# The Mathematics of the Ideal Villa and Other Essays

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The MIT Press
Cambridge, Massachusetts,
and London, England

1976; 1999

# Mannerism and Modern Architecture

First published in the *Architectural Review*, 1950. Though this little piece, particularly in its discussion of Cubism, has been painful to me since before the day of its publication, it has here been allowed to stand substantially as published. Though a present day rehearsal of its arguments (in which I still believe) would surely employ a profoundly different strategy, because this article has long enjoyed a certain notoriety I can see no way of correcting its obscurities and maintaining its sense. Today the art historical discussion of Mannerism has achieved levels of sophistication and detachment which *c.* 1950 were simply not available; but, on the other hand, it is not evident that the modern architect's consciousness of sixteenth century themes has been considerably advanced. There are still two bodies of information—the one art historical, the other modern architectural—and the possibilities of their convergence in a work of rational exegesis still remain remote. Since the writing of this article the initiatives of Robert Venturi have, to some extent, illuminated the situation. Nevertheless, while Venturi has been quite unabashed in his parade of elements of Mannerist origin and while, by these means, he has extended the theater of architectural discourse, the theme modern architecture and Mannerism still awaits the extended and positive interpretation which it deserves.

Le Corbusier's Villa Schwob at La Chaux-de-Fonds of 1916 (Plates 17, 18), his first considerable work to be realized, in spite of its great merits and obvious historical importance, finds no place in the collection of the *Oeuvre complète*; and its absence is entirely understandable. This building is obviously out of key with his later works; and, by its inclusion with them, the didactic emphasis of their collection might have been impaired. But the omission is all the more unfortunate, in that six years later, the building was still found sufficiently serious to be published as an exemplar of proportion and monumentality.[1]

The house is of nearly symmetrical form; and, in spite of a general lightness deriving from its concrete frame, its conventional character is fairly emphatic. The principal block is supported by flanking wings; and a central hall, rising through two stories and crossed by a subsidiary axis, establishes for the plan a simple, balanced, and basically cruciform scheme. The appearance, externally, of these same characteristics of restrained movement and rational elegance seems to invite appreciation in neo-Classical terms; and thus, while the lack of ornament with the simplified cornices suggests the influence of Tony Garnier and the expression of the concrete frame in the flanking walls indicates an obvious debt to Auguste Perret, the elliptical windows are part of the stock furniture of French academic architecture and the building as a whole—compact, coherent, and precise—is an organization which the later eighteenth century might have appreciated and a work toward which a Ledoux, if not a Gabriel, might have found himself sympathetic. One may, it is true, recognize innovation in the simplification of elements, although adequate Austrian and German precedent could no doubt be suggested; one might also perceive in the two bedroom suites of the upper floor some premonition of Le Corbusier's later spatial complexities; but, having made these observations, there is little to be found, in plan and in three elevations at least, which detracts from an almost conventional and conservative excellence.

But the fourth elevation, the entrance facade, presents quite distinct problems of appreciation. Behind its wall the presence of a staircase continued to the third floor has led to an increase in height which somewhat detaches this part of the building from the rest; and this elevation further asserts a severe distinction from the volume in its rear with which on superficial examination it seems scarcely to be related. Indeed, if its succinct, angular qualities are foreign to the curvilinear arrangements of the rest of the building, its exclusive, rectilinear, self-sufficient form seems also to deny the type of organization which reveals itself from the garden.

The flat vertical surface of the two upper floors is divided into three panels. The



outer ones are narrow and pierced by elliptical lunettes, but the central one is elaborately framed, comprising an unrelieved, blank, white surface; and it is toward this surface—and accentuated by all the means within the architect's control—that the eye is immediately led. The low walls, screening service rooms and terrace, are curved inwards rising towards it; the two entrance doors prepare a duality to be resolved; the projecting marquise, with its supporting columns, completes the pregnant isolation of the upper wall; the emphatic elliptical windows increase the demand for a dominant; and, with the mind baffled by so elaborately conceived an ambiguity, the eye comes to rest on the immaculate rectangle and the incisive detail of its brick frame.

Contemplating this facade for any length of time, one is both ravished and immensely irritated. Its moldings are of an extreme finesse. They are lucid and complex. The slightly curved window reveals are of considerable suavity. They reiterate something of the rotund nature of the building behind and help to stress something of the flatness of the surface in which they are located. The contrast of wall below and above the canopy excites; the dogmatic change of color and texture refreshes; but the blank surface is both disturbance and delight; and it is the activity of emptiness which the observer is ultimately called upon to enjoy.

Since this motif, which is so curiously reminiscent of a cinema screen, was presumably intended to shock, its success is complete. For it imbues the facade with all the polemical qualities of a manifesto; and it is this blank panel with its intensifying frame which endows other elements of the facade—columns and canopy—with a staccato quality seeming to foreshadow Le Corbusier's later development. Distinct and deliberate, it draws attention to itself; and yet, without apparent content, it at once distributes attention over the rest of the house. By its conclusiveness, the whole building gains significance; but, by its emptiness, it is, at the same time, the problem in terms of which the whole building is stated; and thus, as apparent outcome of its systematically opposite values, there issue a whole series of disturbances of which it is both origin and result.

Behind the panel lies the staircase, the lighting of which it can only impair, and one must assume that an architect as apt as Le Corbusier could, had he wished, have chosen some alternative and functionally more satisfactory organization; while, even if it were to be supposed (improbable as it appears) that the framed surface was intended to receive some fresco or inscription, it is still a motif sufficiently abnormal and recondite to stimulate curiosity and to encourage a hunt for possible parallels. And here the most probable field of investigation would seem to be Italian; not that with Le Corbusier any direct derivation should be expected,

but that, in general terms, he so frequently appears to be descended from the architectural traditions of Renaissance humanism.

In early Renaissance loggia and palace facades, sequences of alternating windows and panels do not appear to be uncommon. In such more frequent sequences from the sixteenth century, panels and windows acquire almost equal significance. Panels may be expressed as blank surfaces, or become a range of inscribed tablets, or again they may form the frames for painting; but whatever their particular employment may be, the alternation of a developed system of paneling, with an equally developed system of fenestration, seems always to produce complexity and duality of emphasis in a facade. This is a quality which must have given considerable pleasure to the generation of architects subsequent to Bramante; and in the pages of Serlio, for instance, panels occur in almost embarrassing profusion.[2] Sometimes they are to be found in the typical alternation, or on other occasions absorbing entire wall surfaces; in elongated form they are used to intersect two whole ranges of windows, or they may appear as the crowning motif of a triumphal arch or Venetian palace. It was probably Serlio who first employed the panel as the focus of a facade. In some cases he has groups of windows arranged on either side of this reduced but evocative form of central emphasis; but it also seems likely that in only two instances does the panel make a central appearance within an elevation so restricted as that at La Chaux-de-Fonds; and although comparisons of this sort are frequently tendentious and overdrawn, the so-called Casa di Palladio at Vicenza (Plate 19) and Federico Zuccheri's casino in Florence (Plate 20) do show a quality sufficiently remarkable to permit their interpretation as sixteenth century commentaries upon the same theme. Dating from 1572 and 1578 respectively, small houses of a personal and distinctly precious quality, it would be pleasant to assume that they represented a type, a formula for the later sixteenth century artist's house.

Palladio's building is apparently generated by the combination of a domestic facade and an arcaded loggia which, in its ornaments, assumes the role of a triumphal arch. Unlike the conventional triumphal arches of antiquity, however, a developed Corinthian superstructure is included; and although on the ground floor the two functions of the loggia as part of a house and as part of a triumphal arch are closely integrated, in itself the arch is even more intimately related to the panel formed by the Corinthian pilasters above. The breaking forward of the Ionic entablature about the arch provides a direct vertical movement through the two orders, emphasizing their interdependence, so that the panel retains the focus developed by the arch below, but seems otherwise to read as an intrusion projected upward into the *piano nobile*; and its anomalous character is further increased by details which suggest a respect for the functions of the domestic facade. Thus such a feature as the balcony rail of the windows, which emerges from behind the pilasters to appear in the panel as a continuous string course, only serves to exaggerate, as it was presumably intended it should, an already inherent duality.



It need scarcely be pointed out that we are here in the presence of a formal ambiguity of the same order as that which Le Corbusier was to provide in 1916; although in lucid, academic dress, the disturbance is less perceptible and perhaps more complete. Palladio's inversion of the normal is effected within the framework of the classical system, whose externals it appears to respect; but in order to modify the shock to the eyes, Le Corbusier's building can draw on no such conventional reference. Both state the problem of their complex duality with an extreme directness and economy of means, which, by comparison, causes Federico Zuccheri's essay in the same composition to appear at once redundant and bizarre.

Zuccheri's approach is altogether more violent, his building a *jeu d'esprit* conceived as part of a program of personal advertisement illustrating his triple profession as painter, sculptor, and architect. Unlike Palladio, his two elements of focus, the void of the entrance below and the solid of the panel above, are not placed in direct relationship; but each, as the dominant interest in strongly contrasted stone and brick surfaces, appears set within an arrangement of incident which both accentuates and diminishes its importance. Two triangles of interest are thereby established. That below is formed by the three panels with their reliefs of mathematical instruments, that above is organized by windows and niches about the central panel (in this case intended to receive a painting); and this diffused incident, which is still concentrated within strictly triangular schemes, establishes a form of composition different from Palladio's, so that, with Zuccheri, the particular ambiguity of the panel is of less importance when compared with that of the entire facade.

The composition of Zuccheri's lower wall is framed by rusticated pilasters which seem to restrict its details between quite rigid boundaries; but these pilasters receive no downward transmission of weight. Two advanced surfaces in the upper story carry a form of triglyph or bracket which seems to suggest for them a function of support; but these are then displaced by niches from the position above the pilasters which, reasonably, they might be expected to occupy, while the insertion within them of elaborately framed windows invalidates still further

their apparent function. The niches in themselves, on first examination, seem to expand the interest of the upper wall and to create there the appearance of an organization as open as that of the wall below is compressed; but, within this organization it becomes clear that the different elements—niches, windows, and panels—are, in reality, crushed in the harshest juxtaposition so that, on second analysis, the contrast compels one to attribute to the supposedly compressed basement an almost classical directness and ease.

The complexities and repercussions which such schemes elicit are endless and almost indefinable; but patience, conceivably, exhausts itself in the explanation. It would seem to be abundantly clear that it is a dilemma of dual significance, a distinction between the thing as it *is* and as it *appears* which seems to haunt all these three facades; and, if Zuccheri's building by comparison with the more lucid expositions seems to be something of an exercise in genre, its second-hand qualities, perhaps, enhance its value as a document, as almost a textbook illustration of deliberate architectural derangement.

The two examples from the sixteenth century are characteristic late Mannerist schemes, the most apt registers of that alleged universal *malaise* which, in the arts, while retaining the externals of classical correctness, was obliged, at the same time, to disrupt the inner core of classical coherence.

In so-called academic or frankly derivative architecture, the recurrence in 1916 of a form of composition which, at first glance, appears intrinsically Mannerist might cause some, but perhaps not undue, surprise; but, occurring as it does in the main stream of the modern movement, it is remarkable that this blank panel motif at La Chaux-de-Fonds should not have aroused more curiosity. It is not in any way suggested that Le Corbusier's use of the blank panel is dependent on the previous instances; and it is not imagined that a mere correspondence of forms necessitates an analogous content. Such a correspondence may be purely fortuitous or it may be of deeper significance.

Apart from Nikolaus Pevsner's article "The Architecture of Mannerism" and Anthony Blunt's 1949 lecture at the Royal Institute of British Architects, Mannerism, in its accepted sense as a style, has been the subject of no popular discussion. Such discussion must obviously lie beyond the scope of the present essay which, for a frame of reference, relies to a great extent on the article and lecture just cited.[3] In the most general terms works produced between the years 1520 and 1600 are to be considered Mannerist; and it is hoped that the particular analysis of two sixteenth century schemes has provided some illustration of types of ambiguity that are characteristic.



An unavoidable state of mind, and not a mere desire to break rules, sixteenth century Mannerism appears to consist in the deliberate inversion of the classical High Renaissance norm as established by Bramante, to include the very human desire to impair perfection when once it has been achieved, and to represent too a collapse of confidence in the theoretical programs of the earlier Renaissance. As a state of inhibition, it is essentially dependent on the awareness of a preexisting order: as an attitude of dissent, it demands an orthodoxy within whose framework it might be heretical. Clearly, if, as the analysis of the villa at La Chaux-de-Fonds suggests, modern architecture may possibly contain elements analogous to Mannerism, it becomes critical to find for it some corresponding frame of reference, some pedigree, within which it might occupy an analogous position.

Among sources for the modern movement, the characteristic nineteenth century demand for structural integrity has rightly received greatest emphasis. Dependent to some extent on the technical innovations of industrialism, this demand was unexpectedly reinforced by the Revivalists, both Gothic and Greek; and it was they who transformed its original rational-empirical basis and imbued this structural impulse with a dynamic emotional and moral content, so that in this possibly fallacious version, the structural tradition has remained one of the most crude, indiscriminate, and magnificently effective forces which we have inherited from the nineteenth century.

But it remains apparent that a system of architecture cannot ever enjoy a purely material basis, that some conception of form must play an equal and opposite role; and, although formal derivations for the modern movement often seem to impose too great a strain on the imagination, at a time no more remote than the later nineteenth century it is noticeable that advanced architecture from the 1870s onward belongs to one of two discernible patterns.

The program of the first is certainly closest to our sympathy and its outlines clearest in our minds. This was the heroic process of simplification, the direct assault upon nineteenth century pastiche of a Philip Webb, a Richardson, or a Berlage; and it would seem that the central tradition of modern architecture does proceed from the personal conflict which such individuals experienced between the authorities of training and reason. Obedience to the nature of materials, to the laws of structure, consecrated by the theorists of the Gothic Revival and everywhere recognizable in the products of contemporary engineering, seemed to offer an alternative to purely casual picturesque effects; and, from within such a framework, it was felt that an architecture of objective significance might be generated. Thus for architects of this school an inevitable tension was clearly experienced

between a pictorial education and the more purely intellectual demands which a structural idealism imposes; and, being trained in pictorial method but insisting on an architecture regulated by other than visual laws, their forms frequently bear all the marks of the battleground from which they had emerged.

