but de promouvoir l'étude de l'architecture au Canada, en terme de lien entre le passé et la futur. Elle tente également de stimuler et d'entretenir un sens aigu de la critque chez ses collaborateurs ainsi que chez ses lecteurs. Enfin, "The Fifth Column" propose un forum où il est possible d'établir différents points de vue, non dans le seul but de les confronter mais plutôt de rendre possible leur évaluation objective.

Objectifs

Promouvoir l'étude et l'appréciation d'une architecture sensible à l'intérieur de la communauté architecturale ainsi qu'à de plus larges groupes, et par conséquent influencer le développement de l'architecture au Canada;

Promouvoir la constitution d'un forum dans le but d'encourager le diaglogue et les échanges d'idées entre les étudiants, les architectes et les individus intéressés de toute autre provence;

Offrir une alternative critique aux revues de type commercial, en publiant un périodique ayant ses racines à l'intérieur des Ecoles universitaires, traditionnellement pionnières dans l'évolution de la pensée architecturale.

Politiques éditoriales

1. Publier les articles d'étudiants, de membres du corps académique, de professionnels ainsi que d'autres groupes intéressés, qui autrement ne trouveraient que peu d'opportunités d'expression et de publication.
2. Publier une série d'articles dans chaque numéro explorant un thème spécifique qui contribuera à une compréhension approfondie et à une plus grande conscientisation de l'architecture contemporaire.
3. Publier des articles sur les diverses facettes de l'architecture canadienne dans le but de promouvoir la compréhension de ces différentes traditions locales et de leur influence sur la pensée architecturale contemporaire.
4. Publier des articles traitant des influences historiques sur le développement de l'architecture.
5. Publier les projets d'étudiants des différentes Ecoles dans le but de stimuler le débat architectural.
6. Publier des comptes rendus critiques de différentes oeuvres architecturales au Canada ainsi qu'à l'étranger afin de s'arrêter sur et d'influencer le développement de l'architecture au Canada.
7. Publier des comptes rendus critiques des différents événements, publications, conférences et expositions ayant quelque intérêt pour nos lecteurs.

30 octobre, 1985

THE FIFTH COLUMN (La revue canadienne des étudiants en architecture)
publiée mars 1988.

THE FIFTH COLUMN, la revue canadienne des étudiants en architecture, est un organisme sans but lucratif, dont le but est de promouvoir l'étude de l'architecture. Toutes contributions écrites ou graphiques de la communauté architecturale canadienne sont grandement appreciées. Tout document doit être dactylographié, à double interligne, sur papier 8 1/2" x 11" et accompagné d'un résumé de 100 mots et d'une biographie d'une ligne, le tout en trois examplaires. Les illustrations doivent être en noir et blanc sous forme de négatifs, de photographies grand format (8" x 10") ou de posistats. Notez que les documents et illustrations ne seront pas retournés. Les articles acceptés seront assujettis aux exigences du comité de rédaction. The Fifth Column n'est responsable ni des domages subis par le matériel envoyé, ni de sa perte.

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ERRATUM

Nous voudrions s'excuser auprès de Jordan Levine, Linda Rhéault et Caroline Gagnon de n'avoir pas mentionné leur contribution de conception graphique à l'article de l'université Laval: école d'architecture publié dans la revue Vol. 6, No. 2 sur la Formation architectural.

We wish to aplogize to Jordan Levine, Linda Rhéault and Caroline Gagnon for not acknowledging their graphic layout contribution to the article Université Laval: école d'architecture in the Vol. 6, No. 2 issue on Architectural Education.

Note de la rédaction: Des résumés en français accompagnent les articles de langue anglaise.

Editor's Note: French articles are accompanied by English summaries.

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The Architectural Symbol
the creative manifestation
by one
for all
of an understanding
an acceptance
of that which we know
of that which we don't
of that which we must strive to know
and of that which we may never know.

SOMMAIRE

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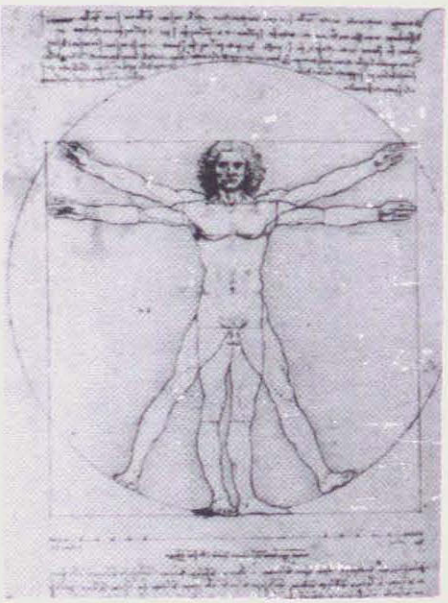


Image et Symbole Imagery and Symbolism

Urban Space
Urban Psychology
Urban Design

by Brian R. Sinclair &
Robert E. Dewar

L'article qui suit explore l'impact psychologique des différentes approches de l'architecture et de l'aménagement urbain et suggère diverses raisons expliquant le mécontentement actuel envers la vie urbaine, ainsi que différentes alternatives pour palier à cette situation.

The design of our cities is a vastly complex task, one that we today seem less able to master than in earlier times. Cities throughout the world are becoming geographically larger and architecturally more intricate each decade, as more of the world's population migrates to these urban centres. The implications of this are profound for both society and the individual.

Much negative commentary has been given about the experience of living in cities, including the impact of crowding, crime, pollution, social collapse, and "unfriendly" sterile architecture. Particularly critical of the experience of living in cities have been people such as Milgram, who, in outlining these experiences, paints a rather bleak picture involving stimulus overload, fast tempo, lack of social responsibility and trust, and anonymity. Others, including Kevin Lynch and Downs and Stea, have written of the disorienting character of cities and of people's difficulty in forming meaningful impressions of urban space.

One's perception of a city is determined by a variety of experiences and images, including those formed by viewing the skyline at a distance (e.g. Manhattan from across the Hudson), driving through city streets, and experiencing buildings and spaces from the pedestrian perspective. It is important to have a strong awareness of each of these scales of perspective when addressing the design of cities.

In 1896 Louis Sullivan wrote his essay entitled "The Tall Office Building Artistically Considered". He discussed the importance of looking at the verticality of the new building type with a sensitivity to scale -- realizing that a building has a tripartite division of bottom (street-level), middle (a number of identical repeated cells) and top (attic). This concern for scale has more recently been raised by Calgary architect Dan Jenkins: "The lower levels belong to the street. The scale, materials, rhythms and uses at street level should relate to the pedestrian. The body of the building should be expressive of the main uses of the building while the top belongs to the skyline of the city."[1]

Of primary importance to these scales is that of the pedestrian, but unfortunately this has not been respected and our modern cities have assumed the unfriendly character of the 'concrete jungle'. Although planners have attempted to create usable and aesthetically pleasing spaces, and architects have striven to put 'meaning' into their buildings, these designers have not always succeeded, except perhaps in the eyes of themselves and their colleagues. Those who shape our cities seem to have missed the point that the design of urban space is a problem of understanding the requirements of the inhabitants within the given context of site, climate and culture.

URBAN SPACE

The design of cities, while always a complex undertaking, has altered in approach throughout history. Greek architecture was the expression of a balanced community in which the essential religious and civic institutions remained the stable ingredient. In the design of their urban spaces the Greeks employed a conception of space that was highly calculated (e.g. the Sacred Way), yet relatively free from enclosure. The Romans' approach to design was based on an engineered ideal. Roman architecture was an urban affair, a combination of urbanization and colonization. Their conception of space in architecture and urban design favoured enclosure. It is interesting to note that while Roman cities in general were built in a somewhat informal fashion, the military camps (Castrums) were rapidly assembled by employing a regular, functional grid-plan. The use of such a grid network for planning is seen again much later in the land surveys of North America, where it is applied for its simplicity.

The Middle Ages saw urban centres composed of closely packed aggregations of houses and craftsmen's shops situated around an area of common interest, where the cathedral and municipal palace were to be found, and where markets and fairs were held. Streets were 'planned' organically on a roughly radiocentric pattern, and were usually narrow and crooked in character. Necessity led to the rediscovery of the ancient safeguard of the wall, which encircled the town. The Medieval conception of space was thus one of intimate enclosure. Given the powerful wall and the dense living conditions, it seems understandable that the inhabitants perceived their city as world. The slow organic growth of their built environment offered sufficient time for prehension, as well as promoting the translation of the 'spirit of the time' into built form (Fig. 1). Saarinen, in his classic book on the city, discusses the notion of high correlation of building, that is, the contextual nature of design. Many architects today, inspired by the theoretical explorations of the Kriers, have again

figure 1

looked to the urban design of the Middle Ages. Medieval buildings were constructed one beside the other, with awareness and respect toward the atmosphere of the whole area, and building practice was guided by unwritten beliefs and traditions that directed society.

The humanist society of the Renaissance took a conscientious view of the city as the heart of an organized society and as the visible expression of the functions of that society. The impulse toward the assertion of individuality (versus Medieval communality) was gaining strength, expressed in the ideal of personal achievement in both thought and action (Fig. 2). The desire to find out how things worked led experimentalists to explore the world around them. Starting with the notion of a unitary space of geometrical structure in which all of the values were interrelated, it was impossible not to see the need for a proportional relationship between the buildings situated in that space. In urban design, the novelty of the concept of space lay in the fact that perspective was no longer considered to be the law of vision but rather the constructive rule of the space itself. Consequently, this principle became important for the distribution of buildings in the design of cities.

By the Industrial Period, capitalism had altered the balance of power in Europe. New forces in the city had arisen, in the form of industrialists, bankers and mechanical inventors. A competitive open market for labour and for the sale of goods was established. The notion of mathematics and the order it implies took hold in many aspects of the society, including architecture and urban design. A need for larger span buildings, to satisfy the demands of industrialization, and the capacity of such new materials as cast iron and plate glass, led to an architecture which was uninhibited by formal stylistic constraints (Fig. 3). City planning was undertaken by engineers and surveyors, who imposed rational mathematical approaches to ensure order in the rapidly expanding urban centres. The planning which prevailed was based on the monotonous grid plan of straight roads and right-angled intersections, regardless of topography. When transferred to the new world, this grid-iron presented the means of breaking traditional social and environmental ties, allowing for a new emphasis on independence, mobility and rationality. Jackson has discussed the early influences of Newtonian thought in Europe, noting that, in terms of space, it was in the New World that the new order first manifested itself, inspiring a society based on the predictable and orderly movements of independent, equal individuals, each occupying a portion of the infinite, undifferentiated space made visible in the National Land Survey of 1785.

The Modern Period begins at the turn of the century, with its ideal of the city of openness and unlimited space. In this age the world has become the city, in contrast to the Medieval concept of city as world. Technology, communication and transport have effectively made the obstacle of distance obsolete and have promoted the notion of the global village. One consequence of this improved communication has been the creation of a universal design philosophy -- for example, a highrise in Tehran is the same as a highrise in Los Angeles, despite the obvious cultural differences between the two places.

The modern age promoted ideas of the machine -- functionalism, efficiency and the future. The Futurists' notions of speed and streamlining were embraced. The machine aesthetic and new technology left no room for the decadent embellishment of buildings with ornament, even though the use of applied decoration had been an aspect of architecture since the first cave-dwellings. The modern age had no use for the trappings of history, even though the collective memory of society (civilization) may have been 'written' into those trappings. The Modernists felt it necessary to wipe the slate clean, to go back to zero. In modern design the surface of the buildings became secondary to the space, the open plan, and movement. The conception of space was one of interpenetration, of the programme as product, and of the three-dimensional expression of utilitarian needs (Fig. 4).

figure 2

figure 3

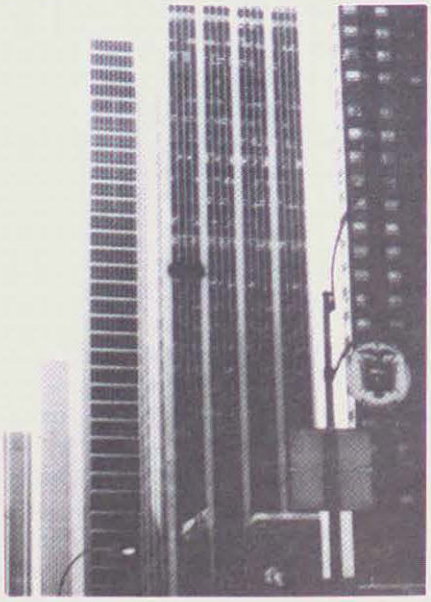


figure 4

URBAN PSYCHOLOGY

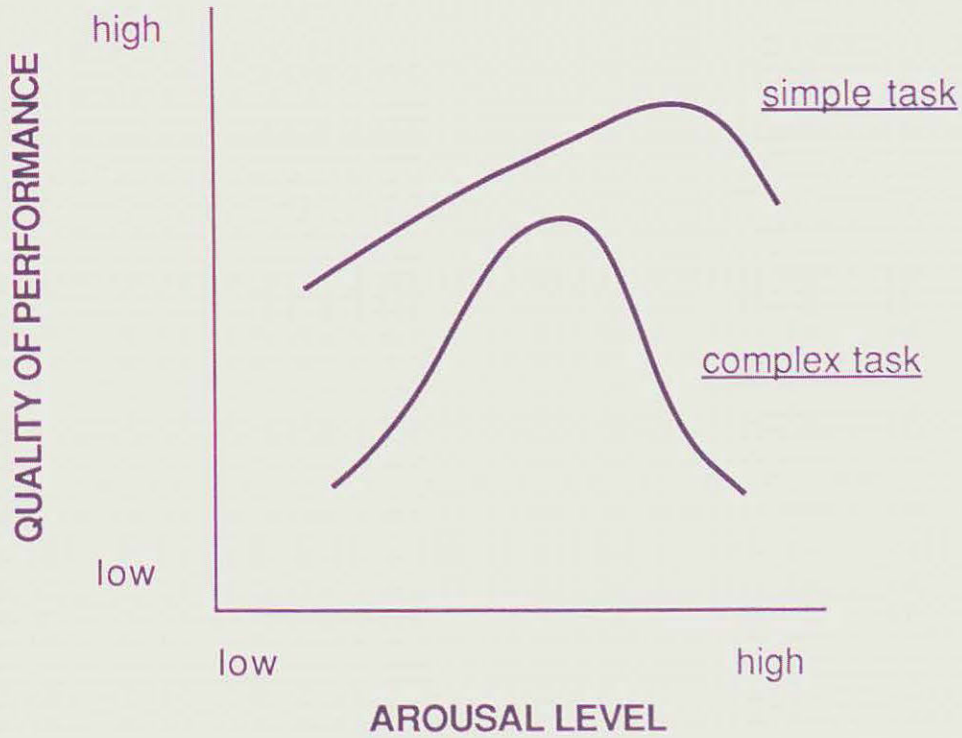
The impressions given to the urban dweller by buildings -- from small structures to soaring skyscrapers -- have an important psychological impact, even though in many cases this may be at an unconscious level. An ancient city in Europe may convey impressions of the distant past, with a proud history reflected in monuments, fountains and buildings. In contrast, the modern North America city with shiny glass and steel buildings, devoid of ornamentation and historical content, may convey a message of a clean, mechanized world, almost futuristic in nature; but does this architecture convey anything beyond this mechanization and a seemingly sterile past, present and future?

A variety of experts -- planners, architects, politicians, and developers -- have together determined what cities should be and what form they should take. Only recently have social scientists become part of this team. The field of environmental psychology (a relatively new discipline) suggests there is a real need to better understand how the urban environment influences human behaviour. The incredibly complex dynamics of the city make an understanding of urban psychology very difficult, yet such an understanding is essential. Alberta architect Peter Hemingway notes, "Now we need to dispense with the tyranny of style and explore the psychological and biological aspects of culture much more vigorously and with all the knowledge and commitment we can muster."[2]

The perception of our urban environment is an active process. Such environments stimulate all our senses and surround us completely as we experience them. While immersed in the city we are constantly exposed to sensory stimulation -- frequently to the point of overload -- whether it be excessive noise, visual clutter, air pollution, or crowding. Yet for many people the city provides an exciting environment. Milgram suggests that cities have great appeal because of their variety, eventfulness, diversity, and the stimulation they provide. For many others, however, the city is an overwhelming environment, often to the point of inducing frustration, anxiety, and withdrawal. The schizophrenia of city dwelling is perhaps best illustrated in Manhattan -- an urban centre which provides the best and the worst characteristics of city life.

Individual differences in response to the urban environment can be understood in terms of the concept of optimal level of arousal, which seems to influence many aspects of human existence. The Yerkes-Dodson Law shows that performance is optimal at an intermediate level of arousal, and diminishes progressively as the arousal level falls below or rises above this intermediate level (Fig. 5). While the optimum is similar for many people, there are, of course, the expected individual differences.

These conclusions are consistent with Berlyne's investigations into stimulation and drive. He defines drive as a "condition whose termination or alleviation is rewarding." Notions of stimulation can be viewed in relation to drive states. Berlyne explains phenomena such as curiosity, exploration, and the effects of sensory deprivation by assuming a curvilinear relationship between drive level and extent or variety of stimulation. He postulates four factors which determine the 'pleasingness' or positive attraction to a stimulus or an environ-



performance versus arousal level

figure 5

ment -- novelty, complexity, surprisingness, and incongruity. (Berlyne calls these 'collative' properties of a stimulus.) His research indicates that intermediate levels of each of these properties seem most desirable in terms of human preference. The average individual would experience this, for example, when driving along a roadway. A highway with relatively little stimulation -- no trees, no curves, no scenery to examine-- constitutes a boring environment. Driving in a very busy city, in contrast, with heavy traffic, information from traffic control devices, numerous buildings and complex surroundings may be overwhelming (Fig. 6). It would seem that the urban designer must explore these extremes in order to understand how to design better cities, cities that provide optimal conditions in this regard.

Information processing theorists frequently talk about channel capacity, overload, and complexity of stimulation in terms of the 'rate of information', or the number of noticeable differences per unit of time. Obviously both speed of movement and the number of noticeable differences both play an important role in the perception of complexity. The speed of movement in the environment influences perception of time and distance, both of which seem to be related to the flow of information. Clearly, pedestrians and motorists perceive the urban environment very differently. Driving a vehicle through an urban environment involves not only rapid movement, but also demands a level of concentration which leaves relatively little time or capacity to appreciate a complex environment. Pedestrians, on the other hand, move at a much more leisurely pace, stopping as desired in order to take in the environment around them, and to view it from various perspectives. Very often large buildings pay little attention to the perceptual and cognitive needs of the pedestrian. They present large plain concrete walls which have virtually no variation in these lower two or three stories which are of interest to the pedestrian. The visual requirements of the speeding motorist and the strolling pedestrian are incompatible.

The city of a few centuries ago was built to a pedestrian scale, whereas today's modern city tends to be built on a scale suitable for rapidly moving traffic. Because the effects of speed and scale have generally been neglected in recent times, the levels of complexity selected in planning and design decisions are frequently inappropriate. People may either ignore or become confused by an inappropriate environment.

Architecture is currently in a state of transition, one which has been referred to as an evolution, rather than the more radical revolution. New trends in architectural thinking, grouped under the loosely defined title of Post-Modernism, reject the austerity and abstraction of orthodox modernism and seek instead a return to complexity, to ornament, to the picturesque, and to the use of elements from the past. In manifestations of Post-Modernism we see an array of expressions -- of neostyles, of historicisms, of mannerisms. After a long and all-encompassing period of suppression under Modernism, the need for complexity and interest in architecture is again being expressed. A reaction such as Post-Modernism is providing seemed inevitable; Eberhard Zeidler has noted that "New directions in architecture always appear when the ruling style seems to calcify in its own dogma."[3] Post-Modern design, whether a protest against Modernist ideology or simply against banality, has embraced those elements of novelty, complexity, surprisingness, and incongruity that Berlyne suggests are important in our environments.

Rapaport, in his book Human Aspects of Urban Form, stresses the importance of environmental perception. He sees perception as "the most fundamental mechanism linking people and environments -- the all-pervasive process involved in man-environment interaction."[4] He points out the importance of environmental complexity,

figure 6

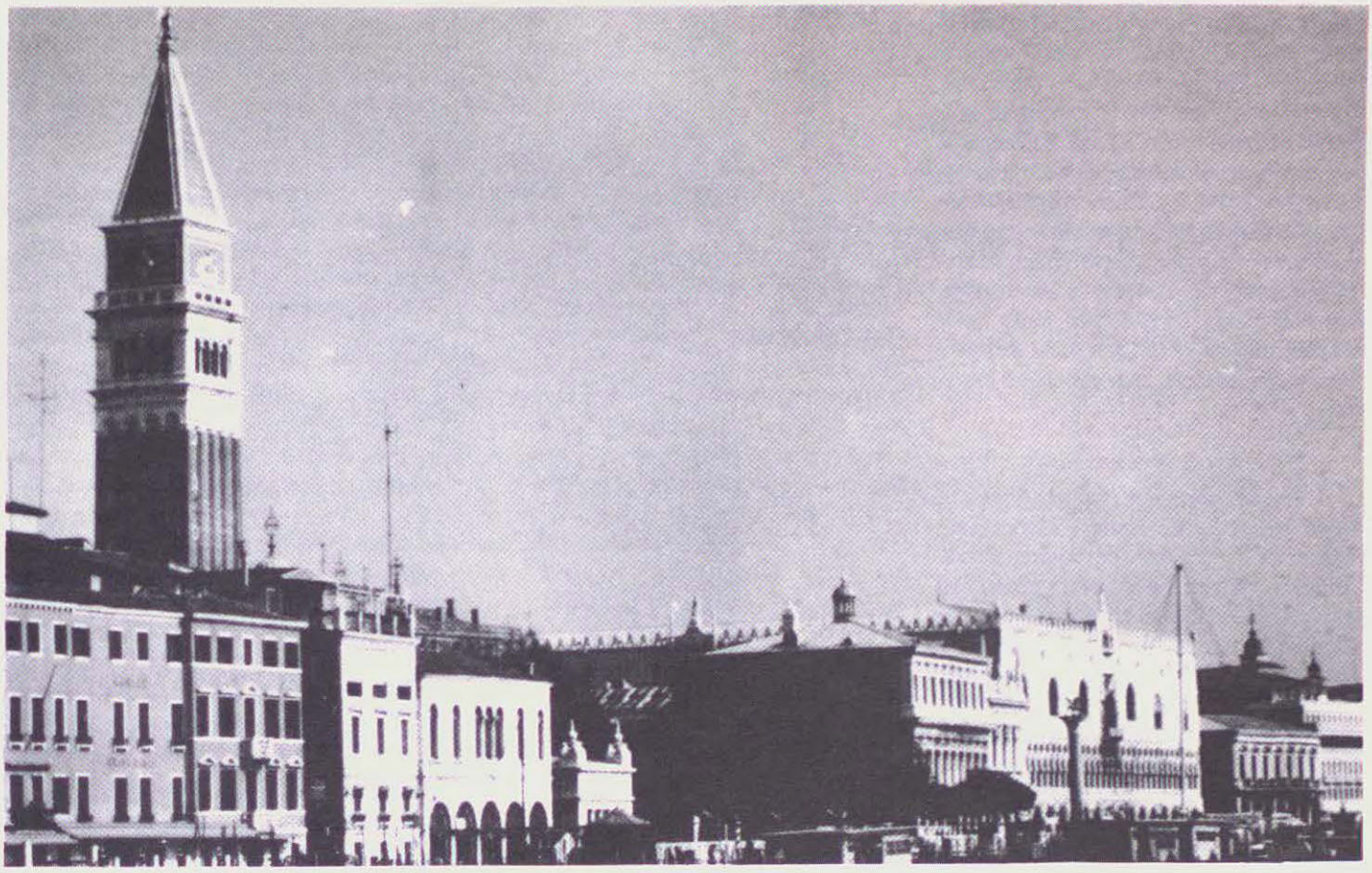


figure 7

which can be obtained through ambiguity, in the sense of a multiplicity of meanings, or through the use of varied, rich and even mysterious environments (Fig. 7).

Today many architects are talking about architecture and urban design as expressing 'meaning' in the sense that music or poetry does. However contemporary this debate seems, it has been a recurrent theme through history. The richness of architecture and of meaning has often been discussed by critics. Goethe put forward his dictum that architecture was 'frozen music'. J.F. Blondel was one of the first theorists to assert that good architecture not only communicates, but it becomes 'analogous to poetry'. James Fergusson, in his 1849 publication The Principles of Beauty in Art (contemporary with Ruskin's Seven Lamps of Architecture), argues that eloquence, poetry, and drama were the highest forms of art, and that only the ornamental aspects of architecture could approach the phonetic qualities of such art.

It seems then, that it is possible to view architecture as possessing some of the characteristics or qualities of poetry, or perhaps of language in general. As in language, architecture must follow an ordering system. Michael Graves suggests there is both a standard form and a poetic form in any language or art. The poetic forms in architecture "are sensitive to the figurative, associative, and anthropomorphic attitudes of a culture."[5] The poetic form of architecture is responsive to issues external to building, incorporating the three-dimensional expression of society's myths and rituals. Greenburg has indicated "it is the role of the architect to aid in the realization of society's aspirations by designing buildings which express the meaning and significance of the institutions they house."[6] It seems clear that some aspect of 'meaning' is an important function of architecture, and that design should attempt to reflect more than simply the function of the building or city. We must lift architecture above mere functionalism, and create buildings for individual people and their associated cultures.

It is interesting to look to history for a better understanding of the role of ornament and embellishment in architectural meaning and language. At the end of the last century a number of architects and critics were expressing concern about the state of architecture, claiming that an architecture which relied on historical style and decoration was somehow unclean and decadent, even immoral. The Industrial Revolution had made the machine a central influence, not only in architecture but in many other fields also. Louis Sullivan's notion of 'form follows function', when combined with Adolf Loos' manifesto that 'ornament is a crime', helped to bring an end to the orgy of Victorian Ornamentalism.

The Modern Movement, rather than having a language based on the expressive ornamental elements that referred to man and to nature, thought it more appropriate that the new age wipe the slate clean of history and to go back to zero. The new architecture was an architecture of space, with little concern for the elements of enclosure which provide the symbolic substance we require in our environments. The Modern Movement based itself largely on technology and the expression of technology, on what Graves has referred to as the internal language of architecture. He notes that "in its rejection of the human or anthropomorphic representation of previous architecture, the Modern Movement undermined the poetic form in favour of nonfigural, abstract geometries."[7]

The new approach stressed the functional aspects of architecture, seeming to neglect the realization that architecture should derive not only from pragmatic necessity but also from evolved symbolic sources based in religion, science, myth and tradition. Thus the Modern Movement severed the continuity of architecture's collective memory, the notion that architecture is in constant evolution, with each

period or style, drawing on and learning from previous works. This collective memory had in many ways been communicated through the use of ornament and embellishment: it was a kind of unwritten but understood communicator of meaning and the past (Fig. 8). Some contemporary critics would argue that the mass media has rendered communication through ornament obsolete. In contrast to Modernism, the Post-Modern Movement looks back into the past to try to understand and perhaps reconnect with that collective memory.

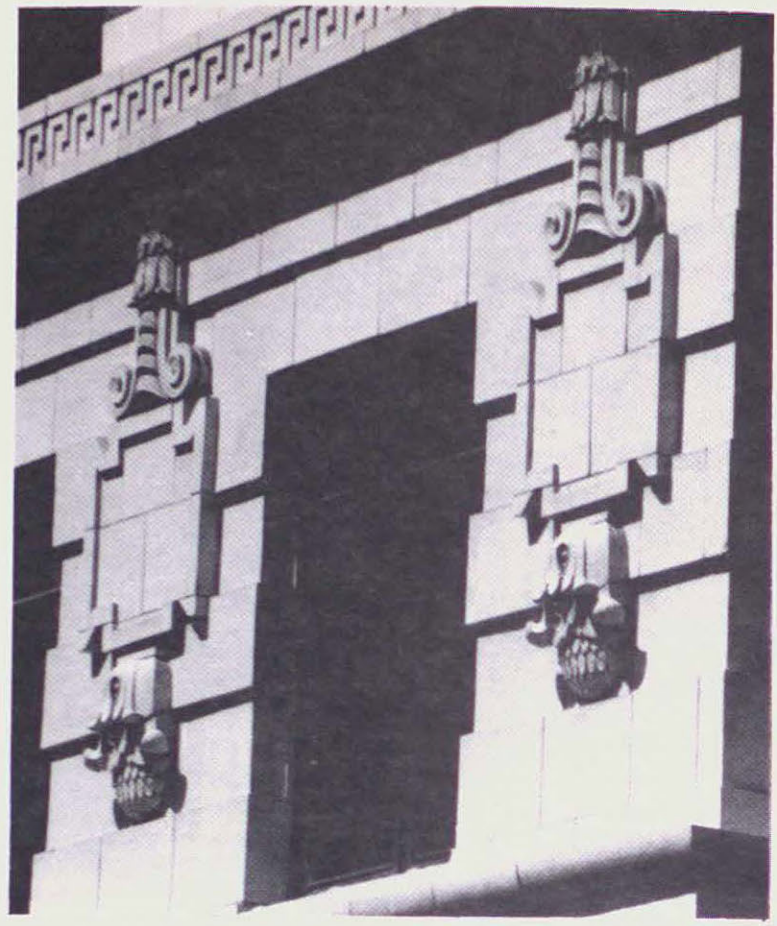


figure 8

The American writer and critic Henry Hope Reed argued against Modernism, calling is a "cancer destroying visual America." Where the Victorian period had engaged in excessive embellishment, the Modern Movement was engaging in excessive banality. From a perceptual viewpoint, the Modernists' environment was starving the people of stimulation -- and creating a dry state that needed satiation. Aware of the problems of Modernism, Robert Venturi wrote Complexity and Contradiction in Architecture. In his book he set up a series of 'visual preferences' that were in opposition to Modernism: complexity and contradiction versus simplification; ambiguity and tensions versus straight-forwardness; doubly functioning elements versus singly working ones; hybrid versus pure elements; messy vitality versus obvious unity. In Venturi's 'gentle manifesto', the Modernist Mies van der Rohe's dictum 'less-is-more' is transformed into the Post-Modernists' 'less-is-bore'. In response to a perceived need for greater complexity in architecture some theorists, such as Smith, suggest that urban dwellers have needs that are both intellectual and emotional, with aesthetic experience that necessitates mental stimulation through surprise, ambiguity and complexity. Venturi notes that, while architecture is necessarily complex and contradictory through its inclusion of traditional Vitruvian elements (firmness, commodity, delight), the Modern Movement failed to realize the importance of such complexity. Today's society is rich and multi-faceted, and Post-Modernism attempts to capture this character through the use of ornament and historical reference. Perhaps the best known example of this historicism in a large building is Johnson's AT&T building in New York City -- with a grand arch at the base and a mammoth Chippendale roofline. While the suitability of Johnson's historical references are questionable, the important value of the AT&T building is the precedent it sets in breaking from the glass-box routine.

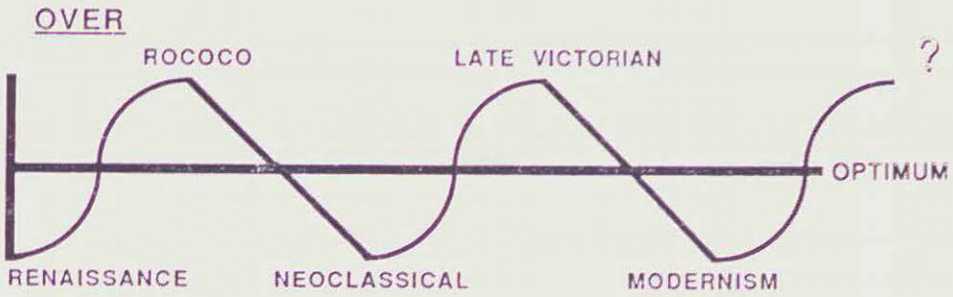
Jensen & Conway have discussed the re-emergence of ornament in architecture, stating that, "after more than a generation of glass-boxes, white walls, and functional design, the validity of decorativeness as an idea is being reaffirmed. A growing number of architects, designers, and artists are consciously breaking one of the rules in which they themselves have been trained; they are violating the Modernist prescription against ornament."[8] Ornamentalism is growing, with its fascination with the surface of things, with elaboration, with borrowing, with sensory stimulation. Carr argues that a delicate balance must be achieved between complexity and order. This pertains at the level of both the individual building and the city.

While a degree of complexity is needed, urban designers must also strive to create an identifiable, understandable and meaningful environment. The notion of the understanding, or "legibility", of a city has been addressed by a number of theorists including Kevin Lynch. In his Image of the City, Lynch suggests five major factors or components which contribute to the legibility of a city. These include paths (e.g. streets), edges (e.g. shorelines, rivers), districts (identifiable areas of a city easily differentiated from one another), nodes (focal points), and landmarks (major buildings or structures). A city having more identifiable elements than another city will be more readily comprehensible, and it will be psychologically more comfortable for both inhabitants and visitors. Initial impressions and ease of orientation in the environment have a major impact on our feeling of comfort or of alienation within that environment. The way in which we perceive and form mental images of the buildings and spaces of our cities determines our attitudes toward them. It is therefore important that those responsible for urban planning and urban forms realize the psychological requirements to be satisfied in order that citizens comprehend their physical environment and feel a part of it.

URBAN DESIGN

Through the examination of the history and psychology of urban space, it can be seen that various approaches to urban design have had differing degrees of success in terms of 'pleasingness' to the user. Throughout the history of architecture design has gone through phases of attempting to meet the psychological needs of optimal level of arousal through building complexity and variety (Fig. 9). A cycle begins with some design conventions being

established -- the Renaissance approach to design, for example. Designers work within these conventions for a period of time, exploring the possibilities thereof. Soon these are exhausted and designs introduce a more inventive complexity as found in Baroque architecture, for example. In the Rococo Period, design became ornate and complex -- perhaps overly complicated. In a revolt against the excesses of such architecture, design is then altered dramatically. It is simplified and again brought under control by the severe rules of Neo-Classicism. The cycle continues, building up in complexity until the excessive eclecticism of, for example, the late Victorian era. We may conclude that problems arise from designs which offer too much stimulation, overloading even the most tolerant of the users.



architectural complexity cycle

figure 9

The Modernist reaction against Victorian embellishment and ornamentation was dramatic, but inevitable. Technology had changed drastically and social change was under way. It seemed that an architecture of ornament was unacceptable for the new age. Such an age called for guidance, and in architecture it was provided by the creed of Modernism. After World War II, however, the strict rules for the utopian dream of Modernist architecture lost potency. With the necessity of rapid post-war development, the economics of building became paramount, causing a decay in the quality of our cities. Ideal notions of Modernist planning, such as Unité d'habitation or Ville Radieuse, were superficially replicated by developers who both knew and cared little about the social concerns that underlay the original projects. As with previous movements and styles -- for Modernism was but another style -- the Modern Movement's dogma eventually waned. In most cities of the Western world, and especially in North America, the Modern or International Style produced hoards of 'less-is-more' buildings. As Tom Wolfe cynically notes, the streets were filled with "row after Mies van der row of glass boxes." But from a psychological point of view, the complexity of earlier periods had given way to the Modernist banality, to cities which were too often considered boring and unstimulating.

An example of the modernist extreme is the city of Calgary, Alberta, where in a very short period of time -- the Boom Years of the 1970's -- large numbers of plain glass buildings were erected, and these quickly dominated the skyline. Michael McMordie, in his introduction to Calgary Architecture: The Boom Years 1972-1982, notes that the first half of the boom years is characterized by an abundance of "second and third rate building." With the exception of a few curved corners and the odd variation in roofline, these buildings offered little in the way of stimulus, complexity or novel visual impact. At the same time the trend was to demolish old, architecturally interesting buildings which, by modern standards, were out of place, and which from a developers standpoint were uneconomical. Fortunately, a few of these buildings (e.g. the Courthouse and McDougall School) were saved and in some cases were integrated into the designs of newer buildings (e.g. Burns Building; Fig. 10). The change in attitude which allowed these historic projects to be preserved also roused a concern among architects regarding the quality of the large new developments. Thus the latter years of the boom period began to see an increase in buildings with architectural character, such as the Nova Building, Western Canadian Place (Fig. 11) and the Petro Canada Towers. Companies with

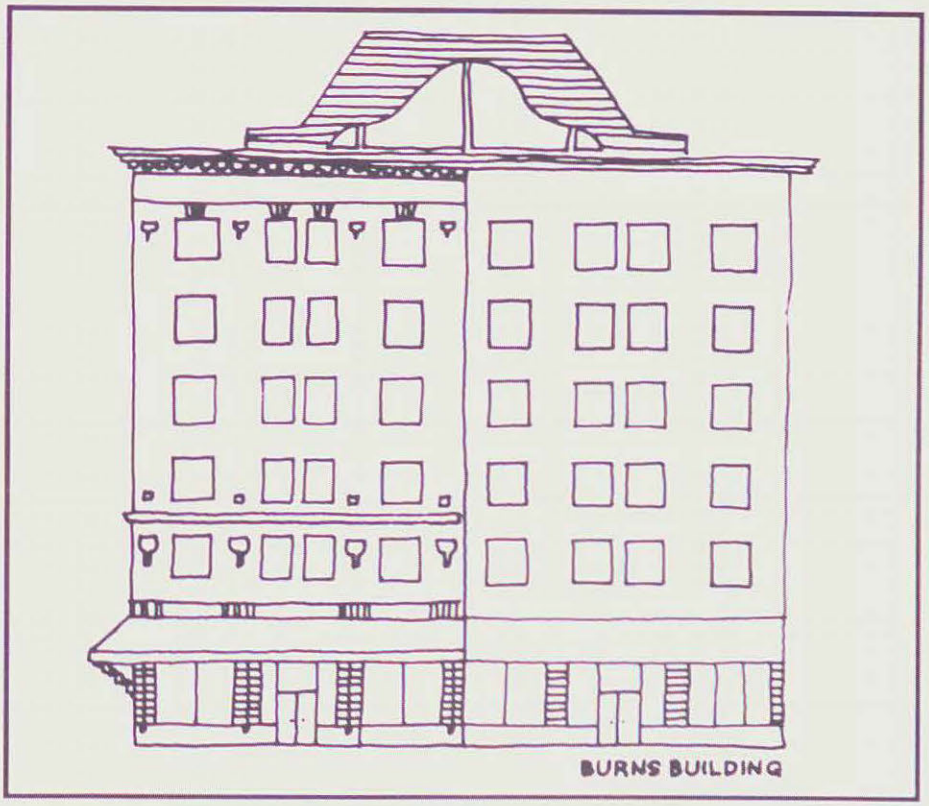


figure 10

headquarters in Calgary wanted to present a positive image through the quality of their office towers; and architects newly versed in the theories of Post-Modernism were willing to comply creatively to their clients' requests. Among the later projects, Western Canadian Place provided a dramatic galleria in the lower stories, a pleasant departure from the otherwise prevalent Modernist box, undifferentiated from bottom to top. A concern with the street (Fig. 12) is lacking in the sterile Calgary core which, except for a few pedestrian-oriented gestures such as the old Hudson Bay Building arcade, is geared at street level to the automobile. Jane Jacobs, in her book The Death and Life of Great American Cities, stresses the importance of city sidewalks in promoting "togetherness" and a sense of trust among city dwellers. Unfortunately the planning of the Calgary core intentionally separates pedestrians from the street by moving them 15 feet above grade into an enclosed circulation network (the Plus 15 System; Fig. 13). Although this system is relatively new and needs more time to develop, it appears at present to be of questionable value. It does offer protection from the harsh winter climate of Calgary, but it also seems to have a negative impact on urban street activity. Whether such a trade-off is acceptable remains debatable.

Another aspect which influences the "adequacy" of an urban environment is the climate. Cities in tropical parts of the world require reasonable protection from the sun by means of shade trees, air conditioning, etc. Countries which have long winters must of course design quite differently. A good physical solution to the harsh winter environment is the Plus 15 System found in Calgary and in Minneapolis. The system links numerous large buildings in the downtown with covered walkways, generally about 15 ft. above the road. These create a series of indoor walkways through and between buildings, which obviates the necessity for pedestrians to go outside. This is clearly an efficient way to escape cold weather, but experience shows that pedestrians may, as a result, have difficulty in orienting themselves within the city, since clues to the external environment are generally obscured by the walkway envelope. This orientation problem becomes even more acute in underground systems, where circulation is removed from the outside world. Such systems replace outside pedestrian movement and thus kill street activity, especially during inclement weather. Of course the merchants soon follow the pedestrians indoors, and so yet another aspect of street life disappears.