The alternative tendency, apparently, owes nothing to this dialectic; but, equally concerned with a rational solution of the mid-nineteenth century impasse, it found in physical attractiveness its architectural ideal. Without either the former school's consistent vigor or narrow prejudice, the architects of this second school look down the perspectives of history with a liberal eye and are anxious to coordinate the ensuing suggestions. Thus, from an analysis of function, there emerged a discipline of the plan; and, from the impressions of a visual survey, that research into architectural composition which engrossed so many. Adhering to no distinct formula of revival, there is a willingness in this second school to combine motifs from different styles; and, in the resultant amalgam, they appear as 'telling' features in a composition, rather than for any further significance which they might possess. Thus we find that Norman Shaw is able to support late Gothic effects of mass with details from the school of Wren; and, when architecture is chiefly valued as a source of visual stimuli, then obviously concern will chiefly be with broad effects of movement, volume, silhouette, and relationship.

Neither of these two schools can be considered as completely independent, nor as completely unaffected by the other's activities; but, while for the one an architecture objectively rooted in structure and craftsmanship is an emotional necessity, the other neither finds such objectivity possible, nor perhaps desirable. For the first school, architecture still possessed a certain moral quality—among its purposes was that of imparting a truth; for the second, the significance of architecture was more exclusively aesthetic—its purpose was to convey a sensation. The architects of this second school saw the possibilities of a rational manner to lie in the expression of the sensuous content common to all phases of art; and, in this emphasis, they are perhaps the more typical of the later nineteenth century.

The great distinction of this period, its insistence on purely physical and visual justification for form, appears to separate its artistic production from that of all previous epochs—from the Renaissance by its failure to represent public ideas, from the later eighteenth and early nineteenth century Romantic phase by its elimination of private literary flavor. For, although in intention, the architecture of the early nineteenth century was pictorial, in practice, particularly through its neo-Classical exponents, who have with justice been interpreted as the legatees of the Renaissance tradition, it inherited a good deal of earlier academic thought.



But, for the later nineteenth century, the Renaissance is no longer a positive force but a historical fact; and it is by the absence of the Renaissance theoretical tradition, with its emphasis upon other values than the visual, that particularly the academic productions of this time are most clearly distinguished.

Just as the Renaissance, in opposition to the eighteenth and nineteenth centuries, conceives Nature as the ideal form of any species, as a mathematical and Platonic absolute whose triumph over matter it is the purpose of art to assist; so, in painting, it seeks an infallibility of form. Scientific perspective reduces external reality to a mathematical order; and, in so far as they can be brought into this scheme, the 'accidental' properties of the physical world acquire significance. Therefore the artistic process is not the impressionistic record of the thing seen; but is rather the informing of observation by a philosophical idea; and, in Renaissance architecture, imagination and the senses function within a corresponding scheme. Proportion becomes the result of scientific deduction; and form (by these means appearing as a visual aspect of knowledge and typifying a moral state) acquires the independent right to existence, apart from the sensuous pleasure which it might elicit.

It was not until the later eighteenth century that, with the empirical philosophy of the Enlightenment, there emerged its corollary: the direct pictorial approach to architecture and its evaluation according to its impact on the eye. When Hume was able to declare that "all probable knowledge is nothing but a species of sensation," the possibilities of an intellectual order seem to have been demolished; and when he could add that "Beauty is no quality in the things themselves" but "exists merely in the mind which contemplates and each mind perceives a different beauty,"[4] then empiricism, by emancipating the senses, appears to have provided the stimulus and the apologetic of the great nineteenth century free-for-all. Eclecticism and individual sensibility emerged as necessary by-products; and personal liberty was as effectively proclaimed for the world of forms as, in 1789, it was asserted for the political sphere. But, just as politically the *ancien régime* lingered on, so with earlier attitudes persisting, the Romantics saw indirectly according to the associational value of their forms; and it was not until the *furore* of the movement had spent itself that late nineteenth century 'realism' came to regularize the situation.

After the mid-nineteenth century, perhaps because Liberalism and Romanticism were no longer in active and revolutionary coalition, that moral zeal which had once infused their joint program is less frequently found; and, in all activities, the attempt now seems to have been made to systematize the Romantic experience,

to extract 'scientific' formulae from its subjective enthusiasms. Thus, in architecture, the Romantic forms and their *sensational* implications become progressively codified; and, while the earlier phase had been sensible of literary and archaeological overtones, for the later these suggestions tend to be discounted. An eclectic research into elements and principles of architecture now arises which is distinguished from the analyses of the Renaissance theorists by its exclusively functional and visual frames of reference.

The development of the idea of architectural composition might be cited as typical of these generalizations. The conception of architectural composition was never, during the Renaissance, successfully isolated; and, while a Reynolds and a Soane were alive to the scenic possibilities of architecture, architectural composition as such does not play a large part in their theory. A developed literature upon the subject is of comparatively recent growth; and, as representing the coordination of a subjective point of view, the idea seems to be characteristic of the later nineteenth century.

Apart from an expressed antagonism to the exponents of late nineteenth century theory, modern architects have still not clarified their relationship to its ideas; and, although these ideas now usually called academic have never been effectively replaced, modern architects generally have expressed a decisive but undefined hostility towards them. "Moi je dis oui, l'académie dit non," Le Corbusier inscribes a drawing; and, in the same spirit, functional, mechanical, mathematical, sociological arguments have all, as extra-visual architectural sanctions, been introduced to provide counter-irritants. But a mere reaction from a system of ideas is scarcely sufficient to eradicate that system; and, more than likely, in the sense of providing a matrix, the dominant attitudes of the late nineteenth century were historically effective in the evolution of the modern movement.

It is a defect of the pictorial approach, which takes account chiefly of masses and relationships in their effect upon the eye, that frequently the object itself and its detail suffer a devaluation. Subjected exclusively to the laws of human sensation, the object is seen in impressionist manner and its inner substance, whether material or formal, remains undeveloped. It is a defect of universalized eclecticism that it must inevitably involve a failure to comprehend both historical and individual personality. Its theorists perceive a visual common denominator of form but are unable to allow the non-visual distinctions of content; and thus, indisposed to permit the internal individuality of particular styles, but affirming the ideal of stylistic reminiscence, the late nineteenth century academy destroys the logic of the historical process while it insists on the value of historical precept.



By all-inclusive tolerance history is neutralized and the reduced effects of the eclectic method are rationalized in order to support a more abstract investigation of sensuous properties in mass and proportion. Thus, almost by negative action, a most powerful solvent of revivalism is provided; and in advanced circles, by the early twentieth century, with the identity of the past destroyed and revivalist motifs reduced to a mere suggestion, there is in general circulation a developed and systematic theory of the effects of architecture upon the eye.

With this conception the Art Nouveau and the more expressionist schools of contemporary architecture could certainly be associated; and, in their direct sensory appeal, those Mendelsohn sketches representing film studios, sacred buildings, observatories and automobile chassis factories,[5] might be considered a logical conclusion of the idea of architecture as pictorial composition. Within the terms of this tradition it seems probable that advanced architects of the structural tradition came to interpret the formal suggestions of 'the styles'; and, for instance, in Philip Johnson's monograph, there is clearly demonstrated the partial dependence of Mies van der Rohe's early designs on the works of Schinkel. But, if schemes of Gropius have suggested a descent from the same sources, it should be noticed that this early twentieth century admiration for neo-Classicism was not exclusive to the modern movement, for so many commercial palaces and domestic monuments betray the same affinity. In these buildings, although attempts are made to enforce classical detail, the necessarily increased scale or elaborated function leads either to inflation or towards a too discreet suggestiveness; and it is in reproducing the blocking, the outline, the *compositional* elements that the greatest success seems to have been experienced.

The Edwardian baroque, in fact, offers admirable examples of the impressionist eye brought to bear upon the remnants of the classical tradition; but, outside these strictly academic limits, we find architects functioning within the structural tradition whose point of view also remains decisively impressionist. And thus, for instance, with the early Gropius, a compositional norm rather broadly derived from neo-Classicism is actively balanced by the promptings of a mechanized structure.

As arising from such an antithesis between newly clarified conceptions of vision and structure those early twentieth century buildings which are rightly considered to belong to the modern movement can be understood, for, by other means, it seems difficult to account for the stylistic differences which separate the works of these years from those which appeared in the 1920s. The buildings of Perret, Behrens, Adolf Loos, to name architects illustrated by Nikolaus Pevsner in his *Pio-*

*neers of Modern Design*, are not naive, nor primitive; and they are evidently precursors of the later development. But, comparing, for instance, the Adolf Loos Steiner House of 1910 in Vienna (Plate 21) with any typical production of the twenties, it becomes clear that here there are differences of formal ideal which neither nationality, nor the temperament of the architect, nor technical innovation, nor the maturing of an idea, can fully explain.

Loos, with his fanatical attacks upon ornament, might possibly, from one point of view, be considered as already showing Mannerist tendencies; but, allowing for an elimination of extraneous detail and for a certain mechanistic excellence, this house with its extreme severity and "its unmitigated contrast of receding centre and projecting wings, the unbroken line of the roof, the small openings in the attic,"[6] even in the horizontal windows, is not entirely remote from the more naked types of neo-Classical villa as projected by Ledoux. Without injustice it can be evaluated by the pictorial criteria which we have discussed; and, although a later nineteenth century academician might not have been overjoyed by the contemplation of this facade, there is nothing here to which he could have raised final theoretical objection.

But, such is certainly not the case with the villa at La Chaux-de-Fonds.

A work of art lives according to the laws of the mind, and some form of abstraction clearly must form a basis for all artistic achievement; but it is apparent that, over and above this minimum, a work may possess those specifically cerebral qualities to which the term 'abstract' is more conveniently applied, and it has, in this sense, been commonly employed in the definition of the Cubist and subsequent schools of painting. The Cubist experiment—which can now be seen not as an arbitrary break with tradition, but as the necessary development of an existing situation—is the single most striking artistic event of the early twentieth century. Its influence and that of abstract painting in general upon the modern movement in architecture have been consistently emphasized, and their effects are obvious: simplification and intersection, plane as opposed to mass, the realization of prism-like geometrical forms; in fact the developed manner of the modern movement in the twenties. But it is clear too that, although working with a visual medium, the abstract art of today is working with a not wholly visual purpose. For abstraction presupposes a mental order of which it is the representative.

Here it is important to distinguish between the process of abstraction in the Renaissance and at the present day. Abstraction occurring in Renaissance art makes reference to a world of ideal forms, asserts what the artist believes to be



objective truth, and typifies what he considers to be the scientific workings of the universe. Abstraction in contemporary art makes reference to a world of personal sensation and, in the end, typifies only the private workings of the artist's mind.

There is thus, in both cases, a reluctance merely to report the outward forms of the external world; but, in the one, it is related to a world of public, in the other, of private symbolism. And that private symbolism might form a basis for art is clearly a point of view inherited from the subjective attitudes of developed Romanticism. Thus while, on the one hand, contemporary painting, in abandoning the impressionist program, denies the value of sensational schemes which had developed since the eighteenth century, on the other, it affirms an attitude derived from closely related sources.

This reaction to sensation, at the same time positive and negative, is as characteristic of the output of our own day as it is of certain works of the sixteenth century; and the analogy of the development in painting might conveniently be applied to architecture. Here one might notice how characteristic are Le Corbusier's reactions towards the intellectual atmosphere of 1900. His *Oeuvre complète* is a production as developed and as theoretically informed as any of the great architectural treatises of the sixteenth century; and his published writings form perhaps the most fertile, suggestive and exact statement of a point of view which has emerged since that time. Contradictions in a work of this scale are inevitable; and they are public property. It is not these which require exposition; but rather it is those more specific contradictions which emerge vis-à-vis the pictorial, rationalistic, universalized premises of the opening century.

In affirming, through the medium of abstraction, a mental order, Le Corbusier immediately dissents from the theory of rationalized sense perception which was current in 1900; but, disgusted by the inflated insipidity of Beaux Arts practice, he yet inherits its whole rationalized position in connection with the 'styles.' The notes of travel from his student sketch book represent an eclectic principle which that institution would have fully endorsed. There is here a fine lack of distinction which only the liberalism of the late nineteenth century could have permitted; and, although each example is experienced with a passion of personal discovery, this is still the characteristic theoretical program of the time. The Venetian Piazzetta, Patte's *Monuments Erigés à la Gloire de Louis XV*, the forum of Pompeii and the temples of the Acropolis, offer the material for a deduction of the bases of civic space; while impressions of Stamboul, Paris, Rome, Pisa, and the temples of Angkor Wat are jostled alongside notes from the plates of Androuet du Cerceau—apart from the later nineteenth century, no other phase in history could,

with so magnificent a lack of discrimination, have comprised so wide a field.

But, if *Towards a New Architecture* is read from time to time and the reader can avoid being absorbed by the persuasiveness of its rhetoric, a fundamental dilemma becomes evident. This is the incapacity to define an attitude to sensation. An absolute value is consistently imputed to mathematics, which is 'sure and certain,' and order is established as an intellectual concept affirmative of universal and comforting truths; but, perhaps, even with the word 'comforting' the senses are involved, and it becomes apparent that cubes, spheres, cylinders, cones, and their products are demanded as objects governed by and intensifying sensuous appreciation. At one moment, architecture is "the art above all others which achieves a state of Platonic grandeur";[7] but, at the next, it becomes clear that this state, far from being changeless and eternal, is an excitement subsidiary to the personal perception of "the masterly, correct and magnificent play of masses brought together in light."[8] So the reader can never be clear as to what conception of rightness the word 'correct' refers. Is it an idea, apart from, but infusing the object, which is 'correct' (the theory of the Renaissance); or is it a visual attribute of the object itself (the theory of 1900)? A definition remains elusive.

Mathematics and geometry are, of course, not the only standards which Le Corbusier erects against the theory of the Beaux Arts and 1900. *Towards a New Architecture* proposes programs of social realism, by means of which architecture, generated by function, structure, or technique, is to acquire an objective significance as symbolizing the intrinsic processes of society. But it also becomes clear that, for reasons of a lurking indecision, the essential 'realism' of these programs cannot be converted into any system of public symbolism and that the attempt to assert an objective order appears fated largely to result in an inversion of the aestheticism which was, in the first case, so much deplored. That is: the mathematical or mechanical symbols of an external reality are no sooner paraded than they are absorbed by the more developed sensuous reaction which they provoke; and abstraction, far from abetting public understanding, seemingly confirms the intensification of private significance.