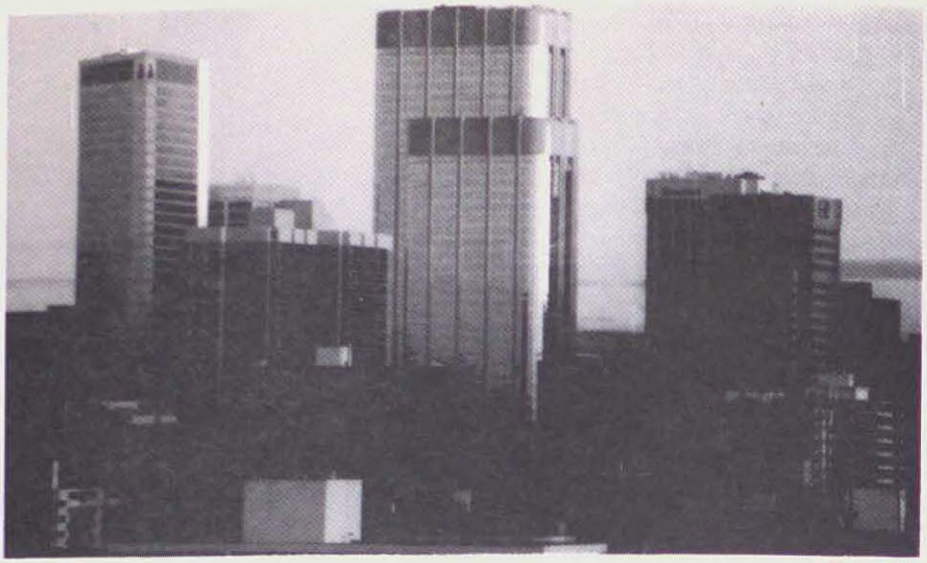


figure 11

figure 12

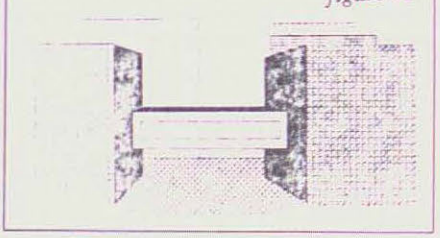


figure 13

The resulting dilemma is a difficult one -- does a city using such a network give up its street life to the automobile, or can a compromise be reached? Perhaps the circulation bridges in the Plus 15 System can be altered to interact more with the street. If the network is to be successful the design of the links will have to be improved. The bridges should be animated -- a continuation of the normal streetscape, such as Florence's Ponte Vecchio (Fig. 14) or the Venetian Ponte Rialto.

The use of color is another aspect often overlooked in the design of the urban environment. Many cities have their cores designed in a colorful and pleasant fashion in order to counteract the dullness of typically overcast conditions (e.g. Scandinavian cities). Visual complexity relates directly to color -- as to ornament -- and we need to find an optimal level of stimulation via color. In the dull grey light of a winter day in a northern city there is little visual stimulation which captures our interest.

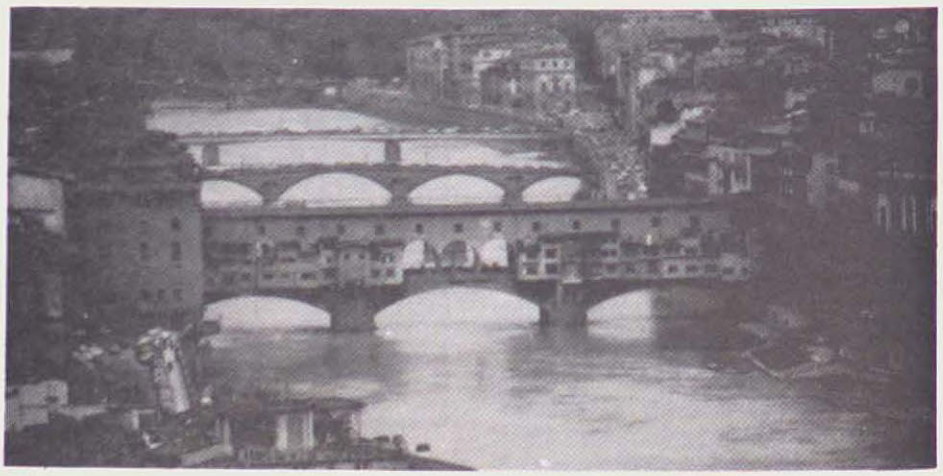


figure 14

Streets of grey concrete, aluminum facing and mirrored glass combine with the pale sky to produce a nondescript environment. Through sensitive cold-climate design promoting colorful detailing at street level and appropriate coniferous landscaping, our cities will be visually more comfortable all year. Fortunately interest in this aspect of design is growing. The First International Conference on "Winter Cities" (held recently in Edmonton, Alberta, under the joint sponsorship of the Canadian and American architectural associations) shows a new trend.

Legibility of urban environments varies considerably, but is generally more prominent in the older European cities than it is in their newer North American counterparts. Easily identifiable nodes, pathways, edges, and landmarks exist, for example, in the city of Paris (e.g. Eiffel Tower, Sacre Coeur, Centre Pompidou; Fig. 15). London, England, in contrast, with its composition of numerous small boroughs and winding streets does not offer so many easy views of distant landmarks. Paris, while also having a complex network of curving arteries, has imposed upon them the magnificently ordered system of Hausmann's boulevards. This balance of chaos and order, of complexity and simplicity, make Paris one of the world's most interesting and liveable cities.

In many urban centres, an abundance of anonymous "International Style" buildings adds to the problem of legibility. So much of the environment has taken on the same image that nothing stands out. Many of the larger cities in Asia (e.g. Singapore, Hong Kong; Fig. 16) are composed of sterile modern buildings of little character, and with little relationship to their contexts. Canadian architect Raymond Affleck has discussed this problem of 'International' architecture. "A 50-story building still has doorways, windows, a roof. It still exists at the street level and can be seen at a distance against the sky. It still has a bottom, a middle and a top. Its context has to do with the gathering together of a great many people in one place whether the building is in Hong Kong or Calgary. Despite these similarities, the differences between a huge Asian port and a young prairie

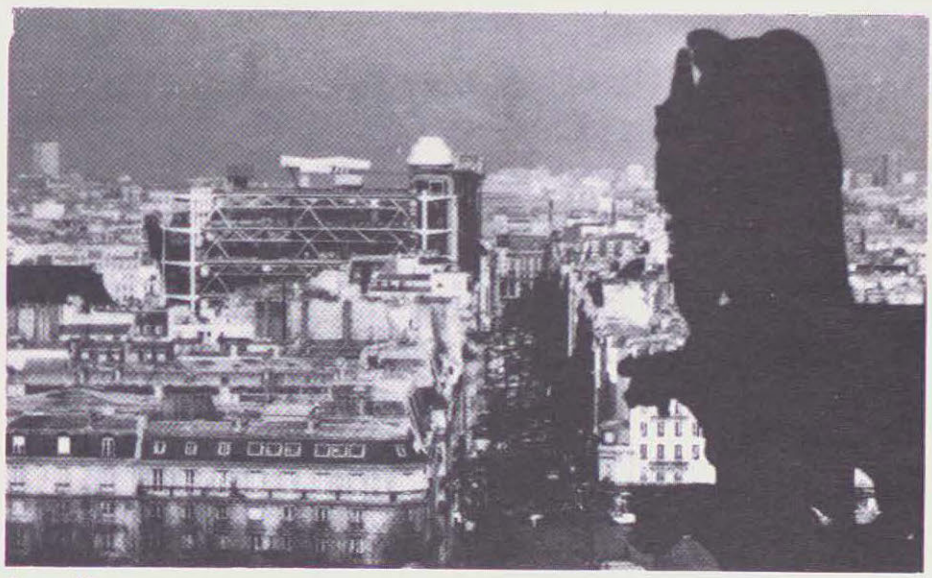


figure 15

figure 16

figure 17

city provide plenty of scope for architectural differentiations."[9] (Fig. 17)

Another aspect of urban design which makes certain cities more interesting is the planning of their street systems. In many North American cities a grid system of north-south and east-west streets forms rectangular blocks of approximately the same size (Fig. 18). Exceptions occur in some early twentieth century residential areas such as Montreal's Town of Mount Royal and Vancouver's Shaughnessy district and continue in many current suburban developments. In downtown Calgary or Edmonton, orientation is facilitated by the street numbering system. Calgary, for example, begins at Centre Street and Centre Avenue and extends in a quadrant system of streets running north and south and avenues running east and west. One knows, for example, that the corner of 5th Street and 24 Avenue N.W. is five blocks north and 24 blocks west of the downtown's center. This is helpful for orientation, since one cannot easily become lost if one can count. Exploring such a city, however, is hardly a challenging experience. In contrast, exploring almost any European city, no matter what its size, presents a challenge which yields a discovery at every corner. (Fig. 19) Small curving streets present a more complex and

figure 18

challenging environment for the tourist seeking adventure. Clearly some compromise between a highly structured street layout and a complex and unpredictable layout would be desirable.

The absence of meaning in modern architecture is a problem more difficult to resolve. It can be reasonably concluded that the variety of meaning in the modern buildings of today does not match the variety found in buildings of earlier centuries. Perhaps today's society is less adept at understanding meaning in contemporary buildings. In a pluralist society such as ours, there are so many options, so many myths, so many truths, that it becomes difficult to "speak" all the languages. In the Gothic Period, when the iconography of church architecture was of universal interest, this architecture presented messages through its design (soaring construction, use of light through stained glass, sculpture and statuary that informed the followers of the way of the church). Charles Jencks stressed the need for meaning in today's architecture by suggesting that architecture should ultimately signify a way of life, something the Modern Movement failed to do. Modernism ironically seemed to provide a simplified architecture for a more complex world.

An approach that demonstrates the principles described in the current paper is seen in an urban proposal designed by one of the authors, B.R. Sinclair (Fig. 20). In 'Project for Eau Claire', the context of grid-iron and Modernist highrises in Calgary presents a backdrop in which a large housing and public market development is set. Composed of a gently curving hemicircle of various sized units, the multi-leveled row housing system wraps around a market complex. The housing, reminiscent of Nash's Park Crescent, offers a clear break from the repetition of Calgary's downtown grid through its geometry. Through its form, the housing operates at several scales -- on the larger scale, easing the physical transition from the office towers of the core down to the Bow River, while at the pedestrian scale being attentive to complexity, orientation and detail.

Against the inner wall of the housing development runs a grade-level arcade, offering protection from the elements while allowing access to shops, cafés, and the housing units' common stairwell entrances. The arcade opens along its course to a grand tree-lined promenade, designed to the pedestrian scale. Attention is given to the psychological needs of the user through the design -- for example, variety of surfaces and materials, defined zones for various usages (circulation, cafés, sitting areas, etc.), level changes, varied fenestration, and use of symbols (e.g. celebration of entry via pediments). Separating the housing and promenade from the public market is the Canal, diverted into the district from the nearby river. The Canal provides both active (fountains, falls) and passive (ponds) sections. It acts as a common area to tie together the separate housing and market components, while simultaneously providing a clear physical and visual break. (Fig. 21)

The Market utilizes, through retrofit, a series of existing buildings (Transit Bus Barns). Against the homogeneity of these structures, and in reference to Industrial Age 'glass palaces', is set a large circular two-level glass conservatory. This building is an enclosed meeting space with restaurants, sitting spaces, gardens and open areas. It is the 'jewel in the rough', providing a warm and comfortable environment to be particularly appreciated on cold winter days. Its transparency allows those outside the building to observe the contents, thus aiding in identification and promoting entrance, while those on the inside are provided ease of orientation and entertaining views out to the market, promenade and housing beyond. The road system through the market intentionally meanders, slowing vehicular traffic, promoting exploration, providing some unexpected complexity, and acting to unify the individual market buildings. The total design scheme is sited in one of the few undeveloped areas remaining in the Calgary core. While the project covers a very large area, it attempts to deal with the more finite problems that arise from the difficult adjacency of office towers and pedestrian areas. The design of our urban centres must attend to these problems -- providing for exploration, orientation, security, visual interest and mean-

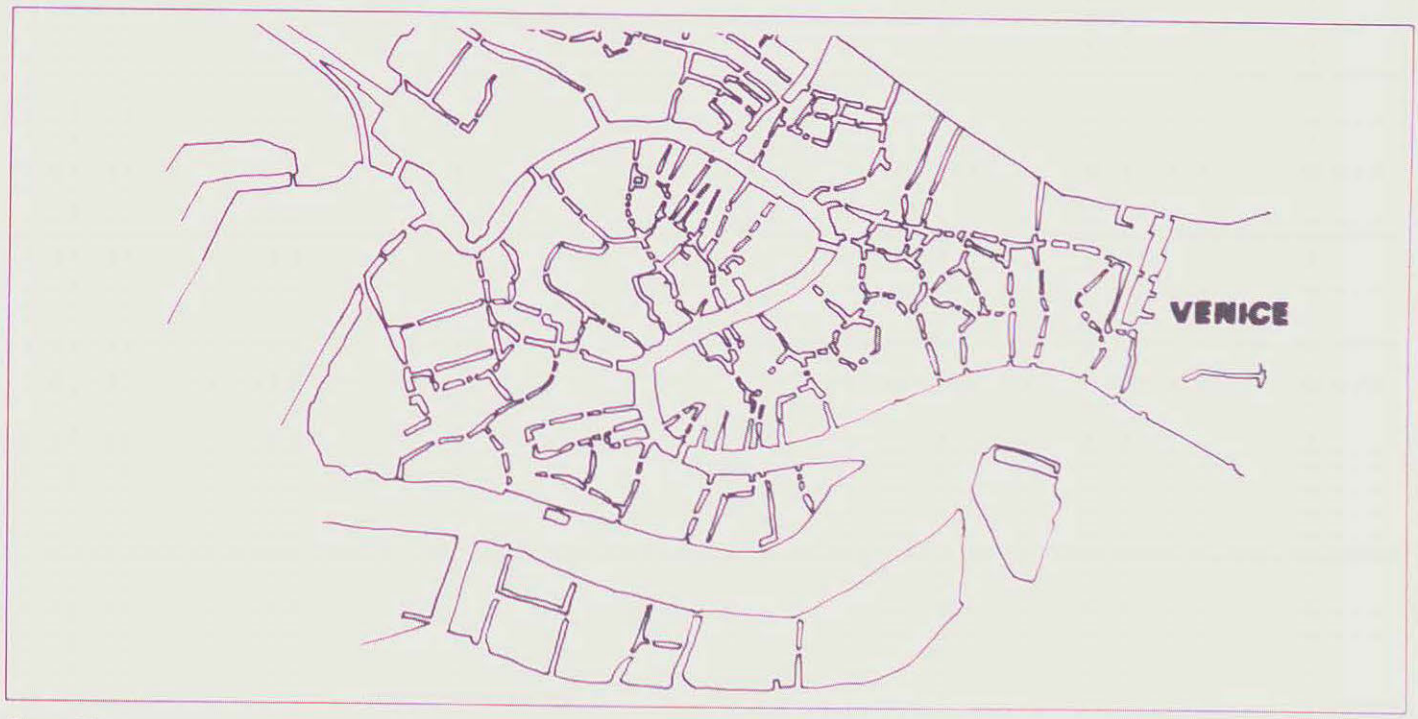


figure 19

ing -- all within the contextual banality which usually exists in these cities.

It is important that urban designers and planners learn from the mistakes of the Modern Movement and attempt to address more closely the users of the urban environment. This is best done by attention to general information needs and attention to the requirements for ease of orientation. As proposed by Berlyne in his examination of the psychology of aesthetics, a reasonable level of complexity, novelty and surprise must be interwoven with requirements of information and orientation.

Many architects have suggested that buildings and environments should somehow communicate an awareness of history, something which would involve more than simply function and construction. Robert Stern proposes that architecture must 'story-tell'. Moore notes that "... one of the things most violently wrong with architecture in the twentieth century is that the number of things that buildings have been allowed to say has shrunk so greatly that they've simply stopped being interesting to most people."[10] From a psychological point of view it is crucial to design so that people are stimulated by interesting surroundings.

While today we remain critical of the Modern Movement's banality, we must also be cautious of Post-Modernism and its potential for excess. For the desired psychological effects designers must strive to attain the appropriate levels of complexity and stimulation. Architect and urban designer Carl Knipfel provides a concise proposition which captures the central concerns of this paper: "... can we look for inspiration to some middle ground between the sterility of Mies and the fantasy of Sleeping Beauty's castle? There exists the opportunity, indeed the necessity, to evolve a meaningful architectural expression of our period in history, our climate and our pluralist society."[11]

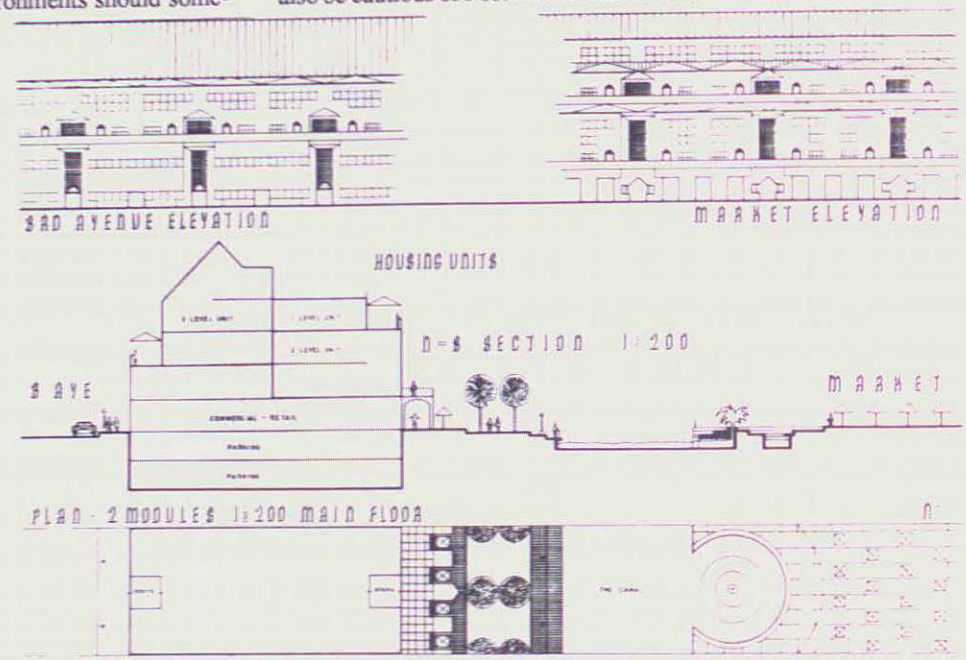


figure 20

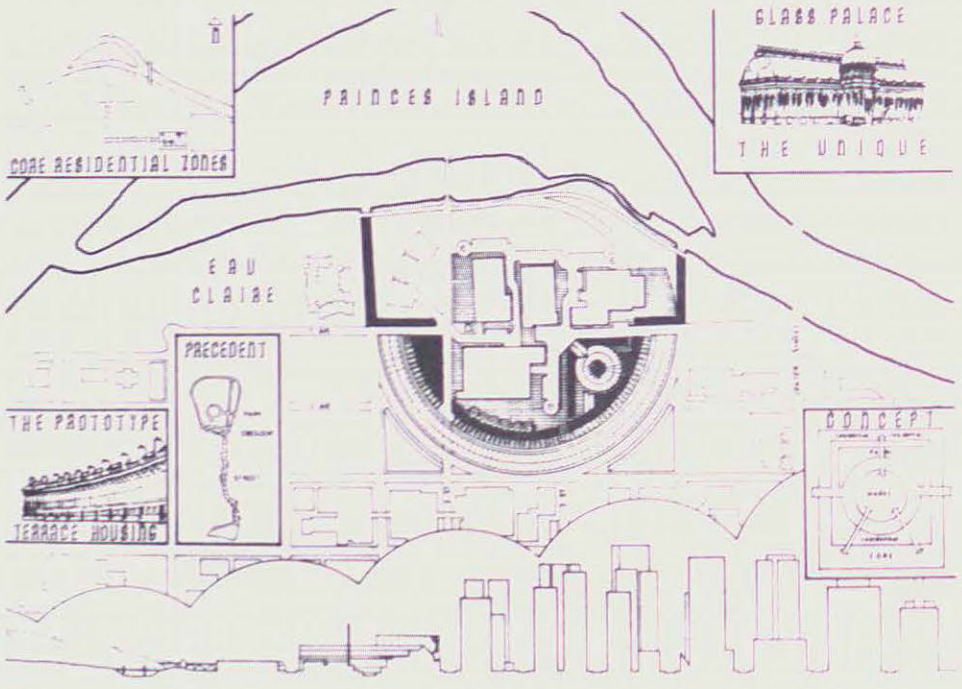


figure 21

NOTES

1. Jenkins, Dan. "From Mies to Metaphors". The Canadian Architect. Vol. 28, No. 5, May 1983. p. 33.

2. Hemingway, Peter. "From Mies to Metaphors". The Canadian Architect. Vol. 28, No. 5, May 1983. p. 26.

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5. Graves, Michael. "A Case for Figurative Architecture". Buildings and Projects 1966-1981. Rizzoli, New York, 1982. p. 11.

6. Greenburg, Michael. "Architecti.Vitae,Verba". Speaking a New Classicism: American Architecture Now. Smith College Musuem of Art, Northampton, Massachusetts, 1981. p. 33.

7. Graves, Michael. "A Case for Figurative Architecture". Building and Projects 1966-1981. Rizzoli, New York, 1982. p. 11.

8. Jensen, Robert and Conway, Patricia. Ornamentalism. Clarkson N. Potter, Inc. Publishers, New York, 1982. p. xiii.

9. Affleck, Raymond. "From Mies to Metaphors". The Canadian Architect. Vol. 28, No. 5, May 1983. p. 31.

10. Moore, Charles. L'Architecture d'Aujourd'hui. No. 184, March 1976. p. xlv.

11. Knipfel, Carl. "From Mies to Metaphors". The Canadian Architect. Vol. 28, No. 5, 1983. p. 27.

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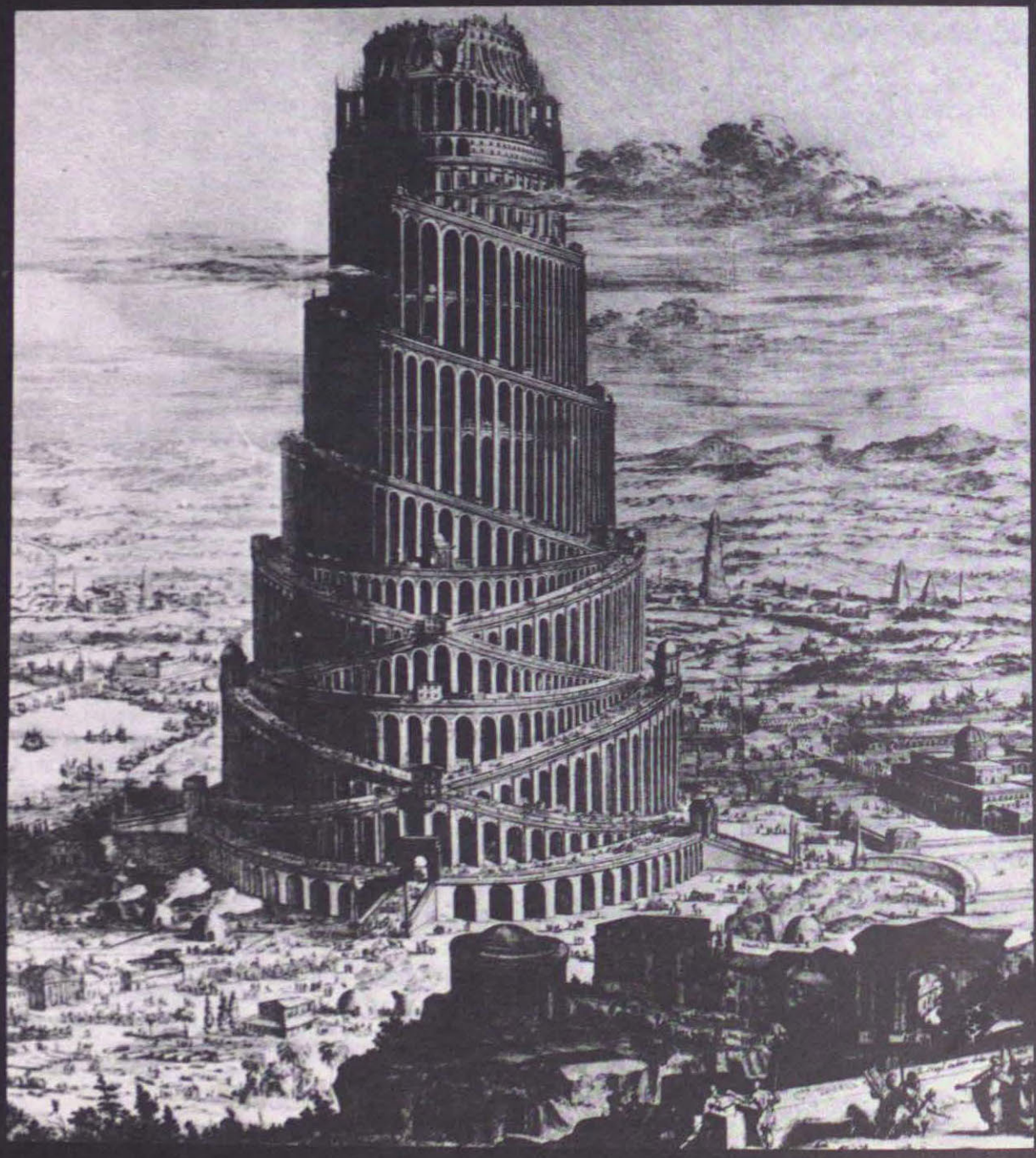
Robert E. Dewar, Ph.D., is a professor of psychology in the Department of Psychology at the University of Calgary. His major areas of research are traffic safety, visual communication systems, and wayfinding in built environments.

Layout: Pierre J. Sinanian

image et symbole
imagery and symbolism



The Architectural Symbol
the creative manifestation
by one
for all
of an understanding
an acceptance
of that which we know
of that which we don't
of that which we must strive to know
and of that which we may never know.

Our present architectural situation is one characterized by an ongoing polemical discourse, set amongst a number of ideological camps, each concerned with resolving the issue of what constitutes the elements of an appropriate and relevant symbolic architecture. An architecture that is relevant and meaningful within today's frame of reference of time and place. At its most elementary level the act of creating a symbolic architecture is one which involves the representation of an idea, an emotion, or of an artifact.

The ability to engage in representation must involve the articulate and knowledgeable reinterpretation of that which we choose to symbolize. It is by embarking upon a conscious voyage of both inner and outer discovery that one becomes truly capable of symbolically understanding the world within which we live.

The voyage becomes a metaphor for the personal challenge to understand the elements of the external environment within an interpretive personal framework.

This undertaking involves not only an understanding of the realm of the designed and built fabric but it also involves the careful analysis of present day societal concerns. This component of the architectural investigation has to this day occupied a somewhat important position within the range of pre-design activities that the architect performs even if such an investigation has always held the numerical and statistical product as the basis of its importance.

I wish to claim that there is a component of our external environmental understanding which has been in lacking and whose signs of neglect are apparent throughout the resulting spectrum of existing mediocre representational architecture. This component is that which asks of an individual to understand his position within his environment vis à vis a greater order, an order which fundamentally directs and molds the terrestrial environment of man. Defining such an order is a somewhat difficult task in our age of scientific certainty, for we live in an age where only that which is physical, and that which can be quantified is that which is understood and accepted as a source of knowledge.

In and of itself such an order can only be defined relative to a body of experience. The order requires that one actively engage within an experiential framework that searches to answer for each individual what constitutes their contextual position. This order establishes a hierarchy which places man not at the pinnacle of the triangular strata but rather below that of the generator. It requires of the designer to possess the ability to search for relevant knowledge, knowledge which will allow us to better comprehend those immutable and metaphysical elements found within the union of all spheres of existence. Such an order is an order of our senses, of our intuitions, of our beliefs. This order becomes the element which each individual must embody in order to truly derive a personal "storia", a story which establishes the basis for the creation of a true vision. An architect must have a personal vision, one that is rooted within an acquired understanding of the knowledge that resides within the experiential environment of man.

It is only through the reconciliation of one's personal vision with that of the hidden universal order that the elements of a truly symbolic architecture can be revealed.

> "Through symbolization, knowledge has reconciled the finite with the infinite, the specific with the universal, the temporary with the eternal, expressing the inexpressible in authentically human terms."[1]

NOTE

Alberto Perez Gomez, "Architecture as Embodied Knowledge", Journal Architectural Education, Vol. 40:2.

Franka Trubiano, *editor*

e d i t o r i a l

Of body, mind and spirit

by Rafel H. Aziz

Cet essai se propose d'examiner les diverses manières par lesquelles l'architecture aborda le corps humain à travers l'histoire. Il émettra des arguments en faveur d'un rapport réciproque entre celle-ci et l'existence en général. L'auteur espère ainsi établir des nouveaux critères de base selon lesquels l'on pourra créer et juger l'architecture.

> "Primitive man has brought his chariot to a stop, he decides that here shall be his native soil [on which to construct a hut and temple]... by imposing the order of his foot or his arm, he has created a unit which regulates the whole work; and this work is on his own scale, to his own proportion, comfortable for him, to his measure... But in deciding the form of the enclosure, the form of the hut, the situation of the altar and its accessories, he has had by instinct recourse to right angles, axes, the square, the circle... [which] are geometrical truths, and give results that our eye can measure and recognize... [Furthermore] the door of his hut is on the axis of the enclosure -- and the door of the enclosure faces exactly the door of the hut [that is also on axis with both the altar and the door of the sanctuary which forms a shelter for a god]."[1]

In creating a home for themselves and a temple for their god, humans turned to their own bodies for a basis from which to manifest architecture. The first inhabitants, Le Corbusier postulates, achieved this by performing three fundamental acts, all of which were derived from a desire to represent their existence. Ironically, Le Corbusier returned to the maiden steps of primitive man in an attempt to formulate a vision for a new architecture. This, however, is not surprising considering the belief that the presence of human beings' essentiality in any creative act goes back to the beginning of time. This association is even present in the Judeo-Christian tradition: "The carpenter stretcheth out his rule; he marketh it out with the compass, and maketh it after the figure of a man, according to the beauty of a man; that it may remain in the house." (Isaiah 44:13). By building according to the proportions of their own bodies, humans were convinced they were doing so of and from their own nature. Later, Christ would make an analogy between the temple and himself (John 2:21), thereby placing the body in a divine realm.

Within our nature lie three notions to which Le Corbusier has clearly alluded: the physical, intellectual, and emotional. As architecture must satisfy every part of us, every sense, every want -- basically the whole of human nature -- it must do so by transforming these notions into principles for its own manifestation. The intention here will be to achieve this transformation by initially examining the human body through its colorful interpretations in history and later, from this, to derive principles of architecture. Thus, this discussion will argue for a reciprocal relationship between architecture and holistic being in an attempt to establish principles upon which the former may be based, created and judged, in essence, to realize an architecture of body, mind and spirit.

A comprehensive discourse of architecture vis-à-vis the human body rightfully deserves a treatise, one yet to be undertaken. As it is not possible to do so within the limits of these pages, it will suffice to provide an overview of numerous interpretations of the human body through a series of historical periods from antiquity to the present. While each period viewed the body differently -- whether figuratively, metaphorically, symbolically, or phenomenologically -- all shared a common belief of representing its eternal existence in an architecture that would, in turn, be equally timeless.

To begin, ancient Egyptians have left very little in the way of actual writing on the subject at hand; we are left to archaeological findings to interpret their intentions. One such finding was made by C.R. Lepsius who, in an unfinished tomb, discovered the first of hundreds of figures overlaid by a square grid.[2] (Fig.1) Each figure included a centre line denoting a vertical axis which was, in turn, divided by six horizontal lines

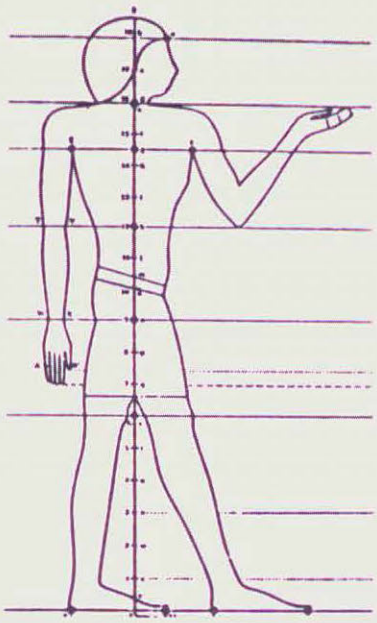


Fig. 1 Lepsius' Canon (Geometry in Egyptian Art, p. 17)

marking significant points on the human body. In addition, two red dots established the feet. Lepsius concluded that the length of the foot was the basic unit which also determined both the dimension of the network of squares as well as the members of the body. Interestingly enough, the overall height of the figure was six foot units; a ratio to later concur with Vitruvius' canon. An alternate interpretation, based on other grids, is given by Erk Iverson who claimed the module to be either a cubit (i.e. the length from elbow to finger tip) or a derivation thereof (i.e. the fist or hand). Sigfried Giedion agrees with both Lepsius and Iverson, contending that, "Egyptian architecture is a projection of the human body and limbs transposed into a larger -- but still human -- scale. This is especially true of the great temples. Man and man's artifact were closely interlocked."[3]

Clearly a physical relationship was established by the first Egyptians between architecture and the human body. This is quite understandable, being the first and simplest of the three notions to perform. What more appropriate unit of measure could they find than one based on a member of their own body? A Pharaoh would have been honored if his temple or tomb were established on his "royal" cubit, hand or foot.

Classical Greeks, in contrast, were more interested in an intellectual association between artifact and being, an appropriate next step in the evolution of civilization. They sought to understand the harmonic essence of creation by establishing its nature in their minds. The Pythagorean motto "All is number" is well known. Simple numbers and their interrelations, closely linked to musical consonances, were believed to represent both the macrocosm and microcosm of nature, the universe, and the encompassing. To the Greeks, simple ratios of 1:2, 2:3, 3:4 or other derivations produced by musical strings, provided the ears and eyes with the same satisfaction; thus, their expression was to be realized in all creations.

Plato expanded upon this Pythagorean insight to formulate a cosmological order which would influence thinking for some two thousand years, being most firmly instilled in Renaissance doctrine. He maintained that the beauty of creation relied on it being good, ordered, perfect, and whole. Plato first established the "Number of World-Soul". Beginning with the progressions 1,2,4,8 and 1,3,9,27, he created two rhythmic sequences to embrace universal harmony. Plato went on to define the four elements: earth, water, air, and fire, together with the universal geometrical figures, namely, the five Platonic solids. Through relations of numbers and figures, Plato was satisfied he had re-established what he called "the spirit of friendship" that God had originally intended.

These relations proved significant in classical aesthetics, which according to Erwin Panofsky, "identified the principle of beauty with the consonance of the parts with each other and the whole".[4] While Plato and his Pythagorean predecessors had sought to satisfy the objective mind, Panofsky has realized a desire by ancient Greeks to also satisfy the subjective sight; both needs are equally relevant within the context of the intellectual relationship between creator and creation. Although Panofsky found optical refinements in sculpture, others such as John Pennethorne and Bannister Fletcher have revealed them in architecture. Their purpose, in all cases, was to account and adjust for any distortions due to such factors as: perspective, angle of sight, column thickness, heights of elements, and backgrounds. These refinements seem to suggest that, to the Greeks, visually-pleasing compositions were as much associated with a sense of perfection as were harmonic numbers.

The discussion thus far has relied on interpretations of either archaeological findings or indirect literary sources. However, a complete treatise on architecture has survived from antiquity, specifically, Vitruvius' ten books De architectura . In this work he deliberated at length upon the connection between buildings and the human body. Others before him had written about the latter, but made no correlation with the former; Plato, in contemplating the constituents of the human body had declared the head to be "the seat of our divinest and holiest part... which serves all the rest,"[5] while Polyclitus, in formulating classical Greek anthropometry, held that the body's beauty was based on the relation of its members to each other and the whole.

Vitruvius, on the other hand, developed a more comprehensive aesthetic theory centred on an analogy between the design of a temple and a well shaped man. "Since nature has designed the human body so that its members are duly proportioned to the frame as a whole", claimed Vitruvius, "in perfect buildings the different members must be exact relations to the whole general scheme".[6] He was convinced of perfection in the human figure following several brilliant insights. On a symbolic level, Vitruvius realized that the body, with arms and legs extended and with navel as centre, produces a circular outline. At the same time, a square is derived as a result of equality in measurement between the height of a man and the span of his outstretched arms (Fig. 2). Furthermore, Vitruvius advised that the Doric column corresponds to the strength of a man and the Ionic column to the slenderness of a woman, a concept already utilized in the caryatid porch of the Erechtheion in Athens (Fig. 3). On a practical level, he developed several proportional relations specific to

the members of the human figure, thereby recalling the canon of Polyclitusic with substance. Having deduced these notions and ratios from nature's most perfect creation, Vitruvius proceeded to apply the principles to temple designs so as to realize his original analogous conception.

With the fall of the Roman Empire and the rise of Christianity, emphasis shifted towards a religious symbolism of the human body on which the arts were to be realized. The concern was with the third notion, the spiritual relation. In Byzantine doctrine, which has survived through Cennino Cennini, the face, believed to be "the seat of spiritual expression", was taken as the most significant and beautiful unit of

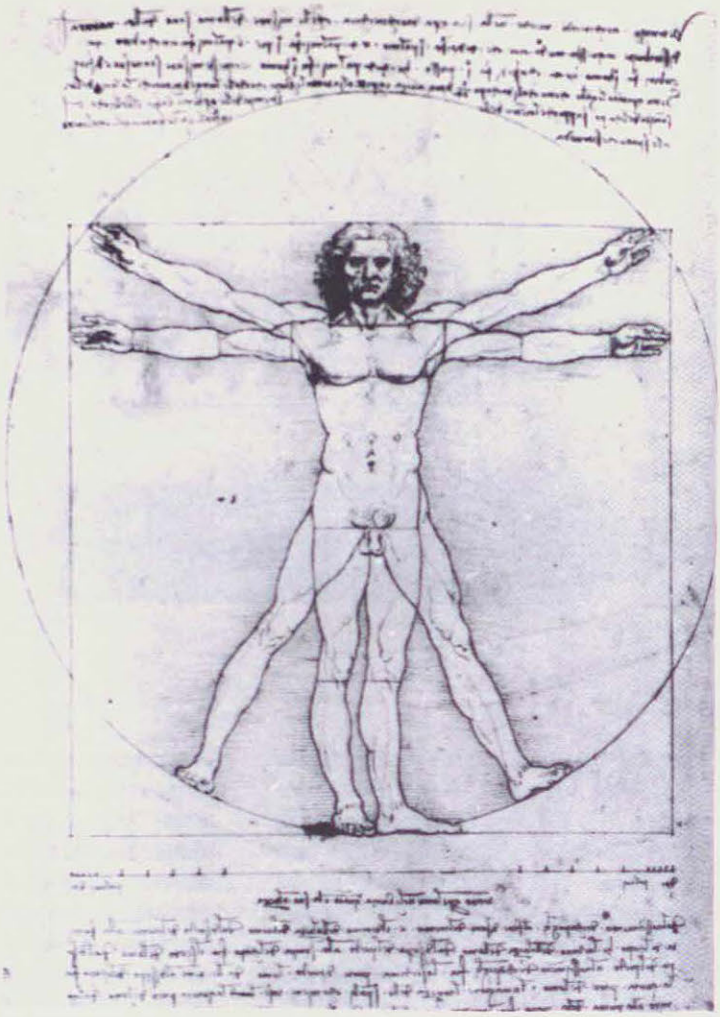


Fig. 2
Vitruvian Figure according to Leonardo da Vinci
(Architectural Principles in the Age of Humanism, pl. 2b)

Fig. 3
The Erechtheion - Caryatid Porch
(A History of Architecture, p. 233)

Fig. 4
The 'Three-Circle Scheme'
(Meaning in the Visual Arts, p. 79)

measurement. The number three was then assigned equal importance, undoubtedly a reference to the trinity. In modules of three or fractions of thirds, the whole human body was made accountable; for instance, the total height was nine face-lengths. Of particular interest is the Byzantine "three-circle scheme."[7] (Fig. 4) In this case, the face was expressed in terms of three concentric circles with a common centre at the root of the nose. The first circle, with radius of 1 nose-length, outlined the brow and cheeks; the second, with radius of 2 nose-lengths, determined the exterior limits of the head and lower limit of the face; and the third, with radius of 3 nose-lengths, passed through the throat and formed a halo.

Spiritual symbolism continued through the middle ages and combined with a love of geometry to typify the Gothic mind. The sketch-book of Villard de Honnecourt, from 1235, for example, clearly reveals an obsession with geometry (Fig. 5). Everything from people to animals to buildings were expressed in terms of triangles, squares, circles and stars; the most prominent shape was the triangle, again in reference to the religious importance of the trinity. A notable illustration denotes a figure of Christ set within the 'vesica piscis' (a shape formed by developing arcs from two adjoining equilateral triangles) sug-

Fig. 5
Villard de Honnecourt, Page from Sketchbook (Architectural Principles in the Age of Humanism, p. 41b)

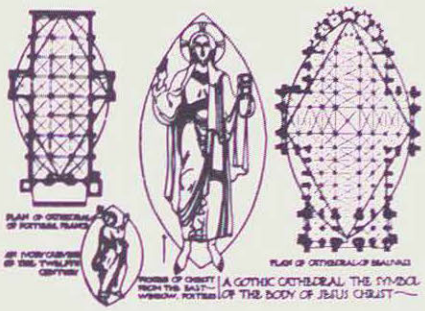


Fig. 6
The 'Vesica Piscis' (The Beautiful Necessity, p. 69)

gesting the shape had divine importance (Fig. 6). By then applying the 'vesica piscis' to cathedral plans, the human figure was symbolically represented. Besides its presence in arches, gables, traceries and vaults, the triangle also played a major role in the vertical dimension of the cathedral as was evident in a conference of 1392, held to deliberate over the design of Milan Cathedral. The discussion centred on whether to build the cathedral in section according to the square, 'ad quadratum', or the equilateral triangle, 'ad triangulum'. Given the religious fervour of the time, the latter was chosen. As a result, one can experience and share with the cathedral its aspiration towards the heavens. In totality, this house of God embodied the three notions stated at the outset: the human body was physically represented in plan, the Gothic mind was satisfied with geometrical beauty, and the spirit was in awe over the ambience of symbolic meaning.