This spectacle of self-division is not peculiar to Le Corbusier. For, in varying degrees, it is a dilemma which the whole modern movement appears to share; and, in it, the mental climate of the sixteenth century receives its clearest parallel at the present day. Internal stylistic causes for sixteenth century Mannerism seem chiefly to lie in the impossibility of maintaining the majestic balance between clarity and drama which had marked the mature style of Bramante; but external factors of schism are also represented and Mannerism's architectural progress is, to



a great extent, determined by those religious and political conflicts which devastated contemporary Europe. The Reformation and Counter-Reformation emphasis of religious values opposed to those of the humanists; the threat to the Papacy and the European schism which the Reformation itself elicited; the resultant increase of Spanish influence in Italy; all both represent and contribute to the emotional and intellectual disturbance. And if in the sixteenth century Mannerism was the visual index of an acute spiritual and political crisis, the recurrence of similar propensities at the present day should not be unexpected nor should corresponding conflicts require indication.

In an architectural context, the theory of 1900 might be interpreted as a reflection of the tolerant liberalism of that period; and, in our own inability to define our position toward it, we might observe that contempt which we often feel for the nineteenth century liberal's too facile simplifications. Eclecticism is essentially the liberal style; and it was eclecticism which created that characteristic product, the detached and sophisticated observer. A personality of enormous and almost mythical benevolence and goodwill, this is an individual who seems to be in fairly constant demand by the modern movement—the *ville radieuse* exists for him to enjoy; but this city also embodies a society in which it seems likely that his detached observation could have scarcely any place.

It is, conceivably, from the presence of conflicts such as these that the drama of Le Corbusier's architecture derives; and, while the villa at La Chaux-de-Fonds might be presented as a first step in such a process of inversion, it would perhaps be more opportune to return to the distinction between the modern movement before 1914 and the modern movement in the 1920s.

In his *Space, Time and Architecture*, Siegfried Giedion makes a comparison between Gropius's Bauhaus building of 1926 and a Cubist head, Picasso's *L'Arlesienne* of 1911-12 (see Plates 66 and 67); and, from it, he draws an inference of which the attractiveness cannot be denied. In the Bauhaus "the extensive transparent areas, by dematerializing the corners, permit the hovering relations of planes and the kind of overlapping which appears in contemporary painting."[9] But if, as already suggested, the program of Cubism is not wholly a visual one, are we to assume that these works, apart from a similarity of form, are animated by a deeper similarity of content? If so, we shall be obliged to admit that Gropius's aims are partly independent of visual justification; if not, we shall be obliged to deduce that, either the comparison is superficial, or that Gropius himself had not fully understood the significance of Cubism; and, of these conclusions, it is surely the first which demands our assent.

A professed lack of interest in formal experiment and a belief in the possibility of extracting an architectural lyricism from the application of rational techniques to the demands of society, appear to form the bases of Gropius's system. Yet Giedion's comparison between the Bauhaus and the Picasso shows that in Gropius's work of 1926 abstraction is not wholly denied; and it is indisputably this 'abstract' element which most clearly separates the Bauhaus from the productions previous to the First World War.

Apart from Gropius's Ahlfeld factory, the building for the Deutsche Werkbund exhibition of 1914 represents one of the most self-conscious pre-World War I attempts to extract architectural feeling from a building's structural skeleton. Specific architectural effects of the past make the slightest contribution and detail is reduced to the simplest geometrical form; but, although in this building, mass is contracted to an ultimate limit, there appears to be no decisive break with the pictorial ideals of *c.* 1900. The motif of the famous staircases, corner cylindrical elements which appear as wrapping round or bursting through flat facades, can be paralleled in academic architecture before this date; and, although the transparent volumes of this building represent a supreme affirmation of a mechanistic idealism, they contain in themselves no single element which appears to contradict the dominant academic theory. The famous element of space-time does not enter into this building; and, unlike the Bauhaus, its complex can be summed up from two single positions.

Even as late as 1923, the experiment at Haus Am Horn at Weimar (Plate 22), a simple composition of geometrical masses, can still be interpreted in these same terms; and a parallel with a neo-Classical monument, Goethe's garden house, could still be maintained.[10] But, in the same year, certain Bauhaus schemes—most notably those of Farkas Molnar (Plate 23)—do suggest the approach which has come to be considered as characteristic of modern architecture. In these we notice an abandoning of the idea of mass, a substitution of plane, an emphasis upon the prismatic quality of the cube; and at the same time an attack on the cube, which by disrupting the coherence of its internal volume, intensifies our appreciation of both its planar and its geometrical qualities. These are projects which appear as complete illustrations of the Giedionesque concept of space-time for which the Bauhaus is so justly famous. They are compositions which "the eye cannot sum up . . . at one view"; which "it is necessary to go around on all sides, to see . . . from above as well as from below."[11]

Now, in itself, the idea of physical movement in the observation of a building is not new; and, if it formed a typical Baroque means for observing the rise and fall



of masses, it is even more apparent in the irregular schemes of Romanticism. However, even they, let alone such symmetrical compositions as Blenheim, are usually provided with a single dominant element; and, seen through the media of distance and atmosphere, the interrelationship of freely disposed masses is combined as a picturesque whole. It is clear that, though intellectual limitations do not enter into the megalomania of a Fonthill, the limitations of the eye, of human vision, are scrupulously observed.

But at the Bauhaus, while one registers mental appreciation of both plan and structure, the eye is faced with the disturbing problem of simultaneous impact from widely dispersed elements. A dominating central element is eliminated; subsidiary elements are thus unable to play a supporting role; and, in a state of visual autonomy, they are disposed around the void of the central bridge which neither provides visual explanation for them as a consistent scheme nor allows them to assume independence as separate units (Plate 24). In other words, with focus disallowed, the eye becomes stretched; and, noticing this, it might be suggested that the role of this bridge—as the fundamental core of the conception and as the negation of the visual function of a central element—is closely related to that of the blank panel at La Chaux-de-Fonds. For, in a similar way, this bridge is both a source and a result of peripheral disturbances; and it is significant that only from a non-visual angle, the 'abstract' view from the air, can the Bauhaus become intelligible to the eye (Plate 25).

In this idea of disturbing, rather than providing immediate pleasure for the eye, the element of delight in modern architecture appears chiefly to lie. An intense precision or an exaggerated rusticity of detail is presented within the bounds of a strictly conceived complex of planned obscurity; and a labyrinthine scheme is offered which frustrates the eye by intensifying the visual pleasure of individual episodes, in themselves only to become coherent as the result of a mental act of reconstruction.

Sixteenth century Mannerism is characterized by similar ambiguities; and, to proceed to comparison, a deliberate and insoluble spatial complexity might be thought to be offered equally by Michelangelo's Cappella Sforza (Figure 3) and Mies van der Rohe's project of 1923 for the Brick Country House (Figure 4).

In the Capella Sforza, Michelangelo, working in the tradition of the centralized building, establishes an apparently centralized space; but, within its limits, every effort is then made to destroy that focus which such a space demands. Invaded by columns set on the diagonal, supported by apses of a form both definite and incomplete, the central space is completed not by a dome but by a balloon vault;

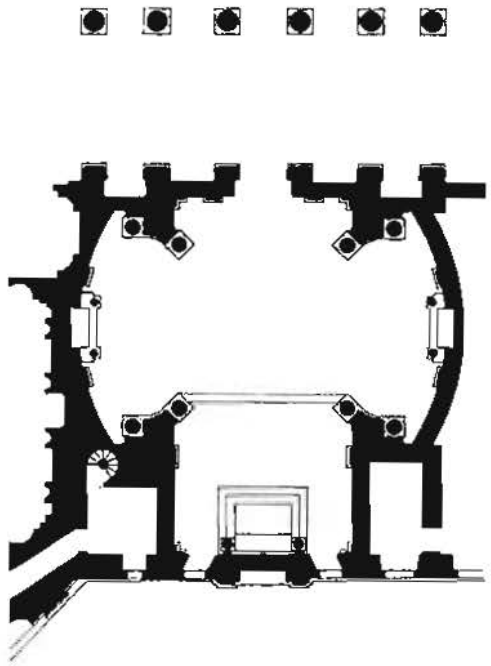


Figure 3 Capella Sforza, Santa Maria Maggiore, Rome. Plan. Michelangelo Buonarotti, completed 1573.

Figure 4 Project, Brick Country House. Ludwig Mies van der Rohe, 1923.

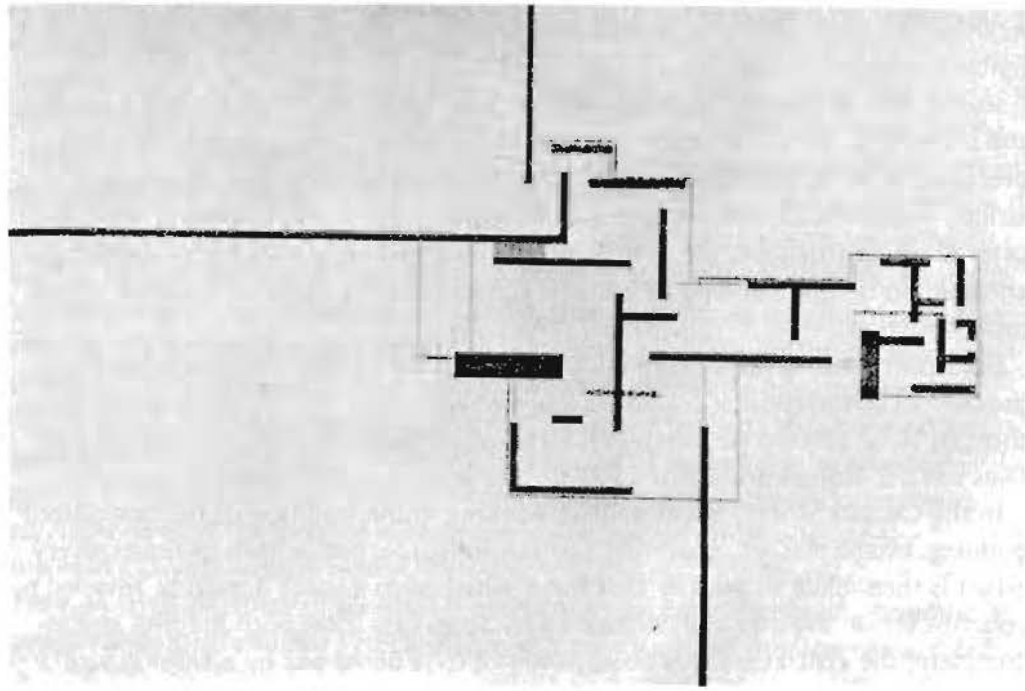




Figure 5 Project, Hubbe House, Magdeburg. Mies van der Rohe, 1935.

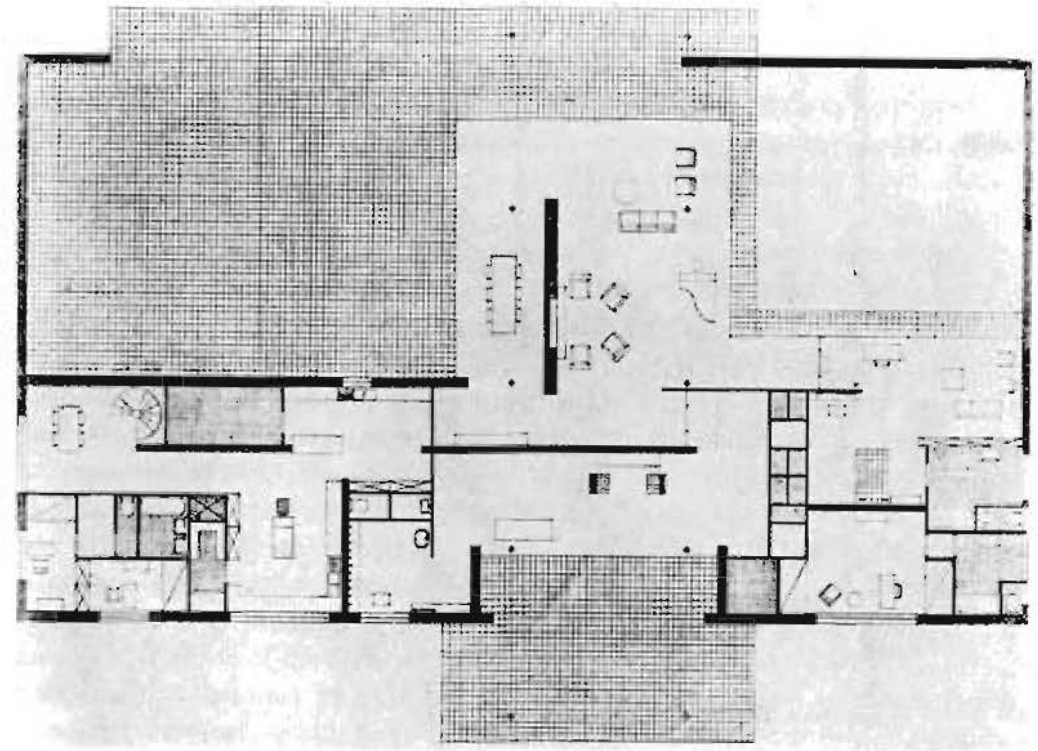
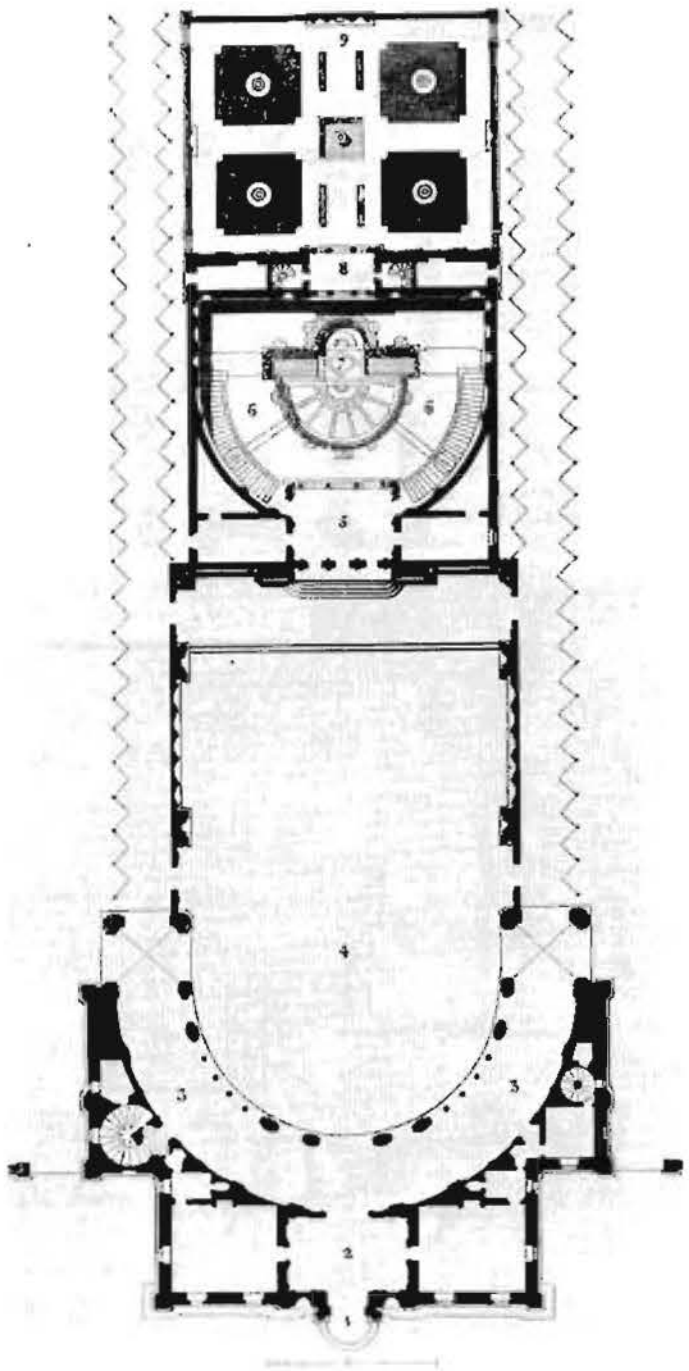


Figure 6 Villa Giulia, Rome. Plan. Jacopo Barozzi da Vignola and Bartolomeo Ammanati, 1552–.






and, with this space furrowed by conflicting thrusts and engaged in active competition with the area of the sanctuary, there ensues not so much ideal harmony as planned distraction.

And, in the Brick Country House, there are analogous developments to be observed. This house is without either conclusion or focus; and, if here Mies is operating not within the tradition of the centralized building but, ultimately, in that of the irregular and freely disposed Romantic plan, the disintegration of prototype is as complete as with Michelangelo. In both cases, forms are precise, volumes competitive and undefined; but, while an effect of studied incoherence is apparently an ideal in both cases, with Michelangelo the use of a Composite order and its accessories offers a statement of conventional legibility; whereas Mies can intrude no such directly recognizable material. Mies's means are both less and less public; and, with him, the involuted clarity of his intention is, primarily, registered in the private abstraction of his plan.

Similar correspondences are to be found in two such widely differing schemes as those of the Mies project of 1935 for the Hubbe House at Magdeburg (Figure 5) and the Villa Giulia of Vignola and Ammannati (Figure 6); and, although in neither of these is there the exaggerated complexity of the last two examples, both are developed within the bounds of a tightly defined courtyard and, in neither case, are elements clearly separated or an unimpeded flow of space permitted. The general layout of the Villa Giulia is axial, emphasizing the hemicycle of its *corps de logis*; but the unifying quality of this axis is scarcely allowed to appear. As an agent of organization it is constantly interrupted by light screens and small changes of level which are sufficient to create ambiguity without making its sources in any way too obvious. At the Hubbe House, Mies imposes a T-shaped building upon his courtyard; but, like the axis at the Villa Giulia, again, its role is passive. It is both subordinate and contradictory to the rigid organization of the bounding wall; and, while the idea of the T-shape suggests a geometrical form, then by an unaccountable advance and interception of planes, the purely logical consequences of this form are studiously avoided. Thus, in both schemes, precise compositions of apparently undeniable clarity offer an overall intellectual satisfaction within which it seems neither to be desired nor expected that any single element should be visually complete.

It is particularly the space arrangements of the present day which will bear comparison with those of the sixteenth century; and, in the arrangement of facades, Mannerist parallels must be both harder to find and less valuable to prove. The Mannerist architect, working within the classical system, inverts the natural logic of its implied structural function; but modern architecture makes no overt refer-

ence to the classical system. In more general terms, the Mannerist architect works towards the crushing emphasis or the visual elimination of mass, towards the exploitation or the denial of ideas of load or of apparent stability. He exploits contradictory elements in a facade, employs harshly rectilinear forms, and emphasizes a type of arrested movement; but, if many of these tendencies are characteristic occurrences in the vertical surfaces of contemporary architecture, comparison here is perhaps of a more superficial than clearly demonstrable order.

However, in the present-day choice of texture, surface, and detail, aims general to Mannerism might possibly be detected. The surface of the Mannerist wall is either primitive or overrefined; and a brutally direct rustication frequently occurs in combination with an excess of attenuated delicacy. In this context, it is frivolous to compare the preciosity of Serlio's restlessly modeled, quoined designs with our own random rubble; but the frigid architecture which appears as the background to many of Bronzino's portraits is surely balanced by the chill of many interiors of our own day. And the linear delicacy of much contemporary detail certainly finds a sixteenth century correspondence.

A further Mannerist device, the discord between elements of different scale placed in immediate juxtaposition, offers a more valuable parallel. It is familiar as the overscaled entrance door; and it is employed, alike, by Michelangelo in the apses of St. Peter's (Plate 26) and, with different elements, by Le Corbusier in the Cité de Refuge (Plate 27). The apses of St. Peter's alternate large and small bays, and they extract the utmost poignancy and elegance from the movement of mass and the dramatic definition of plane. They are of a perfection beyond the ordinary; and, side by side with the gaping overscaled voids of window and niche in the large bays, there appears the violent discord of the smaller and dissimilar niches which seem to be crushed, but not extinguished, by the minor intercolumniations.

In comparing the apses of St. Peter's with the building for the Salvation Army, perhaps we really measure the production of our own day. In the Salvation Army building, in a composition of aggressive and profound sophistication, plastic elements of a major scale are foiled against the comparatively minor regulations of the glazed wall. Here again the complete identity of discordant objects is affirmed; and, as at St. Peter's, in this intricate and monumental conceit, there is no release and no unambiguous satisfaction for the eye. Disturbance is complete; and if, in this mechanized conception, there is nothing which replaces the purely human poetry of sixteenth century organization, there is still a savage delicacy which makes explicable Le Corbusier's *éloge* upon Michelangelo and St. Peter's



which "grouped together the square shapes, the drum, the dome," and whose "mouldings are of an intensely passionate character, harsh and pathetic."[13]

The quality of this appreciation penetrates beyond the mere externals of appearance. Even in his choice of adjectives, Le Corbusier involves the observer on a plane other than that of visual discrimination; and, although such discrimination may assist the evaluation of Mannerist and modern architecture, through the standards of the eye neither can be fully understood. St. Peter's, as conceived by Michelangelo, Le Corbusier finds the embodiment of "a passion, an intelligence beyond normal, it was the everlasting Yea," an eternal scheme which is beyond the limitations of any time. But it is surely not accidental that it is by the Mannerist excess and conflict of this building that he is most deeply moved. Nor, presumably, is it by accident that this capacity of a modern architect to perceive stridently incompatible details should so closely coincide with the beginning of their investigation by historians of art.

For Burckhardt in the nineteenth century, the Ricetto of Michelangelo's Laurenziana, embodying some of his earliest Mannerist experiments, was "evidently a joke of the great master." But, for subsequent generations, the joke has become less clear; and, although for a time it was only a proto-baroque sixteenth century which was visible, for the 1920s an epoch curiously reproducing contemporary patterns of disturbance became apparent. At this time, it is as though the eye received a decisive twist by which, since it demanded visual ambiguity, it could produce it in contemporary works and discover it in a previous age—even in works of apparently unimpeachable correctness. Thus, if at one time the classicism of the whole Renaissance movement seemed to be completely clear and, if at another, the impressionist eye of the Edwardians was everywhere enabled to see the voluptuous qualities of their own baroque; so the present day seems to be particularly susceptible to the uneasy violence of Mannerism which marks both its own productions and its historical admirations. Thus, it is perhaps inevitable that Mannerism should come to be isolated and defined by historians during those same years of the 1920s when modern architecture felt most strongly the demand for inverted spatial effects.

## Notes

1 In Le Corbusier's *Vers une architecture*, according to the English translation, London 1927, p. 76, "this villa of small dimensions, seen in the midst of other buildings erected without a rule, gives the effect of being more monumental and of another order."

2 See Serlio, *Tutte l'opere d'architetturo*. In the edition of 1619, paneling alternating with windows occurs in Book VII, pp. 15, 23, 25, 27, 29, 33, 43, 45, 53, 151, 159, 187, 221, 229. The example in Book VII, p. 187, suggests itself as a possible source for Palladio's scheme. It was perhaps through the influence of Serlio that this motif penetrated France, where, for instance, alternating with a range of windows, it is to be seen in such a scheme as Lescot's Louvre.

3 Nikolaus Pevsner, "The Architecture of Mannerism," *Mint*, 1946. Anthony Blunt, "Mannerism in Architecture," *R.I.B.A. Journal*, March, 1949.

4 David Hume, "Of the Standard of Taste," *Essays Moral, Political and Literary*, London, 1898, p. 268.

5 See Arnold Whittick, *Eric Mendelsohn*, London, 1940.

6 Nikolaus Pevsner, *Pioneers of the Modern Movement*, London, 1937, p. 192.

7 Le Corbusier, *Towards a New Architecture*, London, 1927, p. 102.

8 *Ibid*., p. 31.

9 Siegfried Giedion, *Space, Time and Architecture*, 5th ed., Cambridge, Mass., 1967, p. 495.

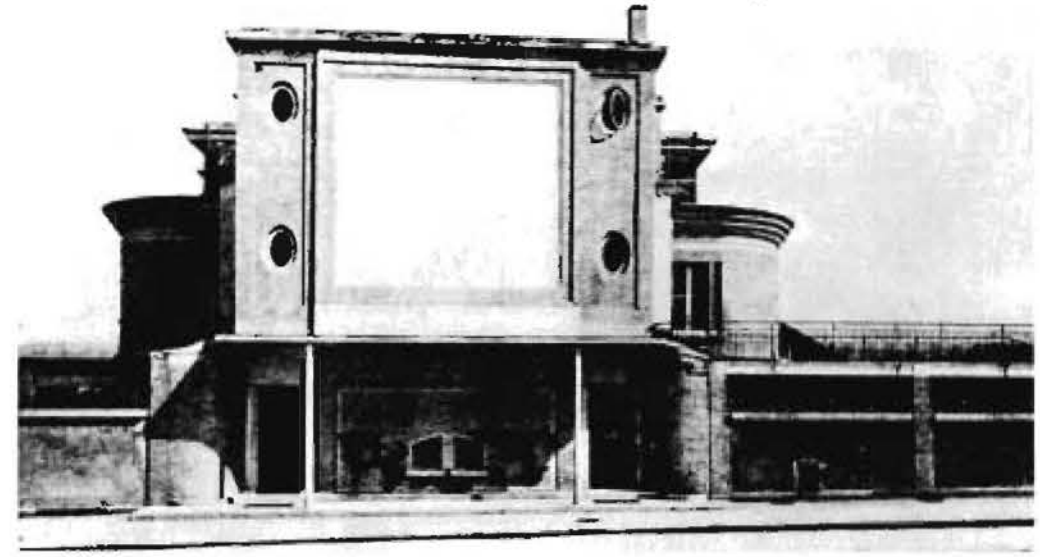
10 Herbert Bayer, Walter Gropius, Ilse Gropius, *Bauhaus, 1919-28*, New York, 1938, p. 85.

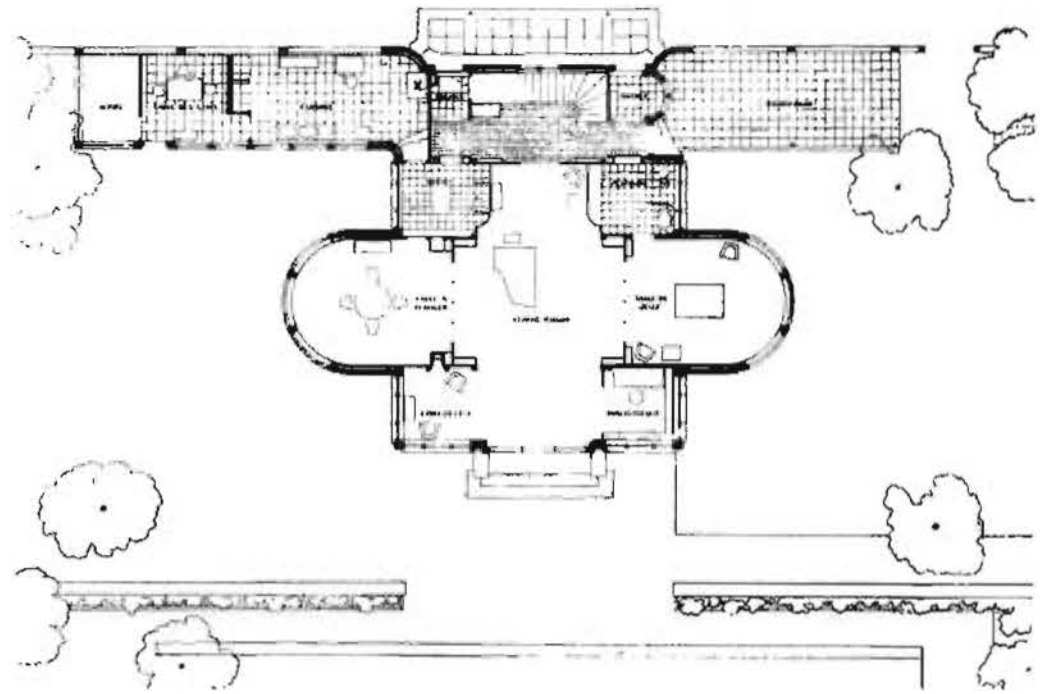
11 Giedion, p. 497.

12 Le Corbusier, *Towards a New Architecture*, p. 158.

Plate 17 Villa Schwob, La Chaux-de-Fonds. Le Corbusier, 1916.

Plate 18 Villa Schwob. Plan.