The union of architecture and being may be said to have culminated during the Renaissance when all three notions were purposely and simultaneously manifested. Artistic belief was basically this: human beings, regarding their existence as representative of universal perfection, felt destined to become the ideal model on which all subsequent creations were to be conceived. Since God had created man in his image, the human body had been produced by divine will and therefore contained the innermost secrets of nature . As such, its essence was to be embraced and expressed in all that was to be created so as to echo universal harmony.

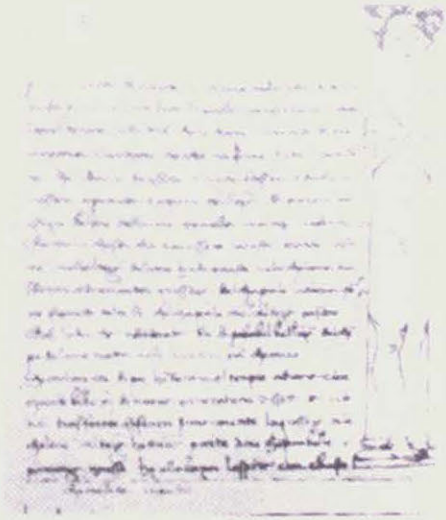
Once the purpose was envisioned, Renaissance artists turned to a wealth of precedent to discover and develop principles upon which to mould their conceptions. By reconciling Pythagorean-Platonic, Vitruvian, and Christian doctrines, this age of blossoming creative spirit realized their ideal of co-existence and co-creation within an all-pervading cosmic order. They learned from these doctrines, respectively, of the need to satisfy the mind through numerical and geometrical order, the body through an association of its members and measure to a building, and the spirit through a metaphysical interpretation of the microcosm and macrocosm of human existence.

So clear were Renaissance convictions[8] that these notions, focused upon the architecture-being reciprocal relation, permeated all artistic endeavors. While describing a facade, for instance, George Hersey makes repeated reference to its personification: "a multistory columnar facade is a scala of slaves or servants, men, matrons, virgins, and divinities. Such a facade is a population table, a racial history, and a genealogy."[9] (Fig. 7) Indeed, the 'age of humanism' has bestowed upon civilization the beauty, elegance and magnificence of the arts.

The two centuries following the Renaissance saw an onslaught of criticism of that period. The 'new age of empiricism and emotionalism', as coined by Rudolf Wittkower, discounted the body-building analogy, objective perception, and the symbolic essence of existence. Collective intentions were gradually replaced by individual infatuations, leaving no coherent theory to speak of by the nineteenth century. Feeling somewhat at a loss, several theoreticians of the day sought to re-establish lost notions of being. Views were understandably fragmented, given the division between attitudes reflecting romantic individualism evident in the literary movement of the period and the scientific trends of the century.

However divergent the views, there remained the common thread of the human body and its derivations. D.R. Hay, in the mid-nineteenth century, returned to the Vitruvian analogy of the human figure as the "most truly beautiful work of creation," from which he proceeded to reveal the numerable relations within this "species of harmony". Viollet-le-Duc shifted from this physical interpretation of the body and concentrated instead on the intellectual notion. His contention was that since

Fig. 7
Francesco di Giorgio, Human Figure and Architecture (Architectural Principles in the Age of Humanism, pl. 1a)

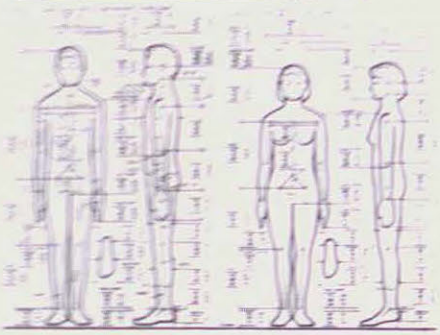


the eye was capable of recognizing laws of unities a building must appear completely stable, a view also put forth by contemporaries like Joseph Gwilt and Edward Cresy. Viollet-le-Duc argued that "sight is a sense, like hearing, which can never suffer a discord without being offended."[9] This implied that a building must initially impart an intellectual satisfaction to the viewer as a prerequisite to further experiential pleasures. Cesar Daly, an architect at the Paris Academy, would complete the triad of the subject at hand and round off the diverse views of the century. In the cause of the spiritual need of human nature he asked, "Is art itself anything other than the expression of human sentiment by means of symbols?"[10] Daly believed that a moving of the self through satisfaction of the spirit or soul was of prime significance in an aesthetic experience.

During this century the views have been equally variant. Two concerns however, have characterized the period: the scale of the human body and an obsession with the golden section. Le Corbusier combined both in order to establish a measuring tool upon which a whole work could be regulated. His "Modulor" provided a wide range with which to determine both the "containers" and "extensions of man." (Fig. 8) Witkower correctly argues that "by taking man in his environment, instead of universals, as his starting point, Le Corbusier has shifted from absolute to relative standards. His Modulor lacks the metaphysical connotations..."[11] This is clearly evident in the fact that Le Corbusier later changed his model from a French to an English policeman, not to mention the various dimensional conflicts which occur when adhering to the specificity of the scale. This was undoubtedly the outcome of strenuous attempts to justify the golden section in the human figure instead of deriving a universally *'perceptible'* figure from it as Vitruvius had done.

In addition, the human figure could not escape the realm of tested facts, in the light of our emphasis on science and technology. What had been considered as an aesthetic ideal (both in the abstract and symbolic sense) for centuries, the human body, began to be considered in terms of practical measurements and function in the twentieth century. Anthropometry was hence developed to relate the body to its functional capacities (Fig. 9). In attempting to achieve a 'physical fit' and consequently turning the body into a semi-robot, most modern buildings have failed to provide any intellectual or emotional satisfaction.

Fig. 9
Anthropometric Figure
(Graphic Standards, p. 2)



Recently, some hopeful signs have begun to surface regarding the relevance of the body. The foremost proponent of this has been Rob Krier who unequivocally insists on its recognition in both architecture and urban design. He passionately argues for a scale "adjusted to the size of the human body and its patterns of behaviour, perception and sensitivity."[12]

Having dwelt upon numerous historical interpretations of the architecture-being analogy, it is now possible to derive principles in association with the notions put forth at the outset. To repeat, the premise has been that there is a definite reciprocal relationship between architecture and holistic being. The three notions, both inherent within human nature and longing to be fulfilled, are the physical, intellectual and emotional. These may be considered, respectively, in terms of the body, mind and spirit. Successful architecture must satisfy these notions and must itself be satisfied by their equivalent principles. The body must correspond, the mind must comprehend and the spirit must celebrate the complete experience or intimate relationship with the architecture. The three principles are simply: correspondence, comprehension and celebration.

Correspondence is achieved through the representational or figurative presence of the body and/or interpretations of its members and measures in a building. Comprehension relies on order, symmetry, proportion, and numerical as well as geometrical harmonies. Finally, celebration is that which uplifts the spirit through the symbolic and metaphysical meaning of human existence. In concert, these principles take architecture to heights of beauty, grace and nobility.

The value of any theory, of course, lies in its practical application. Suffice it to say the historical periods already discussed have clearly demonstrated the theory's validity. Three further examples will illustrate this more specifically. These will extend to the monumental (Villa Rotonda), the vernacular (a house facade in the small Spanish town of Abrantes), and the cultural (the Japanese house). Although by no means exhaustive, these analyses will also serve to reinforce the idea of these principles.

In examining Palladio's Villa Rotonda, one witnesses the ideals of architecture as conceived and realized by a master in full command of his art. Thus, to reveal the principles under discussion within this majestic edifice is imperative. First, the exterior. Correspondence on the facade is

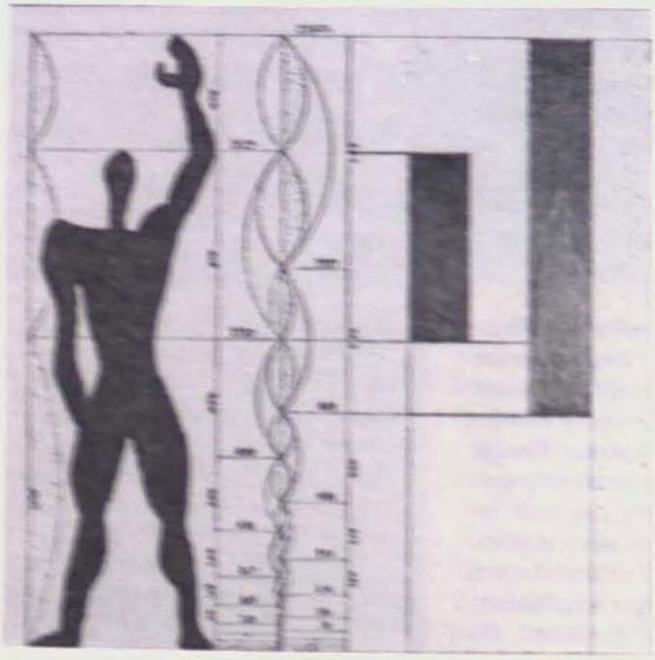


Fig. 8
The Modulor
(Architecture: Form, Space & Order, p. 317)

evident through a relative scale, on the one hand, between the body and elements such as doors, windows, niches, stairs, columns, pediments, statues, etc., and, on the other hand, between the body and the division of the whole artifact as is apparent in the clearly articulated tripartite division of base, middle and top. Comprehension is evident within the definite relationship of the parts to each other and to the whole through an underlying order, symmetry and hierarchy, so that everything has its "proper" place. Celebration is achieved with, once again, the tripartite divisions, the elements, and the grandeur of the temple fronted central block which acts as the focus of the composition. Next, the interior: here, correspondence is realized through a relationship between the body and the spaces. A notion of verticality is present in the corridors, the central hall and the lower rooms suggesting a correspondence to a standing or sitting figure. In contrast, the horizontality of the upper rooms suggests an association with a lying position. Spaces are also relevant for the principle of comprehension as their width to length to height is based either on a numerical or geometrical relationship as specified by Palladio in his seven ideal shapes. There is also a definite hierarchical transition from large to mid-size to small rooms. Lastly, celebration is visible in the domed central hall which acts as the climax of the interior. Furthermore, wall and ceiling paintings depict the symbolic interpretations of human existence of the day. In short, this edifice of beauty, grace and nobility is truly an "entire and complete" work as intended by the Renaissance master.

Turning to the vernacular example, the following description is typical of a house facade in the small Spanish town of Abrantes. A single-story house,it has at its centre a doorway with a flanking window at each side located at the quarter points of the facade. Both windows and door are framed with either painted wood trim or simply a panted border; the same frame continues along the facade's bottom, ends, and top. A shallow roof crowns the whole. Now for the principles: the physical body and house are related via a corresponding measure and scale. Next, the observer is comforted by the overall balance, order and symmetry of the facade, satisfying the principle of comprehension. Lastly, the individually coloured frames celebrate an added dimension to this facade. The author of these serene houses was unlikely the capital 'A' architect but rather human instinct, which always strives to fully satisfy the self.

When considering the Japanese house, the cultural belief of respect for and proximity to nature plays a vital role between being and building. As the house is in concert with nature, so too is the body in correspondence with the house. On the exterior, the tripartite division of a raised platform, living quarters, and steep overhung roof help to relate the house to the body's proportions (Fig. 10). Moreover, modular division derived from the Tatami mat used inside further reduces the external walls to a human scale. These three foot by six foot mats also find significance elsewhere . Their number and arrangement not only determine the size and shape of individual rooms but also the configuration of the whole house; hence, fulfilling the need for comprehension. The interior, likewise, reveals the intentional correspondence between the human body and space as is evident by the use of low ceilings which are, in turn, an outcome of a culture's desire to be in a seated or reclined position. As for celebration, this principle is obvious in the full and natural expression of both the identity and value of each material and element. Furthermore, the symbolism of

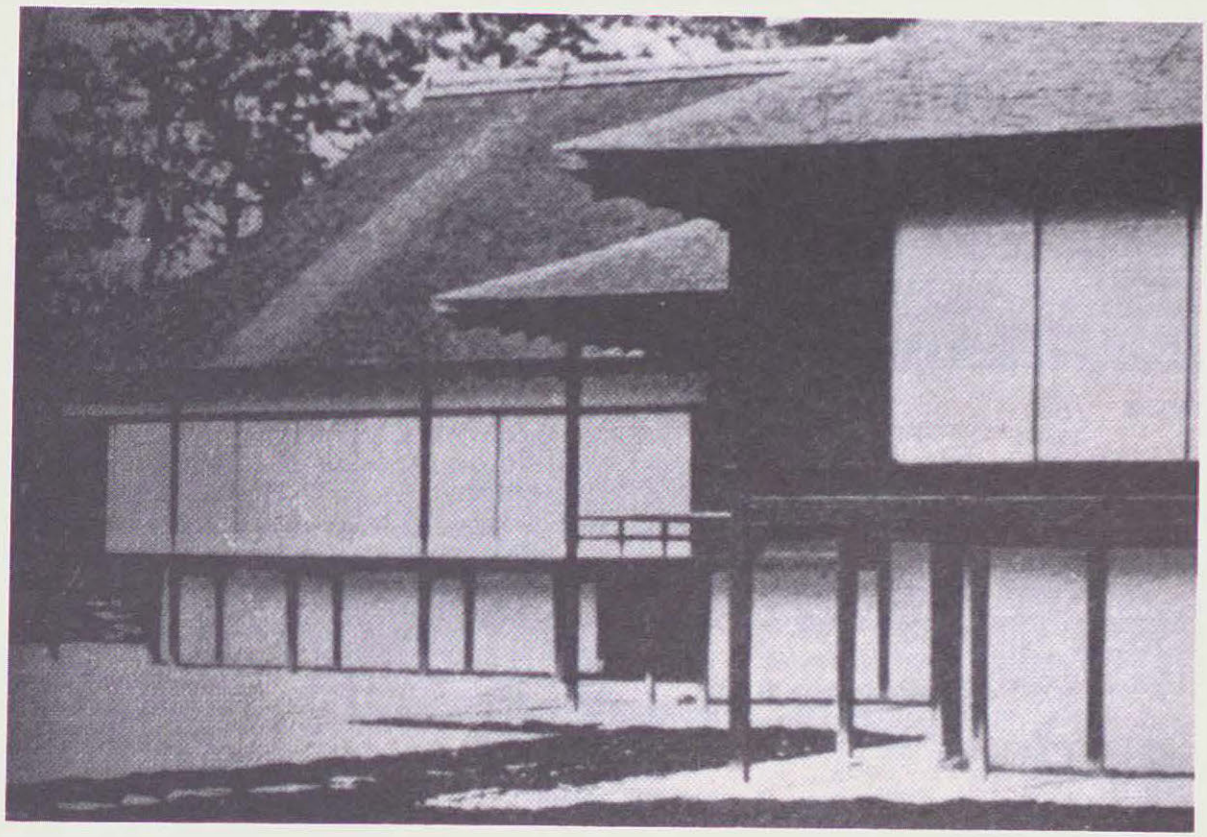


Fig. 12 Katsura Palace, Kyoto, Japan (Evolution of the House, p. 139)

self to nature pervades throughout, resulting in a simple and natural house at peace with its context and in contemplation with its inhabitants.

Although regrettably brief, these three examples have been intended to illustrate the application of the being-building association, specifically, the principle of correspondence, comprehension and celebration. At the same time, a further argument has been implied. For any theory to enter the domain of truth, it must be substantiated regardless of architectural style, type and place. Basically, if a work of architecture is to be considered timeless, the principles upon which it is manifested must be universal. Perhaps an architecture of body, mind and spirit is a means to an end.

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NOTES

1. Le Corbusier, Towards a New Architecture, trans. Frederick Etchells (London: The Architectural Press, 1927), p. 65-68.
2. S. Giedion, The Beginning of Architecture (Princeton: Princeton University Press, 1981), p. 482.
3. Ibid., p. 491.
4. Erwin Panofsky, "The History of the Theory of Human Proportion as a Reflection of The History of Styles", Meaning in the Visual Arts (New York: Doubleday & Co. Inc., 1955), p. 68.
5. Plato, Timaeus (Middlesex, England: Penguin Books Ltd., 1967), p. 60-61.
6. M. Vitruvius, The Ten Books of Architecture, trans. Hicky Morgan (New York: Dover Publications, Inc., 1960), Bk. III, Ch. 1, 4.
7. Panofsky, p. 78-83.
8. For a detailed discourse on the principles of the Renaissance see Rudolf Wittkower's Architectural Principles in the Age of Humanism and Peter Scholfield's The Theory of Proportion in Architecture.
9. G.L. Hersey, Pythagorean Palaces (Ithaca: Cornell University Press, 1976), p. 195.
10. Viollet-le-Duc, Discourse on Architecture (Boston: James R. Osgood and Co., 1875), p. 413.
11. Cesar Daly, in Ann L. Van Zantan, "Form and Society: Cesar Daly and the Revue Generale de l'Architecture", Opposition #8 (Cambridge: The MIT Press, 1977), p. 140.
12. R. Wittkower, Idea and Image (London: Thames and Hudson, 1978), p. 122.
13. R. Krier, Rob Krier on Architecture (London: Academy Editions, 1982), p. 5.

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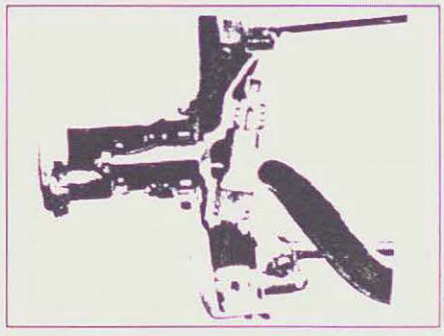
LE CORBUSIER: THE LIMITS OF MODERNISM

By Frank J. Bercarich

Le Corbusier était confronté à un dilemme: l'architecture s'écroulerait-elle sur elle même comme étant une autre illusion d'une tradition esthétique (bâtiment comme kitsch) ou se transformerait-elle sur des principes basés sur la précision monotone de la technologie (bâtiment comme instrument) ? Dans l'oeuvre de Le Corbusier, on sent la lutte acharnée pour résoudre ce conflit , un conflit qui nous aide à définir

> "I want to fight with truth itself.
> It will surely torment me."[1]
> Le Corbusier

Richard Rorty reminds us that we are the inheritors of a tradition of Modernism that is characterized as much by its limitations as by its potential for new explorations. Modernism, he writes, exists under a triple constraint: (1) Hegel's prophecy that any future would be transcended by a future future; (2) Marx's prophecy of the end of all individual enterprises; and (3) Freud's analysis of the entropic drive beyond the Pleasure Principle -- an analysis closely akin to Nietzche's vision of the death of Man. As Rorty says, "Who can see himself as caught in a dialectical moment, enmeshed in a family romance, parasitic upon the last stages of capitalism, yet still in competition with the mighty dead?". Le Corbusier, particularly in Vers Une Architecture[2], set out to create a stance within this tradition at least partly in the fear that



***Front wheel*, Delage**

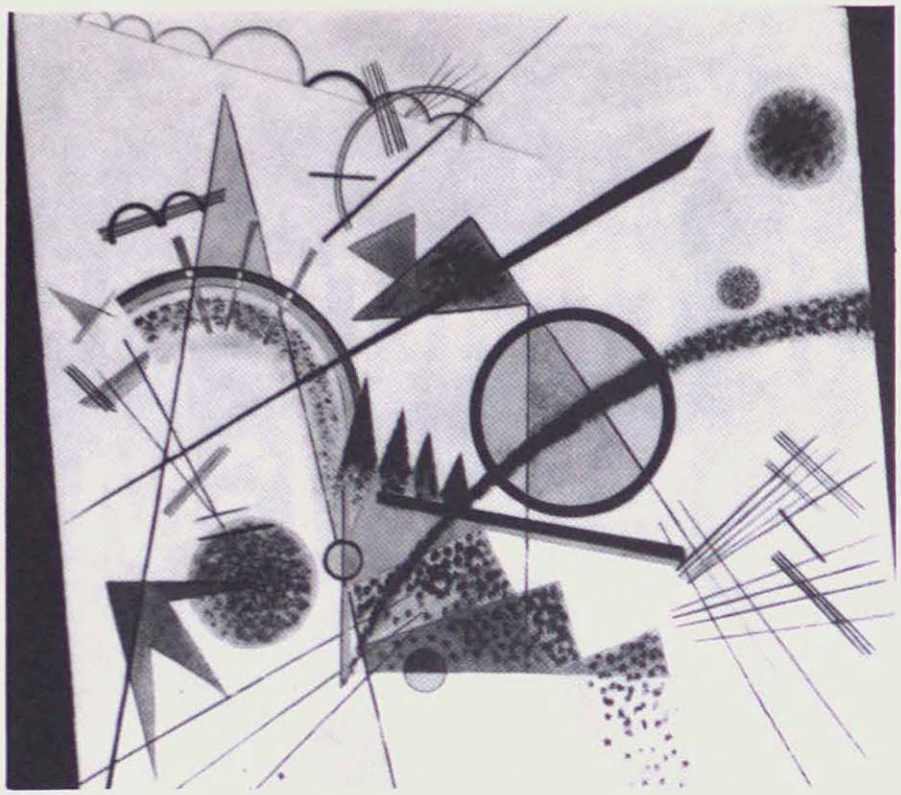
architecture had reached Rorty's endpoint. Vers Une Architecture can be understood as a defensive struggle fought against the closure.

> "Today painting has outsped the other arts. Modern painting... sequestered itself in a frame, flourishing, full of matter, far removed from distracting realism; it lends itself to meditation."[3]
> Le Corbusier

Le Corbusier's plea to painters and sculptors to "not forget the problem of architecture" contrasts eloquently with the early theoreticians who held that architecture was superior to the other arts. For them, architecture was the unchanging harmony of the universe and the idea of man as the image of God's perfection. Classical philosophers, following the example of the Ancients, examined the proportions of the human figure for secrets of universal Truth and speculated on the possibility of expressing Truth by means of simple mathematical formulae. The orders of architecture, for example, were not only a token of the divine ordering of the human body; they were actually part of the divine gift of the temple "type" which was either drawn by the hand of God itself or drawn by Solomon under direct guidance from God. Classical architecture was therefore the only true architecture not only because it conformed to reason (in the manner set out by the ancient authorities) but because it was a direct result of divine revelation.

The Humanists of the Quattrocento, feeling dissatisfied with mythical historicism, began to rationally explore the structure of that code, and in architectural theory the stability of the ancient conventions and orders began to be questioned. If architecture is the replication of ancient standards, which in turn are shadows of Absolute Ideas, they reasoned, then the architect is condemned to copy a copy, or at best, approximate the "Idea" which has been corrupted and contaminated by the passage of time and history.

History, according to this conception, could not be represented by a continuous



Wassily Kandinsky *: Dans le carre noir* ,1923 , oil on canvas.

"Today painting has outsped the other arts. Modern painting... sequestered itself in a frame, flourishing, full of matter, far removed from distracting realism; it lends itself to meditation."[3]
Le Corbusier

line to the ancient sources, but rather by a broken line defined by an arbitrary yardstick that decides, its values and goals each time. The first avant-garde in the modern sense, itself broke the continuity of the "Romanesque-Gothic" while claiming to be independently building a new history that would allow a transhistorical comparison with the great example of antiquity in order to recover the exact meaning of its syntactical and emblematical values. By the sixteenth century, the entire culture swung between these two poles. As Manfredo Tafuri wrote,

> "On one hand, the will to give historical foundation to an anti-historical code, like the one of the revived Classicism; on the other, the temptation -- repressed but always there -- to compromise and dirty one's hands with the very Medieval and Gothic languages that the entire Classicist culture wanted to erase... But the exorcism had not been complete. The ghost of the Middle Ages continued to reappear, making the nightmares of Mannerism even more tormented."[4]

Instead of the victory of the ideal unity of classicist language, the first great attempt to root architectural theory into history resulted in an anguished awareness of the precarious nature of its foundations. The notion of the ideal correlation between form and natural meaning was replaced by a more empirical approach. Classical proportion and ornament could now no longer be accepted as a rational basis for design but was justified as a convention governed by rules which could be revised and improved. In abandoning the notion of a pre-ordained agreement, the early avant-garde theorists sought to re-affirm the essential truth of the classical conventions but at a more profound and secure level. If nature could not be known directly, they believed, Reason, (since it was a human creation), could provide a basis for certainty. In place of ancient theoretical truths of which we could hold only uncertain opinions, there would be "positive beauty", mechanical and inevitable, which was obvious to all. In place of practical conventions, there would be "arbitrary beauty" which depended upon individual inclination.

The Neo-classical doctrine of "arbitrary and positive beauty", which relegated architecture to the shifting fortunes of "individual inclination", proved to be unstable as well. With archeology and new explorations providing new sources of inspiration, form was gradually detached from any singularity of meaning. The radical avant-garde began "to spin, twist and irremediably mutilate the frozen lists and recipes that the classical mind had struggled for centuries to keep alive"[5]. By the late nineteenth century, the process of revision had been installed at the very center of art where it emerged as a critical skepticism which, in principle, put all convention - and the idea of convention itself - under corrosive scrutiny. As Le Corbusier wrote:

> "[Modern man] has need of ideal certainties which previously religion gave him; doubting it now and metaphysics also, he is driven on himself where the

true world goes on within; the anguishing emptiness which nothing can fill... except art..."

Painting, (Surrealism, Dada, Cubism, etc.) with its greater capacity for abrupt, revolutionary transformations, became the model that the aesthetic avant-garde would follow in their search for a radical originality. In architecture the antithesis between historical revision and rigorous abstraction produced a whole range of typological syntheses in which parts and fragments produced new forms built purely for effect and devoid not only of meaning but lacking even practical use.

> "Our engineers are healthy and virile, active and useful, balanced and happy in their work. Our architects are disillusioned and unemployed, boastful and peevish."[6]
>
> Le Corbusier

The splintering of the avant-garde in the last quarter of the nineteenth century meant, for many, the rejection of a cultural millennium, and the creation of an architecture based entirely on the impersonal laws of material resistance, statics and dynamics. The mechanical properties of the machine and the biological process of man were seen as "mutually sustaining and interdependent as the common origin of all principles governing the dynamic nature of form". Progress was determined by the development of the means of production rather than the refinement of individual impulses. Leon Trotsky wrote:

> "It would be extremely light-minded to give the name of proletarian culture even to the most valuable achievements of individual representatives of the working class. One cannot turn the concept of culture into the small change of individual living and determine the success of class culture by the work of individual inventors and poets."[7]

By suppressing the subjective, imprecise artifice of architecture, a new technological avant-garde (Constructivism, Suprematism, et al.) sought to establish building as a necessity that would transcend style. It would be based on 'positive beauty', the self evident laws of technology and engineering. The arbitrary and artificial social constructs would be stripped away by aligning the nature of the building strictly to the nature of the process of its fabrication. "The individual is losing significance," wrote Mies van der Rohe, "his destiny is no longer what interests us." In the pursuit of certainty, progress would mean the continuous purification of technique until architectural form would be nothing more than the "visible record of the act of building". By transforming itself into a pure Instrumentality, architecture would proceed by a process of reduction that would bring an end to the confusion and ambiguity of the past. The Utopia of Modernism was to be a place of anonymous invention and freedom that would reveal itself within the continuous breaking of restricting social convention.

> "Nevertheless, there exists this thing called Architecture, an admirable thing, the loveliest of all."[8]
>
> Le Corbusier

Le Corbusier was confronted by a dilemma. Would architecture collapse into itself as yet another distorted vision of an aesthetic tradition (Building as Kitsch) or would architecture transform itself on principles based on the empty precision of technological authority (Building as Instrument)? Between this Scylla and Charybdis what strategies were still available?

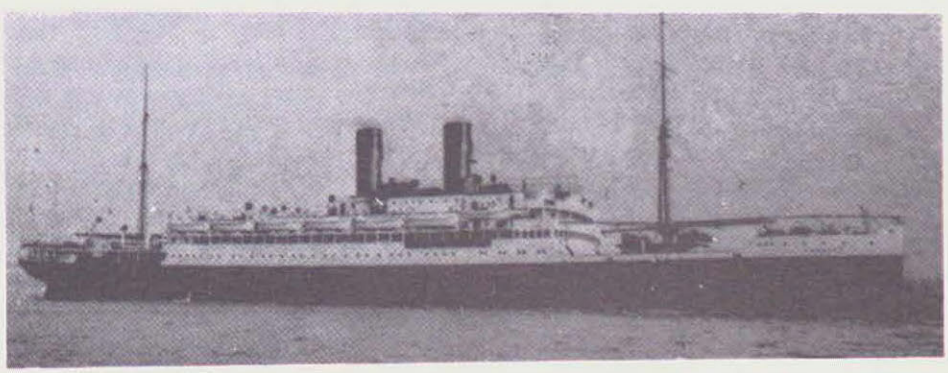
The Enlightenment tradition had always been committed to the construction of a permanent, neutral framework of inquiry that would lead to an objective understanding of the society of man and his environment. In response to the crisis of Classical thought -- what Michel Foucault termed "a desperate searching for a new similitude in a world where nothing resembled what it once resembled," the early avant-garde developed a series of strategies that would profoundly affect later architecture. They proposed that form and meaning must be bound inseparably within the fixities and limits of space and time either through an intuition of Spatial Identity (Representation) or Temporal Identity (Type). First, Boullee attempted to generate a universal language of symbolic geometry (Representation and Form); then Durand elaborated a theory of composition that aligned form with its internal functioning (Representation and Function); and finally, Daly (and Laugier before him) sought to found architectural culture on a "Natural" basis by reference to a primitive precedent (Type and Archetype), or to an evolving model (Type and Antetype), that would direct architecture to a future perfection.

In Le Corbusier one sees the moment of transition from this tradition to the forms of a new architecture. While simultaneously stressing the need to reject tradition, Le Corbusier constantly referred to it, whether by involving its principles or by overtly contradicting them. Throughout Vers une Architecture the suppressed original strategy and Le Corbusier's revision can be seen as a paradigmatic set such that his meaning can be understood in reference to its precursor.

REPRESENTATION AND FORM

> "Circular bodies please our senses because of their smooth contours; angular bodies are displeasing because of their harshness; those that rise to the sky delight us and those that

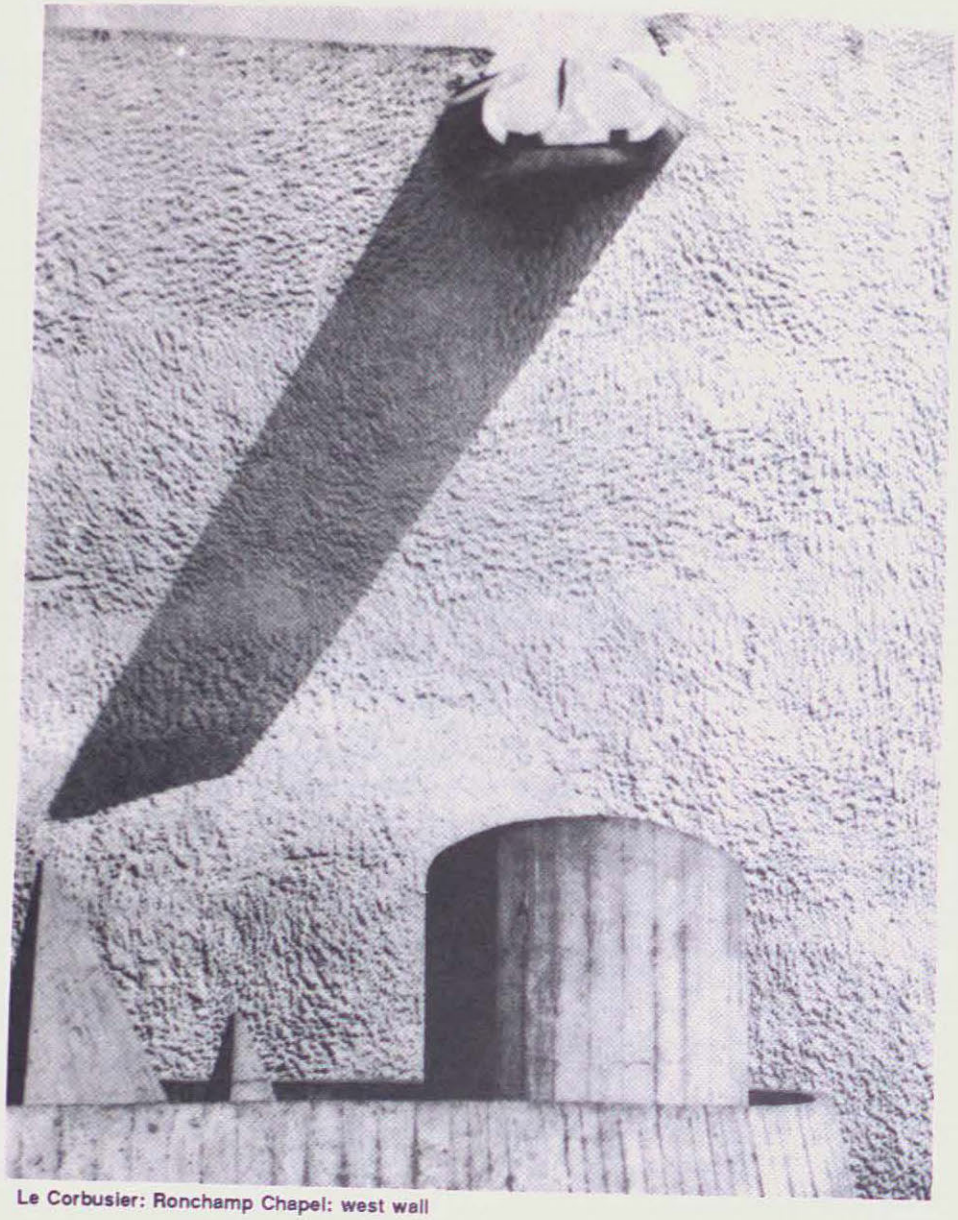
"Our engineers are healthy and virile, active and useful, balanced and happy in their work. Our architects are disillusioned and unemployed, boastful and peevish."



The *Flandre*, Cie Transatlantique

"Architecture is the masterly, correct and magnificent play of masses brought together in light. Our eyes are made to see forms in light: light and shade reveal these forms; cubes, cones, spheres, cylinders and pyramids; the image of these is distinct and tangible within us and without ambiguity. It is for that reason that these are beautiful forms. Everybody is agreed to that: the child, the savage and the metaphysician."

Le Corbusier



Le Corbusier: Ronchamp Chapel: west wall

stretch to the horizon are noble and majestic."[9]

Etienne Boullee

"Architecture is the masterly, correct and magnificent play of masses brought together in light. Our eyes are made to see forms in light: light and shade reveal these forms; cubes, cones, spheres, cylinders and pyramids; the image of these is distinct and tangible within us and without ambiguity. It is for that reason that these are beautiful forms. Everybody is agreed to that: the child, the savage and the metaphysician."[10]

Le Corbusier

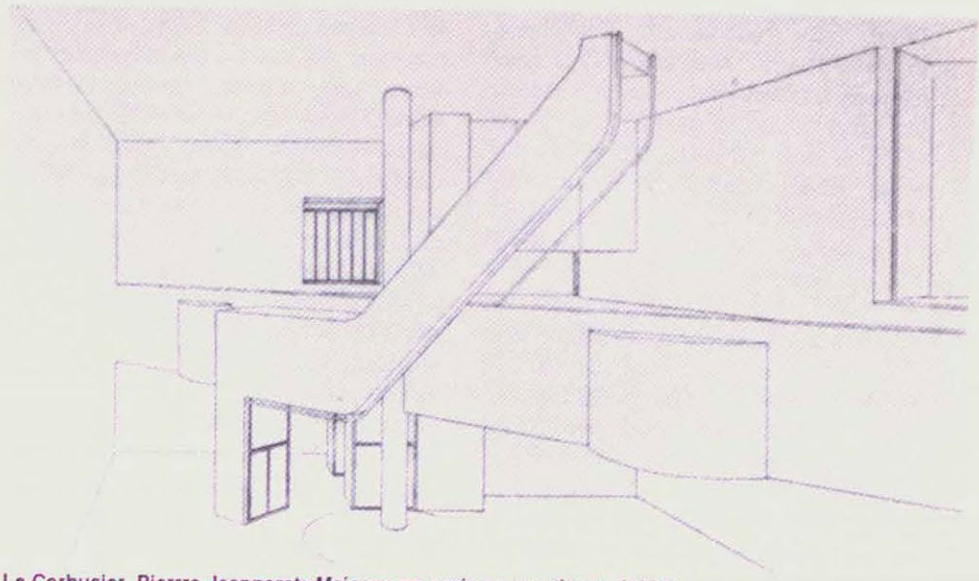
For Le Corbusier, beauty was the result of the interplay between primary forms which revealed their meaning to us without ambiguity. Architectural beauty was the result of the conjunction of direct sensation and geometrical forms. Architecture's intrinsic superiority over the other arts lay in its capacity to represent the geometrical essence of Nature most directly.

For Boullee as well, the idea that architectural representation could express Nature meant that "the language of the monuments is clear to everyone". This "Architecture Parlante" was to be an essential component of Utopian society that was to be established through the immediacy of "their symbolic language... expressing the uses of Nature and the attributes of the Creator"[11]. Representing a symbolic universe of unchanging meaning, the building itself could be magnified to dimensions that would match the scale of Nature itself. Nature and building could be reconstituted to create a harmonious and permanent unity.

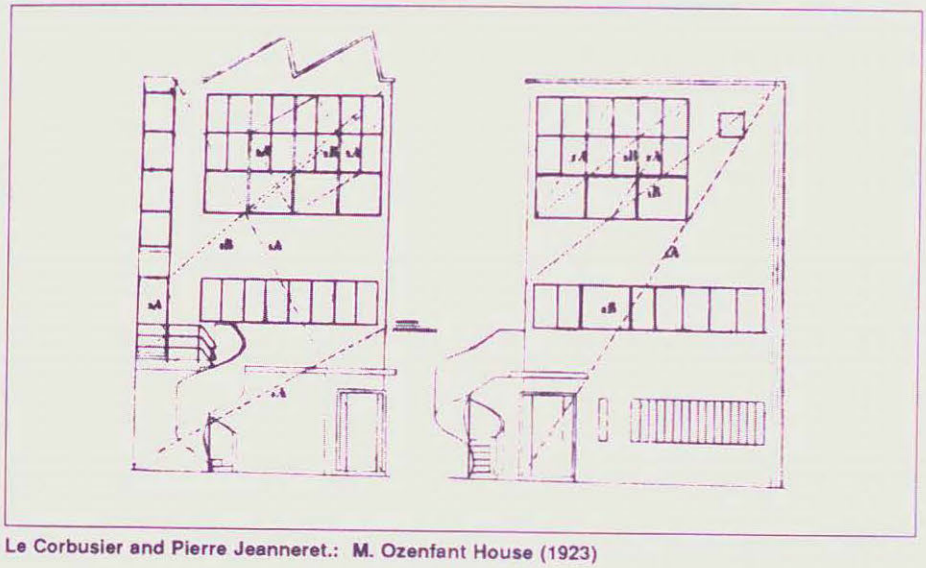
For Boullée, as well as Le Corbusier, there was no conflict between painting and architecture since all the fine arts could be reduced to the single principle of the imitation of Nature. Yet, ever since Courbet, the attempt to depict appearance directly and accurately has been paralleled by the deformation and exaggeration of appearances -- often in the work of the same artists. With all their excesses and violations of convention, Impressionist and Cubist paintings could and did claim to be more "realistic" than classical painting. For Le Corbusier, this signaled the presence of a new condition. Nature, he wrote, had been "transformed in its outward appearance in the use mode of it, by reason of the machine"[12]. The harmony between Art and Nature could no longer be achieved directly but rather through an intermediary -- the engineer -- who, governed by mathematics, was in accord with universal laws and capable of representing Nature even more directly than the architect. The ocean liner, for

"Architecture has no other objective than private and public usefulness, the conservation of the happiness of individuals, families and society."

J.N.L. Durand



Le Corbusier, Pierrre Jeanneret: *Maisons en serie pour artisans.* (1924)



Le Corbusier and Pierre Jeanneret.: M. Ozenfant House (1923)

"Every art or science has a definitive objective. There is only one way of doing things right."

Abbe Laugier

example, was designed according to principles of technology and provided for the needs of a rational human society. It was built with a purity of form and immensity of scale in which the subjective choice of the designer was reduced to a minimum. This logic, when projected onto the city of Paris, became "la Ville Radieuse" -- a startling vision of 18 immense isolated point towers punctuating an urban space where all traces of history have been obliterated, the so-called "mobilization of the ground."