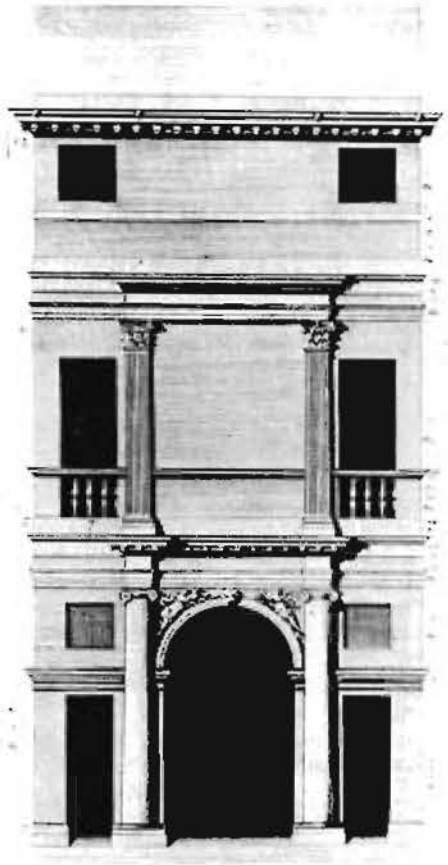


Plate 19 Casa di Palladio (Casa Cogollo), Vicenza. Attributed to Andrea Palladio, *c.* 1572.

Plate 20 Casino dello Zuccheri, Florence. Federigo Zuccheri, 1578.

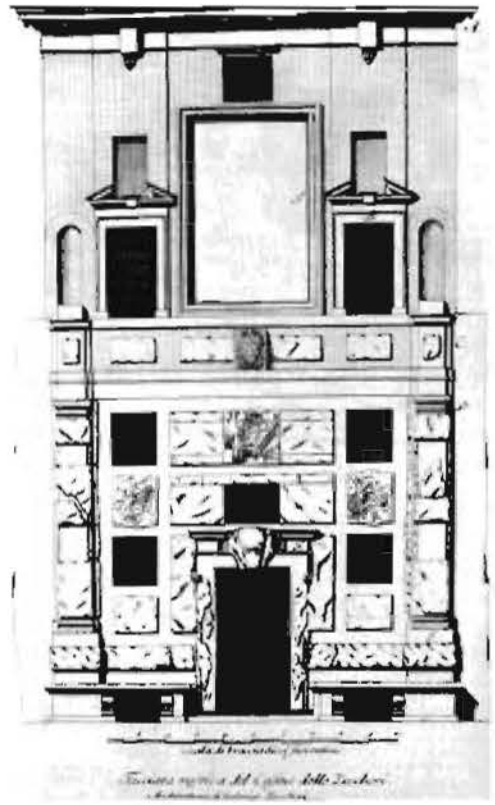
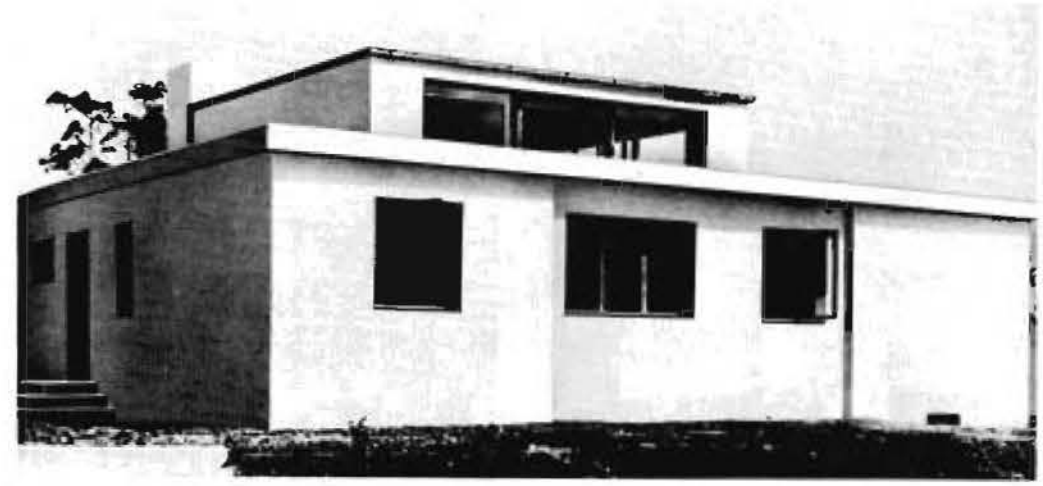


Plate 21 Steiner House, Vienna. Adolf Loos, 1910.





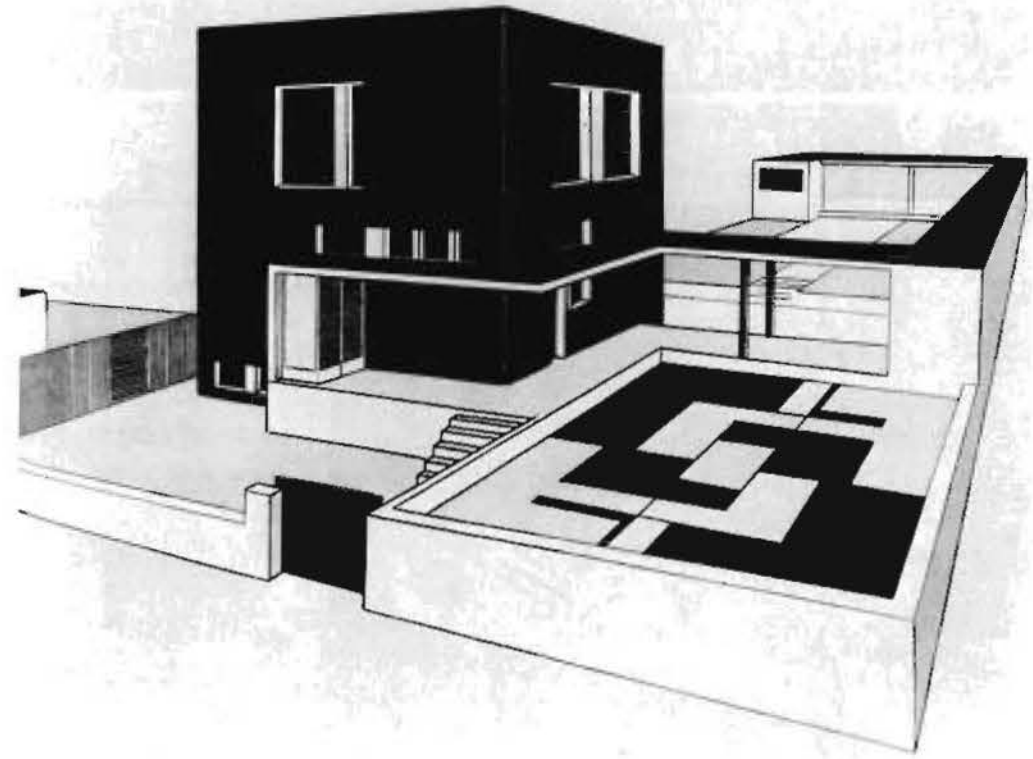


Plate 22 Haus am Horn, Weimar. Georg Muche and Adolf Meyer, 1923.

Plate 23 Project, The Red Cube. Farkas Molnar, 1923.

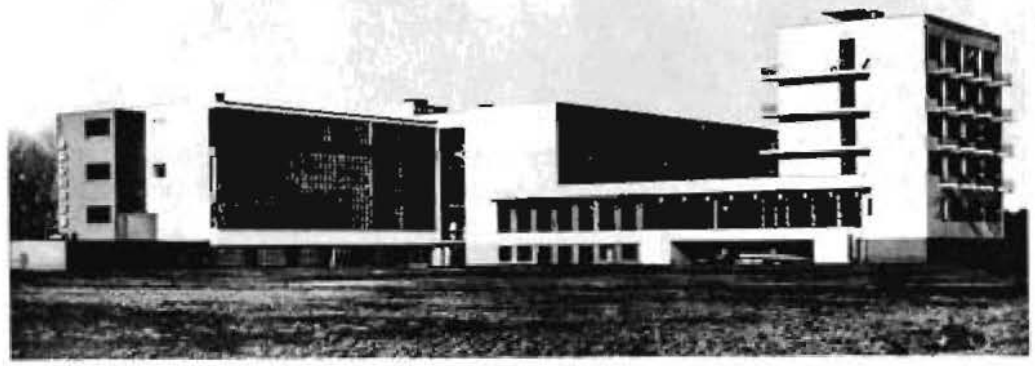


Plate 24 Bauhaus, Dessau. Walter Gropius, 1925-26.

Plate 25 Bauhaus. Aerial view.



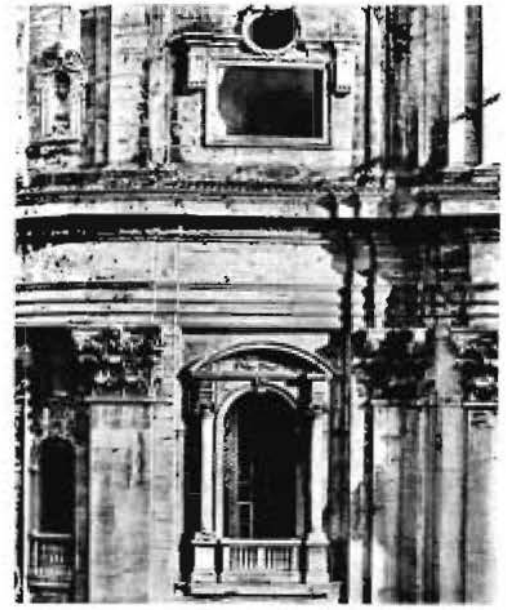
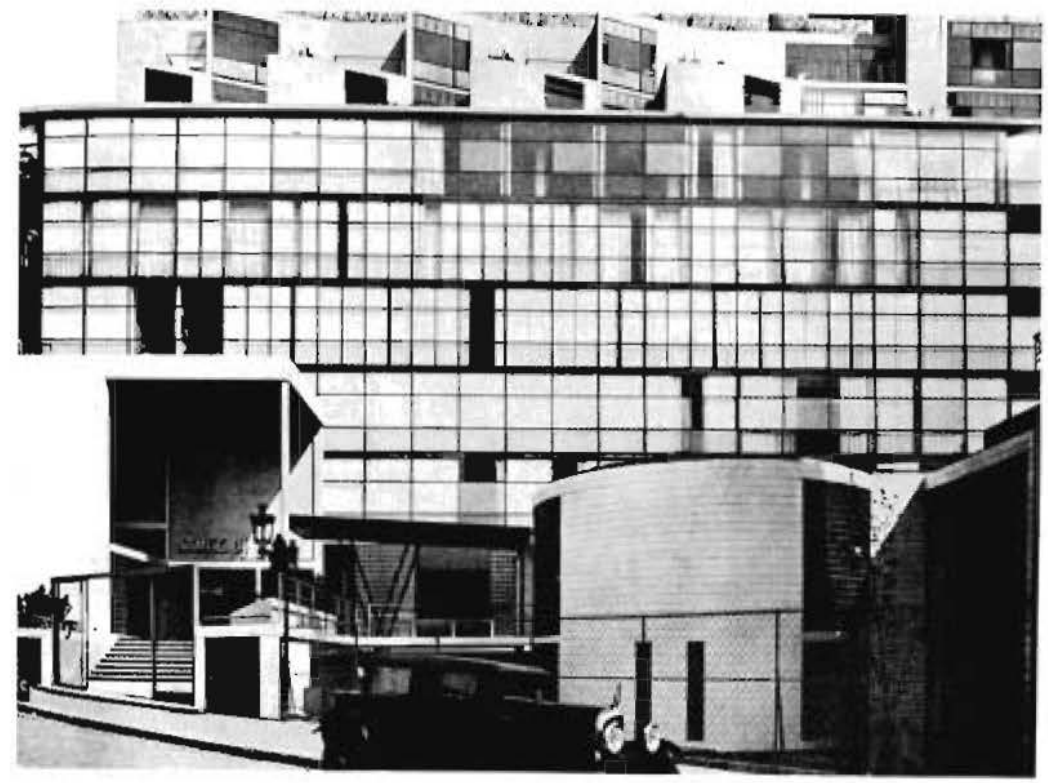


Plate 26 St. Peter's, Rome. Detail of apses. Michelangelo Buonarotti, 1546- .

Plate 27 Cité de Refuge (Salvation Army Building), Paris. Facade. Le Corbusier, 1932-33.



# The Architecture of Utopia

First published in *Granta*, 1959.

For unto you is paradise opened, the tree of life is planted, the time to come is prepared, plenteousness is made ready, a city is builded, and rest is allowed, yea perfect goodness and wisdom. The root of evil is sealed up from you, weakness and the moth is hid from you, and corruption is fled into hell to be forgotten. Sorrows are passed, and in the end is shewed the treasure of immortality.
—2 Esdras 8: 52-54

Utopia and the image of a city are inseparable. And if, as we might suppose, Utopia does find one of its roots in Jewish millennial thought, the reason is not far to seek. "A city is builded and is set upon a broad field and is full of good things." "Glorious things are spoken of thee, O city of God." "And he carried me away in the spirit to a great and high mountain, and showed me that great city, the holy Jerusalem, descending out of heaven from God." Such biblical references to the felicity of a promised city are too abundant to ignore; but, for all that, the ingredients of the later *Civitas Dei* are as much Platonic as Hebraic and certainly it is a distinctly Platonic deity which presides over the first Utopias to assume specific and architectural form.

Architecture serves practical ends, it is subjected to use; but it is also shaped by ideas and fantasies, and these it can classify, crystallize, and make visible. Very occasionally indeed the architectural crystallization of an idea may even precede the literary one; and thus, if we can consider the Renaissance concept of the ideal city to be Utopian—as surely we may—we find here a notable case of architectural priority. For Thomas More's famous book did not appear until 1516; and by this time the Utopian theme had been well established—in Italian architecture, at least—for almost half a century. Filarete's Sforzinda, the paradigmatic city of so many future Utopian essays, had been projected *c.* 1460; and although Scamozzi's Palma Nova, the first ideal city to achieve concrete form, was not realized until 1593, the themes which it employs were a common architectural currency by 1500.

As illustrated by Sforzinda and Palma Nova (Plates 75 and 76), the ideal city is usually circular; and, as More said of the towns of his own Utopia, "He that knows one knows them all, they are so alike one another, except where the situation makes some difference."[1] One may withdraw in horror from this calculated elimination of variety; and quite rightly so, for the ideal city, though an entertaining type to inspect, is often a somewhat monotonous environment. But then the ideal city, like Utopia itself, should scarcely be judged in these immediate physical terms. Nor should we evaluate it by either visual or practical criteria, for its rationale is cosmic and metaphysical; and here, of course, lies its peculiar ability to impose itself on the mind.



An architect of the Renaissance, had he felt it necessary to argue about circular, centralized, and radial exercises such as *Palma Nova*, to justify them might possibly have quoted the account in the *Timaeus* where the Demiurge is described as fashioning the universe "in a spherical shape, in which all the radii from the middle are equally distant from the bounding extremities; as this is the most perfect of all figures and the most similar to himself."[2] And thus, the Renaissance architect might have concluded, as an analogy of this divinely created sphere and as an emblem of the artificer who is declared to be immanent within it, the city receives its circular outline.

Now it is by association with the emblematic significance of the sphere that we can understand the persistence of the circular form throughout by far the greater number of architectural Utopias; and so long as our mental inflection is Platonic, as a setting for the headquarters of an ideal state the ideal form of the circle, the mirror of a harmonious cosmic order, follows quite naturally. Thus, on through the seventeenth, eighteenth, and even nineteenth centuries—even as late as 1898 in Ebenezer Howard's prototype for Letchworth Garden City—we still find the circle or conspicuous traces of it.

But there is perhaps another argument involved in this choice of form which is not only Platonic in its bias but also Christian. For possibly the circle is intended both to signify and to assist a redemption of society. It is said to be a natural shape. As obviously, if it is the shape of the universe, it must be. "It is manifest that nature delights principally in round figures, since we find that most things which are generated, made or directed by nature are round."[3] The dictum is from Alberti, one of the first architects to bring a typically Renaissance intellect to bear upon the problems of the city; but the opinion is by no means peculiar to him. Rather, it reflects the characteristic tone of quattrocento humanism; and the argument that the circular city is predominantly 'natural' (not at all incongruous with the argument that it is divine), must evidently have introduced a powerful predisposition in its favor. For if a circular city might now be considered to exemplify the laws of nature, how unnatural and therefore in a sense how 'fallen' the medieval city must have seemed; while if the medieval city could be thus seen as a counterpart to Babylon, almost as illustration of the working of original sin, the humanistic version of the New Jerusalem could now very well be experienced as the symbol of a regenerated humanity, or a restoration of the injuries of time.

Thus, if nature takes pleasure in the circle (and gives second preference to the square), it is to be expected that these forms should recur elsewhere within the fabric of a Utopian town; and Campanella, for instance, describes, in his *Città del*

*Sole*, a church that is placed in the center of the town and which "is perfectly round, free on all sides, but supported by massive and elegant columns," a church in which "on the altar is nothing but two globes, of which the larger is a celestial, the smaller a terrestrial one, and in the dome are painted the stars of the sky." But, again, the church which is thus specified had been long anticipated by architects. "We cannot doubt that the little temples we make ought to resemble this very great one, which by His immense goodness was perfectly completed with one word of His."[4] This is the opinion of Palladio, and it was also his practice; but Campanella's church and Palladio's advice are already previsioned by the central building in the *Perspective of a Square* (Plate 77), variously attributed to Luciano Laurana, Francesco Di Giorgio, or Piero della Francesca and executed *c.* 1470.

Here it might be said that we are shown Utopia infiltrating a preexisting reality; but, nevertheless, this picture can quite well be allowed to serve as a representation of just the city which humanist thought envisaged. "The place where you intend to fix a temple," Alberti recommends, "ought to be noted, famous, and indeed stately, clear from all contagion of secular things";[5] and, following his advice, not only is this particular church round, but the square in which it stands is mathematically proportioned according to Pythagorean principles, while the little palaces about it, grave, regular, and serene, complete the illusion that we have indeed entered into a world where perfect equilibrium is the law.

Fully to understand the revolutionary quality of this space, one should compare it with some medieval square (which, incidentally, one might prefer); and one should compare it then with its innumerable and rather belated progeny. No space of quite this order and regularity came into existence until Michelangelo began his Campidoglio *c.* 1546, and scarcely any space of comparable order was attempted until the seventeenth century. In Paris the Place des Vosges was conceived in 1603. In London the Piazza of Covent Garden dates from the 1630s.

And the same may be said of the *Street Scene* attributed to Bramante (Plate 78), which provides an urbanistic motif first to be realized in the theater before achieving a more permanent form in building. For it was not until the pontificate of Sixtus V, determined as he was to transform Rome into a modern city, that this kind of straight, serious, and majestic thoroughfare became something which no great city was to be considered complete without. While it is surely equivalent streets which Wren proposed for London, it is again some diluted Napoleonic memory of this avenue of palaces and its closing triumphal arch which persists in the Champs Elysées and in all those innumerable boulevards in Paris and elsewhere that arose to imitate it.



However, the success of the small circular church—which Alberti, in humanist style, insisted on calling a temple—was even greater. Already built by 1502, the dimunitive Tempietto of San Pietro in Montorio summarized themes which were then to be monumentally exploited in Michelangelo's St. Peter's, were to be taken up in France, to recur in St. Paul's, to become Hawksmoor's magnificent mausoleum at Castle Howard, and which in Oxford, again set down in the middle of a square, still present themselves for our inspection as the Radcliffe Library.

But we must beware of overstatement; and quite simply to propose all these spaces, all these squares and buildings to be Utopian is to be guilty of obvious overstatement. The Radcliffe Camera, for instance, or the Place des Vosges can scarcely be called Utopian without considerable qualification of this term. For we can scarcely suppose that their respective sponsors, either Oxford or Henri IV, would seriously have been disposed to spend large amounts of capital simply in order to exhibit the plastic corollary to highly abstract political speculation. So much is clear; and yet the Radcliffe Camera and the Place des Vosges, neither of them exactly revolutionary manifestations, are both of them still the products of an architectural culture which had long accepted the once revolutionary *città ideale* as axiomatic and which habitually derived all the conventional elements of its repertory from this city's accessories. May we not then propose, by way of qualification, that these architectural manifestations, though not in the strict sense Utopian, are still a complement to Utopian thought? That they rose to satisfy emotional needs awakened by humanistic speculation? And that they are products of the same impulse which made of the New Jerusalem an instrument for reshaping the world?

So much may be proposed; but there is still an element of irony which attaches itself to any realization of the Utopian vision. Transcending reality as it does, transforming it as it may, Utopia becomes increasingly compromised as it becomes increasingly acceptable. Notoriously, the configuration of the ideal city was 'ideal' not only for the philosopher but also for the military engineer; and while the first of such cities, Palma Nova, was established as a Venetian military station towards the Istrian frontier, others, very many with names famous in the history of war, were 'idealized' rather through an application to the laws of ballistics than through any devotion to the principles of Plato.[7]

In these and other ways we might demonstrate how a revolutionary idea transforms not only the world but also itself. Penetrating that establishment which it seeks to subvert, permeating it, providing its own color and tone, Utopia ultimately becomes the *ancien régime* against which new demonstrations arise. But the

constellation of ideas, partly Christian, partly Platonic, in some senses scientific, which presided over the inception of the late fifteenth century vision could scarcely be expected to occur again, and no subsequent Utopia has ever been able to command an architectural enthusiasm so concentrated and intense as that which Renaissance humanism could draw upon. Thus the successors of the humanists, the philosophers of the Enlightenment, conscious though they might have been of imperfections in the world which they occupied, were only rarely able to enlist the services of their architectural contemporaries.

For these reasons, in the project by Ledoux of 1776 (Plate 79)—which we might envisage as typifying the Utopian conditions that the Enlightenment conceived—the circular form seems largely to survive as an intelligible convention. It cannot be wholly sacrificed. Nor can it be wholly convincing. For though the rather deistic turn of mind exhibited by Ledoux might very well be able to accept a circular disposition for cities, for churches, and even for strange cemetery-catacombs—even though a Boullée could find it the supremely appropriate configuration for the Cenotaph for Newton (Plate 80)—the concept is no longer quite so 'natural' as it once had been; and though a Renaissance idea of 'nature' might still provide the mold for revolutionary form, it could no longer wholly absorb the sympathies of that new kind of 'natural' man which the impending revolution itself was to evoke.

Romantic individualism and the concept of Utopia were scarcely to be fused; and, as a result, in the nineteenth century the Utopian idea was able to draw on no first-class architectural talent. It persisted, and even proliferated; but it persisted as regards architecture chiefly as a subterranean tradition. Neither the average nor the exceptional nineteenth century architect were ever to be much seduced by Benthamite principles of utility or Positivistic schemes of social reform; so that, in default of the architect's interest, the nineteenth century Utopia retains much of the stamp which the Italians had put upon it between three and four hundred years ago.

But it had in any case become a somewhat provincial idea;[8] and to the better minds of the time, often heavily influenced by subtle hypotheses as to the 'organic' nature of society, the *appearance* of Utopia must have come to seem unduly mechanical.[9] Accordingly, deserted by intellect, Utopia now becomes naive; and while its Platonic forms persist they are no longer infused with a corresponding content. Also, Utopia seems now to have descended the social scale; for it is apparently no longer concerned with the redemption of society as a whole, but only with the redemption of its lower strata. Therefore the nineteenth century Utopia is apt to wear a look of either strenuous philanthropy or equally strenuous self-



help; and the *Happy Colony* "to be built by the working men of Britain in New Zealand" (Plate 81) might be taken as an example of the latter look. It is a delightful mid-Victorian proposition; but although in this engaging scheme so many of the former elements of Utopia survive—Platonic solids, delineations of the globe, and even a little central building which has ceased to function as a temple and become instead a model farm—still it is rather to be doubted whether such symbolism any longer had public significance or whether many of those to whom this project was addressed were conscious of its author's transpositions of the traditional iconography.

But, if one kind of Utopia has here received its ultimate formal degradation, can it be said that Utopia has been revived in our own day?

That there is, or rather was, a profound Utopian impulse in modern architecture is indisputable; and, much as one imagines the drawing boards of Renaissance Italy, the drawing boards of the earlier decades of this century certainly seem to have been cluttered with the abstracted images of cities. Two in particular deserve attention: the mechanistic, vitalistic city of the Futurists where dynamism was ceaseless and a life was promised approximating to an absolute orgy of flux (Plate 82); and another city which, though a metropolis, was curiously static and which seems to have been almost as empty of people as the square in the picture at Urbino. Something of the Futurist city has been a component of all subsequent development. But the success of the second city, Le Corbusier's ville radieuse (Plate 83) has been inordinate; so that, for the present, one could safely assert that this is the image of the city which controls. Never perhaps to be realized as a whole, its accessories, like those of Sforzinda, have everywhere been adopted. But, if in reality the ville radieuse would be almost as boring as Sforzinda before it, if it has a similar schematic monotony, if, like Sforzinda, it is perhaps one of those general ideas which can never be erased, one of those high abstractions which are empowered to perpetuate themselves, does this make of it a Utopia in the sense which we have so considered Sforzinda?

If Utopias are what Karl Mannheim defines them to be: "orientations transcending reality . . . which, when they pass over into conduct, tend to shatter, either partially or wholly, the order of things prevailing at the time,"[10] then we must surely concede that the ville radieuse is an instrument of some power. But, if we ask with what ideas an 'orientation' which 'transcends reality' is constructed we are obliged to wonder whether contemporary society can really tolerate such an 'orientation.'

Judged in terms of results, the most viable Utopia was certainly that evolved *c.* 1500 and which, to borrow a phrase from Jacob Burckhardt, might convenient-

ly be described as an attempt to turn the state into a work of art. Now need we say that the state never can be turned into a work of art? That the attempt to do so is the attempt to bring time to a stop, the impossible attempt to arrest growth and motion? For the work of art (which is also an attempt to bring time to a stop), once it has left its maker, is not subject to change. It enjoys neither growth nor motion. Its mode of existence is not biological. And, though it may instruct, civilize, and even edify the individual who is exposed to it, in itself the work of art will remain constant. For the work of art is not life; and nor, for that matter, is Utopia politics. But in the relation of the individual with the work of art we may still see something comparable to the relation of the state with Utopia. For Utopia too may instruct, civilize, and even edify the political society which is exposed to it. It may do all this; but for all that it cannot, any more than the work of art, become alive. It cannot, that is, *become* the society which it changes; and it cannot therefore change itself.

A crude naturalism experiences great difficulty in recognizing these existential conditions of the Utopian idea; and, to continue the analogy, a crude naturalism approaches Utopia very much indeed as the vulgar are supposed to approach a work of art. It demands an immediate effect. The work of art is *like* life. Utopia is *like* politics. Then let them be so. But the demand that Utopia approximate to a portrait at the Royal Academy or a novel by Arnold Bennett is conceivably more innocent than vulgar. For while the mimetic intention of both art and Utopia requires no emphasis, neither can properly 'imitate' life or society except after their own laws—laws which, to all appearance, four hundred and fifty years ago were wonderfully identical. Indeed, at a much later date, Sir Joshua Reynolds' outrageous pronouncement that "the whole beauty and grandeur of art consists in being able to get above all singular forms, local customs, particularities, and details of every kind,"[11] might very well be a definition of "the whole beauty and grandeur" of Utopia. But it is also a statement of classical artistic doctrine, and it introduces the problem of whether we are able to detach Utopia from classicism.

Perhaps with difficulty we may: but only surely if we are prepared to recognize Utopia's limitations; and only too if, while recognizing them, we are also prepared to remember that Utopia is defined as an 'orientation' which 'transcends reality.' Then, and armed with this definition, we might even conclude that, when 'reality' is primarily attributed to motion, growth, change, and history, then the preeminent 'reality-transcending orientation,' the obvious Utopia, might evidently be something not too far removed from that persistent image which has so often been the instrument of change—the classical image of changelessness.



## Addendum 1973

And the classical image of changelessness, that impossible image which has yet been responsible for more changes than one would wish to think about, is so important to this discussion that it might be useful to introduce a rather more strict definition of Utopia than Karl Mannheim's.

**A Utopian conception in its fully developed form might be defined as a unified vision which includes:**

**1. a carefully considered artistic theory or attitude towards art integrated with**
**2. a fully developed political and social structure conceived of as extant in**
**3. a locus independent of time, place, history or accident.[12]**

Now, for obvious reasons, no Utopian speculator—be he philosopher, architect, or absolute despot—was ever able to combine all these themes. But, if we are here in the realm of myth and if to combine all these themes was a patent impossibility for the speculative intellect of the Renaissance and the Enlightenment (which had a high regard for them all), any comparable endeavor is surely an even more patent impossibility for us at the present day.