Technology, not Nature could provide the means of rescuing architecture. Instead of Boullee's concept of the identity between Natural forms and representation, Le Corbusier proposed the identity between machine form and architectural representation. More than a simple assimilation of objects of technology, technology had a regulatory role in which complete machines (aircraft carriers, grain silos, airplanes, etc.) became templates for an architecture now distanced from its ancient source of inspiration -- the landscape. As Charles Jencks wrote, his forms are "the antithesis of organic architecture and its metaphors of growth, harmony, reconciliation and picturesque compromise. Its relation to Nature is cataclysmic, abrupt and sublime."[13]

REPRESENTATION AND FUNCTION

> "Architecture has no other objective than private and public usefulness, the conservation of the happiness of individuals, families and society."[14]
>
> J.N.L. Durand

For Le Corbusier beauty resulted from the discovery of fundamental principles. He believed that architecture depended upon the fulfillment of the needs of society that "lived primarily by... baths, hot-water, cold-water, warmth at will, conservation of food, hygiene, sun, beauty in the sense of good proportion."[15]

With the growing authority of technology and engineering, Le Corbusier wanted to clarify the distinction between surface ornament and style, and the building underneath. The former seemed to be a product of imprecise subjective factors while the actual structures seemed to be products of inevitable law of material science and economics. Once it became possible to separate decorations and style from the constructed object, Le Corbusier argues that it was necessary to strip away the artificial facades and express the building through the representation of its internal functioning. By being true to its internal nature, architecture would be true to the laws of Nature itself in a transparent fusion of appearance and essence. A 'style' that would transcend style would emerge and bring an end to the eclecticism of the past.

When fully rationalized, architecture would be designed as an assembly of standardized parts that would be mass produced like other objects of modern life. "If we eliminate from our hearts," Le Corbusier wrote, "all dead concepts... we shall arrive at the House-Machine, the mass production house, healthy and beautiful in the same way that working tools are beautiful."[16]

If architecture could be reduced to a tool, Le Corbusier also reasoned that the engineer, already fully integrated into the means of production, could absorb his profession. "The engineers," he wrote, "overwhelm with their calculations our expiring architecture."[17] The continuing demystification of architecture (Adolph Loos, Hannes Mayer) was thus accompanied by an equally widespread continuation of mythology in other forms. Proust and Yeats explored the spiritual in art as did Kandinsky and Klee. The writer that championed Cubism also argued for its spiritual aspirations.

Here, Le Corbusier found fault with the technological avant-garde such as the Constructivists for thinking that architecture had nothing more to do than resemble machines. "S'il n'y a pas de poésie," he wrote, "tout s'écroule." He swerved from Durand's view and proposed that the satisfaction of the need "satisfied one part of the mind, the primary part, that was a necessary but not sufficient condition for the richer satisfaction of art."[18] For Durand, building should become like machinery following the dictates of an inevitable economic and technical destiny. Le Corbusier reversed this concept, machinery had to be raised to "a state of platonic grandeur, mathematical order, speculation, the perception of the harmony which lies in emotional relationships"[19] in order to become architecture.

TYPE AND ARCHETYPE

> "Every art or science has a definitive objective. There is only one way of doing things right."[20]
>
> Abbe Laugier

Beauty originated in the mathematical laws that governed both natural and cultural forms. For Le Corbusier, the search for the origins of architecture could be pursued through an intuitive or experimental approach since both would produce the same result. "Nature is ruled by mathematics," he wrote, "and in consonance with nature; they express the laws of nature and themselves proceed from these laws. The Fibonacci series, for example, guides the growth of leaves, shells, as well as the proportions of the 'trace-regulateur'."[21] Architecture, he believed, results from the adherence to the structure and proportions of archetypal models that transcend particular conditions. The study of such archetypal models would serve as an abstract ideal which would at once be a "pre-existent germ and primitive cause" that would continue to inspire and even correct the present.

The effectiveness of this idea depended on the existence of a united and consistent culture. By the end of the nineteenth century, however, the avant-garde's critique of the idea of man as "an all powerful, all rational being at the center of his physical world" had begun to undermine the possibility for consensus. This consensus came to be seen as a nauseating bourgeois convention, a 'doxa', an example of a cultural convention masquerading as a

The Parthenon, 5th century B.C.

"Is there not in the universality of these figures, the proof that at the base of human instinct exists the conscience of a permanent relationship between, on one hand, certain considerations of lines, and on the other, the static and dynamic condition of bodies?"

Cesar Daly

fact of nature. Artists, in particular the painters and sculptors of Surrealism and Dadaism, explored an aesthetic ideal that depended on the fragmentation and re-interpretation of pre-existent reality. Their method, as perfected by Salvador Dali was "the fabrication of evidence for unprovable speculations and the subsequent grafting of this evidence on the world, so that a 'false' fact takes its unlawful place among the 'real' facts." Their intention was to destroy, or at least upset all existing categorizations in order to make a fresh start. The Dadaists advocated the withering away of art and the recovery and cultivation of the marvelous, the lyric, in everyday life. By dramatizing the arbitrary relationship between meaning and form, they aspired to free the individual of the constraints that held him in discontented bondage to society. "Architecture is stifled by custom," wrote Le Corbusier, "the Styles are a lie."[22]

The new architecture would not be an architecture of agreement and consensus; the source of its power would be its capacity to evoke poetic emotion through unexpected associations and juxtapositions; the same individual who would welcome the unfamiliar forms of primitive sculpture would also revel in powerful automobiles, go to movies and speculate about airplane flight and the fourth dimension. Instead of the ancient certainties of religion and metaphysics, "Art will have the mission of superior distraction and it will give this exalted contentment without which the calm of the soul is impossible."[23]

Le Corbusier appropriated Surrealism's "cadavre exquis", and projects such as the Unite d'habitation with its internalized streets, elevated gardens and detached base, can be seen as a bricolage of existing elements fragmented and reassembled to create a disturbing new form. Architecture would be based on the abrupt assimilation of isolated elements giving them a symbolic significance which they had not previously possessed. With the Surrealists, Le Corbusier understood that there is only interpretation, and that every interpretation responds to an earlier interpretation, and then gives way to a later one. Le Corbusier wrote, "when Egyptian priests had their hierotic types sculptured, they knew that what was being fabricated was a machine to provoke sacred emotions". The Parthenon was "...in the inexorable realm of the mechanical... the mouldings are tight and firm ... all this plastic machinery is realized in marble with the rigour that we have learned to apply to the machine. The impression is of naked, polished steel."[24]

Architecture is not simply a renewable archetype in a rational universe -- it is a defensive struggle in constant change. Here, Le Corbusier precisely reversed Laugier's paradigm; instead of the past serving to guide the present, the study of the present would serve to revise and reinterpret our understanding of the past. Taken to its logical extreme, this would produce the illusion of having "fathered one's own fathers" -- the illusion that architecture could stand outside its own tradition.

TYPE AND ANTETYPE

> "Is there not in the universality of these figures, the proof that at the base of human instinct exists the conscience of a permanent relationship between, on one hand, certain considerations of lines, and on the other, the static and dynamic condition of bodies?"[25]
>
> Cesar Daly

Daly argued that beauty is derived from the discovery of fundamental principles by means of a science evolving towards perfection. Architecture depends on the time and place of its invention as it also evolves towards perfection. An analysis of the expressive forms of the past is a means by which the movement of the permanent essence can be traced in order to project its movement into the future. Form, then, evolves through stages of gradual development. Underlying this gradual evolution, there lies principles and elements that remain constant. The idea of a Darwinian evolution towards superior types was, with few alterations in tone, reinterpreted and put into the service of Le Corbusier's thesis. "There exists a new spirit. Industry, overwhelming us like a flood which rolls toward its destined end, has furnished us with new tools adapted to this new epoch..."[26]

The danger in this approach, particularly in a period without a strong sense of its own identity and values, lay in the production of an architecture of eclecticism. For Daly, this was seen as a necessary stage of development that would inevitably be abandoned once the true direction of the future would establish itself. The certainty of progress would guarantee the eventual triumph of the best, as superior standards would emerge from the chaos of competition.

For the avant-garde, the idea of the inevitability of progress was precisely the focus of their doubt and uncertainty. The "art for art's" sake of eclecticism appeared to be diametrically opposed to the new discoveries of Freud regarding the nature of the unconscious and the relationship between Art and Society. For the Surrealists and artists of Dada, all literature and art was an "alibi" and a "lamentable expedient", since it was directed toward the maintenance of a repressive illusion. The impasse would be ended if the artistic impulse could be directed back to everyday life, toward found objects, chance encounters -- the creation of each day as a work of genius. The only true art would be life itself.

Amidst the struggle among the avant-garde, Le Corbusier distanced himself from Dadaism and Surrealism and proposed a new movement -- Purism -- based on the inverse of Daly's paradigm. Superior standards do not emerge from competition, he argued, but rather, "When a standard is established, competition comes at once and violently into play."[27] The law of natural selection would produce the basic 'object types' such as the wine bottle, the pipe, the flask, etcetera. They would possess a certain "anonymous dignity" since they would not have been produced by an individual effort but rather through "the best efforts of thousands of men converging towards the most economical and certain shape." Architecture was to be purified of the contamination of personal interference and convention by identification with the impersonal and universal in civilization.

Le Corbusier's lifelong struggle to submerge individualistic art for the benefit of universal art reflects his search for an architecture that was trans-historical and non-conventional, while at the same time poetic and inspired. It was this love for the impersonal that never quite allowed him to come to terms with the idea that convention itself, with its inevitable "pettiness, provinciality, subjectivity and snobbism", might be universal as well.

CONCLUSION

> "Art is a deep love of one's ego, which one seeks in retreat and solitude... It is a solitude that one can struggle with the ego, that one punishes and encourages oneself."[28]
>
> Le Corbusier

As with Nietzche's Superman, Le Corbusier had to master his precursor/

opponent's power and ideas, before he could go on to destroy them in order to resynthesize them. This destructive/constructive pattern can be seen to unfold in a three phase movement of: Identity, Break, and Return, relative to the prior tradition.

Identity: In the first phase, the Enlightenment cosmology is reaffirmed in which Architecture is a narrative record and mimetic representation of society's relationship with the Natural World. Le Corbusier restated and defended this position with brilliant forcefulness, but at the same time, the text of Vers une Architecture reveals a profoundly felt anxiety.

Break: In each case, the constraints imposed by the new dominance of the aesthetic and technical avant-garde reveal the limit within the original tradition; architecture no longer acts directly to mediate between society and the universe.

Return: In each case, Le Corbusier proposed an architecture that was more concerned with its own limited objective. If architecture could no longer interpose itself between society and Nature, it must become more self-referential as an architecture about architecture with an existence outside, yet reflective of, its inescapable origination.

What emerges from Vers une Architecture is not a coherent resolution of the contradictions inherent in Modernism. What emerges instead, is a vision of architecture as a defensive process in constant change and engaged in a continuous debate with itself as well as with its precursory tradition.

Hannah Arendt tells us that political thought as a Realist tradition extends from Plato to Marx and ends there. It can be argued that moral psychology as a tradition goes from Plato to Freud and ends there. Architecture as a tradition has no Marx or Freud, but Le Corbusier came closest to that end-stop position. His architecture paradoxically breaks with the past in order to extend it, but at the price of narrowing and internalizing the tradition so that subsequent attempts to go beyond Le Corbusier have not as yet succeeded.

Layout: Eric Stein

NOTES

1. Le Corbusier, letter to Charles L'Eplattenier, 1908.
2. Richard Rorty, Philosophy and the Mirror of Nature.
3. Le Corbusier, Vers une architecture, p. 23.
4. Manfredo Tafuri, Theories and History of Architecture, p. 17.
5. Joseph Rykwert, The First Moderns.
6. Le Corbusier, Vers une architecture, p. 18.
7. Leon Trotsky, Literature and Revolution, p. 200.
8. Le Corbusier, Vers une architecture, p. 19.
9. Jean-Marie Perouse de Montclos, Etienne-Louis Boullée, p. 38.
10. Le Corbusier, Vers une architecture, p. 31.
11. Jean-Marie Perouse de Montclos, Etienne-Louis Boullée, p. 10.
12. Le Corbusier, Vers une architecture, p. 21.
13. Charles Jencks, Le Corbusier, p. 174.
14. J.M.L Durand, Précis des leçons.
15. Le Corbusier, Vers une architecture, p. 89.
16. Ibid, p. 13.
17. Ibid, p. 33.
18. Ibid, p. 72.
19. Ibid, p. 102.
20. Marc-Antoine Laugier, Essai sur l'architecture.
21. Le Corbusier, The Modular.
22. Le Corbusier, Vers une architecture, p. 9.
23. Ibid, p. 23.
24. Ibid, p. 195.
25. Cesar Daly, "Du symbolisme dans l'architecture", Revue, Vol. 7.
26. Le Corbusier, Vers une architecture, p. 12.
27. Ibid, p. 124.
28. Le Corbusier, letter to Charles L'Eplattenier, 1908.

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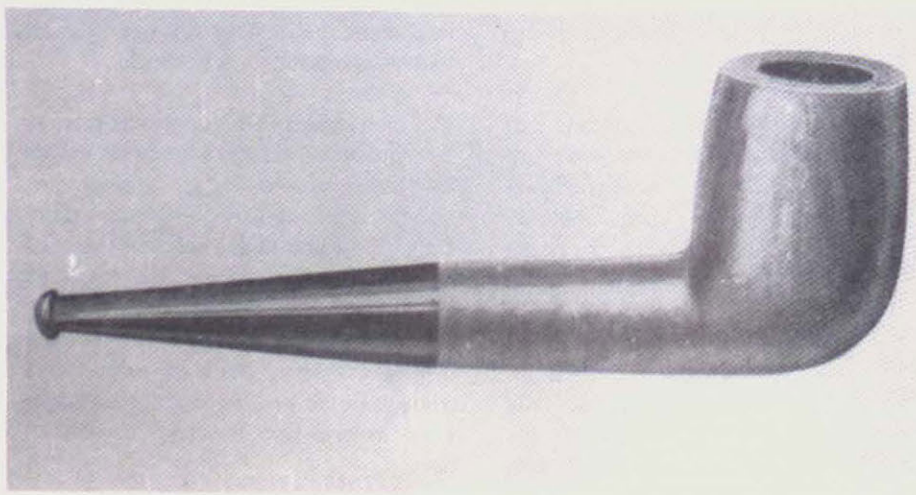


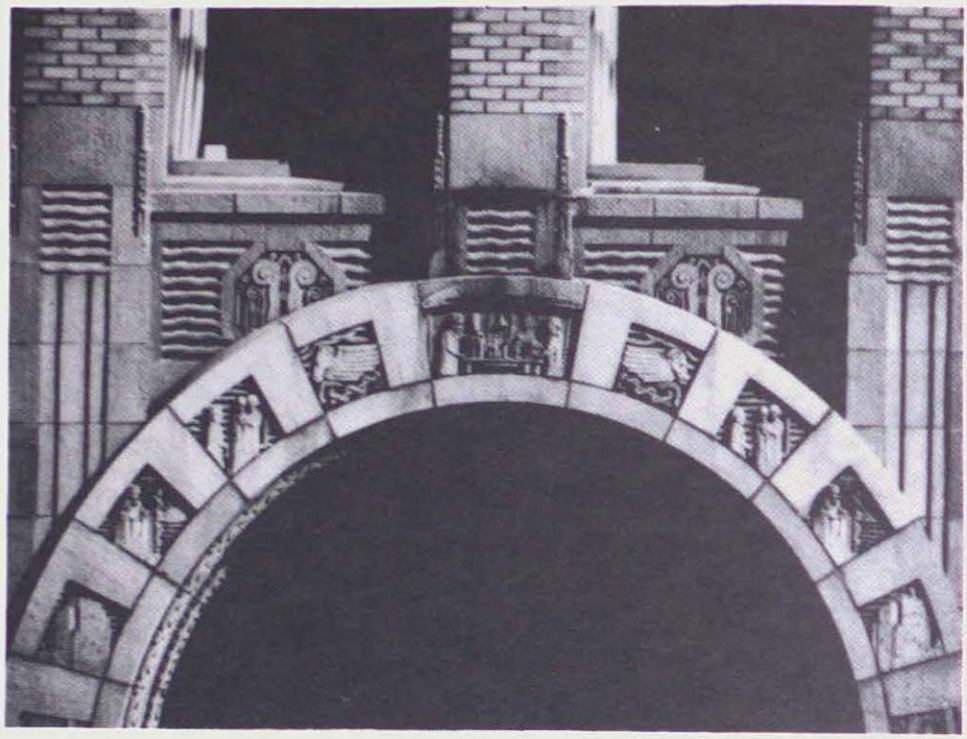
Florence is a Gargoyle

by Arthur Allen

Hopefully the Wrecker's Ball of the Vancouver Urbanarium celebrations has created a magic spell powerful enough to protect the Medical-Dental Building at Georgia and Hornby Streets, but if it has not, and a real wrecking ball goes to work, the sight and sound of shattering terra-cotta ornament will be a very painful experience. The glazed clay decorations of the Medical-Dental Building, along with their contemporaries on the popular Marine Building, are in a class by themselves, and are widely known as excellent examples of Art Deco ornamentation.

The Medical-Dental ornaments are worth preserving on grounds of style, delicacy, and visual delight alone. To me, however, it is the symbolism and meaning of the clay cast figures that is most intriguing. It is the

Florence is a Gargoyle



story told by the ornaments that is unique to this building; a story that makes preservation of the building and its ornaments so worthwhile.

I understand that when the building opened for business in 1927 it contained a small hospital unit that continued in operation until approximately 1960. I also understand that when medical and dental staff in the building first saw the nine foot nurses high on the corners of the building, with that peculiar humour common in their profession they promptly named the nurses "The Rhea Sisters... Pya, Dya, and Gonna!"

Personally I prefer to call the nurses "Florence". Actually they are dressed in uniforms of World War I, not the long gowns worn by Florence Nightingale of Crimean fame. I call them Florence because they are indeed gargoyles -- placed in 1927 to remind us that it is now the wonders of medical science, not the powers of Medieval magic, that will prevent evil spirits, i.e. disease, from entering a building.

For some years, too busy to meddle in such things, I did not pursue this idea in detail, until I read an anthropologist's account of house decoration among primitive peoples of India. The anthropologist, Tore Hakansson, contends that people decorate body orifices: eyes, ears, noses and mouths, in order to deter the entry of evil spirits. This practice, says Hakansson, is extended to architectural orifices: doorways, windows, chimneys and vents.

I immediately went to the Medical-Dental Building to inspect the entrance -- and was astounded! The leather brown terra-cotta panels that decorate the archway over the main entry on Georgia Street contain a fascinating series of pictographic messages. Starting at the top of the arch, the panels depict:

Florence is a Gargoyle

-- a keystone panel illustrating a medical laboratory where science brews its modern potions.

-- on each side of the keystone, a panel illustrating a horse's head, with wings, and a caduceus, a rod with an entwined serpent, the symbol of the Canadian Medical Association.

-- next, on each side, a panel showing a scene of higher learning, a lecturer speaking, presumably to medical students.

-- fourth, panels showing families in prayer, with a clergyman under a cross.

-- lower panels show further scenes of Greek mythology, Christian worship, and medical science.

-- finally, at the bottom of each side of the arch, right at eye level where I had walked so often without seeing, there are two large panels, each depicting another caduceus. In these cases the symbols show rods, each with two entwined snakes.

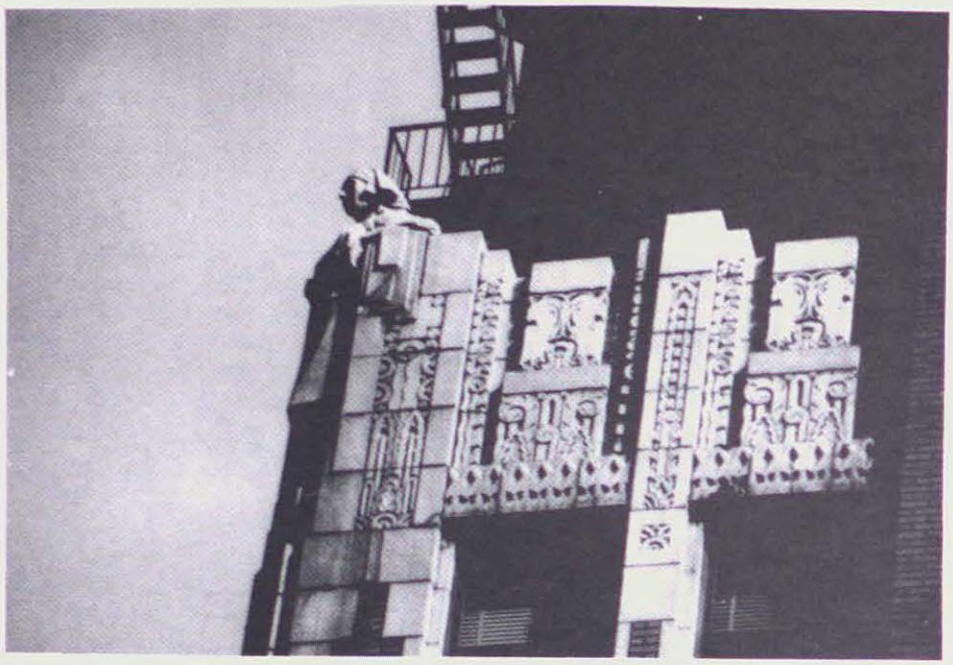
The message was suddenly clear! In case of illness, try medicine, prayer, and magic, in suitable proportions!!!

As usual I left the building quite pleased with my new perception. It wasn't long however, before a nagging doubt appeared. While photographing ornaments of other old buildings in Vancouver, I had found numerous examples of the caduceus, most of them rods, with two serpents coiling up the shafts. The old Vancouver coat of arms carried a double serpent caduceus, which may still be seen on the Burrand Bridge, and over the entry to City Hall. Several old buildings of the Bank of Commerce still display it, for instance at Main and Pender. The single serpent caduceus may be seen on the Academy of Medicine at 10th and Burrard, in the concrete mural by Beatrice Lennie showing Hippocrates with his staff and pet snake.

Again my curiosity deepened, and I looked up a handbook of Classical Mythology, and read on.

It seems that the caduceus with single serpent is appropriate to Hippocrates, allegedly the father of modern medicine, and to

Florence is a Gargoyle



Asclepius, the great healer who was able to revive the dead, a feat by which Zeus was not impressed. The caduceus with two snakes however, was developed when Apollo gave Hermes a rod, or wand, in exchange for the lyre, which Hermes had fashioned from a tortoise shell. The story goes that one day Hermes placed the point of his wand between two fighting snakes, whereupon the serpents promptly coiled themselves on the shaft, where they remain to this day.

At this point I was still confused, until I read more about Hermes. That ancient figure was very busy, even for a God. He was messenger of the Gods, guide of the dead, God of wind, speed, navigation, increase of animals, manual skill, oratory, and God of travellers, commerce... and of thieves.

Again I understood! Hermes, and the double serpent caduceus, are the symbols of money and commerce, of bank vaults and of robbers! How could such a symbol be mounted at the entrance to a place of mercy, healing, and of charity? Truly, it must have been a mistake... or did a sculptor have his/her tongue in cheek while modelling the double caduceus of the Medical-Dental Building?

What can be done? ... Possibly like the Puritans of England, we should remove this badly mistaken symbol. If we do however, to be fair we ought to remove the head of Hermes from the Hotel Vancouver; Hermes was God of travellers, but also of thieves. We should also find and remove the four Jolly Rogers on the Marine Building. How could anyone dare to place the skull and crossbones on such an eminent citadel of enterprising commerce and honest hard work?

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Symbolism and its meaning in architecture:

An Interview With Dr. Alberto Perez-Gomez

by Tony Barake

Dans cette interview le docteur Perez-Gomez discute du symbolisme et de son lien avec l'architecture.

The Fifth Column: In your book Architecture and the Crisis of Modern Science, you write of science and of the scientific attitude causing a crisis in architecture. Am I misinterpreting you?

Alberto Perez-Gomez: What the title of the book refers to is a crisis in science itself, and in the expectations which we have of science, not so much that one is the cause of the other. Yes, one can speak of the crisis of values, of our ecological or economic crisis, but that is not really what the title of the book implies. I even had a different title for the book in mind.

TFC: What did you have in mind ?

PG: Oh, something about geometry and architecture, a lot more humble in a way. While the title of the introduction was "Architecture and the Crisis of Modern Science", MIT press suggested it as the title of the whole book. It is certainly the source of my whole historical position which in turn comes from Husserl, perhaps the father of continental European philosophy. Whether you look at structuralism or, even later, continental post-structuralism or existentialism, all of the well known authors owe him a lot. The title is really a paraphrase of Husserl, and what he means is that somehow the world of our experience can no longer be accounted for by scientific systems; that something happened in the beginning of the 19th century that made science truly autonomous, so that there is a link which is broken between the universes of discourse, or the syntactic systems of the different sciences and the world of our experience.

TFC: Was that break perhaps due to the ever increasing demands of the empires of the western world of the 19th century, where the need for specialization became necessary to take advantage of the fast growth of technology?

PG: This business of specialization is one of the causes, but I would not go so far as to say that it caused the crisis. You see, that is where Husserl gets very interesting. He doesn't reduce this whole problem to material forces. It is easy to see the material forces. These are the kinds of things that Peter Collins talks about. What Husserl is saying is that there is a mental dimension to all of this, an intellectual dimension, that the origins of this transformation are not that recent, that they go back to Plato. What happens in the early 19th century is that intellectual tools are developed which allow for this arrogant control and domination of the world finally to take place, tools that in fact did not exist before. That is why I am so interested for example in the geometries, in this change from Euclidean geometries first, to descriptive and projective geometries and finally to non-Euclidean geometries. Because there, Husserl points out, that the

ground of intuition finally disappears. It is very clear if you read Ortega or Husserl, that without intuition, without the idea as image it is impossible to do anything in Euclidean geometry.

TFC: You are talking about the distancing from the world?

PG: Yes, the geometry is really "of the world". And you need to acknowledge that the point of departure of geometry is intuition, and, therefore, it is not precise. It is really part of the primordial, ever-changing realm of human existence.

TFC: If Plato started this distancing, where ideas became entities, were things more unified before Plato in your opinion?

PG: Yes, you could put it that way in reference to pre-Classical Greek or mythical cultures. And Plato himself, mind you, was very obsessed with the notion that ideas inhabit the world, the world of experience. This is not as simple as it seems. What has in fact happened in modern science is what one could call a perversion of Plato. Plato's own writings are still deployed in the universe of myth. So the roots of modern science are there, but there is a perversion in this inversion of priorities where certain mathematicians would still believe that numbers are more real than the stuff of the world.

TFC: Yes, granted, but as late as the 19th century, when physicists were saying that there was nothing left to discover, they still believed in the Ether, they still believed that light travelled through some medium, it was intuitively impossible to think of emptiness. When did this total abstraction you talk about occur?

PG: Well I'm not sure. It's a question of where you draw the line. I do believe that the big break has something to do with the industrial revolution. These tools that I'm describing, particularly descriptive and projective geometries, have a lot to do with it. I mean projective geometries already allow you to do geometry with algebra.

TFC: This distance is necessary to maintain the world as it is. The world has become so complex that to deal with it in a more holistic way would require vulgarization. The specialization is a phenomenon related to the sheer quantity of information to be dealt with.

PG: This is only so if you insist on assigning to science the only legitimate "knowledge" of the world. In art and poetry, you can (and must) deal with the whole. What appears to have happened in the beginning of the 19th century is that philosophy becomes also specialized so that all the questions that concern the human being as a person, which were previously integrated into the endeavors of science, become separated. Furthermore, you have to realize that a clear differentiation between cosmology and history. The problem can be taken back to the Greek times as the first kind of initial break, but if you look at the history of Western culture, there is always a coherence between history and cosmology. In the Renaissance, for example, looking at the writings of Alberti, he substantiates through stories, through history, the cosmological outlook. There is no break and this appears to us terribly artificial. As far as he is concerned, the whole realm which is external to the human being is quite homogeneous and consistent.

In the 18th century, the break starts to become really apparent with the work of Vico particularly. He makes the distinction between history as the normative science and Galileo's, Descartes', and Newton's position, which is of course much more dominant in Europe. Somehow the

natural sciences, particularly astronomy and then physics, become the normative sciences. This model will then be extrapolated to biology, psychology sociology and the rest. Only the arts, and particularly literature, inherit thereafter the ontological aspirations of traditional knowledge.

TFC: Why that tendency to give the natural sciences so much authority?

PG: This is of course a very complex problem. But I think one of the issues is, first of all, an obsession for the invariant. This is, of course, very human because the invariant is given in experience and we always have a tendency to fall in love with it simply because we are mortals. At another level, it has to do with the technical interest. The fact is that if you don't make it happen,the scientific "assumptions" about the world of everyday life are impossible to believe. You know Galileo's experiments are completely in his mind. When he talks about inertia, about bodies that don't change when they move, the concept that motion is a "state", is a weird notion if you think of our experience. So in order to make this believable you have to make it happen. And thus, with this mentality of modern science, emerges a technical interest which implies increasing domination, increasing control of the physical reality of man.

TFC: But what about Aristotle with his thought experiments? He seems to have been the final authority for people of the Middle Ages. Why all of a sudden this need for making it happen with machines, with objects ?

PG: While Aristotle is interested in categories, he is always very concerned with being close to experience, being very respectful of the stuff of the world as given. He is troubled by this very much. In this he is very different from Plato. Plato is much more impatient. And really as far as the two philosophers are concerned in their own time, that is the difference. It is one of patience versus impatience. Because Plato himself would struggle with this notion that even the supreme idea is given in the world of experience.

TFC: Yet, both have intuition in common. At some point this intuition is questioned. The questioning of intuition comes with the miracles of modern science, the new machines etc... it works...

PG: It works; well that is what makes it so powerful. We are also giving up a lot. This is similar to the fascination with the invariable. One could say that in the original human condition, even in mythical times, there is this desire to control, and that is of course associated with magic. This magic, which has something to do with man's problem of dwelling, makes man different from the animal: the animal adapts itself to the environment, is in a sense part of the environment, whereas man really has this problem, he is always finding himself "against" the environment. This existential, fundamental condition of human beings, is, therefore, from the very beginning, nutured by the necessity of magic. But also from the beginning, you have white and black magic. You have white magic, a reconciliatory kind of magic, which becomes religion. It respects the world as given and tries to deal with these inadequacies. There is also, however, the other kind of magic, black magic, with which man asserts his individuality and tries to dominate. It's very clear that technology supports the aspirations of this black magic which, in turn, becomes indispensable for the science to be proven. So one thing feeds on the other, gets perpetuated.

You have to remember that this fascination with the whole process is really a 19th century phenomenon. Even in the 18th century people would

be terribly afraid of thunder, for example. These things we take for granted, but it is actually quite recent that people become so obsessed with technology and that technology becomes like second nature.

TFC: The beginning of the Modern movement in architecture with its obsession with the new materials and the creation of new form, that kind of mentality is a reflection of this power. Let's deny the ancients, let's create a new classicism, let create a new order. How and why does this lead to problems in architecture?

PG: Heidegger talks about this problem in his essay on technology. He sees the problem of technology as not just machines, but as the problem of giving the means more importance than the ends, so that the whole process of human life becomes one of efficiency. Even the values of hedonism - maximum pleasure and minimum pain - are technology in action. It is a whole mentality that is deeper than our political ideologies and conditions of our "modern" experience. But, Heidegger clearly states that we cannot be nostalgic about this, and he tries to formulate a positive attitude: we have to take an outlook which releases us towards *things* which are *not* the objects of science. First of all, we have to relearn how to perceive, how to see, and that the *thing* is always more than any theory of science would allow us to conceive of it. The contemporary arts have been very concerned with the issue of what *is* the thing. So there is certain hope there.

Breton talks about this concern in his little article on the crisis of the object. He says, no matter how much we dissect, take apart or theorize, about water, for instance, water will always be more in our experience. That is the ground: our embodied perception of water. That is where meaning is ultimately given. This is much more crucial than any reduction, linguistic or mathematical, or of any order which we may disclose. That is one aspect of Heidegger's statement. If you accept it and follow it through, the whole problem is one of learning how to perceive and how to bracket all of our scientific prejudices. That is one way: a renewed awareness of knowledge through perception as elucidated by phenomenology.

The other aspect of Heidegger's statement is his request for an openness to mysteries. Those are his words. This means essentially coming to terms with the fact that no matter how complex the world seems, at some point in time this reconciliation of personal experience with the universe of thought is necessary for us to make sense, as human beings, of what we do in the world. You can keep on postponing it, and that is in fact what Husserl calls the crisis.

Today we seem to be able to keep on postponing it. We don't know how far we can go. Human nature is extremely fragile, yet extremely resilient. You have these stories about people going crazy in captivity for two days and scientists or writers that can spend forty years in captivity, inventing whole worlds in their minds. So this is the problem. We don't know how far we can go, but we must realize that this openness to mystery is a condition of humanity, of coherence of human nature. It is a question of personal reconciliation. It is also a question of bringing back the traditional concerns of philosophy in a transformed way (because it is not even possible to bring them back as metaphysics or anything like that; that's finished). We must bring them back into what we do and how we articulate what we do as architects.

TFC: Yes, but the made world is what I was talking about in terms of the complexity... we've made a world that is so complex that becomes difficult to deal with.

You are talking about the distance between the symbol and the experience, since it is impossible to really describe completely what is around us. Experience is there, but the descriptions will always be faulty. They may be language, pictures, whatever. Now architecture, being something one thinks of, or designs, and then makes so that it can be experienced, makes that bridge between the symbol and reality. So my question is: since we have this technology around us, and since it is something that we've made, is it not natural to want to glorify it and put it in our architecture?

PG: Symbol is not a secondary order of reality. Symbol, if you are going to understand it from a phenomenological perspective, is what makes our embodied engagement in the world human in the first place; that is, what differentiates human perception from animal perception. Now let me try to give you a simple example that comes from Merleau-Ponty's Structure of Behaviour. He meditates upon an experiment that Koffka, a well known psychologist, did with apes.The animals are capable of taking a branch and using it as a tool to obtain a banana placed high in their cage, for example. What happens in the world of the animal is that the branch has actually stopped being a branch to become a tool allowing the hungry animal to get his fruit. This looks similar to what a human being would do, but the fundamental difference is that for the human being, the branch doesn't stop being a branch when you use it as a tool. The thing is open. It has an openness, so that in the way the world is given to us, there is always an openness, something Merleau-Ponty calls the invisible dimension of human experience. The visible is given while the invisible is that dimension which is always open and can never be closed. It is never a one-to-one relationship.

That is the quarrel that phenomenology has with semiology. It is not that sign and signifier don't exist, it's the problem of the one-to-one relationship, which is an obsession today, say at the popular level in terms of talking about meaning, but which is really a perversion of the very nature of human experience, where you don't really have to think about it. The world is given with that openness. Then taking this one step further, it could be stated that the world is given symbolically.The symbol is of the world. An example: the pair of compasses placed in a coat of arms in the main square of Brussels is a symbol for the guild of the Masons, right? The compass is not only a compass; it is a whole world, a whole world that is not only the whole world of work of the mason, but that is the world of tribute to God, and building the city of God, and the reconciliation it entails. It's really a whole universe that is embodied in the very real compass. So there is nothing arcane or unreal about the symbol. The symbol is of the world but it allows man to effectively belong to a reality that is greater than the specificity of the symbol and to transcend the present. That is one of the fundamental issues of symbolization, both in art and in architecture. That is the whole point. You are not condemned to the individual present, to your mortality, but you can aspire to belong to something and obviously larger.

TFC: So if I understand you, the symbol is what occurs when we link the syntax and the semantics. Does that not constantly change depending on the context?

PG: Yes, that's part of its mystery you see. It changes constantly and you are right in saying that this aspect is one of the problems today, in a world obsessed with syntax. What can we do as architects if we are concerned with symbol and with semantics? This is a very real problem. On the other hand, if you understand how we actually perceive the world, the nature of human perception, and if you understand that at its very root it is symbolic, then there is always hope, because things are always more than these reductions.

TFC: Yes, but we are in a time when symbols are changing very quickly and architecture, being something that hopefully lasts, is put in a tenuous position by this view.

PG: Yes, I wouldn't disagree with you. This has led to my concern about theoretical projects which you probably know about, projects rooted in a poetic normative. These represent a priviledged vehicle to maintain in architecture the importance of symbolization as a cultural dimension. I think that if we don't acknowledge that this is our only way of dealing with the mystery, then we are condemned to nonsense; we are really condemned to being totally disoriented. So that is the alternative.

TFC: So in the architectural research that you are doing, and others like Hejduk are doing, do you see it as a generator which can lead us to built architecture, or do you see it as standing by itself? Do you see building as something feasible, or have you separated building and architecture at this point?

PG: No, I have not separated it completely at this point. I could also understand "building" in its traditional sense and emphasize the opposite: that a condition for architecture is that it could be *constructed* in the same way, by the architect's *own* hands. In the sense of conventional practice, I do believe that it is particularly difficult to "build" architecture in the industrialized world, and that it's probably harder than it ever was before. But that doesn't mean that it is not absolutely crucial to try to do it. I guess I am less worried with this problem because I do perceive that the historical reality of architecture has always shifted. You know, for example, that there is a lot of ephemeral architecture that we don't even have access to, canvas and wood architecture which was in its own time absolutely crucial. It may well be that architectural intentions (which I would describe as this symbolic ordering, the actual taking measure of the world rather than appearance) may be that inhabiting some other realms, like film, painting... things that we would call by other names. Perhaps this is really the condition of the modern world, that architecture is very seldom embodied in the realm of, as you might say, permanent "buildings".

TFC: Coming back to architectural research... another common approach is to go back to precedent, and from it develop architecture. Now in that sense, there is also the notion of history, because a precedent is the link to the past. This is often not a generation of new ideas but a taking of old ideas and trying to move them forward. Do you see any hope in that kind of approach?

PG: If you take the precedent of a Renaissance villa, or whatever, that is only the residue of something, that is not the architecture. It is just like a shadow, a footprint. The historical phenomenon is more complex than that, and I would claim that the problem with that approach is that one is objectifying or cannibalizing history. Dealing with history demands that you respect it for what it is, for how it reveals the mystery in its own time. You don't destroy it, classify it or tear it apart. You actually understand what it means in its own time. That is why I am fascinated with history, because it is really *all* we have.

By the same token, you have to understand that you cannot take history at face value. You really have to understand its value, what Ricoeur calls "the world of the work", in order to be able to come to understand our world, and hopefully go from there. You would then come to a self-understanding by being open to the world of work. That is the issue, that you don't cut, objectify, or transform, things that already exist. I certainly believe that you need history to put forward a coherent story of your own, to come to terms with the problem of here and now, because that is all we have. But scientific distortions are very dangerous. You have to understand that attitudes like a concern for typology and precedent are often obsessed with that which is invariable, whereas, in fact, what is constant is the change itself. So rather than this obsession with the invariable, we have to realize that we are indeed in a different world, and

what we learn from that work is how it reveals a certain mystery in its own time, how it symbolizes in its own time for our present.

TFC: This reinterpretation, can it not occur simply by building? For example, the PoMo architects that are, as you say, cannibalizing history by taking pediments and putting them over doors, in a way they may be mediating, taking the modern technique and mediating them with the forms of history. Just by building, the meaning comes out of the act, comes out of doing what they are doing. I'm also taking an extreme position to bring out the point. I'm basically asking whether it is necessary to be so introspective about this issue. We can't build anything other than what we can.

PG: You put it very well, yes. It is like a circle, but my straight answer would be yes. It is very important that one is conscious because one has to articulate in words what one makes, and that is ultimately what matters; that is ultimately all you know as a human being. Having said that, I must insist that I understand very well that given the limitations set by technology, developers, fashion, window details, economics and all that stuff, what you end up building is very easily dateable. However, I still believe that the intention is crucial, because that is all that one can really speak about. The rest is part of the order of history. You are submerged and born into it. But somehow, if you look at the historical tradition of our 2000 years of architectural history, there is clear evidence, I believe, that this consciousness means something. The architects that have been conscious of their place and time, and have managed, in fact, to articulate it in words or in explicit or implicit theoretical positions, are certainly aware. The architects that are "aware" of their time and place are the significant players that eventually become the leaders and makers of our "tradition". Those are the real architects in a sense. So if we are concerned today with architecture and with the dilemma that is ours, one has to somehow look at this and believe that however difficult it may be to accept that thinking and doing are intimately connected, however difficult that is from our objectivistic point of view, regardless of how much we know, and regardless of the limitations upon what we can build, the coherence of real theory and practice will make a difference. If we are going to save architecure and reconnect it to "practice", if we are concerned at all with somehow making buildings, large rather than small constructions that embody that symbolic intentionality, the problem of self-understanding or establishing a critical distance between what we do and the world becomes an important question.

So, again, the short answer to your question would be yes. It does make a difference. Particularly from the point of view of our scientific understanding of perception. This is difficult to accept because we readily and uncritically accept that somehow we are like machines, that our hands do something and our thoughts do something else. I am convinced that a mental acknowledgement of the situation would go a long way toward change. That is what happened in history, whether we believe it or not. The mind and the ideas have played a fundamental role in changes, they have not just been material changes. It is always a question of mentality not only of materiality.