We may, indeed, hunger and thirst after righteousness and our moral zeal may well be effusive; but whether our moral passion will, or should, overcome our intellectual fastidiousness must be another matter. We may agonize over a supposed prevalent absence of Utopian reference; but, however much it may be often considered to be so, the relation of society to Utopia is not the relation of a donkey to a carrot. Utopia is an optimum and, therefore, an end condition. Such are the terms of its alliance with classicism. A particular Utopia can be subjected to neither alteration, addition, nor subtraction;[13] but, while recognizing this, if we go on to observe the constantly expressed preference of the present day for the dynamic rather than the static, for becoming rather than being, for process rather than product, perhaps for effort rather than achievement, we can only begin to define a situation which is inimical to the idea of Utopia. And if we then go on to observe our interest in the concrete and the specific, in the paradoxical, in things as found, if we notice our preference for toughness, difficulty, and complication, our insistence on the empirical fact, on data collection, our belief in the work of art as an issue of tensions and balances, as a reconciliation of discordances and opposites, as something essentially and absolutely located in time and place, as something which presents and re-presents its temporal and spatial limitations, as something growing from and thereby illustrating its liaison with existing society,

as something intimately involved with particular technologies and with ascertainable functions and techniques, then this can only be still further to establish that the range of often contradictory ideas which we habitually entertain are, *if it is possible to take them together*, considerably more than distinctly hostile to any form of Utopian fantasy.

Or so one might have thought. But any such simple and tolerably commonsense conjecture can only be to deny the historical evidence that a mental orientation towards specifics and a proneness towards Utopian speculation, however logically incompatible they may be, have long been able to enjoy an apparently happy coexistence.

**I have a formal difficulty about the concept of Utopia . . . Does the Utopian postulate a static Utopia, that is to say a society so perfect that any further change (improvement) is inconceivable? Or is Utopia dynamic, a state to which we are continually aspiring but never reach because it itself is continually changing, moving ahead of us? . . . I cannot subscribe to the static version, for its assumptions are inherently absurd. . . .**[14]

So wrote one of the contributors to the issue of *Granta* in which this essay was first published; and his point of view is completely understandable—at least so long as we do not find Utopia to be a genuine problem or, alternatively, so long as we are willing directly to equate the notions of Utopia and social progress. However, if we approach Utopia with suspicion (Utopia where the citizens cannot fail to be happy because they cannot choose but be good), if we are sceptical of its combination of progressivism and classicism, then we might probably recognize that the imagined possible fusion of an evolutionary sequence with a perfected condition (of endless *becoming* which will, still, always be complete *being*) is one of the more extraordinary fantasies of the present day—a fantasy which is apt to seem always as wholly benign as it is undoubtedly, well intentioned.

The idea that society can approximate the condition of music, that change and order may become one and the same, that the roads leading into the future may now, for the first time, be rendered free of all bumps and impediments is, of course, one of the root fantasies of modern architecture; and it is apt to be one of those presumptions which travel unexamined. Utopia is both to bring time to an end and, simultaneously, it is to inaugurate an era in which the movements of time will be, for the most part, smooth and predictable. The notion of the millennium is to retain all of its old-style cosmic significance and is then to be made further agreeable by a redecoration with all the gloss of rationality and science.

The state of mind which is here implied, unembarrassed, superstitious, and



allegedly enlightened, should now be recognized as constituting the major block to any contemporary Utopian formulation—should this be necessary. A state of mind well disposed toward what it supposes Utopia to be but unequipped with sense of metaphysical difficulty or reservation—the state of mind preeminently of the planner and the empirical sociologist—for the most part unaware of Utopia's historical origins and, generally, conceiving these to be irrelevant: what we have here is, very largely, the imposition of Hegel upon Plato and, further, the tacit insistence that the results of this condition are, necessarily, libertarian.

Which may be, rather extravagantly, to generalize and to jump; but which may also be, opportunistically, to identify those coercive attributes of Utopia which Karl Popper has selected to condemn. For Popper's criticisms of Utopia and the closed society,[15] though they were available to—and apparently ignored by—the contributors to *Granta*,[16] must be conceded as establishing a conspicuous obstacle both to the exercise of Utopian fantasy as well as to the deployment of most of the traditional programs/fantasies of modern architecture.

Utopia, because it implies a planned and hermetically sealed society, leads to suppression of diversity, intolerance, often to stasis presenting itself as change, and, ultimately, to violence. Or, more specifically: if Utopia proposes the achievement of abstract goods rather than the eradication of concrete evils then it is apt to be tyrannical: this since there can far more easily be consensus about concrete evils than there can be about abstract goods. Such is the Popperian message, which, supported as it is by a critique of determinism and a developed theory of the nature of investigation, remains hard to refute and which, very largely, continues to be ignored.

But, of course, when all this has been observed and taken to heart (which, in this context, might mean when modern architecture has been cut down to size and its intentions admitted to be poetry rather than prescription), the problem and the predicament of abstract goods in a world of concrete evils—always an acute question for the architect—remains unalleviated and unexamined; and, if one must agree with Popper about the obligation to eradicate concrete evils, then one must still notice that the issue of abstract goods (with all its Platonic, natural law, and modern-architecture overtones) emphatically persists. For how to designate specific evil without at least *some* theory of general good? And is not Popper's position yet another Utopian formulation—and a Utopian formulation which is particularly Germanic?

**The road to progress was not sought in external deeds or in revolutions, but exclusively in the inner constitution of man and its transformations.**

For again, Mannheim--with his discrimination of a largely apolitical and Germanic Utopia (*vide* note 8)—might seem to enter the picture, and Popper's ideal of emancipation through self-knowledge--an emancipation both for the individual and society (the Kantian ideal)--might seem to belong to this important, but still intrinsically local, category.

So, the problem of specific evil, the need for emancipation, a theory of general good and then coercive Utopia as a repository—perhaps *the* respository—of ideas of general good: this might be the conflict of interests that confronts us as we abandon both the folklore of modern architecture and the Popperian destruction of allied propositions; and it is a dilemma which seems to leave us only with the alternatives of Utopia and freedom—with freedom dependent upon Utopia and Utopia always acting to limit freedom.

In American terms this is a quandary which can often become the rule of law versus the will of the people—with 'law' or 'the people' idealized as the purpose of the occasion might seem to require. But, if this pair of opposites presumes an important willingness to argue and no great willingness to insist, it might also be transferable from the area of ostensible politics to the area of criticism in general. So there are no criteria which cannot be faulted, which are not in continuous fluctuation with their opposites. The flat becomes concave. It also becomes convex. The pursuit of an idea presumes its contradiction. The external world and the senses both equivocate; and criticism, however empirical it may sometimes profess to be, depends always upon an act of faith, upon an assumption ('this is a government of laws not men') of impossible realities but plausible abstractions. But, if the possible, the probable, and the plausibly abstract are always in a continuous condition of intersection, it is perhaps in some such area, where myth and reality interfecundate, that we should be willing to place all extreme fantasies both of Utopia and liberty.

The myth of Utopia and the reality of freedom! Alternatively: the reality of Utopia and the myth of freedom! However stated, what we have here are the intimately interwoven presumptions of both authority *and* liberty; and, if they are—both sets—necessary for survival, both of them the necessary components of discourse, then, if we profess any interest in emancipation but are not anxious to propose anarchy, perhaps it should only be said that *some* affirmation of a limited Utopia remains a psychological obligation. Utopia, in any developed form, in its post-enlightenment form, must surely be condemned as a monstrosity; but, while always a flagrant sociological or political nightmare, as a reference (present even in Popper), as a heuristic device, as an imperfect image of the good society, Utopia will persist—but should persist as possible social metaphor rather than probable social prescription.



## Notes

1 Thomas More, *Utopia*, Book II, Ch. II.

2 Plato, *Timaeus*, Bollingen series, 1944, p. 117.

3 James Leoni, *The Architecture of Leon Battista Alberti in Ten Books . . .* , London, 1735, Book VII, Ch. IV.

4 Isaac Ware, *The Four Books of Palladio's Architecture*, London 1738, Book IV, Preface.

5 Leoni, Book VII, Ch. III.

6 This is not entirely to discount the splendid Bramantesque piazza at Vigevano dating from the 1490s.

7 See Horst de la Croix, "Military Architecture and the Radial City Plan in Sixteenth Century Italy," *Art Bulletin*, Vol. XLII, no. 4, 1960.

8 Though this might seem to be a somewhat perfunctory handling of Saint-Simon, Fourier, Owen, *et al.*, one might still agree with Karl Mannheim that these were "dreaming their Utopias in the older intellectualist style" (Mannheim, *Ideology and Utopia*, 1st English ed., 1936; reprinted, New York, n.d., p. 245).

9 And one might again agree with Mannheim that "Where as in France, . . . the situation matured into a political attack the intellectualistic took on a rational form with decisively sharp contours. [But] where it was not possible to follow in this path, as in Germany, the Utopia was introverted and assumed a subjective tone." In Germany, Mannheim continues, "the road to progress was not sought in external deeds or revolutions, but exclusively in the inner constitution of man and its transformations." Mannheim, p. 220.

10 Mannheim, p. 192.

11 Sir Joshua Reynolds *Literary Works*, London, 1835, Vol. I, p. 333. From Discourse III delivered in 1770.

12 Carroll William Westfall, Review of Hermann Bauer, *Kunst und Utopie*, in *Journal of the Society of Architectural Historians*, Vol. XXVI, No. 2, 1967.

13 "A harmony of all the parts in whatsoever subject it appears, fitted together with such proportion and connection, that nothing could be added, diminished, or altered but for the worse": Alberti's definition of beauty (Leoni, Book VI, Ch. II) might also serve to illustrate the obvious predicament of Utopia with reference to both history and change.

14 Robin Marris, "Utopia and Conviction," *Granta*, Vol. LXIII, No. 1187, 1959.

15 See particularly the article, first published in the *Hibbert Journal* 1948, in the collection *Conjectures and Refutations*, New York and London, 1962. But the judgments which Popper here expresses are obviously to be found more extensively developed in his *The Logic of Scientific Discovery* (first published as *Logik der Forschung*, Vienna, 1934), London 1958; in *The Open Society and its Enemies*, London, 1945; and in *The Poverty of Historicism*, London, 1957. A valuable and appreciative criticism of Popper's centrality to the construction of any adequate contemporary critical theory is to be found in G. Radnitzky, *Contemporary Schools of Meta-Science*, Chicago, 1973.

16 That Popper could be overlooked by the contributors to a student magazine in 1959 perhaps should not be surprising; but that a similar failure should have characterized the contributors to vol. 94, no. 2, of the *Proceedings of the American Institute of Arts and Sciences* might arouse curiosity. However the issue *Utopia* of Daedalus, Spring 1965, appears nowhere to display a cognizance of his position.

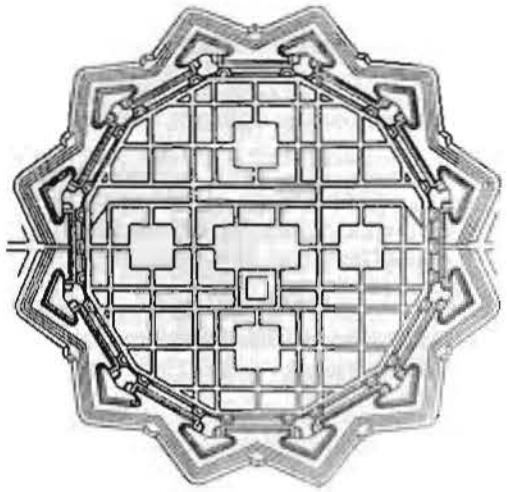


Plate 75 Plan for an ideal city. From Vincenzo Scamozzi, *L'Idea dell architettura universale*, Venice, 1615. This and the city shown in Plate 76 are neither Sforzinda nor Palma Nova. But as Sir Thomas More said of Utopian demonstrations, "They are indeed so alike that he that knows one knows them all."

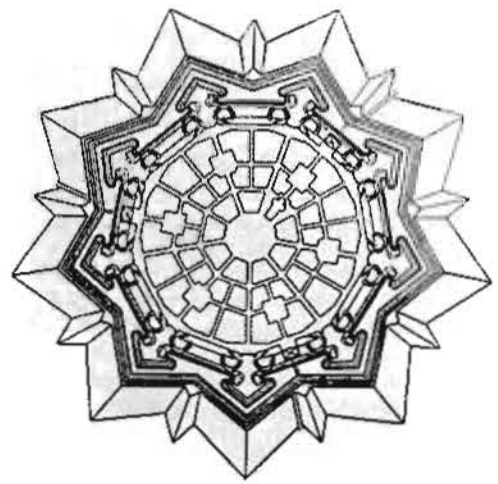
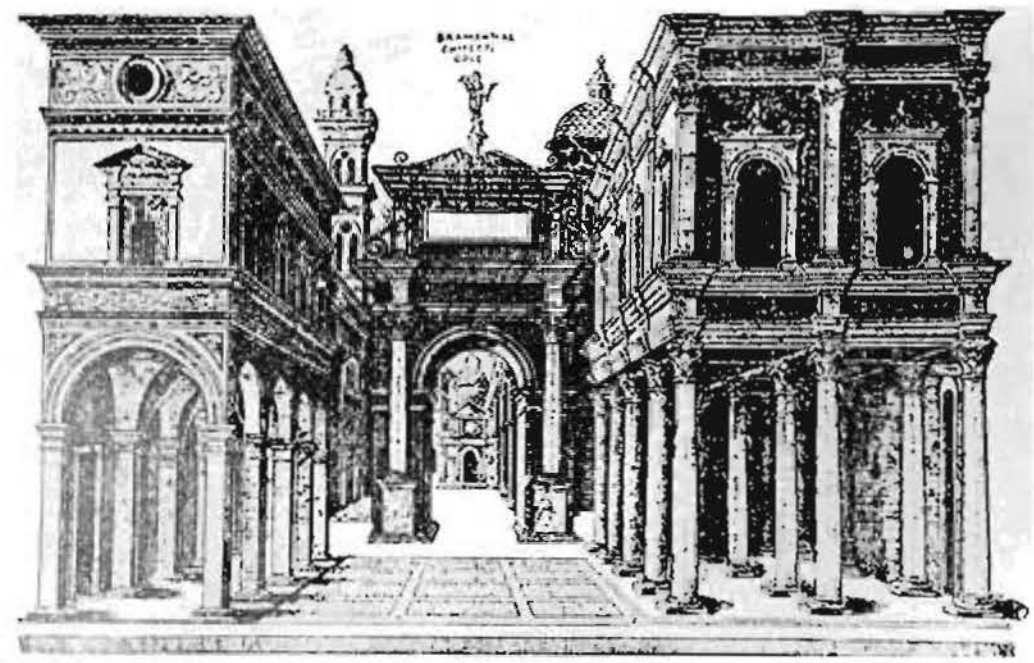


Plate 76 Plan for an ideal city. From Buonaiuto Lorini, *Delle Fortificatione Libri Cinque*, Venice, 1592.



Plate 77 Francesco di Giorgio (?), *Perspective of a Square*, *c.* 1470.

Plate 78 Bramante, *Street Scene*, *c.* 1500-10 (?).



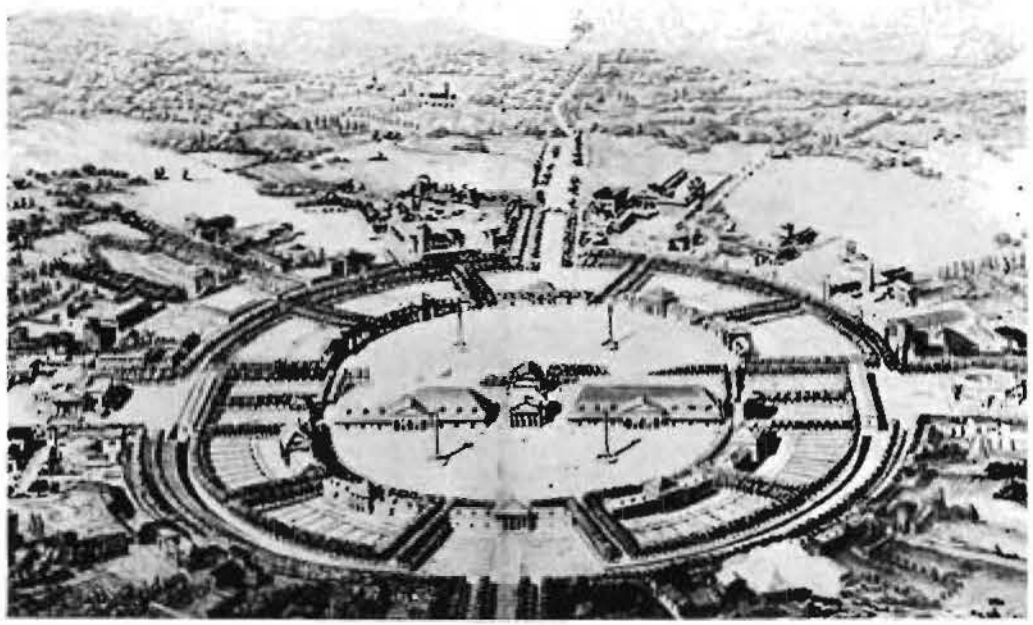
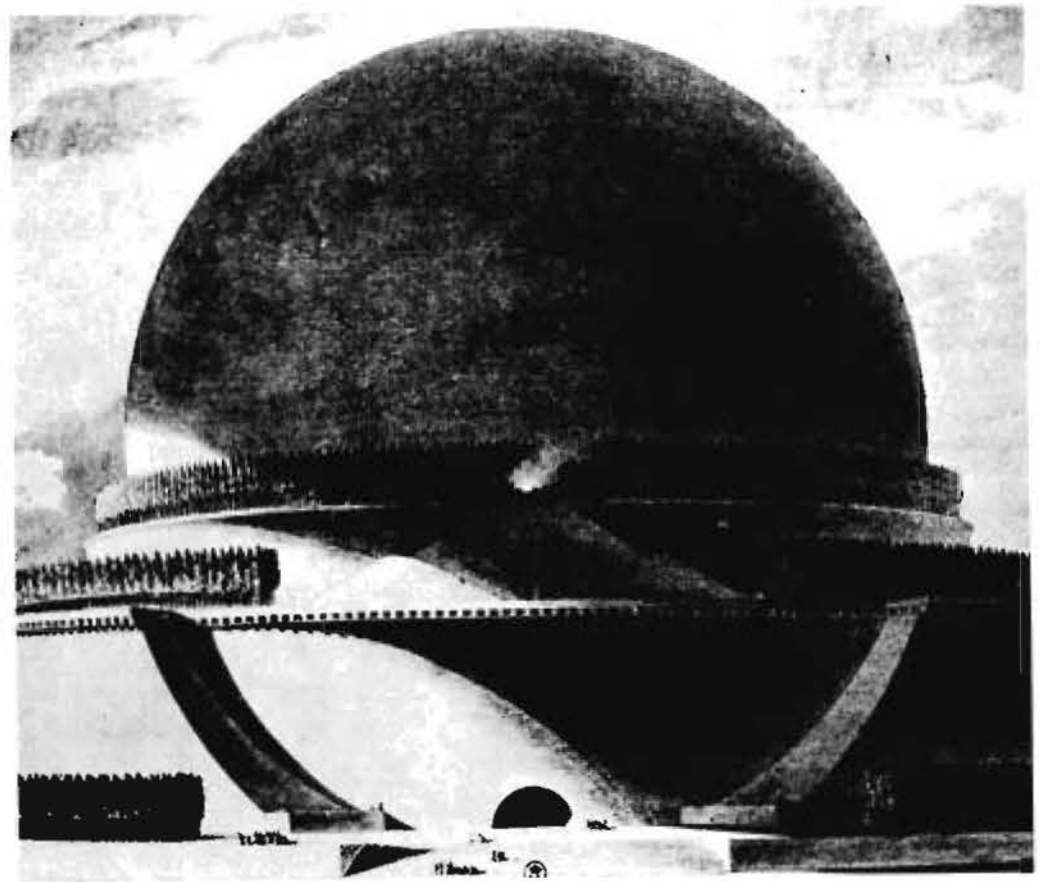
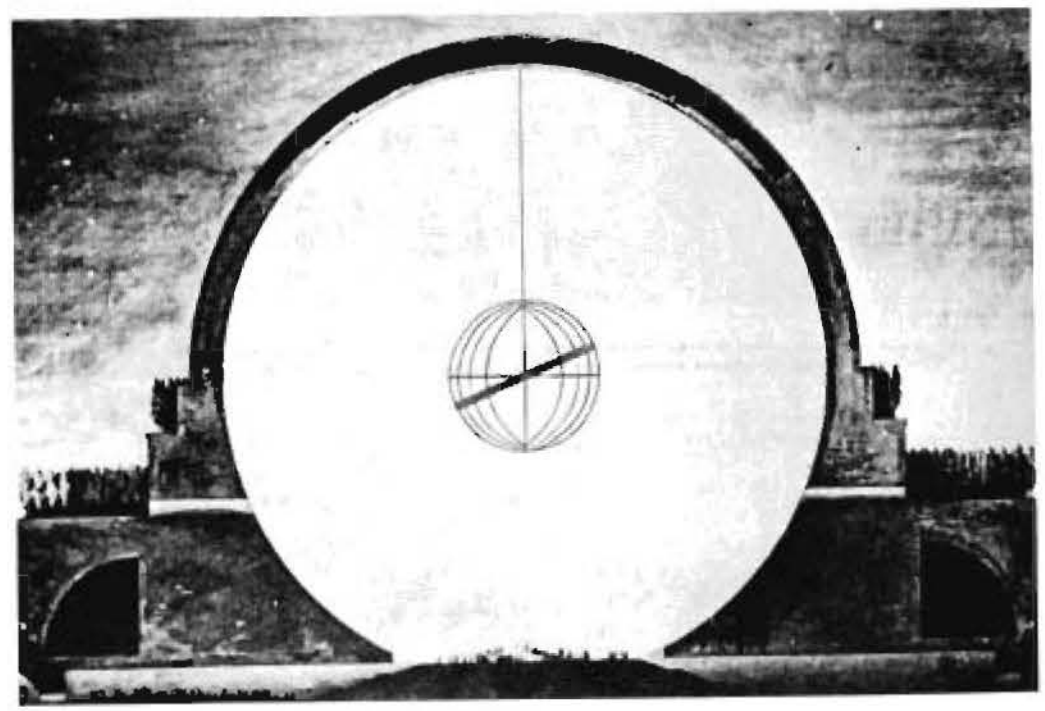


Plate 79 Project, La Saline de Chaux.
Claude-Nicolas Ledoux, 1775-79.

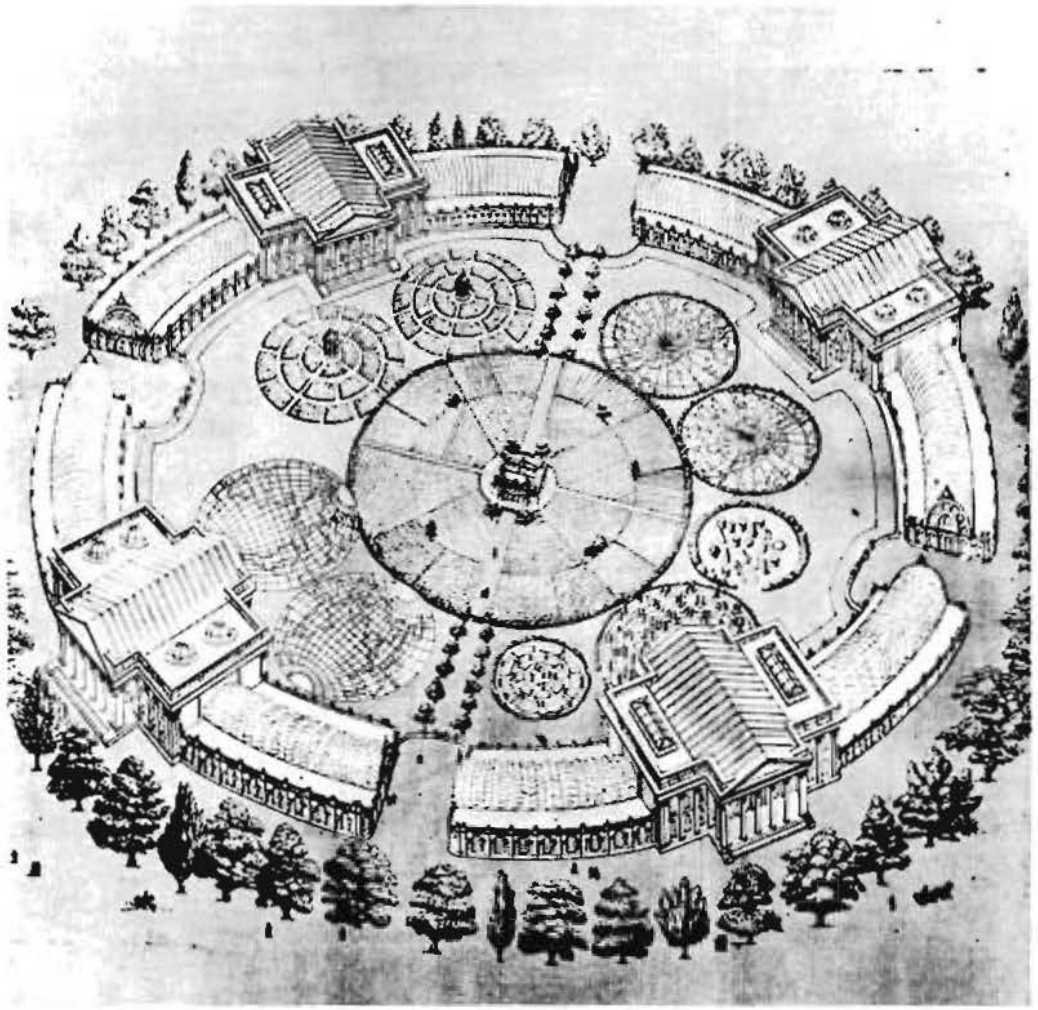
Plate 80 Project, Cenotaph for Newton.
Elevation and section. Etienne Louis
Boullée, 1784.





VIEW OF THE COLLEGES FOR THE HAPPY COLONY

to be established in New Zealand by
The Workmen of Great Britain



THE COLLEGES PLACED IN THE CENTRE OF THE TOWN, IN A CIRCLE OF FIFTY ACRES, ADJOINING THE WORKSHOPS, BATHS, CONSERVATORIES BOTANIC & HORTICULTURAL GARDENS THE TERRESTRIAL & CELESTIAL MAPS, LAID OUT ON THE GROUND. THE CIRCULAR GROVES, EMBODYING HISTORY. THE MUSEUM, MYTHOLOGY, THE MINIATURE FARM &c

Plate 81 The Happy Colony. From Robert Pemberton, *The Happy Colony*, London, 1854.



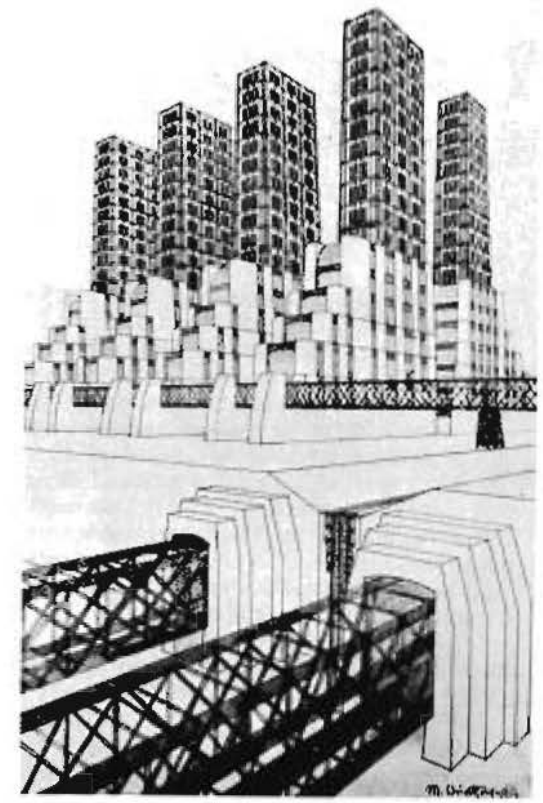


Plate 82 Futurist study. Mario Chiattone, 1914.

Plate 83 Project, Plan Voisin. Le Corbusier, 1925.