TFC: Concerning your point about form and meaning, have we not opened a Pandora's box by discovering this whole notion of syntax and semantics? Is it not an arbitrary division of our perception? Must one not suspend language when one does architecture?

PG: Ricoeur says: there is no symbolization before man speaks, and, therefore, that has something to do with our fundamental perception of constancy in the world, which of course is very close to the world in, say, printed languages. You know the examples that linguists use about, say, primitive tribes : Bedouins that have 30 words for camel, or Lapps that have 6 or 7 words for white, and similarly Inuits with snow. Those languages are still very close to the experience. But it is already a naming, that is what Ricoeur is saying, that somehow one cannot imagine man without language; that is the primary evidence of our perception of the

invariant. By the same token, language is rooted much deeper and Ricoeur is arguing against Wittgenstein, and others who follow him, who would claim that languages are ultimately arbitrary codes, and that all we can have access to are the rules of games. Even lately, post-structuralists tend to follow this idea.

So going to your question, I don't think it is an issue of suspending language when one does architecture, by no means. It's a question of recovering the poetic dimension of language. This is the way Heidegger would say it. Heidegger would claim that man is first a poet and he first speaks poetically. Only later does the word become truly one-to-one with the experience. So it becomes stable and the ground of language which we call prose, we try to refer to the same reality when we speak rather than discover some other modes of reality. I suppose that poetic language would once again take upon itself the task of naming, of articulating what we wish to do as architects, in a realm which is as immediate as possible to the experience. This is why Hejduk is very interested in poetry. I suppose even Ledoux tries to write poetically rather than write scientific prose, as all the people that preceded him did. Those who wrote before Ledoux or Boullée were very interested in a scientific precision of language. They would use a similar language as Newton, for example, to talk about architecture. There was no schism there. But once the schism is acknowledged, then the way in which these architects deal with the problem is to emphatically reject prose in favor of poetry.

TFC: So you are saying that language can be seen as a common ground which can be used in two ways, figuratively, relating to the senses, and as poetry. But as poetry, it becomes non-figurative, as architecture is non-figurative ?

PG: Well there is that dimension, but I would make the difference by saying that, in prose, what is important is the stability, the invariant. The more stable the better; the ideal language would be a kind of mathematical code. This is why modern scientists distrust language. If you have heard modern scientists talk about scientific methodology, they always say, "beware of language".

TFC: But mathematics is only stable because it is internally stable; it is self-referential. And the poetry of mathematics is inherent in the syntax.

PG: This is what structuralists would claim.

TFC: Do you disagree with this position?

PG: I would disagree with that because I think there is no poetry without semantics.

TFC: So form by itself, without intention, is empty? Semantics is the intention.

PG: Yes. I don't think it is possible to reduce poetry to syntax. In poetry, there is not a direct relationship with the experience but a metaphoric, oblique one which, in fact, reveals and conceals - reveals the truth of the experience by concealing it. It brings about the mystery of the experience. I think that is what art does. Art is always putting forward the mystery that Heidegger speaks about.

TFC: But in a way, art seems sometimes to be a conscious suspension of that prose aspect of our thinking. What I was asking, using the example of mathematics and language in general, was: Is not syntax, in itself, an expression of our unconscious intentions? Is not the way we have learned to think syntactic? Most mathematicians will tell you that mathematics is beautiful because it expresses something of their being by its structure, because mathematics is their thinking. Therefore, maybe to make that rift, syntax/semantics, is a way of dealing with issues, while really they are one and the same thing, or aspects of the same thing, of perception.

PG: You are formulating the most crucial debate going on presently in philosophy and linguistics. Of course, we all know that literature is a world of its own, a world of words that indeed suspends the "prose" aspect of thought in order to *say* the other. The issue, however, is always *mimesis* and representation, of that which ultimately cannot be reduced to concepts/words. The only way to accept that meaning is in syntax is by stating that the ground of experience is inaccessible, so that Truth is ultimately inaccessible.

TFC: This is why Gödel is important in your essay in Carleton Book ("Abstraction in Modern Architecture"), because he proved that you have to step outside the system to understand it.

PG: Yes, for me Gödel's proof is a clear sign of how in mathematics, very clear systems like those, it is not possible to stay within the system. To me Gödel's proof is still a way to look at post-structuralism critically.

TFC: But after Gödel, mathematicians resolved the crisis by saying, 'well, there are many mathematics'.

PG: And all you can do is learn the rules and operate within them.

TFC: Mathematics became formalism?.

PG: This is vaguely the post-structuralist position, particularly coming from Wittgenstein. But the issue that Gödel was dealing with is far more profound than that. What Gödel's proof is all about is the impossibility of operating meaningfully without acknowledging the ground. There are many mathematics, but there is only one ground, even if one only catches a glimpse of it before dying.

TFC: In that same Carleton Book essay, you approve of "the personalization of values, leading to anything goes, as long as it is generated by a genuine discovery of order as a form of self knowledge." You seem to be supporting the idea of structuralism by using the word order. What I'm questioning then is, if the order is personal, where does it link into symbol? The symbol can be personal, but since it is architecture, it has to deal with other people. How do you resolve personal versus general ?

PG: The answer is through the story, the personal story, your theory, your articulation, your understanding which ultimately must come from your own personal understanding of history, what the discipline has been. And this, remember, is the world of the work.

TFC: So the building becomes very linked to the architect.

PG: Yes, that is true, but on the other hand, one has to admit that the nature of symbolization in art is that its always points away from the author. It is a circle that starts with the author. Let's look at an example from history, like Suger or Alberti. It starts with a person, it necessitates a person's understanding and vision, but then the work itself points away from the author as it is realized. The nature of the work is of the world rather than of the author. Artists will tell you this, that what they make, immediately, the moment they make it, is no longer theirs. That is really the difference between a poem that one writes when one is sixteen and a real poem. The former is about oneself, the real poem is not about the author.

TFC: So where is that common ground? Is it language?

PG: No, I think it is the body, and its articulation in the world. Language has a lot to do with it; nothing is given in human experience without it. There is another sphere that Merleau-Ponty talks about, however, the pre-reflective one, which is not secondary, but basic (as he claims quite convincingly) upon which all other "universes" of science, art, dreams, etc., are built. He explains that this is the motor, intentionality, having to do with time. The "motility", the motor engagement of the human body in the world, he believes, is the ground upon which these meanings are constituted; therefore, this is the ground that ultimately makes symbolization possible.

TFC: Is that ground constant, since it is given in perception, constant in time, going from the past to today?

PG: It has certain dimensions which are constant and others which are not. For example, the world of, say, an African tribesman versus that of a Western urban man: the tribesman will run and hunt better and faster that the Western man. So obviously the world in which the bodies are engaged shift and, therefore, the ground shifts. But, yes, there is constancy, so if we can be touched by something like a Gothic cathedral without knowing much about Christianity, it is precisely because of this reason. It is rather funny; on one level it seems obvious while, on another, scientists impose structures on all these things, and the emphasis on linguistics or syntax leads to a complete disregard of embodiment as the ground of meaning.

TFC: But there are layers of meaning and of semantics. In this passage, when you are talking about personalization, you are no longer talking about this common basic layer. This personalization is very much linked with the author, is it not? How does that separation from the author occur?

PG: (pause) ...I am quite worried about this article myself. It talks about gnosticism, and that has to be qualified first since it has a lot to do with modern technology, and its worst evil: the inability to acknowledge that there is anything in the world that has value, and that all can be changed, thus leading man to take the task of salvation as a personal task. Gnosticism also has a positive dimension where the artist also assumes the task of salvation, but through reconciliation. That is what I mean in the Carleton Book article. So the personalization is an attempt to transcend "common sense". Critical distance is what I am referring to. It is that you cannot really go and accept what you are told; you have to establish a distance and make up your mind. And start from there, really to believe that it is your perception and your life and that you have to be responsible for it. And that anything you make in the world ultimately hinges upon that. As you say this is very problematic. The way to self-understanding is always through history and the world of the works. This is what saves my position from falling back to a Cartesian subjectivism. Furthermore, it is obvious that freedom is never absolute. An archeologist from the future would easily date the present even if the artefact he found represented the artist's wildest fantasy. I still believe that if you look at the tradition of contributed by architectural history, this personal taking of responsibility, understanding the world, and "making", from that premise rather than from what is "said", particularly today's common sense of technology, will make a great difference. So if you take our present situation for granted, obviously what you do is not going to make any sense, you cannot take it for granted, and I think that is the issue.

TFC: How does that personalization differ from the eclecticism which was occurring in the 19th century where each architect took things he liked and put them on buildings?

PG: The eclecticism of the 19th century depends on a scientistic vision of history which is in fact very much like post-modernism, where you take stable systems, such as styles and use them in the present. Ascribe to them some meaning, like Pugin did, and then make Gothic in England. That is not really what I am talking about. This personalization is really an attempt to recover the ground rather than a glorification of relativism. It has the danger of leading to anything goes, particularly as a pedagogical premise. I would rather accept that danger, face on, while also understanding that through that personal critique, there is a way out, rather than "eluding" the danger by not trying. I reject any position that pretends to take the legitimacy away from this view of the world, which is what modern science tries to do, as do very many schools of architecture. We are going to tell you how, and this is how, and you are going to do it that way. So what I am saying, is that even though there is a danger of "anything goes", I would rather accept that danger, while realizing that the only way out of the dilemma is through this personal understanding, through history/theory. Thus concerning your question, there is clearly no connection between one and the other. Nineteenth century eclecticism is really a scientistic attempt to deal with the problem of meaning in terms of style. And, in fact, if you look at it very carefully, in the 19th century itself, it is not just that you build in any style possible. These people were very serious about which was truly the best style, the truly meaningful style. In 1824, there was a meeting in Germany asking in which style should we build. So it is very serious; Semper, Ruskin, Pugin were very serious. The problem was the scientistic reduction of architecture, first, to form then to syntax, that is style, and the assumption that somehow

syntax held the meaning. But the concern was genuine in a way. So if you understand that, I would say that the same genuine concern is the one that relates to that first statement. Except today, we cannot first accept that scientistic reduction of meaning to form and style. That, in itself, would be the main difference.

TFC: This seems to lead to the idea of authorship, as something which a style does not have. A style is something which you belong to. If you take a personal point of view, you become the author, and everything is "seen" through the filter of your perception.

PG: Yes even though the author becomes very important, there is always the disappearance of the author behind the work. This is the circle I was talking about earlier. In any true work of art, the work becomes of the world. This is constant throughout history. And the world has shifted; it has been pagan, Christian, modern, but art is always of the world rather than of the person. So that is one level. The other level is how culture perceives the architect, which is the notion of authorship. It emerges in the Renaissance, when the architect himself is perceived as being of greater importance. The act of creation, the making of the work of art obeys this profound rule, and the author disappears.

TFC: So we can talk of symbol as a common thing, not symbol as a personal thing? Can you reconcile both?

PG: It really operates when it addresses that ground. I will give you an example, a difficult one because it is very close to us. I am talking about John Hejduk's work. His work is very personal, but as far as I am concerned, it is very much of the world; it is about technology, our dreams, our fears as modern men. So, in that sense, it is very much of the world. We can perhaps debate this. Some people may not agree with me. You look at the work and you tend to say that this is not absolute. But that is the way that I would explain it. He is very close to us in time and he really addresses problems that are very much our own. Therefore, the work is personal but belongs to the world.

TFC: Why does it become so much more personal in modern times? In the Renaissance, there seems to have been more of a consensus of the symbol, whereas now it is fragmented. Is there not the danger that it can fragment to the point where every individual sees something different and then the order is lost? What happens when we get to the point of fragmentation of symbol, where it becomes a question of my perception versus your perception? Can we still talk of symbols today?

PG: Only insofar as we share a world and share a body, insofar as language is ultimately translateable. It gets very basic, and that is the problem because all the other structures which we are conscious of, all the mental structures, are not part of a whole cosmology anymore.

TFC: Back to structuralism again then...

PG: What is common is that we share all these structures, and different languages, but ultimately they all miss it. That means that there is an opening there for something that doesn't miss it, which is again symbolization, and deals with this very primary question of embodiment, gesture... it becomes quite basic. But I think this opening does remain because we are still human beings, and we still have to acknowledge that there is a mystery in the way in which we operate in everyday life. We may not want to see it, but it is there and as long as it is there that little opening for true symbolization and true art will prevail. What makes this very complicated is that many artists and architects, even those concerned with aesthetics have fallen into the trap of structuralism, and have taken this to be simply deconstructions and developments of syntactic models. They flood the world with junk that usually is not particularly interesting. By the same token, there are things around this planet that are absolutely different, qualitatively different, that speak about things that are more profound, that are not just about the syntax. They are things that we do share.

TFC: So that perception of quality really is the key?

PG: Perception is really the key to this whole dilemma. Because we take so much for granted as to how the world is given to us. Ask your colleagues, 'how do we perceive?'. I'm sure that many of them will tell you that it has something to do with sensations that come to my senses and come to my brain, and somehow their meaning appears. This is the problem, because perception is what architecture is all about, and we have to unthink these preconceptions we have about it. Merlau-Ponty wrote that when what one says about perception is more interesting that perception itself, something is wrong with culture. Unfortunately, whether we like it or not, we are not past this state of affairs.

Tony Barake is a third year student at McGill's School of Architecture.

Alberto Perez-Gomez is the Saidye Rosner Bronfman Professor of Architectural History at McGill University, a position he assumed in January 1987.

Layout: Paul Lalonde

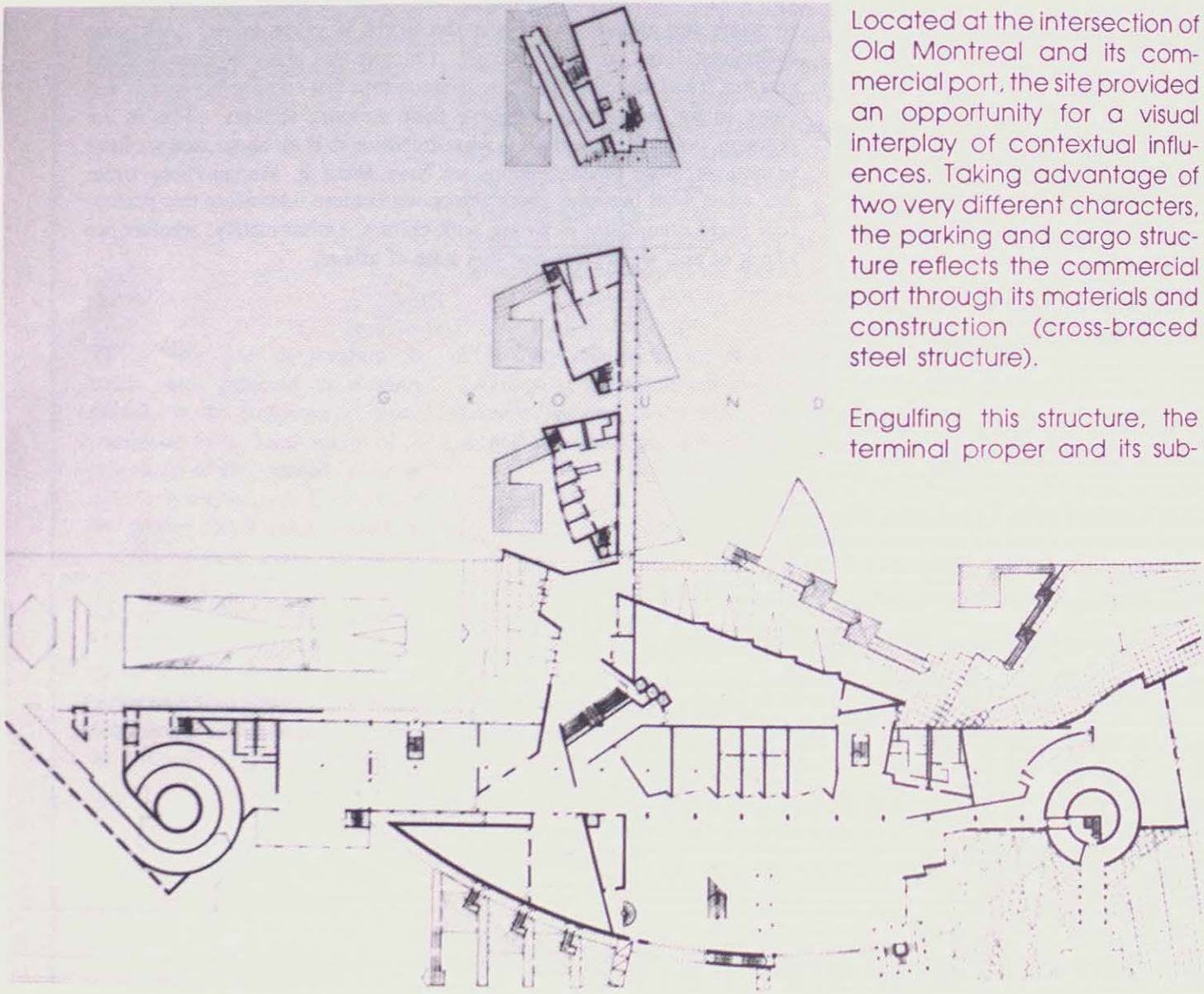
S T U D E N

G R O U N D

The following project is by Lev Bereznycky, a recent graduate of the University of Manitoba. In his thesis project for a passenger terminal in Old Montreal, intricacies in both plan and elevation conjure up images that are not only contextual, but symbolic of the building's function and its waterfront location.

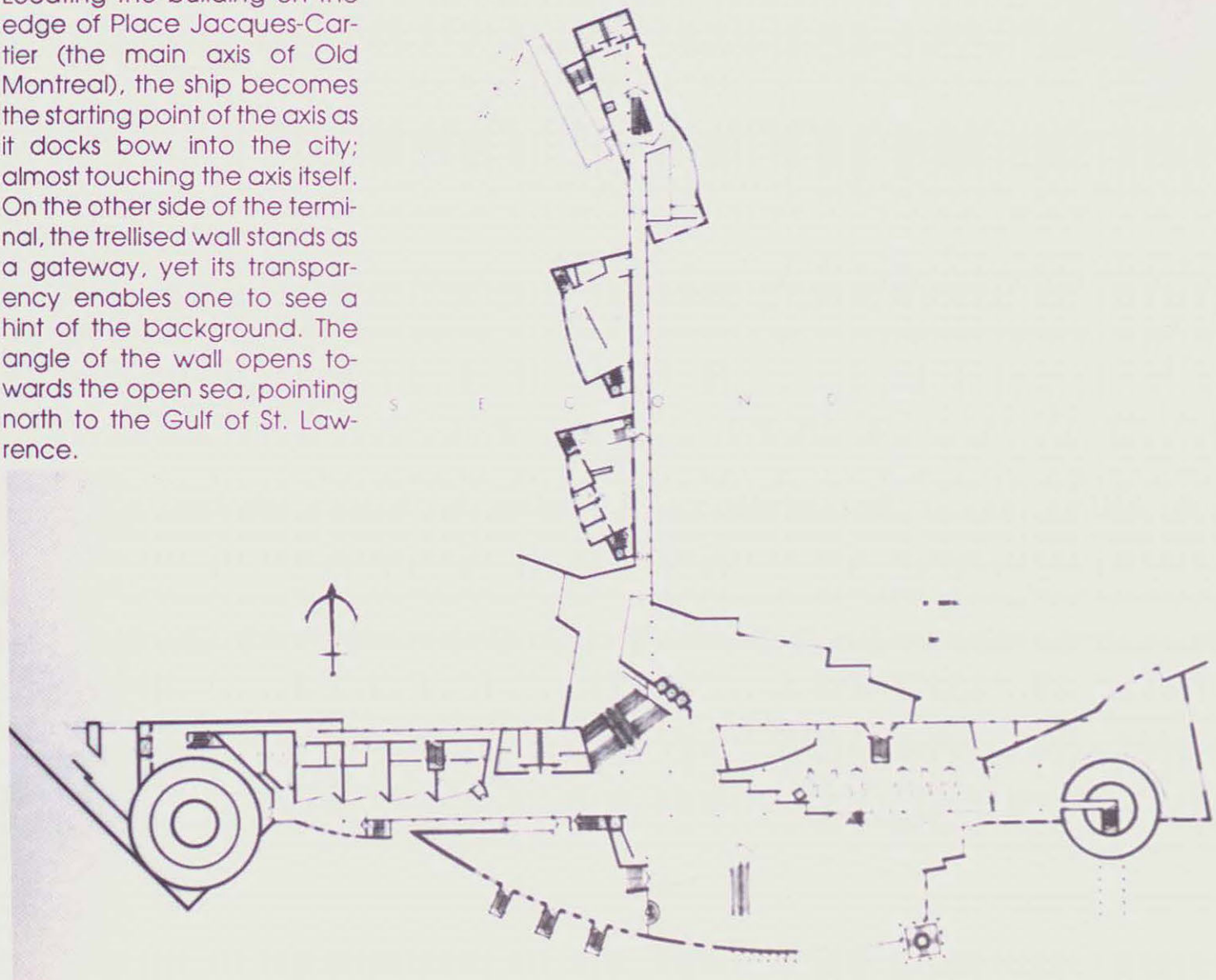
Located at the intersection of Old Montreal and its commercial port, the site provided an opportunity for a visual interplay of contextual influences. Taking advantage of two very different characters, the parking and cargo structure reflects the commercial port through its materials and construction (cross-braced steel structure).

Engulfing this structure, the terminal proper and its sub-



sidiary areas reflect the character of Old Montreal. The west elevation makes use of equally spaced windows facing Rue de la Commune. Along the south wall, the windows invoke a sense of wavelike motion which also continues along the line of the inclined wall.

Locating the building on the edge of Place Jacques-Cartier (the main axis of Old Montreal), the ship becomes the starting point of the axis as it docks bow into the city; almost touching the axis itself. On the other side of the terminal, the trellised wall stands as a gateway, yet its transparency enables one to see a hint of the background. The angle of the wall opens towards the open sea, pointing north to the Gulf of St. Lawrence.



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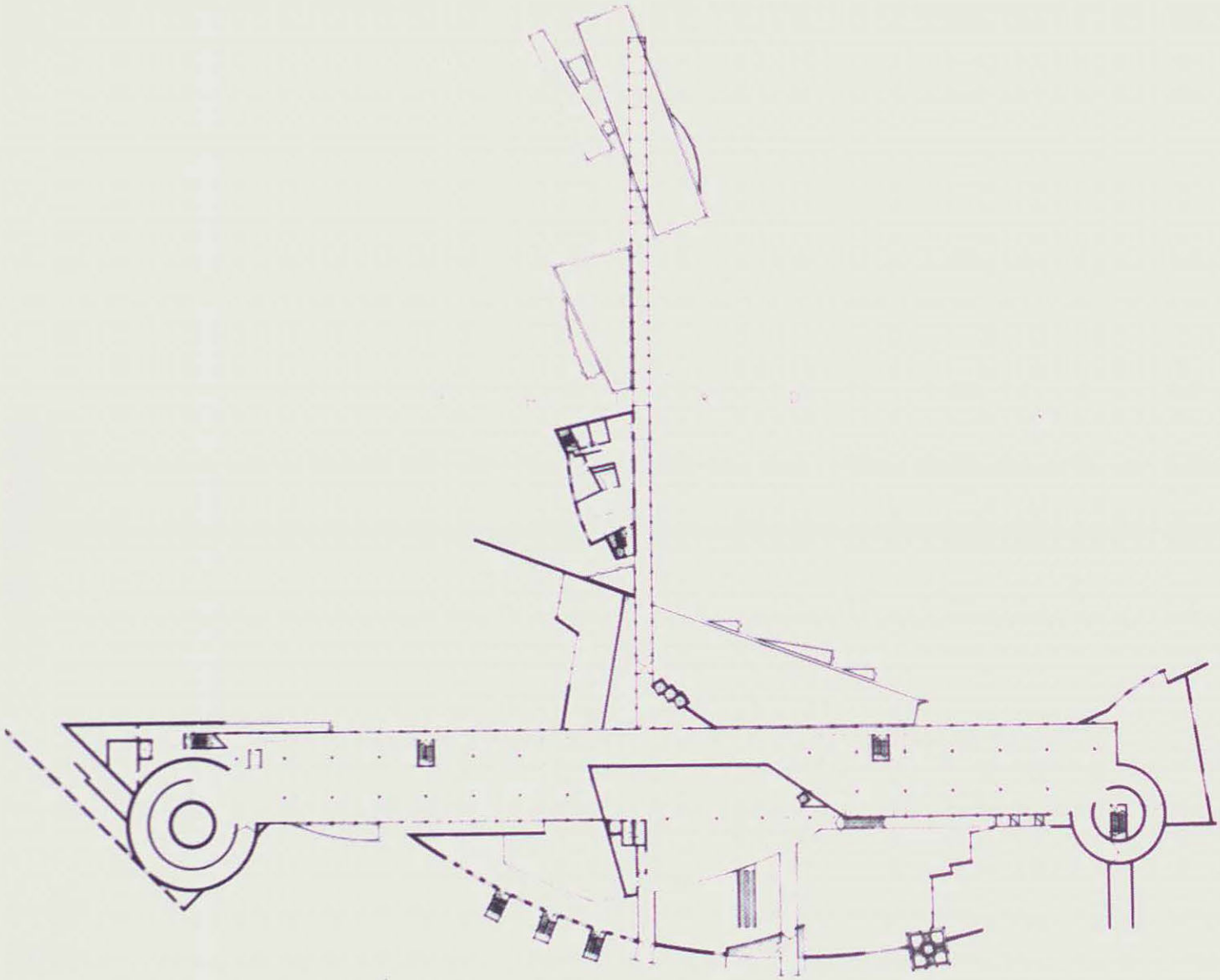

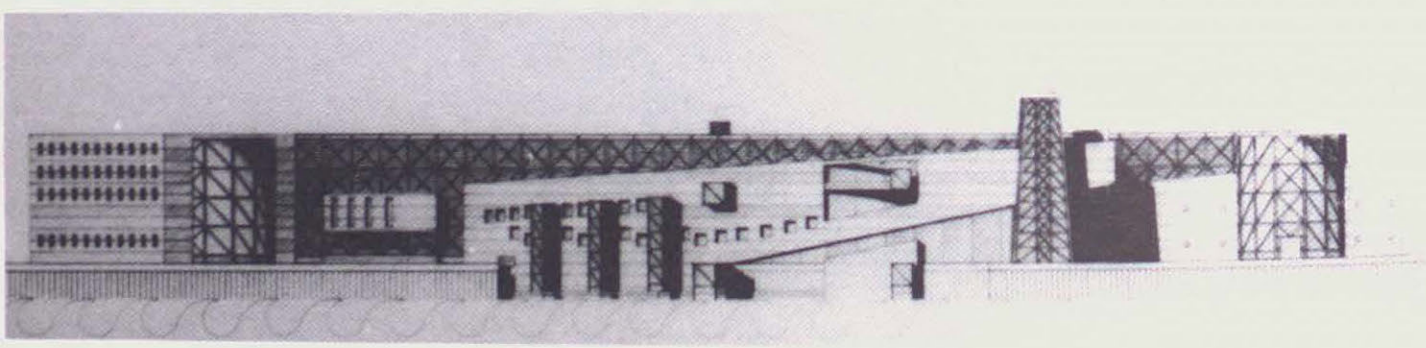

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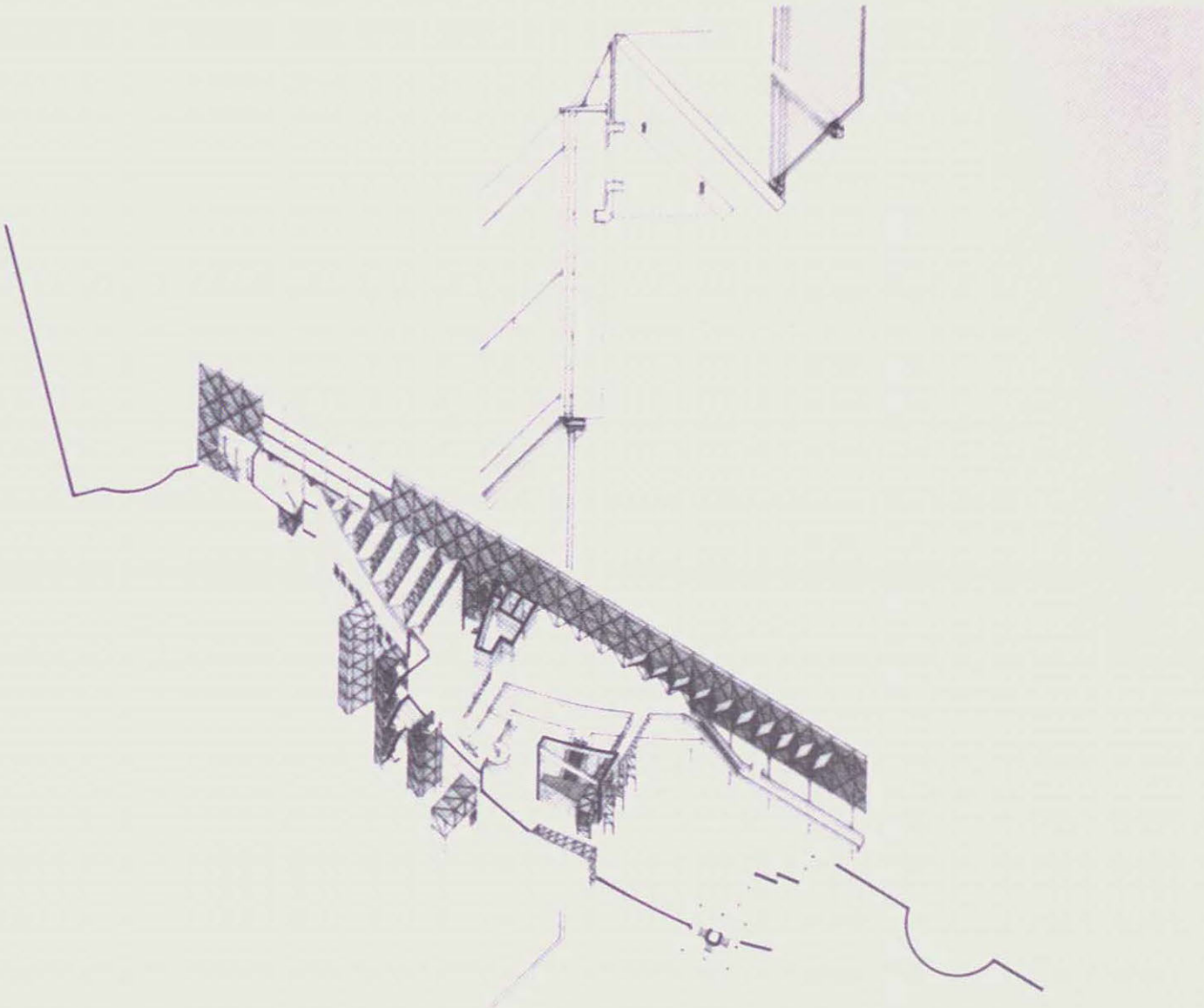

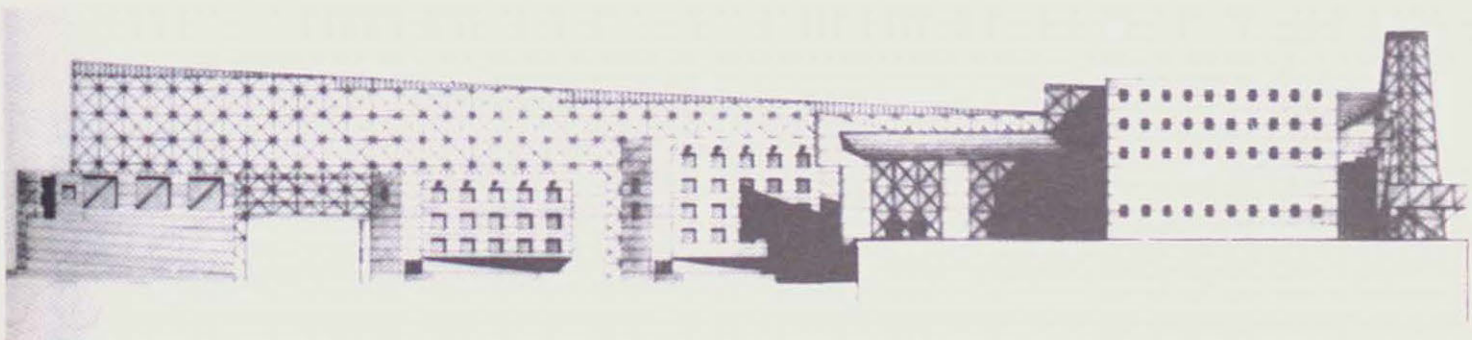

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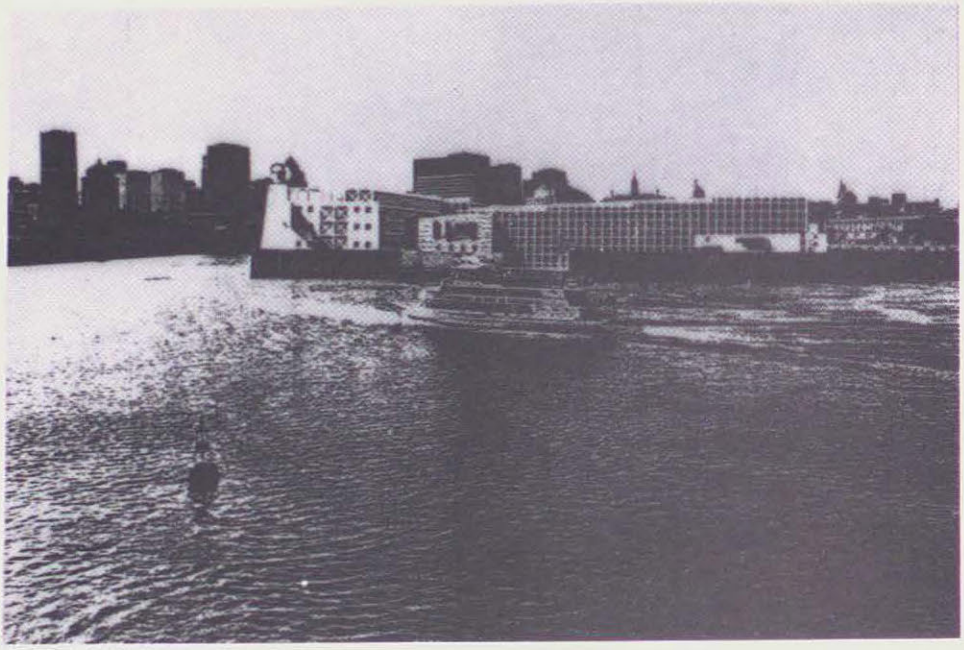
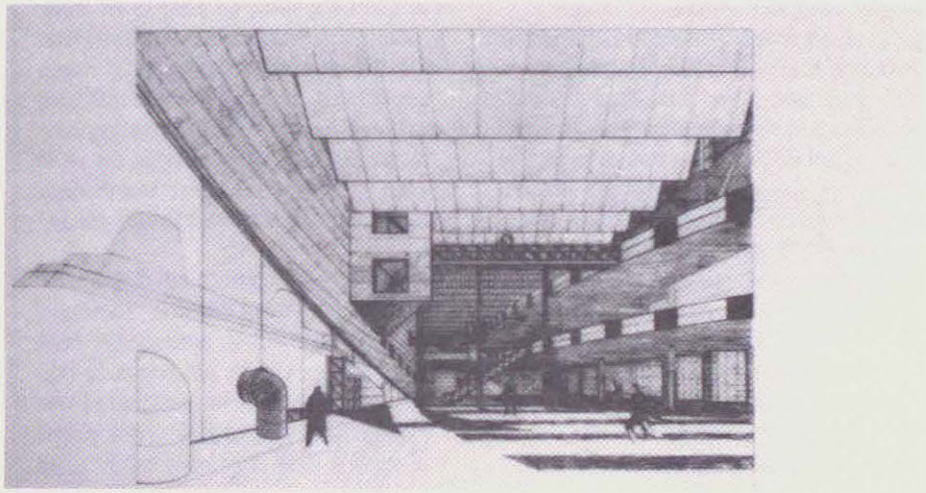
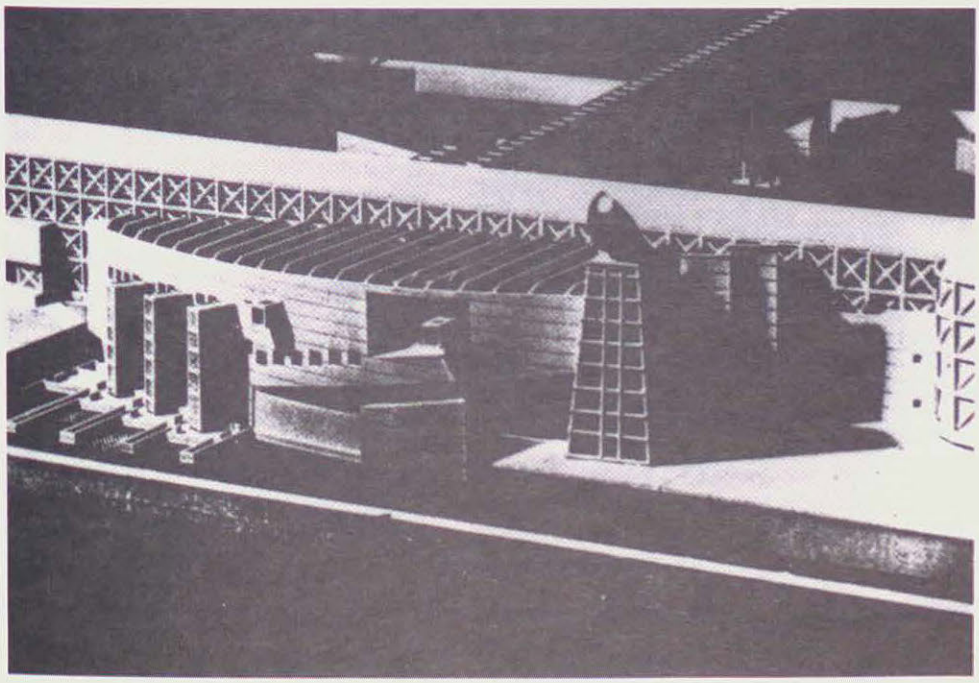


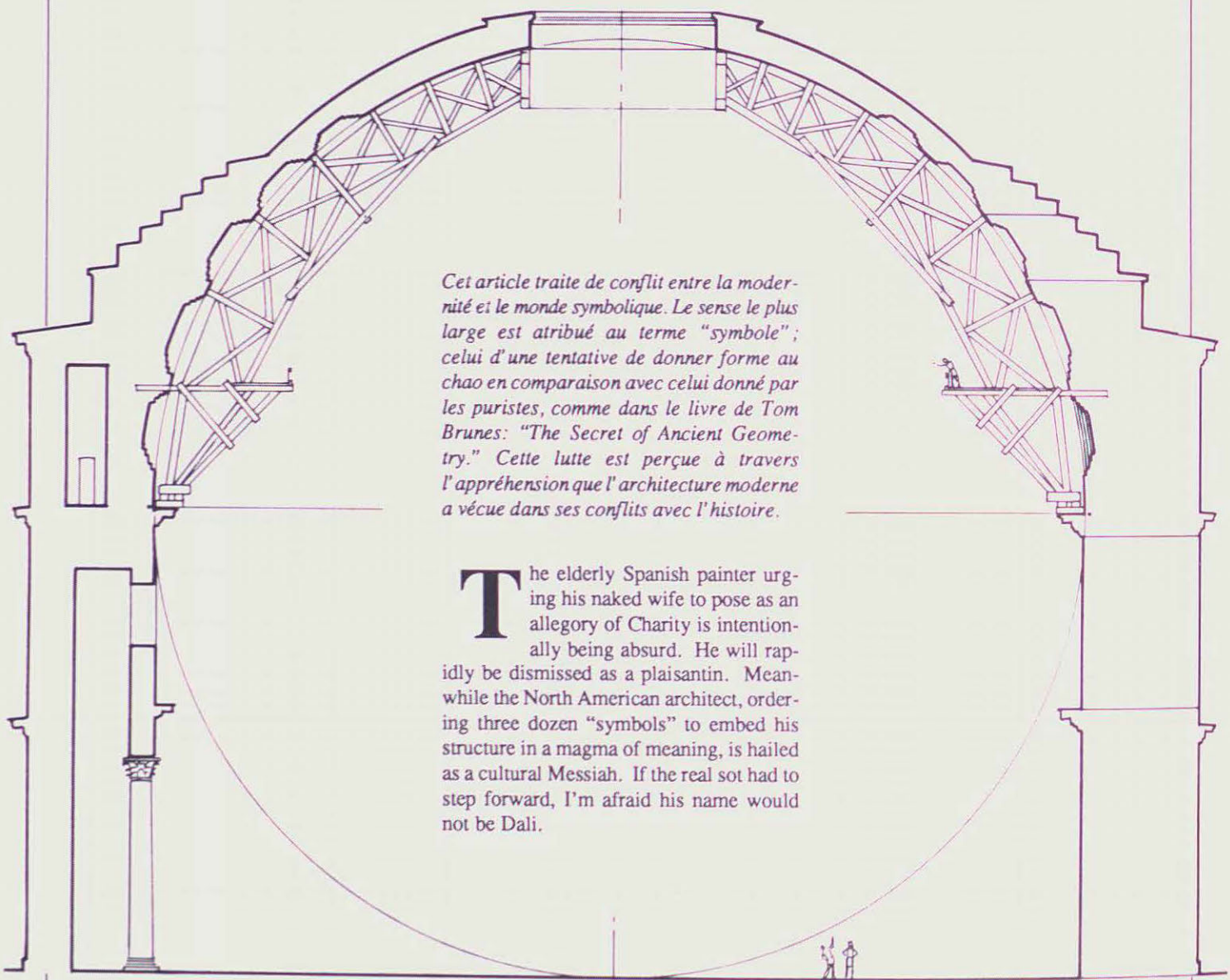
THE GALLEY





Pierre Edouard Latouche

BREAKING THE PERIMETER



Cet article traite de conflit entre la modernité et le monde symbolique. Le sense le plus large est atribué au terme "symbole"; celui d'une tentative de donner forme au chao en comparaison avec celui donné par les puristes, comme dans le livre de Tom Brunes: "The Secret of Ancient Geometry." Cette lutte est perçue à travers l'appréhension que l'architecture moderne a vécue dans ses conflits avec l'histoire.

The elderly Spanish painter urging his naked wife to pose as an allegory of Charity is intentionally being absurd. He will rapidly be dismissed as a plaisantin. Meanwhile the North American architect, ordering three dozen "symbols" to embed his structure in a magma of meaning, is hailed as a cultural Messiah. If the real sot had to step forward, I'm afraid his name would not be Dali.

An architecture that is symbolic necessarily implies a precisely defined perimeter, inside which, at a precise point, at a precise moment, through an unchanging ritual, there is communion with the Absolute. Outside that high plateau, where the ancient priest and his tribe gathered to witness the sun rise, and mark the miracle by placing a stone in a half-circle, there is not one cubic inch of matter where symbols may dwell. Outside that naive gathering of bushmen, who regularly offered part of their hunt to an old magician manipulating circles, squares and triangles, there is no meaning, no dance, no myth, no architecture.

Symbolic thought is a process of synthesis. It concentrates the disorganized experiences of the world, of time and of space, on an object, a ritual or some other form of human activity. That lonely object becomes the ordering principle of the Universe. It is science and power, the master of oceans and of flowers. Amidst its precise limits, human thought, being confined and sheltered, is apt to blossom. However nothing must happen to those sacred limits. They cannot be trespassed, trampled or broken. Such an act, by disrupting the gradual accumulation of knowledge, would bring catastrophic ills to the community: loss of solar and lunar calendars, of hunting-rituals, of magic and so on. Therefore, in order to prevent this, ancient tribes devised complex ensembles of rules, taboos and behaviour codes protecting the edges and the sanctity of shrines. These laws were so broad that they also regulated the carrying and removal of altars. In the Philosophy of Symbolic Forms, Ernst Cassirer describes this second set of rules as "...transition involving rites of passage which must be carefully observed. Their rites govern moves from one city to another, from one country to another, from one phase of life to another." Baptism, First Communion and Bar Mitzvah are more recent, but obvious, examples of such rites.[1]

Hence one may not know what a symbol is, but one must feel, when confronted with a corpus of interdicts, that he is approaching the sacred perimeter where symbols dwell. One must feel that he is approaching something mysterious. And indeed he is, for that sense of the mysterious, that cumbersomeness and opacity of the rule is what symbolism is all about.

Those regulations not only protect symbols but ultimately define them. They are the cornerstone of mythical societies, their driving force. And, with time these same regulations will result in shaping the history of those societies. This has been the case in classical ages which have been legitimized by rites of passage such as those analyzed by Cassirer. Indeed those renaissances took roots by, at once, negating history and invoking divine will as the justification of their power. Hence Virgil's Aeneid, the mythical constitution of Augustan Rome, remains the great Roman tale of one man's struggle to restore the Trojan gods glory, to elevate them to new sacred perimeters:

> His banished gods restored to
> rites divine:
> And settled sure succession in
> his line,
> From whence the race of Albans
> fathers come
> And the long glories of majestic
> Rome.

However, even if the modern reader of these verses has initiated himself to the nature of those regulations, he will still be faced with a dilemma. While he acknowledges the beauty of Dryden's translation, and the metaphorical quality of Virgil's poetry, he nonetheless cannot ignore critical historical evidence indicating that Rome was not founded by Aeneas, but by war and slavery; that luck and greed were more involved in the Trojan wars than Homer would have us think. Briefly stated the reader is left torn between admiration and revulsion: between his sense of justice and aesthetic pleasure, between his love of ancient art and his knowledge that such masterpieces celebrated the exploits of ruthless tyrants.

If such mental lacerations sound a trifle passé one should remember that they arise from Virgil's idea of history, which has little to do with modern analytical history. The same dichotomy being true in architecture. A temple means something for Vitruvius and Procopius, but quite the opposite for Giedion. However our purpose is not to determine whether Vitruvius' vision is superior to another. Our task is to acknowledge this difference and to understand its possible contribution to current architectural thinking.

As stated earlier, symbolic thought being a process of synthesis (the art of limits) it will systematically, and exclusively, try to objectify and to articulate finished forms against chaos. In order to do so it will ignore the existential consequences of this process. Hence if human sacrifices have to be offered to some divinity, the tribe will not question the ethical implication of the ritual. Against this stands modernity and its systematic erosion of that process. Its purpose is to base the origin of symbolic and mythical thought in relativity and subjectivity. Not in a pyramidal order with the Absolute at the apex.

This erosion began to manifest itself in the XVIII century. The Philosophe des Lumières saw critical reason as instrumental in questioning the validity of symbolic thought. The XIX century furthered this inquiry by using history, psychology and sociology as scientific tools for the same purpose. All along both movements were helped by successful revolutions and material conquests, each enabling the Project of the Enlightenment and XIX century scientific endeavours to "genetically" lead the Twentieth century to be absorbed in criticism. The determining actors in this third act being psychology and Marxism.

In the case of Marxist philosophy, if we wander outside hard-core economic analysis, it becomes obvious how extensively Marxism has been applied as a critical tool in all fields, including architecture. Indeed from quite early on architectural manifestoes and utopias such as Engels' The Condition of the Working Class in England (1844), up to Taut's

Arbeitstat fur Kunst (1918) were exemplary of this. More recently this tradition was given new impetus by the publication of Manfredo Tafuri's History and Theory of Architecture (1968). This significant contribution examines how architecture, painting and the avant-garde participated, through the works of artists and thinkers, in the erosion of XIX century bourgeois values (in Marxist terms the ultimate and final manifestation of the symbolic and mythical world).

Although Tafuri limits himself to critical thought in the XX century, his method implicitly acknowledges that the avant-garde was working against a systematic and a real danger. Namely the possibility that bourgeois policies would erase liberties gained by two centuries of opposition. This danger unfortunately became a reality in Europe with a succession of totalitarian dictatorships.

Such regimes, in the language of symbolism, are worlds of pure signification. They avoid any real historical or recent cultural references, and replace beliefs in an apriori order of the Universe by brute force. Consequently, with time, their propagandic symbols, their new social structures, turn out as mere emblems, dead symbols.

This danger became the narrow line that architects and intellectuals of the modern avant-garde had to walk, being critical in their works by mounting an attack on ancient values, yet without producing new symbols or sterile ones (totalitarian emblems). A concern so profound that it still animates German Neo-Expressionist painting.

Somehow this ominous pitfall did sharpen their awareness. The artist became a Knight-Poet, always trying to fulfill his social mission without compromising his pure critical vision. Adolf Loos' writings are a good example of this sense of calling. Conrads writes that "his radical aesthetic purism made him a zealous foe of Art Nouveau and the German Werkbund". The architect himself took a prophetic tone when he wrote in Ornament and Crime (1908): "See the time is high, fulfillment awaits us. Soon the streets of the city will glisten like white walls. Like Zion, the Holy city, the capital of heaven. Then fulfillment will become."[2]

Loos' head on struggle with ornament and his positive conquering attitude, were helped by a complete control over his designs. However this last possibility and this optimism were not shared by all. It was indeed a common concern of his contemporaries that the past would somehow deceitfully creep up and ruin their reforms. Loos' fellow Viennese Freud, when acting as social critic, often wondered about the purpose of psychoanalysis if, in the end, the patient was to be released "into an irrational society".

The same fears also concerned architects involved in urban or territorial planning. How was a revolutionary Constructivist architect to deal with Old Moscow? Could one juxtapose functional architecture into a Baroque palazzo? Wouldn't the later necessarily harm the social and egalitarian purpose of the former? The pristine virginity of modern architecture could not function if it had to cope with remnants of the old symbolic order. On this annoying presence of the past Tafuri writes: "...it carries the memory of an extinct way of producing values, a disturbing and dangerous memory because of the illusion of the possible return to a sacral conception of artistic activity. This is the reason why all avant-garde movements see in history a danger for modern art."[3]

This danger was particularly felt by Wright and Le Corbusier. Both, in their great projects, had to face this problem, and both came to similar conclusions. Essentially they espoused, as "the only alternative to radical destruction", the option of "museographic mummification" or the neutralization of historical centers.[4]

Hence Jeanneret's Plan Voisin would mothball Paris, while Wright's Greenacres would do the same with old Boston, New York and so on.

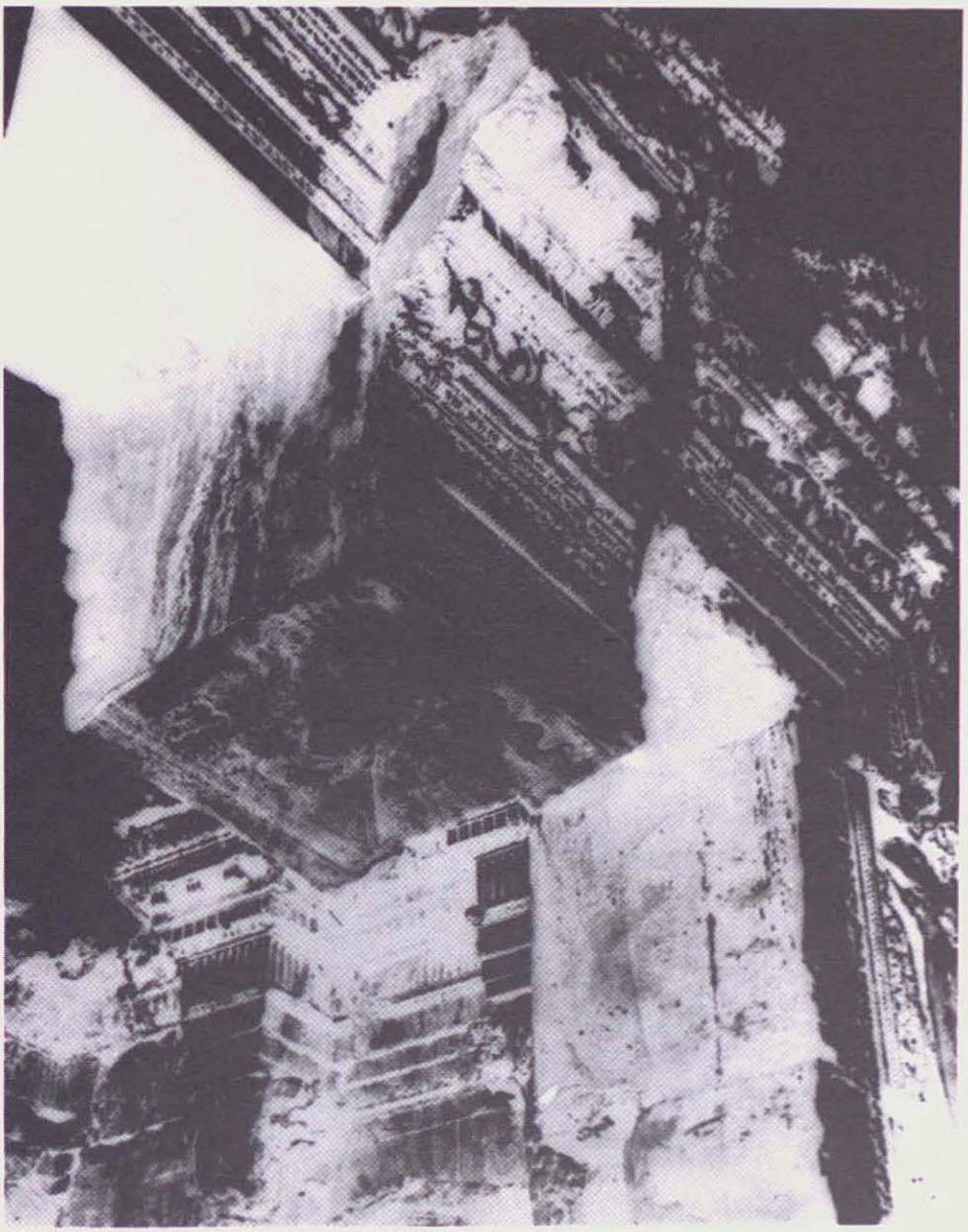
Seen in perspective both schemes appear hopelessly utopian. However one should remember that, in spite of their failures, they both inaugurated a new architectural disposition. Namely the translation in the Fifties and the Sixties of an avant-garde fear of history into a geographical distancing from this history.

What Corbusier's Chandigarh, Kahn's Dacca and Safdie's Habitat represent is not a disillusionment with High Modernism. In fact it is the very continuation of the aims of the avant-garde. India and Bangladesh, as developing countries, were articulated against Western democracies, against ritual consumerism. If architecture was to remain critical, it had to operate outside societies unable to cut their links with history. Doing otherwise meant accepting Mies' corporate modernism. However, since such distant projects weren't too frequent, other alternatives, still loyal to the idea of geographical distancing, became available.

One was to confront danger, to take the bull by the horns, and go at the deepest of Western history. This gamble was undertaken by Le Corbusier at Ronchamps and La Tourette.

The other was, in order to avoid any possible compromise, to design imaginary new worlds and landscapes. From this vein came forth all those Sixties' psychedelic-acid trip visions of orbital space stations, of molecular comic strip floating marinas, and of arcologies.

Unfortunately neither Jeanneret, Kahn, nor Soleri have enabled us to turn the page on history. So today we share in their

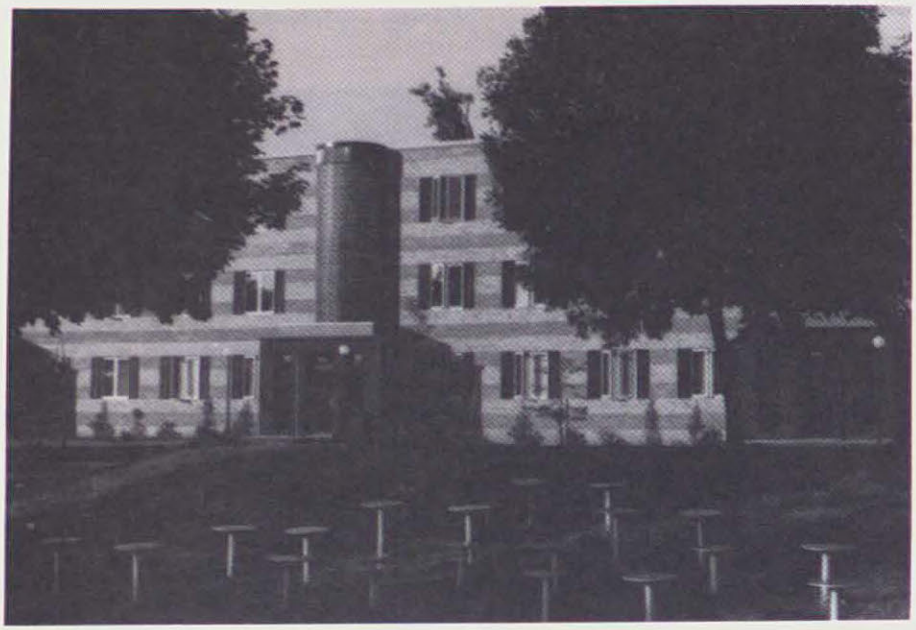


fears and apprehensions. We may research new means to make architecture symbolic, we may rediscover the purpose of modernism, or re-establish Asplund's and Aalto's intimate nordic dialogue with education, nature and death, but whatever we attempt, we will have addressed history as our first concern. For, ultimately, as the ancient symbol, it is the vehicle of Knowledge. A privilege it rather jealously guards.

Pierre Eduoard Latouche received his B.A. in Art History from McGill University in June 1987. He is now studying philosophy in France.

NOTES

1. Carsirer, Ernst. The Philosophy of Symbolic Forms: Mythical Thought, p. 104.
2. Conrads, Ulrich. Programs and Manifestoes on 20th Century Architecture, p. 19-24.
3. Tafuri, Manfredo. Theories and History of Architecture, p. 45.
4. Tafuri, Manfredo. p. 45.



Les jardins du Pelican (photo:Francois Decarie)

ARCHITECTURE AND MYTH: THE **VANDA-STEIN** AFFAIR

by François Goulet

Le Pelican entrance reproduce the temple's gate in the background of Aloys Zotl's painting (photo:Francois Goulet)

Sur la rive sud de Montréal, deux immeubles résidentiels ont été dédiés à la mémoire d'Eva Stein, une anthropologue allemande de renom. Bien que l'architecture veuille symboliser la vie d'Eva Stein, le personnage est inconnu de la plupart des résidants. En l'absence d'indices, les résidents interprétent l'architecture et ses symboles, les meublent de leurs propres mythes. Cette approche est donc distincte de l'architecture "déterministe", qui propose des symboles facilement perceptibles; distincte aussi de l'approche moderne qui suggère un environnement vide de valeurs imposées.

> "Architects make architecture, historians make history, and what they both make is myth."
> Charles Jencks, Meaning in Architecture

Architectural historians sometimes reveal the contribution of overlooked architects who, ignored by teaching institutions and the media, have nevertheless influenced the evolution of their art. The contribution of individuals who are neither architects, artists nor theorists, is less often recognized, even when their life and work has inspired architects and influenced architecture.

Eva Stein was one such person. Today her outstanding destiny is mostly forgotten. But some were so impressed by her that two buildings now stand in Longueuil, along the St-Laurent River, near Montréal, to commemorate her. It is her life, and its source as inspiration for architecture, that will be presented in the following article.

The True Story of Eva Stein

According to Who's Who, Eva Stein was born in 1931 in Stuttgart, Germany. Anthropologist and author of a few books on the Aymaras, a South American tribe, she is best known for her discovery of Iberia, a pre-Colombian city in the Peruvian Andes. This discovery was made in 1957 with her friend Massimo Vanda, an Italian anthropologist and entomologist.

It was also in December of 1957, as reported in the New York Times, that Massimo Vanda and Eva Stein, while searching Iberia, were first reported missing. It was generally thought that their plane had crashed somewhere in the jungle. No one had seen them for 26 years, when they reappeared in 1983. As mentioned that year in La Presse, Eva Stein and François

The New York Tir

 NEW YORK, TUESDAY DECEMBER 2, 1957

THE VANDA-STEIN MYSTERY

LIMA, Peru (UPI) - Massimo Vanda, world famous scientist and his associate Eva Stein, estranged wife of German coal magnate Heinrich Stein, haven't been seen or heard of since their departure from Lima three months ago. They left the Peruvian capital on September 10 aboard their private two-engine plane. Officials here say that the couple was setting out for Quillabamba. Radio reports from the area confirm that a two-engine plane has been spotted a month ago, possibly heading for the village of Iberia. It has been reported, altough unofficially, that the two scientist have sold or given away most of their personal belongings before their departure.

Massimo Vanda is best known for his numerous books on birds and their mythological incarnations in Asian and Pre-Columbian cultures. He is also a respected entomologist. Eva Stein has studied anthropology in Paris and published books on the Aymara Indians. Mr. Vanda and Mrs. Stein met in Paris in 1955 during an art sale at Hotel Drouot. They have been working together on numerous research projects since then.

Eva Stein

Massimo Vanda

Decarie, alias Massimo Vanda, were arrested in Longueuil, after a fifteen year search by the RCMP, assisted by Peruvian National Police. They were formally accused of having pillaged the treasures of Iberia.

According to specialists, Iberia was probably inhabited by the Talixas tribe (a name meaning "people with bird eyes"). Until that discovery, the Talixas were known only through allusions in folk myth passed down through time. Still, according to experts, Talixa's civilization had achieved a very high level of evolution, especially in the field of architecture.

For years, Eva Stein and Massimo Vanda had been hiding in a building conceived by him, surrounded by the treasures and souvenirs they had brought from Iberia.

How and why did this happen?

Eva Stein first met Massimo Vanda in Paris in 1955, at an auction of Aloys Zotl's paintings. The event was reported by Le Figaro at the time. At the auction, the two anthropologists fought over the watercolour of a pelican. Massimo Vanda finally bought it, at twenty times the starting price. After the auction, Eva Stein met Massimo Vanda and told him she was sure an architectural detail in the background of the painting in fact represented the ceremonial gate of a temple, built by the Talixas. How could she have known about a tribe that, at that time, was only described in legends? She wouldn't say. But she convinced Massimo Vanda, who as a result, started working with her.

Soon after, the pair fell in love.

The truth is that when Eva Stein saw the painting at the auction, she experienced a strong "déjà vu", which explains why she wanted it so much. Soon, Massimo Vanda's knowledge about ornithology led them to identify the natural habitat of the bird represented by Zotl. "That's where Iberia is," they thought. At the same time, their research led Eva Stein to remember the most extraordinary thing possible; she had lived a previous life in the Iberian civilization.

Now that she was remembering her past life, the present one had no interest anymore; before her departure for South America, the two scientists sold or gave away most of their personal belongings.

When they finally reached the site of Iberia, in 1957, she instantaneously recalled every detail of her past life. They had no difficulties in understanding the meaning of all the archaeological treasures surrounding them. Eva Stein guided Massimo Vanda through every part of the city, telling him: "Here I was living with my family. Here I went to school. Here I first fell in love. Here I died..." The temple she had recognized on Zotl's painting was there, and she finally realized that she had been the high priestess of ancient Iberia.

For years they lived in Iberia like gods on earth. However, such heavenly existence was shadowed with apprehension, as they knew that, sooner or later, the city and themselves would be discovered by others. So they pillaged the site, secretly bringing everything they could to Lima, hiding their real identity and the origin of their treasures. Then, they reached Canada by boat and travelled onto Longueuil, where Massimo Vanda owned a building. There, Eva Stein started her seclusion, surrounded by

la presse
LE PLUS GRAND QUOTIDIEN FRANÇAIS D'AMÉRIQUE
100 ans

LA MÉTÉO : DÉGAGEMENT
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MIN. : −6°, MAX. : 0°.
DEMAIN : ENNUAGEMENT

MONTRÉAL, LUNDI, 5 DÉCEMBRE 1983 , 99e ANNÉE, n° 279, 100 PAGES, 6 CAHIERS

COUP DE FILET SANS PRÉCÉDENT

Arrestation de François Décarie, alias Massimo Vanda et de sa complice

■ Les journalistes de la métropole ont eu droit, tard dans la soirée d'hier, à un spectacle aussi insolite que dramatique. François Déca-

YVON LÉONARD

rie, qui a dissimulé son identité pendant des années sous le nom de Massimo Vanda, a été inculpé dans sa résidence de Longueuil en compagnie de sa complice Eva Stein. Les deux individus seront accusés de s'être emparés frauduleusement de trésors culturels et archéologiques d'une valeur inestimable. Trois agents de la Gendarmerie royale du Canada ont procédé à l'arrestation sous les yeux d'une dizaine de représentants des médias. Ce coup de filet est le fruit d'une enquête menée conjointement depuis quinze ans par la GRC et les autorités policières du Pérou.

Il faut retourner vingt-cinq ans en arrière pour retracer l'origine de cette affaire Vanda-Stein, une affaire complexe dont plusieurs éléments restent à éclaircir. Massimo Vanda et Eva Stein, dont les noms étaient surtout connus, jusqu'aux événements d'hier, dans les milieux scientifiques, avaient été portés disparus en décembre 1957. On croyait, généralement, que leur avion privé s'était écrasé dans une région inhabitée des Andes péruviennes. Or, la découverte par des archéologues américains, en 1968 dans la région d'Ibéria, des ruines d'une civilisation précolombienne jusqu'alors inconnue a ranimé de vieux soupçons au sujet du couple Vanda-Stein. En effet, le site découvert par l'équipe américaine avait été manifestement pillé par des mains expertes de cinq à dix ans plus tôt. Il est intéressant de noter que l'on ne connaît pas encore le nom de la civilisation ayant atteint de toute évidence un stade d'évolution très avancé. Au dire des spécialistes, il s'agit peut-être des "gens au regard d'oiseau" auxquels font allusion plusieurs légendes du peuple Aymara. Quoiqu'il en soit, le site découvert par les archéologues américains avait été pillé à un point qui rendait toute recherche scientifique extrêmement difficile.

François Décarie (alias Massimo Vanda) et Eva Stein au moment de leur arrestation.

M. Décarie-Vanda, qui ne semble pas jouir de toutes ses facultés, ne cherchait nullement, hier soir, à nier sa culpabilité. On l'entendit même déclarer que ses gestes n'étaient nullement criminels. Pendant que les photographes s'affairaient devant des objets et artefacts aussi inusités les uns que les autres, il répétait à qui voulait l'entendre que les moments passés dans le vieux site andin furent les plus heureux de sa vie. Il parlait, non sans une certaine frénésie, du sens de l'espace de ce peuple ancien, d'un travail incomparable des formes et des volumes. Ses longues années de clandestinité et de réclusion dans sa résidence de Longueuil, au milieu des objets de la vie courante de ce peuple, ont été, d'après lui, pleines de découvertes et d'émerveillement. Eva Stein, qui semblait très fatiguée, se contentait de hocher la tête en signe d'approbation. Elle souffre d'une maladie dont la nature n'a pas encore été précisée. Mais il semble que ce soit cette maladie qui ait incité le couple à s'installer dans un pays au climat assez voisin de celui de l'Allemagne (pays d'origine de Mme Stein). La résidence que les deux complices ont fait construire à Longueuil pour accueillir leur "collection" rappelle les monuments et les temples qu'ils ont pillé au Pérou. M. Décarie, alias Vanda, précise même qu'il a dessiné l'édifice en respectant sinon la lettre du moins l'esprit des innovations architecturales les plus caractéristiques du peuple ancien.

En fin de soirée hier, les scellés ont été apposés sur les portes de la résidence. La date de la comparution des inculpés sera connue demain ou mercredi. Des pourparlers sont présentement en cours entre le Ministère des Affaires Extérieures et le gouvernement péruvien en vue d'établir les modalités du recouvrement de l'ensemble des objets. Un agent des Affaires Extérieures a confirmé à LA PRESSE que l'on cherche à obtenir du gouvernement péruvien l'autorisation d'ouvrir aux spécialistes canadiens et même, éventuellement, au grand public les portes de la résidence Décarie-Vanda avant que la

LE FIGARO

A X X MERCREDI 20 DÉCEMBRE 1955 (N. 12 206) – Édition de 5 heures PRIX : 3,80 F

Les aquarelles de Zötl à l'Hôtel Druot

C'est hier qu'avait lieu à l'Hôtel Drouot, dans un climat survolté, la première de deux ventes aux enchères de l'ensemble de l'oeuvre peint d'Aloys Zotl. Le commissaire-priseur Maurice Rheims a dirigé cette séance exceptionnelle à plus d'un titre, ne serait-ce qu'à celui de la durée : plus de trois heures. On pouvait reconnaître dans la foule pressée des amateurs, des collectionneurs de renom comme MM. Alix de Rothschild, Massimo Vanda et Pierre Balmain. C'est lors de la mise à prix d'une petite aquarelle intitulée "Le Pélican" que fut déclenchée la course la plus vive de la séance. Mme Eva Stein et M. Massimo Vanda rivalisèrent pendant plus de vingt minutes, dans une cascade effrenée de surenchères, avant que Mme Stein ne lâche prise. Lorsque le marteau d'ivoire frappa, l'aquarelle avait atteint un prix vingt fois plus élevé que la mise de départ.

"Le Pélican", aquarelle d'Aloys Zotl qui provoqua hier une des courses aux enchères les plus singulières des annales de l'Hotel Drouot

Aloys Zotl (1803-1887) n'aurait jamais pu s'imaginer que ses oeuvres puissent provoquer de tels émois. Il a mené une existence parfaitement obscure de maître-teinturier dans le bourg d'Eferding en Haute-Autriche. Nous ne savons rien de lui, sinon qu'il a peint toute sa vie dans un secret absolu, laissant 170 aquarelles, toutes signées et minutieusement datées, représentant des singes, des poissons, des reptiles, des oiseaux et des coquillages. Il ne se sépara jamais d'aucune des oeuvres composant ce bestiaire fabuleux. Ce n'est que tout récemment qu'un de ses descendants, qui souhaite garder l'anonymat, apporta toutes ces aquarelles à Paris pour les mettre en vente et, du même coup, attirer sur elles toute l'attention des connaisseurs. Car c'est rien de moins que la relation solitaire et inquiétante d'un homme avec l'univers animal que l'on pouvait contempler à l'Hôtel Drouot. Zotl rend dans ses aquarelles tout le mystère du regard que les an-

souvenirs and remnants of her past life.

To please her, Massimo Vanda introduced some changes to the building, including structures typical to Talixas' Architecture. The first thing he did was to add the temple's gate to the entrance of the building which, incidentally, is called "Le Pélican", after Zotl's painting. He also erected a wall surrounding the building, in the image of Iberia's city wall. Between the wall and the building was added a small courtyard, and he added pergolas to the balconies, inspired by those found in Iberia's tropical civilization.

Like many destined to be great, Eva Stein entered the legendary realm, to an extent that it is often difficult to recognize what is fact and what is myth in her life. But she certainly did exist. Buildings are there to recall her. And if further proof is needed, she obviously lived, for she died in 1985, in Peru, where in response to a court order she had returned to help rebuild the city she had spoiled. A short announcement was published in La Presse milestones' column. To commemorate her, Massimo Vanda designed a second monument, a kind of modern Taj Mahal, next to Le Pélican, and which is called "Les Jardins du Pélican".

The "Real" Truth

And for those who still can't believe this story, the truth is that Massimo Vanda killed Eva Stein. Massimo Vanda, whose real name is François Décarie, a Montreal artist, invented an end to the imaginary Eva Stein. He was tired of her, or more precisely, he didn't want to be branded as the architect who designed for imaginary residents.

Why does someone go to such an extreme as to use an imaginary source of inspiration to design a building, invent in detail the entire life of Eva Stein, print look-alike newspaper stories about her, and finally, announce her death in a real newspaper?

François Décarie's career is the opposite of many architects who late in their careers become designers of wall paper, furniture or jewelry. He is first an artist, who started as a decorator, designing furniture and wall paper, some of which have won international prizes, and have been exhibited at Le Louvre, Paris.

It is only in recent years that he became interested in architecture. A promotor asked him to design a six story condominium building in Longueuil, to be called "Le Pélican". François Décarie produced a relatively standard, though personal, condominium building. When the time came to decorate the model apartment, he realized he had never decorated without specific clients in mind. So he invented the characters of Eva Stein and Massimo Vanda. In the beginning, their story was much simpler. But it slowly evolved and became very detailed. Believing in reincarnation, François Décarie included this belief in Eva Stein's life. He provided her with an obsessive mania for protecting the beauty and youth of her hands, while Massimo Vanda was provided with a passion for insects. These two character traits are reflected in the decoration of the model apartment. Eva's obsession is revealed in

her bedroom, where hundreds of night gloves are piled next to her bed. Massimo's insect collection is exhibited on the wall of his office. Half of the colorful insects are real, half are designed by François Décarie, using paper and fabrics.

This last detail reveals the originality of François Décarie's work. To create sculptures, furniture and decoration, he uses common objects and materials, even construction extras such as industrial outdoor carpeting becomes a luxurious one once it is cut by him; a screen, a hockey puck and a concrete column become religious sculpture; a bowl bought in a bargain store and a basement drain grating become a ceremonial vase with its trivet. François Décarie reveals a hidden beauty in these objects, and creates with them a pseudo mythical experience, where everything looks familiar, but tells a new story. Is this perhaps the kind of "déjà-vu" that Eva Stein experienced when she saw Zotl's painting for the first time? On the ceiling all around the living room is written:

> "Les astres et les dieux nous regardent et nous poussent. Pourquoi nous Eva? Mais pourquoi nous deux?"[2]

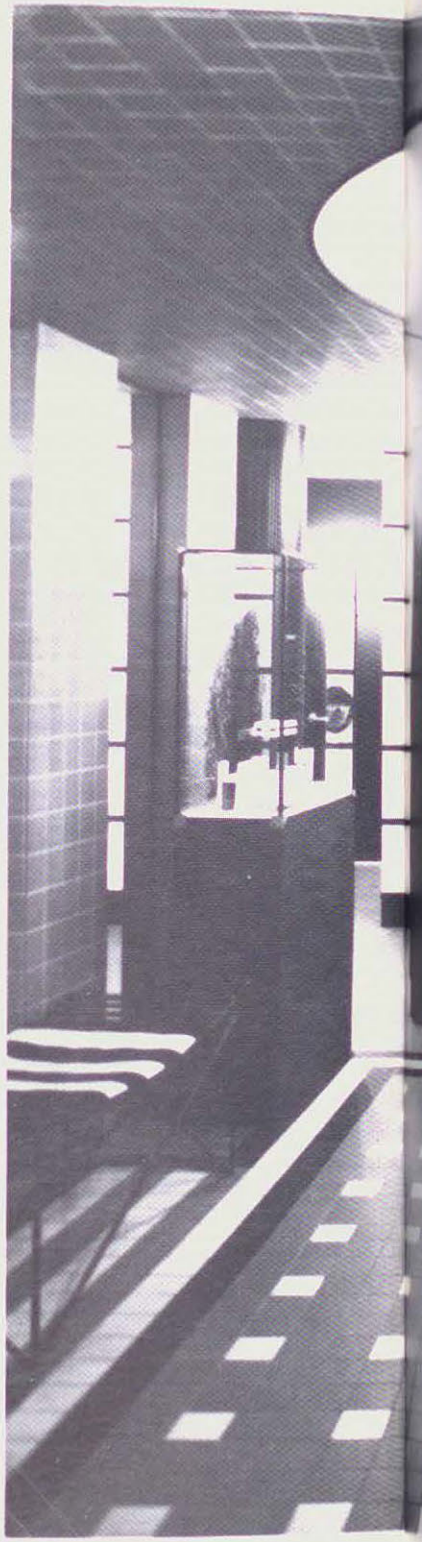
In the end, Eva, Massimo and the holy city of Iberia become so palpable, said François Décarie, that he could see himself in Iberia. It's only lately that he realized Eva Stein could be a source of inspiration for the building itself. Since most of it was already built, Eva Stein's contribution to Le Pélican's outside has been limited to three additions to the original building: the monumental gate, the surrounding wall and the pergolas over the balconies. Nevertheless, in 1984, Le Pélican won a Domus award given by the Association Provinciale des Constructeurs D'Habitation, as well as two Habitas awards given by the Chambre de Commerce de Montréal, one for best multifamily housing project of the year, and one for best interior design of the year.

Eva Stein and her life is much more present in the design of "Les Jardins du Pélican". According to François Décarie, the moderate, somehow hermetic facade symbolizes the South American side of the imaginary couple. The two tones of gray masonry layered on the facade are supposed to recall the horizontality of pre-Colombian walls, with their rows of rocks. The rounded stairwells in glass block on the facade are meant to recall wheat silos, as one would find in an ancient agricultural civilization. The rear side, more open to the environment, symbolizes Eva Stein's South American past life. Balconies celebrate the sun. The third floor residents have access to a terrace on the roof, again with pergolas, inspired in some way by hanging gardens. Thus, the terraces have both a symbolic and a functional purpose, as does the wall surrounding "Le Pélican". Presented as a reminder of Iberia's city walls, the first purpose of the garden wall is to hide the underground parking, which exceeds the building floor area.

An Interpretation of the Truth

It is obvious that the two buildings are not really inspired from pre-Colombian architecture; François Décarie admits he never studied it. It is Eva Stein who is the real source of inspiration to him, or more exactly, the catalyst for François Décarie's ideas.

There are some precedents to the idea of the use of an imaginary source of inspiration. Mark London presents the case of a fire hall built in a field in Coquitlam, B.C.[3] The architect invented a story, pretending that the new building reused a non-existent small town commercial strip with garage, gas station and two-story commercial



Le Pelican's Entrance

Le Pelican and its model apartment

block. Each of the 'original' buildings is expressed in the new construction.

Antoine Grumbach, who teaches architecture at the Université de Paris II, sees architecture as a pedestal to support a collective memory. He once had to design a new urban boulevard for a future new town, between existing villages and a new rapid transit station, near Paris. How does one define the collective memory of a place that does not exist yet? Grumbach's answer was to imagine the ruins of a city that might have existed there before the new town.[4]

What is the interest of this imaginative approach? What does "Le Pélican" signify to its inhabitants?

The question of meaning in architecture has benefitted from semiology, as shown in Meaning in Architecture, which offers a debate on what should be a meaningful architecture. For George Baird, architecture has to offer an "ideal image of human existence, ideal frames for human action", based on fundamental human values.[5] In the same way, Christian Norberg-Schulz suggests that "man can only perceive (give meaning to) order; his orientation and identity depends upon the existence of defined structures in the environment."[6]

Reyner Banham, who teaches at University College, London, criticizes this deterministic approach. He speaks for an "environment void of preformed values but capable of generating new values symbiotically with its inhabitants", that is, an architecture adaptable to changing values.[7] That is also, according to Kurt Forster, what Frank Gehry proposes.[8] This approach is typical of the modern movement. Its best manifestations are modern museums, where the impersonal, flexible, white spaces adapt to every exhibition.

Yet, the Coquitlam fire hall and Grumbach's new boulevard exemplify Norberg-Schulz's suggestion for the need for defined structures of symbols. In these two cases, this need is considered so important that the designers found it necessary to invent an historical structure to give a meaning to what Grumbach described as a "beet field". Eva Stein's monuments are slightly different, places somewhere in between Baird's and Banham's standpoint. Eva Stein's life gives a structure and order to "Le Pélican" and "Les Jardins du Pelican" elements, but her story is not known by most of the inhabitants of the building.[9] In the absence of an Ariane thread, inhabitants are facing a collection of elements, architectural and "décoratifs", all once familiar, but now describing something new.

"Le Pélican" is not the only example of how architecture can be difficult to 'read'. Baird and Norberg-Schulz probably overestimate the public's capacity to understand a defined structure of architectural symbols. Only the happy few, such as architects and the cultural elite, have acquired the knowledge to 'read' the work of other architects. An illustration of this phenomenon can be found in the public's interpretation of symbols on new or modern buildings. As is presently popular (e.g. in the area of Montreal known as the Plateau), Mont Royal architects might select Art Deco or Post Modern ornaments for their buildings. The passerby will however typically not associate such symbols with any particular architectural style or era. Instead they will appreciate them as being similar to older buildings that they know in the neighbourhood.

François Décarie recognizes the consumers' right to a myth. He provides them with clues, but he hopes that they will come up with their own interpretation of the

DI 9 AOÛT 1985

MORIAM

T (Luc)
le 6 août 1985, à
53 ans, est décé-
c Parent, époux
Constantineau.
n épouse, il lais-
le deuil son fils
s soeurs: Thérè-
glas Lindsay),
e; son frère Ar-
belle-soeur An-
cques Brazeau)
lle-mère Alice
ineau; ainsi que
et amis. Les fu-
auront lieu sa-
10 courant. Le
unèbre partira
is du Complexe

Dallaire Inc.
boulevard
Martin est,
rnay, Laval,

endre à l'église
old, boul. Ste-
abreville, où le
era célébré à 10
là au crémato-
fred Dallaire.
et amis sont
y assister sans
vitation.

NÉCROLOGIE

Éva Stein

À Lima au Pérou le 2 août 1985, est décédée Éva Stein laissant dans le deuil, Massimo Vanda et un ami très cher François Décarie. —

Eva Stein's death announcment in La Presse, 9/08/87

Le Pelican and its model apartment (photo: Francois Decarie)

buildings.

"Le Pélican" and "Les Jardins du Pélican" speak, they have a meaning the inhabitants may sense, but never really understand.[10] Facing this mystery, the inhabitants can only interpret those elements, giving them their own meanings. They will react as they do with gods, inventing religion to understand them.

Inhabitants can ignore everything about Eva Stein, yet, from the window of their apartment, they can see the skyline of Montreal. For a few hours, they will hide there, trying to forget the madness of the life they just escaped, just as Eva Stein did.

Les jardins du Pelican front and rear facade (photo: Francois Goulet)

NOTES

1. This article is taken from a paper wrote as a partial requirement for a masters degree in Urban Planning at McGill University. The author would like to thank Torill Kove, Cynthia Cheung and François Décarie for their greatly appreciated assistance.

2. "The stars and gods watch and manipulate us. Why us Eva? Why us?"

3. London, Mark, "Exhibit points to where Canadian architecture is going"., in The Gazette, Montreal, March 28, 1987. The Coquitlam case was part of the exhibition "A Measure of Consensus: Canadian Architecture in Transition", presented in Montreal, in March and April 1987.

4. Antoine Grumbach presented this case at a Hydro-Amenagement lecture in Montreal, in 1985. The lecture is summarized in Forces, No. 74, Montreal, Summer 1986, p. 115.

5. Baird, George, "La dimension amoureuse in architecture", in Meaning in Architecture, edited by Jencks, C., and Baird, George, Barrie & Jenkins Publisher, London, 1969, p. 98.

6. Norberg-Schulz, Christian, "Meaning in architecture", in Meaning in Architecture, Op. cit., p. 228.

7. Banham, Reyner, "The Architecture of Wampanoag", in Meaning in Architecture, Op. cit., pp. 101-118.

8. Kurt Foster expressed this opinion in Montreal, in March 1987, at an Alcan lecture entitled "Impromptu Building; Frank Gehry's Architecture of Improvisation".

9. Though they have some clues: for example, the model of the temple's gate is exposed in the hallway of the Pelican.

10. Charles Jencks once described the mysterious dimension of architecture: "New frames old, or vice-versa; new erodes old, or vice-versa; high collides with low and refinement with Punk, or vice-versa (. . .) . It is this transgression and elision of elements to create an experience that is at once mysterious and full of surprises which relate Post-Modern space to religious and mystical space." (Jencks, Charles, Chaitkin, William, Current Architecture, Academy Editions, London, 1982).

François Goulet is a free-lance journalist who is presently completing his master's degree at the School of Urban Planning, McGill University.

comment

by Ronald Hay
Masters Studio V
University of Manitoba

Dans ce court essai, l'auteur tente de démonter que l'emploi d'images et de symbolisme en design n'est efficace que dans la mesure où certains facteurs pertinents, tels le raisonnement et le procédé, sont tenus en ligne de compte dans le programme.

The discussion of imagery or symbolism alone as a theme is not terribly useful. It points out clearly our unbalanced concern for the visual end-product or visual identity. The creation of place, if it is to be good design, calls for a concern for process and reason as well. This is not to imply that one is any less important than the other, rather that a full understanding of both is necessary in achieving a healthy balance.

The issue of "symbolism" and "imagery" relies on the premise of an architectural vocabulary, which in turn relies on universality of human reaction and interpretation (in this case, the built form). Universality does not exist; reaction and interpretation vary greatly from individual to individual and in more statistically predictable ways from culture to culture. Anthropologists can demonstrate that the only universally understood symbols are in fact not created, but instinctual symbols of social and bodily gestures and expression. Any expression, be it corporeal, spoken or physically made, that can be learned or created is necessarily open to individual interpretation. The concept of an "architectural vocabulary" with its attendant symbols and images is therefore not generally applicable, and so a conceptual red herring.

In creating or adapting solutions to an architectural problem rationalism is employed. Specific temporal and regional situations may result in unique and satisfactory solutions. These may be celebrated by local designers and builders and become objects in themselves; symbols are born as end products of a rational (not to imply purely functional) process. If the same symbol or image is applied in another place or another time by a different builder, it may be in response to the original conditions or perhaps a very different set. Its original raison d'etre may or may not be understood by observers or even by the designers.

Does it really matter? The answer is yes it does, to those who approve or disapprove; and no, not at all, to those who take no notice. To argue the merit of the use of symbols is therefore of limited value. Of much greater concern, however, is the rational issue of whether or not it solves the problems at hand, creates new ones, and serves as an asset to the total project. The issue, therefore, as to whether the symbol is created (from scratch) or evolved (from prototype) is naive and misses the more important point: is it an asset?

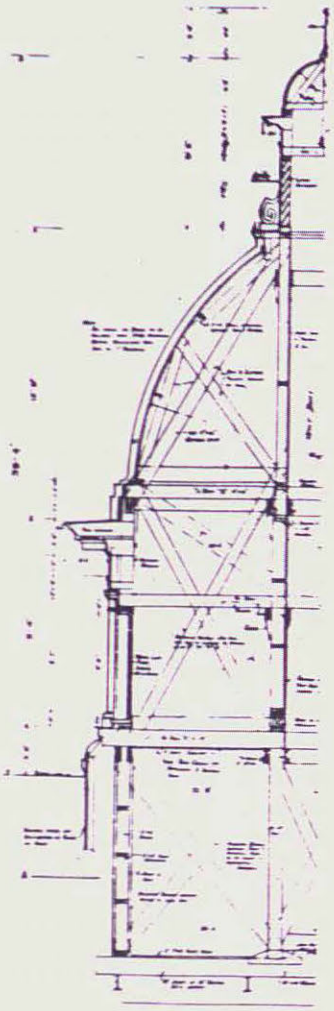
For instance, if a designer were to borrow the ancient Maecenaean symbol for "everlasting life" and applied it to a frieze over a doorway in hopes of attracting attention and celebrating entry, he/she may find that its recent borrowing by Albert Speer and his colleagues has totally changed its meaning, and consequently its quality of attention-getting. If, on the other hand, celebration of entry is made through creating an indirect path once admired during his/her trip to a cave in the Andes, it will be so subtle as to be missed by everyone, save perhaps their guide. It may, however, be entirely successful if it is enjoyed as a wonderful entry by the very people the designer had intended. They symbol of an Andean cave is, in this case, irrelevant.

It would seem, therefore, that a full understanding of both the qualitative and absolute values of imagery is just as important as a full understanding of process and reason. Perhaps then, in these image-conscious days, we would best give due attention to both symbol and reason relative to the program or terms of reference, lest an imbalance should deny good design.

Ronald Hay is a master's student in architecture at the University of Manitoba.

C O U N

Arthur



The old asylum in Weyburn is almost empty now, except for offices and boxes of dry paper; records of various public transactions, bits of the history of a vast, flat place; Saskatchewan. Some of the people who lived and died there were also blown in, like leaves of paper in the drying winds of personal and national depression. The old asylum is empty now, yet I remember impatient dreams as we started construction, demolished roofs, added floors, new dimensions, further extensions, to the big old storage bin for bent and broken minds. I was so eager to learn, and to be sure that the builder did not cheat I counted everything in sight, and wrote it down;

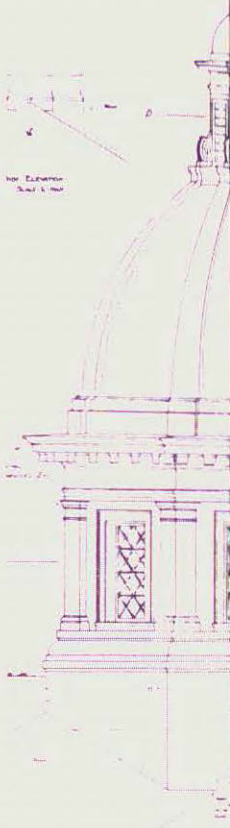
six carpenters driving nails,
three electricians pulling wires,
one jackhammer chattering
smashing concrete, cutting holes
for sewer piping.
five tar-black roofers, cleaning,
and leaving; the job was on time,
going like clockwork, minutes
counting for profit and the fun
of hurrying.

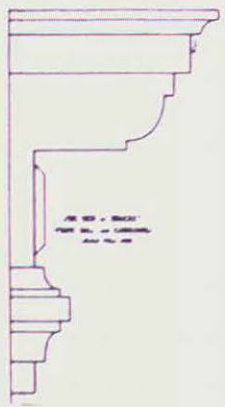
I finished inspecting the new work, including the roof, and counted: twisted studs, broken panes, damaged boards, cracked tiles, and shiny steel locks still in cartons. I listened to the sharp old inspector, and learned as much again from workmen. On my third solo trip I passed from the dust, the heat, and the noise, to the quiet of a small barren room. Used for decades, and scrubbed all its life with harsh cleansers, the room smelled of cleaning, as if all that rubbing would somehow vanquish madness.

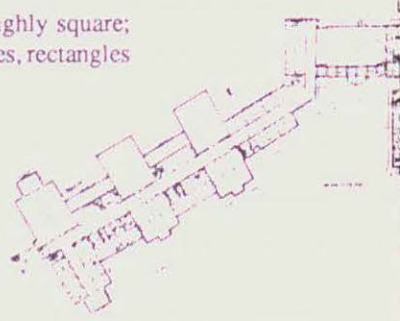
In some spaces the old hospital had a gracious touch, but in the barren room the only curves in sight were:

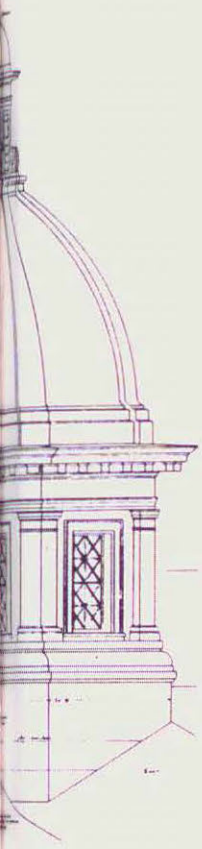
four breasts, two of them young
six buttocks, four young, two mine,
two round handworn doorknobs,
two half-round transoms above
tall doors (nineteen twenty
pre-Post-Modern delights)
two vulgar, bulbous glass lamp
gloves on two round plates
on the ceiling,
and massive brass circles of
locks on the doors.

Everything else was rectangular, or square; the room roughly square; twelve narrow beds in three rows of four; rectangles for aisles, rectangles









for tiles, rectangles for doors, a square for a floor; many rectangles of glass behind smaller squares of steel barred windows; rectangular desk, and a square-cut chair; nice square panels on the solid old hospital doors.

As I entered the room near the windows, and inspected the ceiling, a lone young woman on a back corner bed was lightly clad in the heat. She was very excited to see me, slid quickly over one bed, made a bee-line track, jumped another; to meet me at the far door, for one split instant, I hoped to meet her and touch, then the nurse barred the way, no whip in her hand, the girl crouched, backed snarling, a lioness cub, a beauty still in training. I was twenty five when I left that room. What a hard way to learn about windows and doors; openings for sunlight and friends, but now always the soft parts of architecture.

The center window of the little ward looked out on an axis of symmetry that might have been imposing; a Renaissance garden for princes. Now it looked out on an endless plain, with no center; lost space for the least powerful of princesses. Her story ? I never knew. I didn't know how to say hello, and walked straight on, counting!

I wonder if she noticed the axis of her room?
Was her mind split by a center line like the buildings and grounds in which she moved? Did she pray in symmetrical poses?, dance in circles and squares?, play childlike games where lines on the floor become enormous barriers? I wonder if she ever knew, or knew too well, the private symmetries of love?

Did the magic forms, the geometries of formal architecture, have anything at all to do with her survival? Or is that all a dream of princes and their builders who once hoped that symmetrical gardens of paradise would somehow balance our minds?

Sometimes I think of her when I go to the city:

tall buildings, square towers,
rectangular doors, many square floors,
straight lines for streets,
square little parks,
millions of little pieces of glass,
most of them rectangular,
people moving everywhere,
all of them symmetrical.

Once I tried to sketch a woman, in a different bower. Her centerline of symmetry was easy, but I failed to draw curves using straight lines and squares. By that time I was forty five; was it then that I stopped counting?

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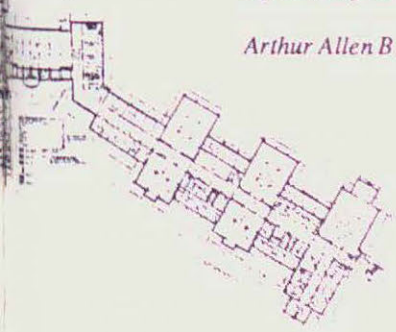

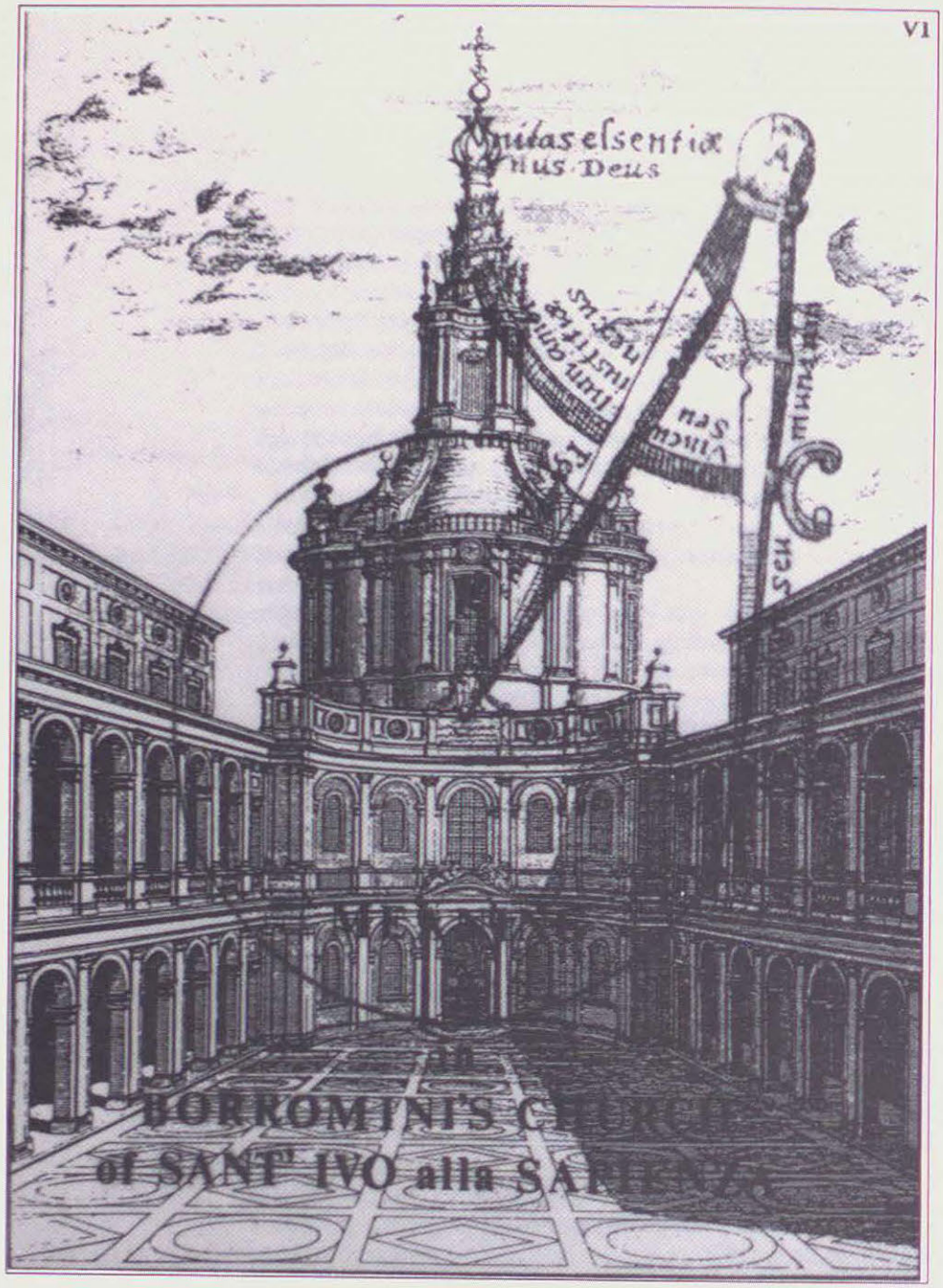

Indra Kagis McEwen

"Transcending specific analogies,
I saw more and more clearly
how much beauty lies in a place
where matter encounters different
meanings:
nothing can be beautiful,
not a person, a thing, or a city,
if it signifies only itself."
Aldo Rossi, A Scientific Autobiography

La petite église baroque de Sant' Ivo alla Sapienza (Rome) conçue par Borromini, est chargée de signification dans tous les aspects de sa conception. L'article qui suit retrace le sens des formes et de l'ornementation choisies par Borromini et révèle toute la profondeur de la considération et du sens de l'oeuvre, d'une certaine manière inconcevable pour l'architecte d'aujourd'hui.

Meaning in architecture: the more architects pursue it, the more it seems to elude them.

The study of architecture today involves exposure to countless apparent alternatives to solving the problem. "Form is function", "ornament is a crime", "less is more", "less is a bore". Consider history, consider typology. Consider topology, morphology, ideology, mythology. Consider formalism, rationalism, structuralism, symbolism, functionalism. Consider the presence of absence and the absence of presence.

Consider truth.

The quest for meaning in architecture is futile unless architects stop looking for meaning as such and start looking for something else. Meaning is the result of something other than itself. Happiness is not what makes us happy. Love or comfort or wealth or beauty or hard work is. Meaning is not what makes architecture meaningful, truth is.

Although architectural truth, like poetic truth, is difficult if not impossible to define in formal terms, its presence in a work is unmistakable. For architectural truth to be present in a work, the architect, like the poet, must have something to say, and he must say it well. And when the truth of what is said becomes inseparable from how it is said, poetry results: in words, in masonry, in wood or in steel.

The object lesson considered here is Borromini's church of Sant' Ivo alla Sapienza in Rome, a small centralized church which is one of the masterpieces of the Italian Baroque, and which, unlike other Baroque masterpieces -- notably Bernini's -- relies on purely architectural means for the embodiment of its infinitely complex, rich, and tightly-woven tapestry of poetic truth.

Francesco Borromini was appointed architect to the University of Rome, known as the Sapienza, in September 1632. The foundation stone of Sant' Ivo was laid in January 1643.[1] It can therefore be assumed that, although Borromini was engaged in other major projects[2] during this period, his ideas for Sant' Ivo had over a decade to mature.

Given his monkish habits, his single-minded devotion to architecture and his legendary powers of concentration,[3] it seems extremely likely that although his days may have been spent on site at San Carlo alle Quattro Fontane or at the Oratory of San Filippo Neri, his evenings during those years were spent reading, drawing and thinking about the temple of wisdom to be built at the eastern end of the courtyard of the Sapienza.

The project was undoubtedly one of great personal significance. Encumbered with a melancholy temperament, a destructive temper (he once had a workman at San Giovanni in Laterano literally beaten to death), and an anxious, anti-social personality; consumed with jealousy for his successful rival and temperamental opposite, Bernini,[4] Borromini was a man whose pursuit of wisdom appears at once poignant and heroic. Yet pursue wisdom he did.

As evidence we have the bust of the stoic philosopher Seneca listed in the inventory[5] of his belongings made at the time of his death as well as a library of 1000 volumes (their titles, unfortunately, uncatalogued) and a "curious bibelot in the form of a snail's shell mounted on a brass pedestal".[6] The spiral configuration of this last object has many symbolic connotations, not the least of which is the search for knowledge.

These possessions may seem insufficient evidence for the assertion that Borromini was obsessed with the pursuit of wisdom, but we must recall that 1000 books represented a vast personal library in the mid 17th century, and as Rudolph Wittkower points out, there was nothing arbitrary about Borromini's life.[7] The posthumous inventory also lists a bust of Michelangelo, whom Borromini is known to have revered, and two portraits of Pope Innocent X Pamphili, the only pope to give Borromini sympathetic support. Even his clothing -- he wore black and dressed in the Spanish style, like Philip II of Spain -- appears to have been chosen as evidence of his saturnine temperament and of his pro-Spanish leanings.[8]

The externals of Borromini's life were of great significance. It is inconceivable that the books, the bust of Seneca and the snail's shell were acquired simply for the interior decoration of the sparsely-furnished suite of rooms he occupied near the church of San Giovanni dei Fiorentini in Rome.

One can readily imagine him, crushed by the burden of distasteful spiritual baggage which he cannot dispose of and longs to learn to carry with grace (with stoic detachment and wisdom), planning the church of Sant' Ivo in the spirit of a Hermetic magus practicing sympathetic magic,[9] carefully manipulating symbols, emblems and images in order to bring wisdom down from the heavens to where he sits in anguish.

From its initial conception, Sant' Ivo was to be a temple of wisdom. The earliest of Borromini's plans bears an inscription in the architect's own hand of these words from the Book of Proverbs: "Wisdom has built herself a house -- she has erected seven columns -- she has laid her table".[10] This plan shows an apse behind the altar, with seven columns arranged in a semi-circle. Among Borromini's last drawings for the church, are those reproduced as plates XVIII and XIX of the Opera del Caval. Francesco Boromino, which show the front elevation bearing an inscription referring to Sant' Ivo as aedes sapientiae or temple of wisdom. The inscription is dated 1660, the year the church was consecrated.

Borromini based his designs on circles and triangles,[11] he had done so at San

Carlino, and he did so again at Sant' Ivo. The use of geometry in the 17th century was at once metaphysical, mystical, magical and poetic. The neo-Platonism of the Renaissance coupled with what Frances Yates calls the "reign of Hermes Trismegistus",[12] combined with the geometry of Christian and Jewish symbolism gave every geometric figure cosmic resonance. The architect, wielder of the compass, was the wielder of a mystical tool.

In his Articuli adversos mathematicos (Prague, 1588)[13] the maverick hermetist Giordano Bruno maintains that, "first and last" (praecipuas atque finales)[14], just as there are two kinds of lines, curved and straight, so are there two basic geometrical figures, the circle and the triangle. Manipulation of circles and triangles create figures which in turn yield knowledge of first and last things.

One of the figures so generated is the so-called figura intellectus (Fig. 1) in whose configuration one may readily decipher the double triangle, the star of Solomon. This star or "seal" of Solomon as it is called in hermetic lore, is also the star of David and it is one of the generating figures of Sant' Ivo's ground plan (Fig. 2). Whether or not Borromini was actually familiar with Bruno's work, his appreciation of the power of geometry can be seen as having been similar to Bruno's. Furthermore Bruno's figura intellectus helps to unlock the mystery of there being seven pillars of wisdom in a church whose plan has ostensibly only six bays.

Bruno's figure shows six circles of equal size forming a ring, while a seventh occupies the space at the centre.

The apse with its seven columns disappeared after the design went beyond its first phase but, with the figura intellectus in mind, one can look at the later versions of the plan and clearly read six circumferential pillars of wisdom with a seventh at their centre. Look at the plan of the drum with the lantern plan superimposed on it, as it appears on an original drawing at the Albertina in Vienna. Look at plate X of the Opera with its reflected ceiling plan (Fig. 3). It is impossible not to see seven circles in these drawings. Seven pillars of wisdom, originally decorating an apse not really integral to the plan, later became part of the very fabric of the church itself, articulating its interior spaces and defining its exterior form.

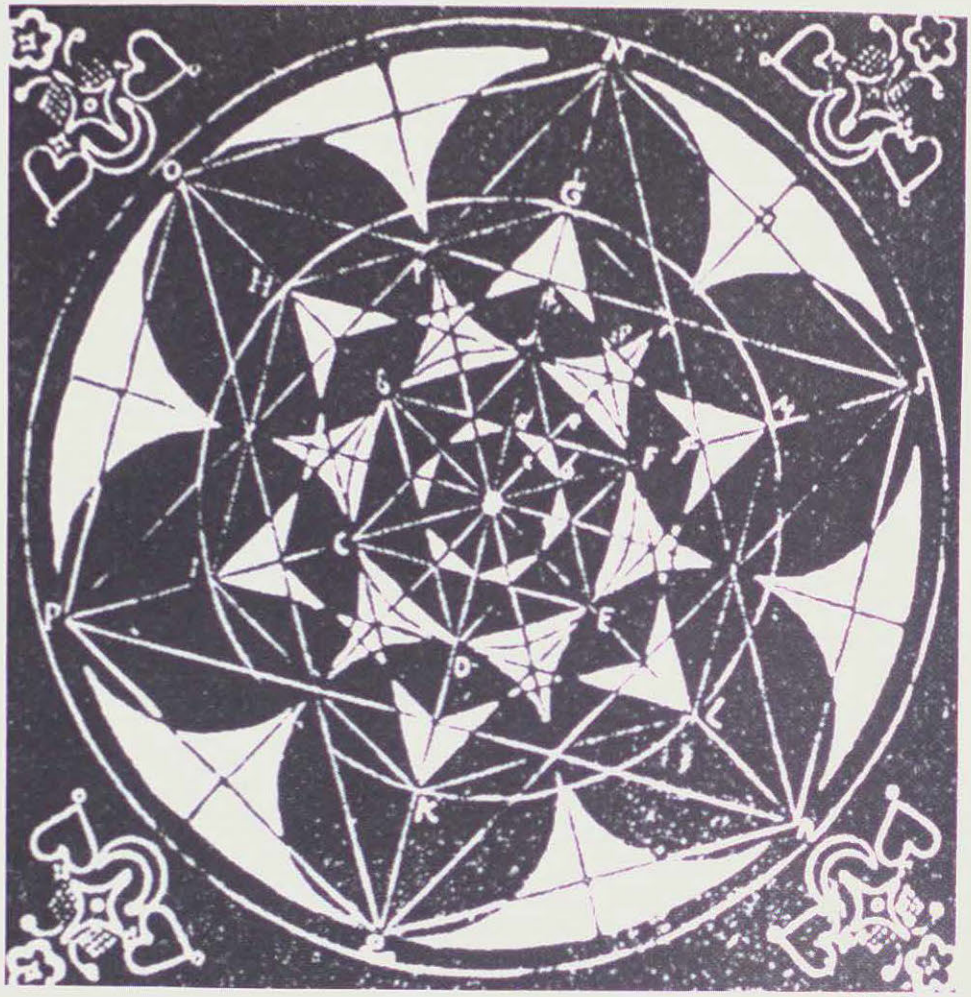

Fig. 1
Bruno's figura intellectus,
from Yates' Giordano Bruno and the Hermetic Tradition.

At ground level, the walls of the six bays which define the interior of the church swing from concave to convex, their rhythm forcefully stressed by the entablature, above which level the whole plan pulls upward and inward to form the dome. The main axis of the church, which, as Anthony Blunt points out, is vertical, pierces the dome at its summit. Here, as wisdom's seventh pillar, it is crowned inside the lantern by a ring of flame, God's glory[15]. At the centre of this ring hovers the Holy Spirit in the form of a dove, and from its periphery fall pentecostal brands of fire, destined for the heads of the twelve apostles, which were to have been enshrined in twelve niches designed for that purpose.

The level of the entablature on the interior corresponds to where the drum begins on the exterior. Thus an immense thickness of buttressing masonry fills the space between interior and exterior perimeters, since the dome curves inward on the interior, while the drum rises vertically on the exterior. Borromini's use of a drum to buttress his dome finds precedent in the Pantheon (whose stepped dome roof he also adapts to his own ends here), as well as in Lombardy, the province where he was born and trained as a stone mason. Borromini's

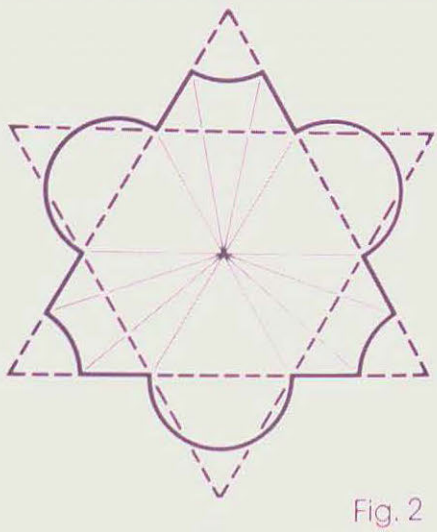

Fig. 2
Plan geometry,
Sant' Ivo alla Sapienza.

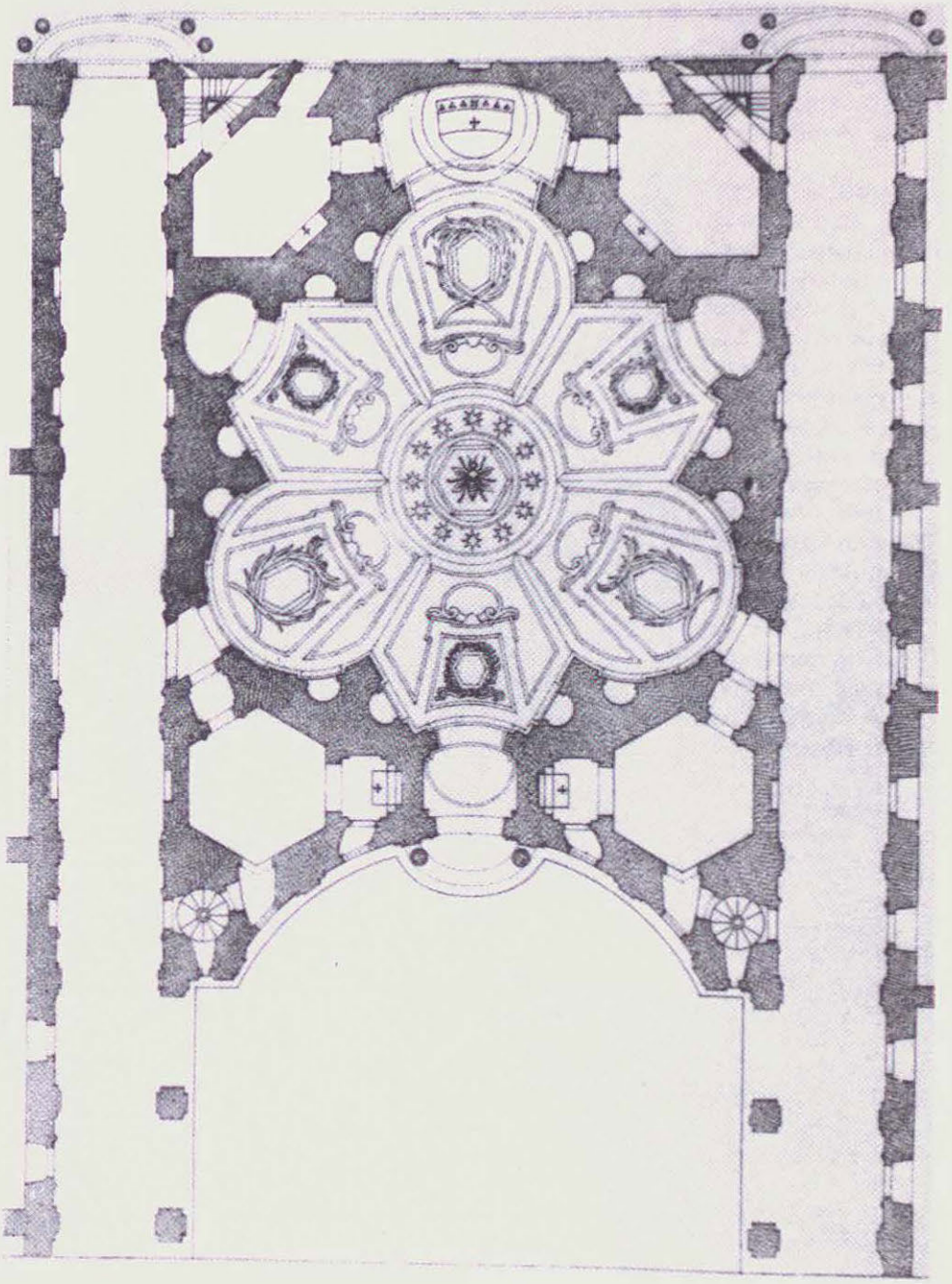

Fig. 3
Dome plan of Sant' Ivo,
plate X. Opera del Caval. Francesco Boromino.

determination to have the church constructed on seven columns, however, supercedes these admittedly important structural considerations. By handling the drum the way he did, the seven columns implicit inside the church become explicit on its exterior, with six of them forming the drum while the lantern, or tempietto as he called it, topped by his celebrated tower spiraling up to heaven, becomes the seventh.

Evidence seems to indicate that the church spire owes its form to an engraving by Martin van Heemskerck, one of a series illustrating, in this case, the eight (not seven) wonders of the ancient world.[16] The engraving in question, published in 1572, is of the city of Babylon, whose most prominent feature is a tower -- none other than the Tower of Babel (Fig. 4). In the context of Sant' Ivo, where, as we shall see, the symbolism of Christian redemption is fundamental, Borromini's spire, the most prominent feature of his church, proclaims a tower of Babel redeemed. When the Holy Spirit descended on the apostles, they were blessed (not cursed, as at Babel) with the gift of tongues. By permitting speech with all nations Pentecost undid Babel, redeemed it. Through this redemption what had been a tower of human folly became a tower of wisdom.[17]

There are seven pillars of wisdom. There are also seven gifts of the holy spirit.[18]

In Christian theology (and one must remember that although Borromini may have been something of a hermetist and was probably a stoic, he was absolutely a Christian) the three persons of the trinity, whose symbol, not coincidentally, is a triangle, are: God the father, who is the God of strength and creative power; Jesus Christ, who is the God of love; and the Holy Spirit,who is the God of intelligence.[19] Chief among the Spirit's seven gifts is the gift of wisdom.

As we have seen, the Holy Spirit crowns the interior of the church. The Spirit's image, surrounded by flamboyant rays and ringed by the circle of eternal perfection is also emblazoned on the front facade. Its position near the entablature of the drum, places it above a relief of the Lamb of the Apocalypse, who is Christ, and between a pair of "chrismata" which flank it on either side. The chrisma[20] is the monogram of Christ, composed of the greek letters chi and rho, the first two letters of "Christ" superimposed (see Fig. 5).

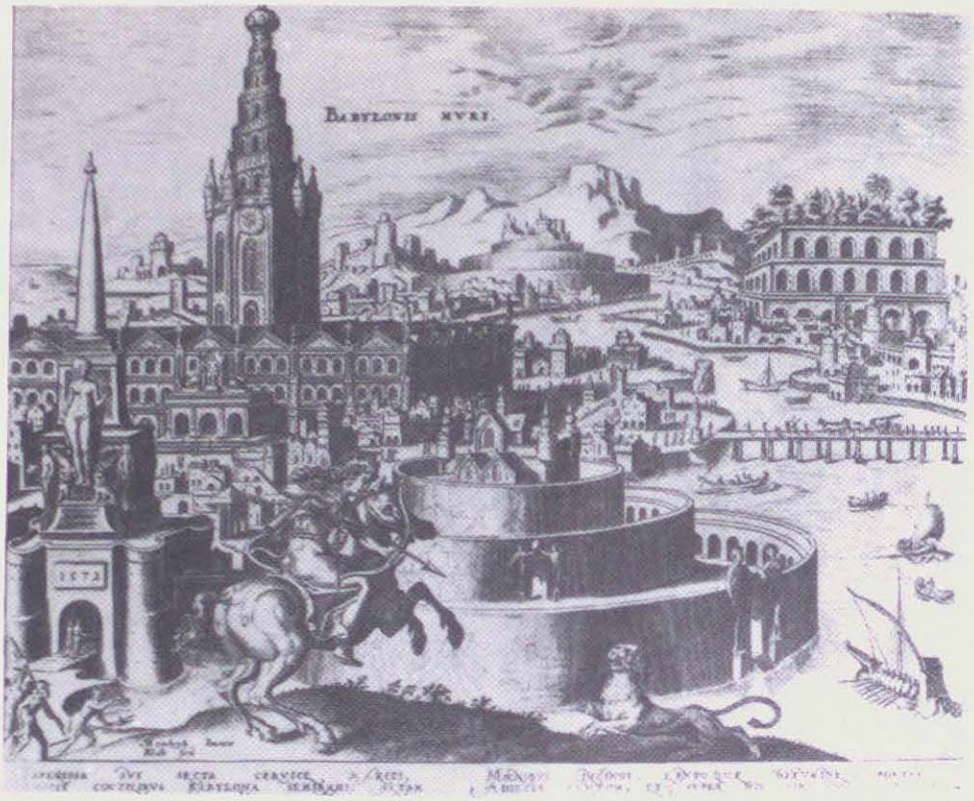

Fig. 4
Martin van Heemskerck's engraving of the city of Babylon, from Duclaux, "Dessins de Martin van Heemskerck".

It is possible, as Paolo Portoghesi[21] has done, to overlay the chrisma on the ground plan of Sant' Ivo, and in fact this superimposition is justified by Borromini's own drawings. Plate IX of the Opera (Fig. 6) a sectional perspective looking towards the entrance of the church, shows the construction lines of the ground plan reduced to four axes and a circle. Their configuration clearly evokes the chrisma combined with the conventional Christian cross.

There is another monogram for Christ's name. It is composed of the Greek letter iota, the first letter of Jesus, and again, the chi for Christ. This monogram reads as a circle equally divided by three axes.[23] Plate VIII of the Opera (Fig. 6), a sectional perspective looking towards the altar, shows this figure overlaid on its ground plan. Twice Borromini's own drawings make deliberate reference to the name of God the son, in a ground plan whose form, as we noted, is carried up unbroken to the top of the dome where it is gathered into the circle of eternity.

Christian belief declares the blood of Jesus Christ to be what the words of the mass describe as the "blood of the new and everlasting covenant" which has replaced the ancient covenant made between God and the Jewish people. The Christian sees the New Testament as a fulfillment of the Old. In the floor plan of Sant' Ivo alla Sapienza we see Christ's name superimposed on the star of David.

A dialogue between the numbers six and eight is established in plan by the six-pointed Star and Christian monogram on the one hand and the eight-pointed chrisma-cross emblem on the other. This dialogue was again stressed when the floor of the church was paved in 1660. Anthony Blunt[23] devotes nearly two pages of his book on Borromini trying, and finally failing, to find convincing formal reasons for Borromini's use of an octagonal paving pattern on a floor that was so emphatically hexagonal. Blunt fails because there are no formal reasons, only symbolic ones.

The hexagon implicit in the six-pointed star symbolizes both the Creator and his creation.[24] One reason for this is suggested by God's creation having taken six days to reach completion. The eight-sided figure, and hence the eight-pointed star, symbolizes regeneration. Baptisteries and baptismal fonts are traditionally octagonal due to this regenerative symbolism. There is a very important precedent in Borromini's own work for combining six

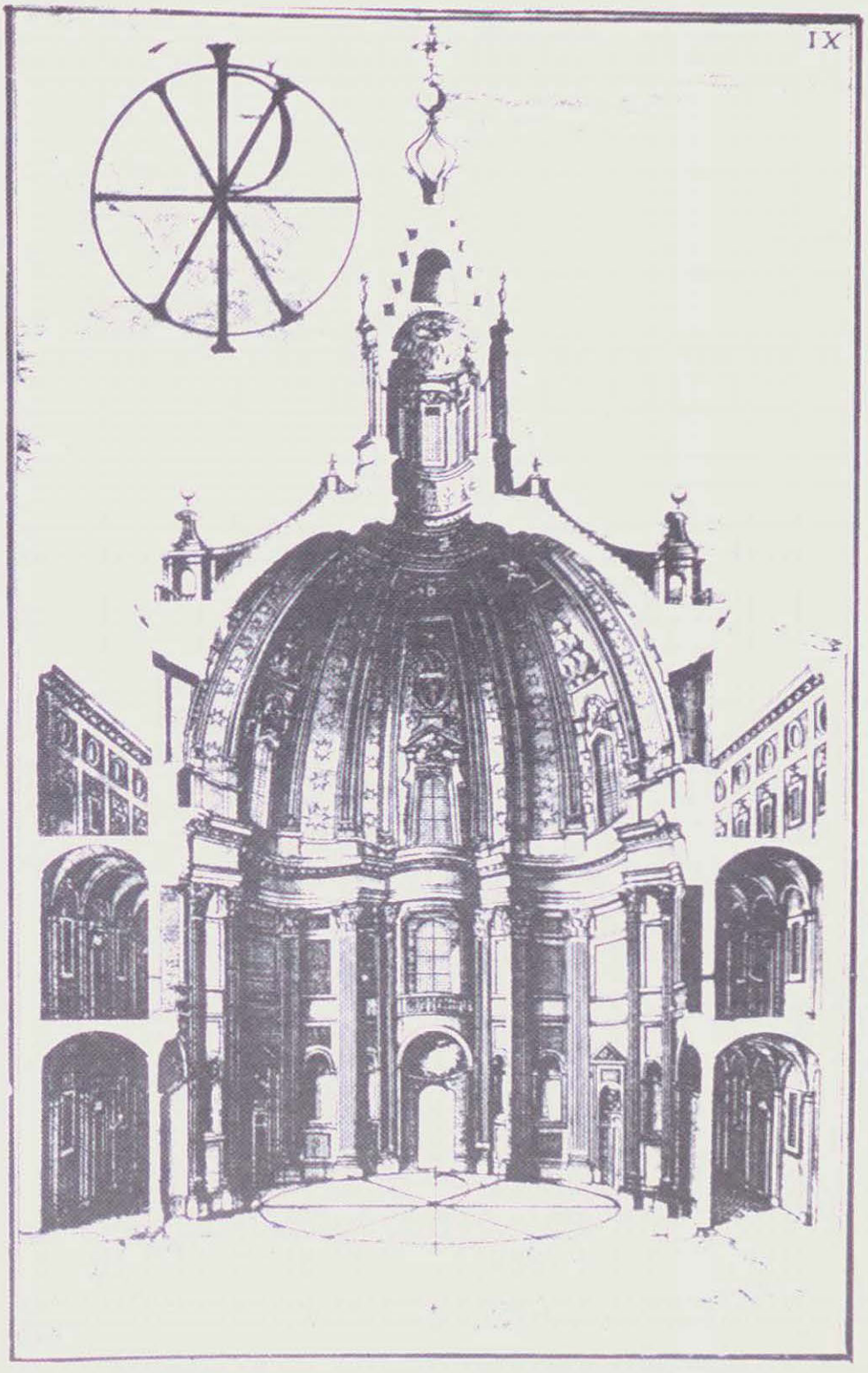

Fig. 5
Sectional perspective looking toward the entrance with superimposed chrisma, plate IX, Opera.

and eight-sided figures in symbolic colloquy. The coffering inside San Carlino's oval dome is an intricate pattern of hexagons and octagons linked by crosses. An enlightened reading of these coffers reveals creation regenerated through the sacrifice of Jesus Christ.

At Sant' Ivo, where the link with San Carlino is reinforced by the prominence given the Holy Spirit who crowns the interiors of both churches, the dialogue between six and eight is repeated in the alternation of six and eight-pointed stars which climb the interior of the dome up to the base of the lantern (Fig. 5 & 6). The six-pointed stars are Solomon's, David's and the Creator's; the eight-pointed ones, stars of regeneration and redemption, are those of Christ. Plate XXXVI of the Opera shows a cross growing from the last star, David's, in the alternating sequence. As the genealogy at the beginning of St. Matthew's gospel goes to some lengths to establish, Jesus was born of the house of David, and as we have seen, the blood of his cross sealed the covenant which replaced that made with David's race. The twelve stars in the ring which circle the dome's summit are all eight-pointed, all Christ's.

As noted earlier, the figure of the plan continues unbroken up through the dome where it is gathered into a circle, giving, in the view of some critics[25] a tent-like aspect to the entire church. Its walls seem to fall about one like a rich fabric, hanging regally in stiff, emblem-encrusted folds. It is almost certainly no coincidence that the first tabernacle of Judeo-Christian tradition, the very first house for God on earth, was Moses' tabernacle in the desert,and it was a tent.

The tabernacle described in Exodus (25-31) with exact measurements given in cubits, if reconstructed[26], looks more like a draped shoe box than the fabulous tent which is Sant' Ivo. It is my belief that the tent Borromini imagined as having been Moses' tabernacle looked more like the one illustrated in Heinrich Khunrath's Amphitheatrum Sapientiae Aeternae (1609; Fig. 7) than anything measureable in Old Testament cubits. It is of considerable interest to note that the general outlines of Khunrath's tent correspond to the general outlines of Sant' Ivo, that the alchemist kneeling before it is seeking divine wisdom, and that on the table beside him is a "curious bibelot in the shape of snail's shell" mounted on a pedestal.

Like Moses before him King David too housed the ark of the covenant in a tent. The words of Psalm 27, said to be David's, convey something of the power of that image: a resonance these words would have had for Borromini who must have known them well.

> "... One request I have ever made of the Lord, let me claim it still, to dwell in the Lord's house my whole life long, resting content in the Lord's goodness, gazing at his temple. In his royal tent he hides me, in the inmost recess of his royal tent, safe from peril. On a rock fastness he lifts me high up; my head rises high above my enemies that encompass me. I will make an offering of triumphant music in this tabernacle of his, singing and praising the Lord..."

Palms of victory and stucco crowns fill the interior of Sant' Ivo alla Sapienza with triumphant iconographic music.

If the tent-tabernacle was the first of God's houses on earth, then the temple, built by David's son Solomon was the second. Its decoration, described in the book of Kings (III Kings 6-9), particularly of the Holy of Holies in which was placed the ark, consisted of cherubim and palm trees, plated with gold.

In Ezekielem Explanationes, the extremely influential work of Jesuits Jeronimo del Prado and Juan Bautista Villalpando published between 1596 and 1604[27], it is claimed that the temple seen in a vision by the prophet Ezekiel in the 6th century B.C. was the same as that built by Solomon 400 years earlier and destroyed by the Babylonians 25 years before the date of Ezekiel's prophesy. Villalpando reconstructed the Temple based on Ezekiel's description, (Ezekiel: 40-48) where measurements are given in cubits. Giving the Temple an image as real architecture was seen as a means of revealing its full mystical import.[28] This reconstruction also featured decoration in the form of palm trees and cherubim. It comes as no surprise, then, to find palm branches and cherubim decorating the interior of Sant' Ivo, temple of Solomonic Wisdom and tabernacle of the bread and wine of the new convenant.

Villalpando reconstructed the temple of Ezekiel's prophesy as architecture dictated by God not only because he believed it to be the same as Solomon's temple, but also, much more importantly, because Ezekiel's temple prefigured Christ, the "temple not made by human hands", and Christs's church, ultimately glorified as the Heavenly Jerusalem of St. John's Apocalypse. No 17th-century catholic architect could have been unaware of Villalpando's work -- certainly not Borromini -- and I believe that he intended Sant' Ivo to have a mystical significance similar to that of Villalpando's celebrated reconstruction of Solomon's temple.

Borromini's church not only recalls Solomon's temple but also a temple even more ancient than Solomon's: the tent-tabernacle of Moses where God first lodged with humanity. Since God is both Alpha and Omega, one cannot invoke Alpha without invoking Omega. One would therefore expect to find, in addition to signs of God's first association with men, signs of his ultimate relationship with his creation. Such signs are present, and they originate, naturally enough, in St. John's vision of the Heavenly Jerusalem (the Glorified Church, the Last Temple), described in the Apocalypse, the last book of the Bible.

On the front façade, above the entrance, as mentioned, is the Lamb of the Apocalypse, who is Christ, lying on the book of the seven seals. The interior is full of apocalyptic associations. The crowns thrown down by the elders before God's throne (Apocalypse 4.10) appear on the walls. The twelve stars which crown the Virgin in Apocalypse 12.2 crown the interior of the dome. The walls of the Heavenly City have twelve foundation stones on which are written the names of the twelve apostles. Sant' Ivo has twelve niches, designed to accommodate statues of those apostles. The heavenly city has no need of sun or moon -- "the glory of God shone there" (Apocalypse 21.23): within the lantern, the highest point inside the church

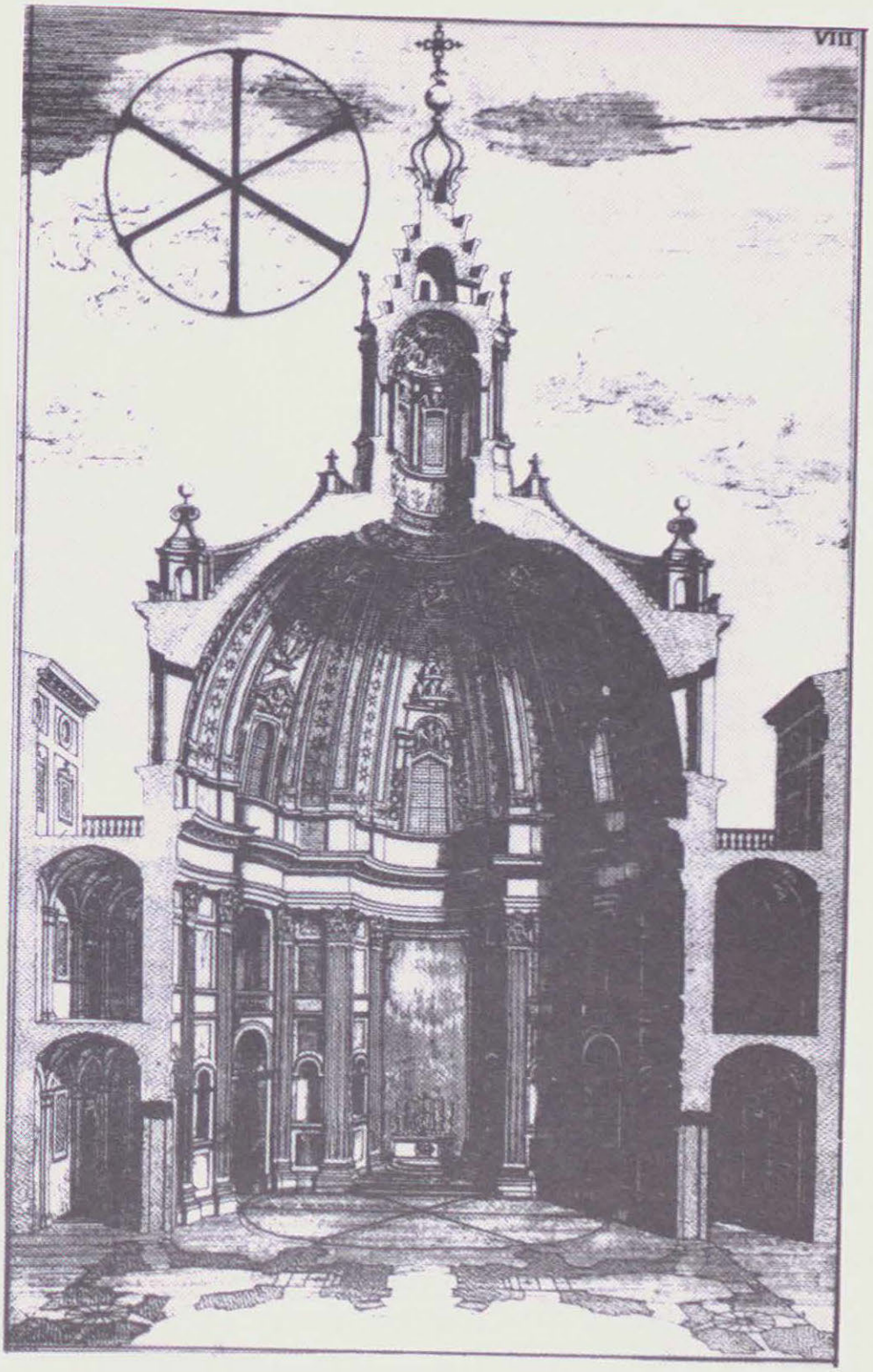

Fig. 6
Sectional perspective looking towards the altar, plate VIII, Opera.

Fig. 7
The alchemist praying before his tent,
from de Mirimonde, Astrologie et Musique.

is crowned by a ring of flame, known iconographically as God's glory. The bride of the Lamb, Christ's church, wears linen of shining white. So does Sant' Ivo, whose white interior walls seem to hang in folds, like a tent -- or a bridal garment.

The concluding verses of St. John's revelation read, "I, Jesus, have sent my angel ... I, the offspring of David's race; I, the bright star that brings the day ...". The stars and crosses of the dome were discussed earlier. Now we see that their significance also links Borromini's church to the Glorified Church of St. John's vision, and in so doing, makes Sant' Ivo, like the Temple reconstructed by Villalpando, a mystical prophesy of that glorified church.

All the plans and elevations of the Opera show Sant' Ivo with a two columned portico (Fig. 8) which seems never to have been built. With Solomon in mind, it is difficult not to see the two columns of this entrance as recalling Jachin and Boaz, the two bronze pillars erected on either side of the entrance to Solomon's temple. The dedication to St. Ivo suggests another reason for evoking the Solomonic temple.

Enlightened dispensation of justice was the chief manifestation of Solomon's wisdom. We all remember how he established the parentage of an infant claimed by two different women by proposing to cut the baby in half (III Kings 3.16-28). In this connection, it is particularly fascinating to discover that Saint Ivo Helory (1253-1303), the Breton saint to whom the church is dedicated, was a lawyer, is the patron saint of lawyers as well as of the University of Nantes in Brittany, and is said to have "administered justice with an impartiality and kindness which gained him the goodwill even of the losing side".[29]

The church portico illustrated in plate XVII of the Opera features two female figures reclining on its pediment. One is clearly the "Christian Faith" of Cesare Ripa's Iconologia[30], first published in 1593. Ripa describes the iconographical representation of Christian faith as a virgin dressed in white, holding in her right hand a cross and an open book, exactly as she appears on Borromini's pediment, where her presence needs no elucidation. The second figure is of less obvious significance. She appears as a woman with two babies on her lap, looking at one, who suckles at her left breast, with a loving gaze, while completely disregarding the other, who stares up at her hungrily. It has as its source plate V of an emblem book by one Petrus Costalius, or Pierre Cousteau, published in 1555.[31]

Every correctly formulated emblem in the 16th century had a motto, an "ikon" or image, and an epigram.[32] The motto of Pierre Cousteau's emblem tells us, in effect, that justice is impartial, and that the emblem originates with the stoic philosopher, Crysippus. A woodcut illustrates a woman with two babies, nursing both, and the epigram under it explains that she represents the goddess Justice (Iustitia) whose right breast nourishes war, and whose left one, peace.

In Borromini's adaptation (Fig. 8), Iustitia feeds only peace while discord goes hungry; just as Justice fostered harmony through her agent Saint Ivo Helory when he settled opposing claims "with an impartiality and kindness which gained him the goodwill even of the losing side". In more general terms, the emblem of Justice, coupled as it is with that of Christian Faith, reminds the believer that Christian justice is ever tempered with love, and that impartial love is what makes Christ the "Prince of Peace".

A veritable 17th-century mania, whose moral purpose was to instruct while pleasing the eye,[33] the language of emblems is everywhere present in Sant' Ivo. We have already discussed the significance on many of them, including some perhaps less obviously "emblematic" in the strict 17th-century sense of the word. Belonging to the same family as emblems, and part of the 17th-century emblem mania were devices and coats of arms, whose use was ubiquitous, even to the decoration of clothing and of state apartments.[34]

The building of Sant' Ivo spanned the reign of three popes. The first was Urban VIII Barberini, and his device was the bee. Its shape and the shape of its honeycomb is reflected in the hexagonal ground plan of the church. That the hexagon reflected the Barberini device, as well as other intentions already discussed, is confirmed by plate X of the Opera. The second pope was Innocent X Pamphili, the only papal patron to favour Borromini over Bernini. His coat of arms bears three lilies as well as a dove carrying an olive branch. The dove appears (plate XXVVIII, Opera), at the top of Borromini's corkscrew spire while lilies decorate the interior of the dome. The decoration of the church in the late 1650's was carried out during the reign of Alexander VII Chigi, whose coat of arms was quartered with oak trees and with a device of six "monti", or mounts, topped by an eight-pointed star. It is not surprising, therefore, to find Chigi monti and stars, and the branches and leaves of oak trees the predominant heraldic motif of Sant' Ivo. Critics seem to be unanimous in seeing the eight-pointed stars in Sant' Ivo exclusively as Chigi stars. These stars also symbolize Christ, the redeemer, the morning star of the Apocalypse. The fact that they are Chigi stars as well simply enriches their meaning.

The use of papal arms in the church of Sant' Ivo has another significance, much more profound than the flattery of actual or potential patrons. When a Christian professes his faith he is recalling a verifiable point in history when the eternal entered time; when, as C.S. Lewis puts it, "myth became fact ... without ceasing to be a myth".[35] That is why, when he recites the apostles' creed, the Christian says that Jesus Christ, son of God, "suffered under Pontius Pilate". The Christian myth of the Dying God differs from all the others in that it can be dated.[36]

The papal arms in Sant' Ivo serve a similar function to the mention of Pontius Pilate in the apostles' creed. Borromini's masterful manipulation of straight and curved lines, of triangles and circles, has succeeded in invoking Alpha and Omega, in making the eternal present. Transfixing the timeless in time are the emblems of bee, dove, and Chigi monti. The first and last temples of Judeo-Christian myth are also this particular temple built during the pontificates of Urban VIII Barberini, Innocent X Pamphili, and Alexander VII Chigi. Seen in this light, the whole church becomes a metaphor for the mystery of the Incarnation.

Incarnation, with a small "i", as the embodiment of truth in poetry, is a lesser mystery but similar in kind to that when, for the Christian, the Word became flesh nearly two thousand years ago. As the church of

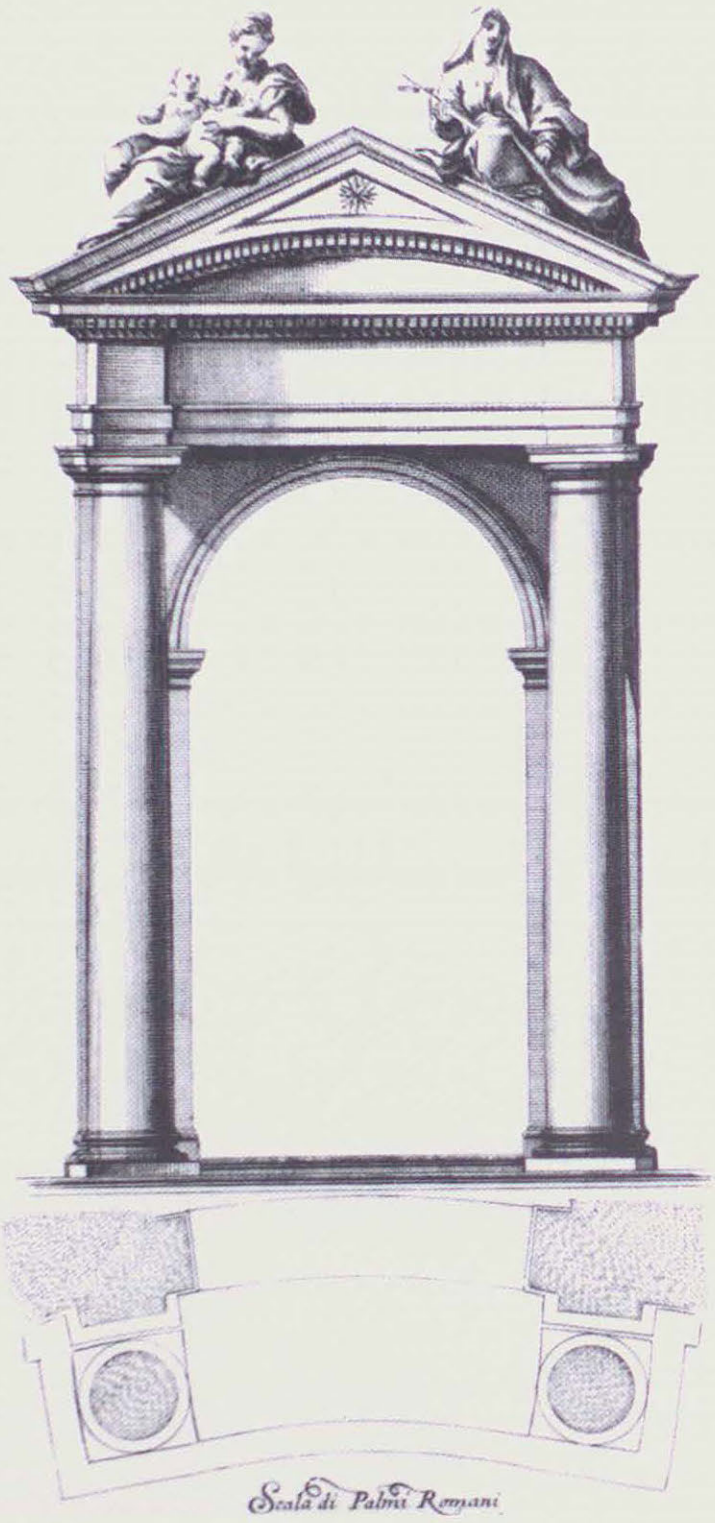

Fig. 8
Unbuilt entrance portico, plate XVII, Opera.

Sant' Ivo so eloquently demonstrates, architecture has the potential for making poetic truth not only materially present but actually inhabitable. It is a potential whose exploitation demands that architects acknowledge the existence of a world of truth worth making flesh. I believe that such assent is crucial if the architect who seeks meaning is to attain his goal.

NOTES

1. Anthony Blunt, Borromini, (London, 1979).

2. San Carlo alle Quattro Fontane and the Oratory of San Filippo Neri.

3. Rudolf Wittkower, "Borromini: His Character and Life" in Studies in the Italian Baroque, (London, 1975), p. 155. Borromini is known to have been both celibate and abstemious.

4. Wittkower, op. cit.

5. Op. cit.

6. Paolo Portoghesi, "Borromini", in The Encyclopaedia of World Art, p. 555.

7. Wittkower, op. cit.

8. Op. cit.

9. Hermetism was a magico-astrological body of knowledge, based on a collection of writing known as the Hermetica, which anthologize the thinking of what turned out, in the 17th century, to be a spurious ancient Egyptian sage known as Hermes Trismegistus, or "thrice-great" Hermes. The practice of hermetism involved a wide range of magical activities and was often combined with Christian belief, which many saw as its having foreshadowed. Frances Yates' Girodano Bruno and the Hermetic Tradition, (London, 1964), is and excellent source book on the subject.

Yates, op. cit., p. 45 ff.

Sympathetic magic involved the practice of channelling divine influences, which pour down uninterruptedly from the heavens, by the use of talismans and images appropriate to the power involved.

10. Pierre de la Ruffieniere du Prey, "Solomonic Symbolism in Borromini's Church of S. Ivo alla Sapienza", Zeitschrift fur Kunst-Gesichte, Vol. XXXI, 1968, p. 216.

11. Blunt, op. cit., p. 114.

12. Yates, op. cit., p. 449. See note 8, above. The "reign of Hermes Trismegistus" lasted from the late 15th to the early 17th centuries.

13. Yates, op. cit.

14. Giordano Bruno, Opera Latine, I.iii, (Florence 1889), p. 19.

15. A.N. Didron, Christian Iconography, (London, 1851), p. 130 ff.

16. L. Duclaux, "Dessins de Martin van Heemskerck". Revue du Louvre, 1981, no. 5, p. 376 ff.

17. Blunt, op. cit., p. 126. Blunt asserts this transmutation as a paradox without mentioning its redemptive significance.

18. Didron, op. cit., p. 424.

19. Op. cit., p. 420.

20. Op. cit., p. 392.

21. Paolo Portoghesi, Borromini: Architettura come Linguaggio, (Rome, 1967).

22. Dodron, op. cit., p. 393.

23. Blunt, op. cit., pp. 121,122.

24.

25. Op. cit., p. 114.

26. See illustrations in Robert Jan van Pelt, "Philo of Alexandria and the Architecture of the Cosmos", A.A. Files 4, July 1983, pp. 3-15.

27. See Rene Taylor, "Hermetism and Mystical Architecture in the Society of Jesus", in Wittkower (ed.), Baroque Art, the Jesuit Contribution (New York, 1972).

28. Taylor, op. cit., p. 75.

29. Herbert Thurston, S.J., and Donald Attwater, Butler's Lives of the Saints (London, 1956), p. 351.

30. Cesare Ripa, Iconologie, French edition of 1644, figure LXIV.

31. Arthur Henkel and Albrecht Schone, Emblemata, (Stuttgart, 1967), p. 1555.

None of the critical works consulted discusses the figures on the pediment. The

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attribution of Couteau's emblem as the source for Borromini's is my own.

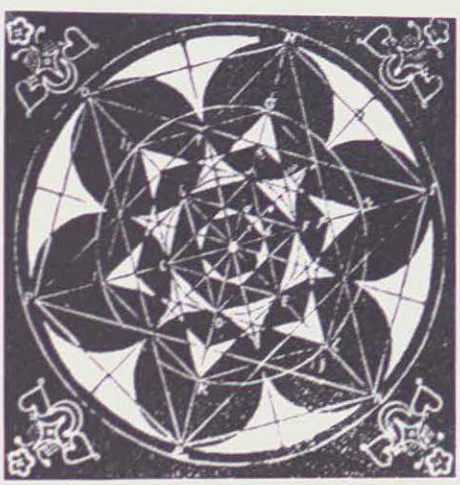
32. Wadislaw Tatarkiewicz, History of Aesthetics, (Paris, 1974) Vol. III. p. 223.

33. Mario Praz, Studies in Seventeenth-Century Imagery, (Rome, 1964), p. 169 ff.

34. Loc. cit.

35. C.S. Lewis, "Myth Became Fact", in God in the Dock, (London, 1979), p. 43; first published in Undeceptions, (London, 1971).

36. Osiris and Dionysus are two examples of Gods whose death and resurrection cannot be dated. For a comparative study of the Dying God myth, see Sir James Frazer's The Golden Bough.



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Articles

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The deadline for submissions of thematic articles for each issue, as well as any material for our Forum section, is as indicated. All submissions should be typed double-spaced and include a 100 word summary, with a one line biography. Any graphic material included should be in black and white and may include negatives, large size photographs (8" x 10") or posistats. For further information contact your Regional Editor of THE FIFTH COLUMN.

TECHNOLOGICAL WARFARE AND THE ARCHITECT
Vol. 7, No. 1

Today's dichotomy between art and science finds its roots in the 18th century, and has been strongly felt by the architect since that time. What does today's technological world hold for the architect? Will he become a computer genius? An engineer? Architecture is torn, now more than ever, between the restraints of the optimization of industrial building processes and the need for personal creation, which in many minds makes the difference between building and architecture. The recent post-modern movement has turned out to be only a cosmetic layer on modern building construction, "a decorated shed". Should architecture, by contrast, be an expression of the technological changes in the building industry? Can architecture ever again be at the leading edge of knowledge today, as it was in the 16th and 17th centuries, or will that role continue to be held by the post-Einsteinian science of today with architecture as the appendix to engineering?

OLD BUILDINGS IN CHANGING CITIES
Vol. 7, No. 2

Today, as architects, we sit and watch, or often contribute, while buildings, or parts thereof are 'preserved' (from the effects of a neglectful society, some would say). Is it worth saving a building once its surroundings deny its original place in the city? Our understanding today of architecture as a combination of elements and styles from which we may draw at will has even brought us to accept juggling the building elements, in fact creating a whole that was never there. Are we deceiving society? If only the facade of the building is kept, is it enough? Some might disagree, but others, Alberti for instance, see the facade as the stageset for the city, in effect the theatre of a culture. Have we forgotten who walks the streets of our cities?

The deadline for submission is September 1, 1988.

PAPER ARCHITECTURE
Vol. 7, Nos. 3 & 4

Does the paper architect intend for his works to be built? Should he? We're all in effect paper architects, for paper and pencil are the architect's most useful tools. So, the question is: do you have to build to be an architect? Today, the architect's practice in effect seems to validate the extent of his knowledge, but what about so-and-so's best project, the one that never got built? (Sort of like the proverbial fish that got away?) The nature of a competition, or a theoretical architecture implies a different approach to the building itself, so do one's years at school. Compare the paper of the construction drawing to that of the 'architectural' plan or rendering. How does one explain the inherent contradiction between the two? The power of a seductive drawing is strong -- perhaps too strong if one imagined Le Corbusier's Ville Radieuse sprawling over Paris... Paper architecture has a history of being very influential -- should we not examine both the results and very nature of this influence? The first sketches drawn by the architect -- these may either shape a building or become a vision that was never to be. Is paper architecture simply the first step or can it also be an end in itself?

The deadline for submission is December, 1988.

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La date limite pour le remise des articles non thématiques ou tout autre matériel qui pourrait être inclus dans les autres sections de la revue, est la même que pour les articles thématiques. Toutes les soumissions d'articles doivent être dactylographiées à double interligne et doivent inclure un resumé d'une centaine de mots, en plus d'une courte biographie. Toutes les illustrations graphiques accompagnant l'article doivent être en noir et blanc et peuvent être présentées sous forme de négatifs, de photos grand format (8" x 10"), ou de posistats. Pour de plus amples renseignements, veuillez communiquer avec votre éditeur régional ou avec THE FIFTH COLUMN.

LA GUERRE? -- L'ARCHITECTE ET LA TECHNOLOGIE DU XXe SIECLE
Vol. 7, No. 1

Depuis le dix-huitième siècle, l'écart entre l'art et la science augmente tel que ces deux disciplines distinctes semblent le plus souvent opposées. Ceci place l'architecture dans une position plutôt ambigüe, cherchant à satisfaire les contraintes de procédé de construction industriel ainsi que le besoin de s'exprimer créativement. Le mouvement récent du post-modernisme s'est avéré n'être qu'une couche cosmétique appliquée sur une charpente construite selon les dernières méthodes de construction, telle une "decorated shed". Devrait l'architecture n'être que l'expression du développement technologique dans l'industrie de construction? Quelle valeur retrouve-t-on chez les nouvelles constructions `high-tech' de Foster, etc.? Est ce que les arts et les sciences traditionnels, personnifiés par l'architecte et le constructeur, peuvent être réconciliés? L'architecture pourra-t-elle réassumer son rôle des seizième et dix-septième siècles, celle de l'avant-garde du temps, ou devra-t-elle reléguer ce rôle à la science post-Einsteinienne et demeurer submissive aux progrès du génie?

VIEUX BATIMENTS DANS LES VILLES EN DEVELOPPEMENT
Vol. 7, No. 2

Aujourd'hui, en tant qu'architectes, nous nous assoyons et observons, ou souvent contribuons, à la 'préservation' totale ou partielle de bâtiments, des effets d'une société négligente, d'après certains. En vaut-il la peine de sauver un bâtiments une fois que l'environnement nie sa place originale dans la ville? Notre approche actuelle vis-à-vis l'architecture, en tant que combinaison d'éléments et de styles d'où nous puisons nos idées, nous a mené à accepter que l'on jongle avec ces éléments, en effet que l'on crée un faux sens d'unité. Sommes-nous en train de décevoir la société? Si seule la façade est gardée, est-ce assez? Certains ne sont peut-être pas d'accord, mais d'autres, comme Alberti par example, voient la façade comme étant une mise en scène pour la ville, le théâtre de la culture en fait. Avons-nous oublié ceux que marchent dans les rues de nos villes

La limite pour la soumission d'article est le 1 septembre 1988.

ARCHITECTURE DE PAPIER
Vol. 7, Nos. 3 & 4

Le théoricien doit-il nécessairement s'attendre à voir ses oeuvres construites? Est-il nécessaire qu'un architecte construise pour mériter son titre? Le papier et le crayon étant nos outils essentiels, ne sommes-nous pas tous, à un certain moment, des théoriciens de l'architecture?

De nos jours, la pratique architecturale comme telle semble considérer l'importance du savoir, mais que dire du meilleur projet de tel architecte: n'est-ce pas celui qu'il ne construira jamais?

L'influence d'un dessin séduisant est forte, peut-être trop forte si, par exemple, on imagine la Ville Radieuse de Le Corbusier s'étalant sur Paris... "L'architecture de papier", celle qui n'a jamais été construite, qui ne le sera jamais et qui n'a pas la prétention de l'être a influencé depuis toujours l'évolution du bâti; une influence qu'il ne faudrait pas négliger et dont les conséquences et la nature même est à considérer.

La limite pour la soumission d'article est le 1 décembre 1988.

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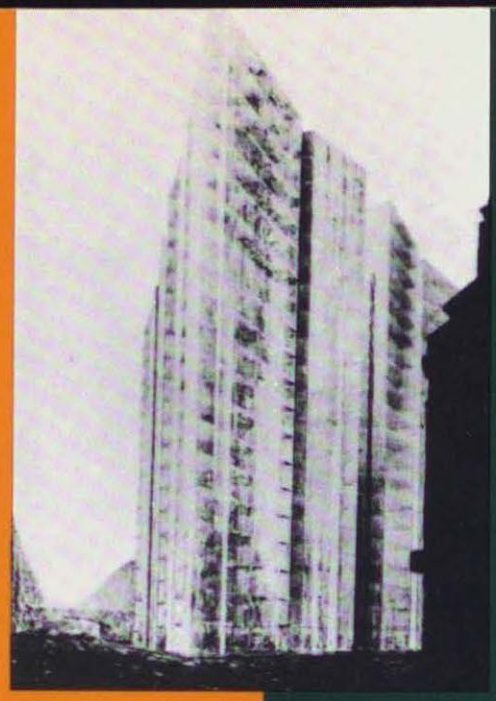

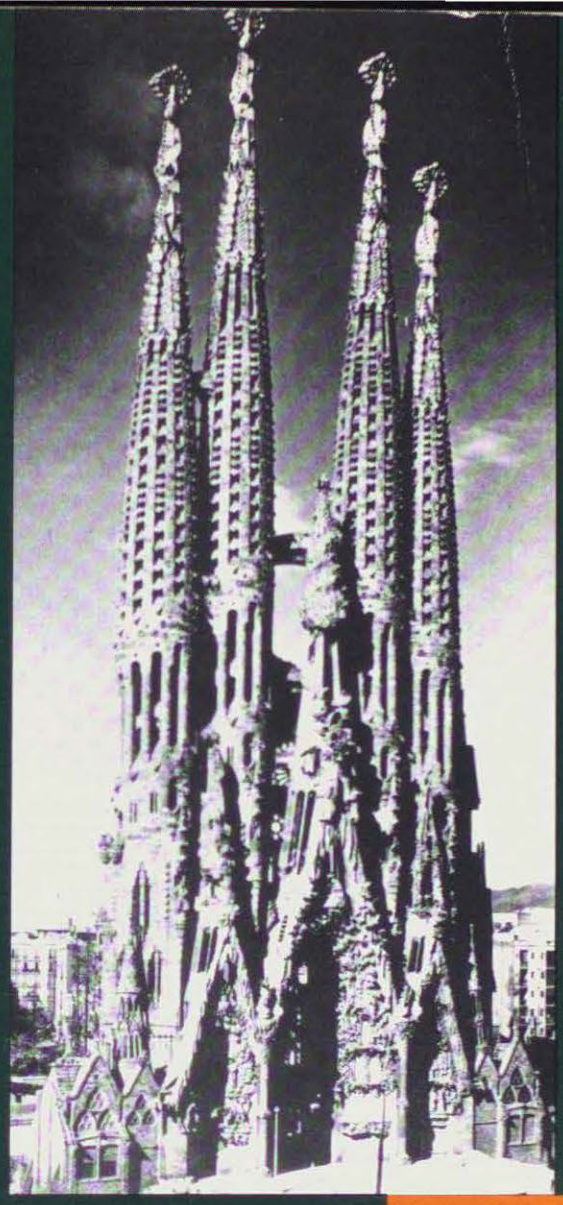

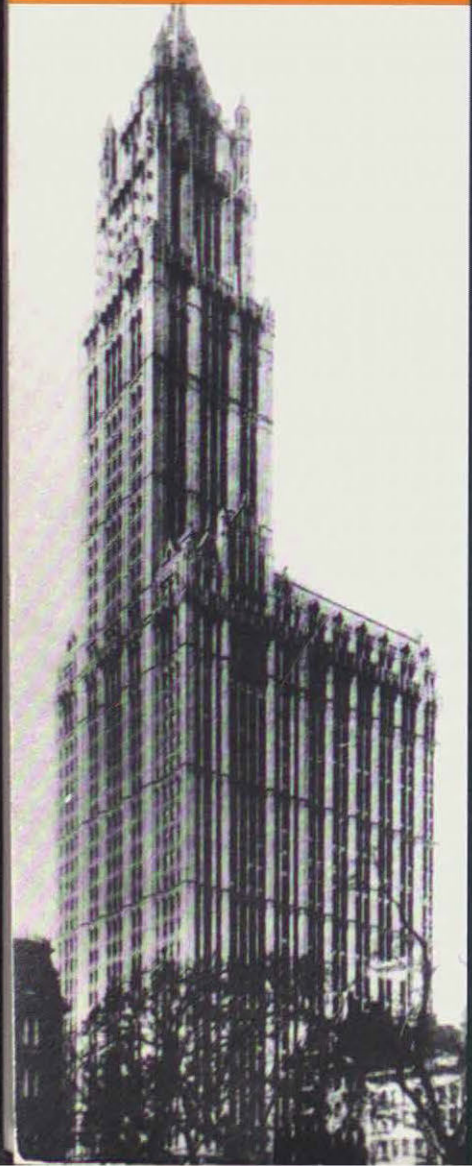

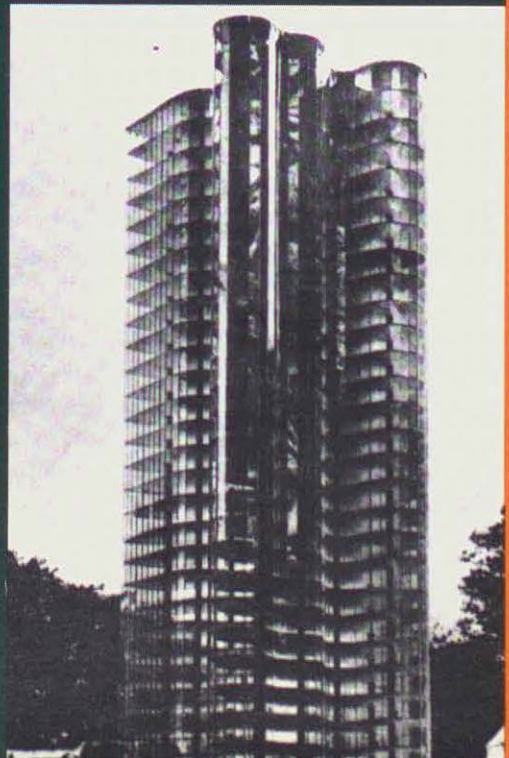

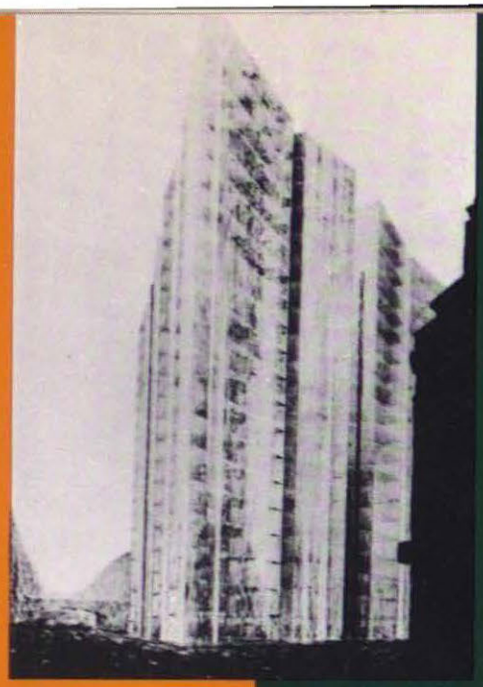

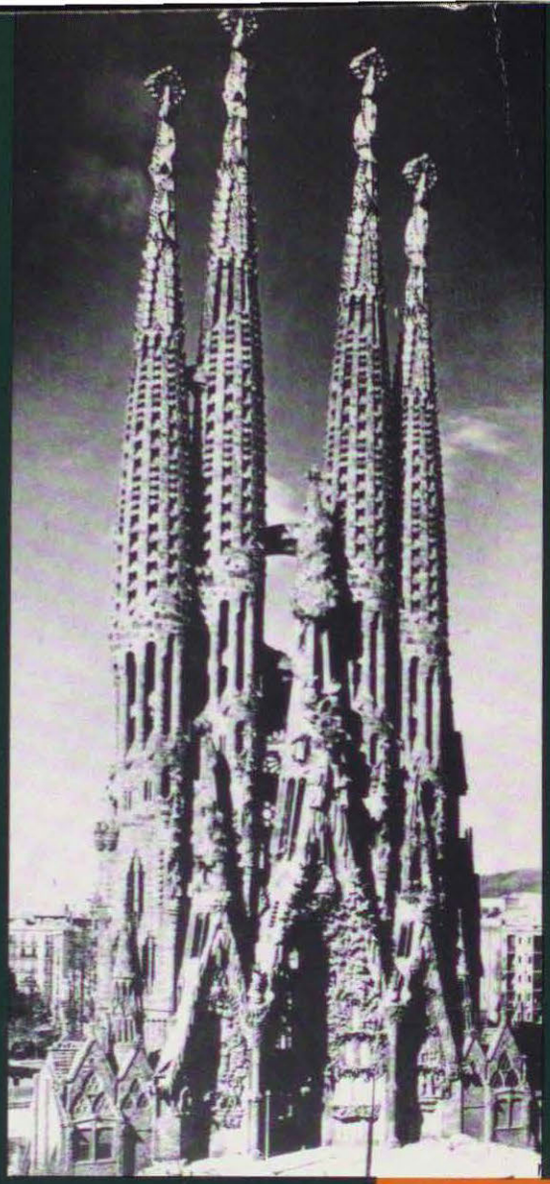

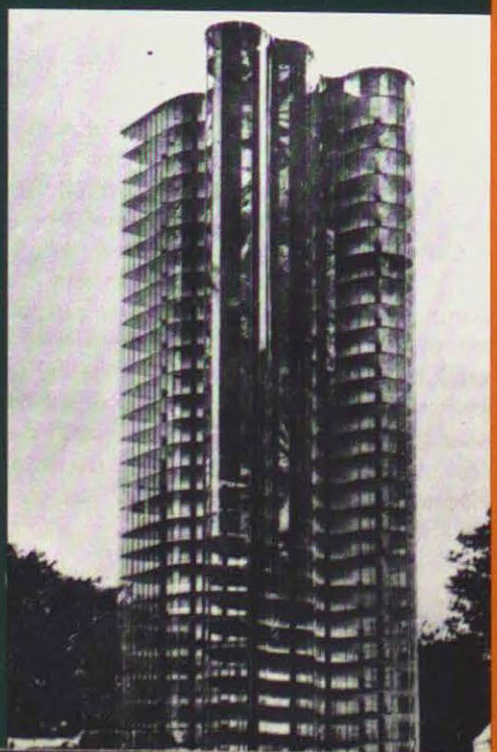

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