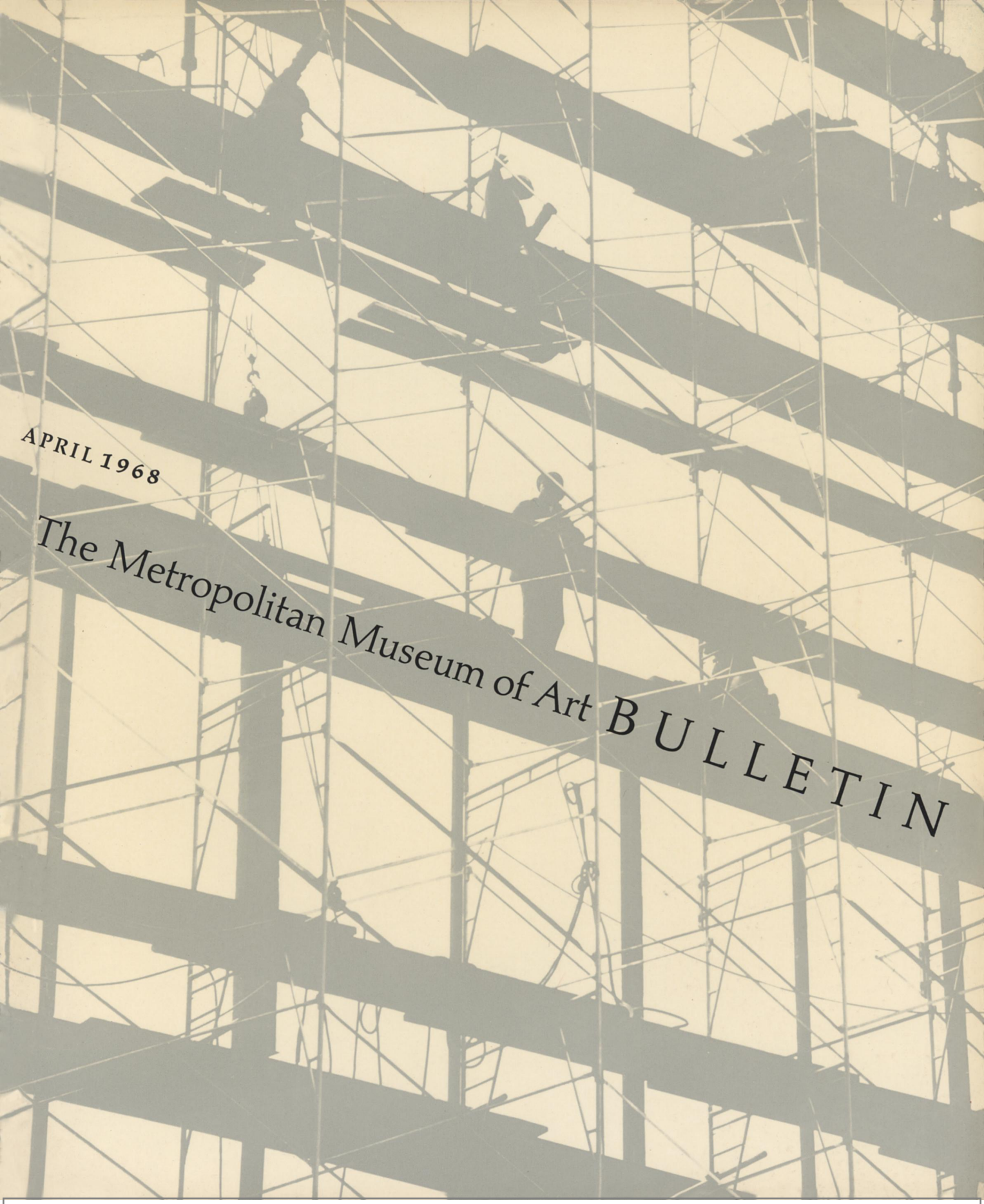
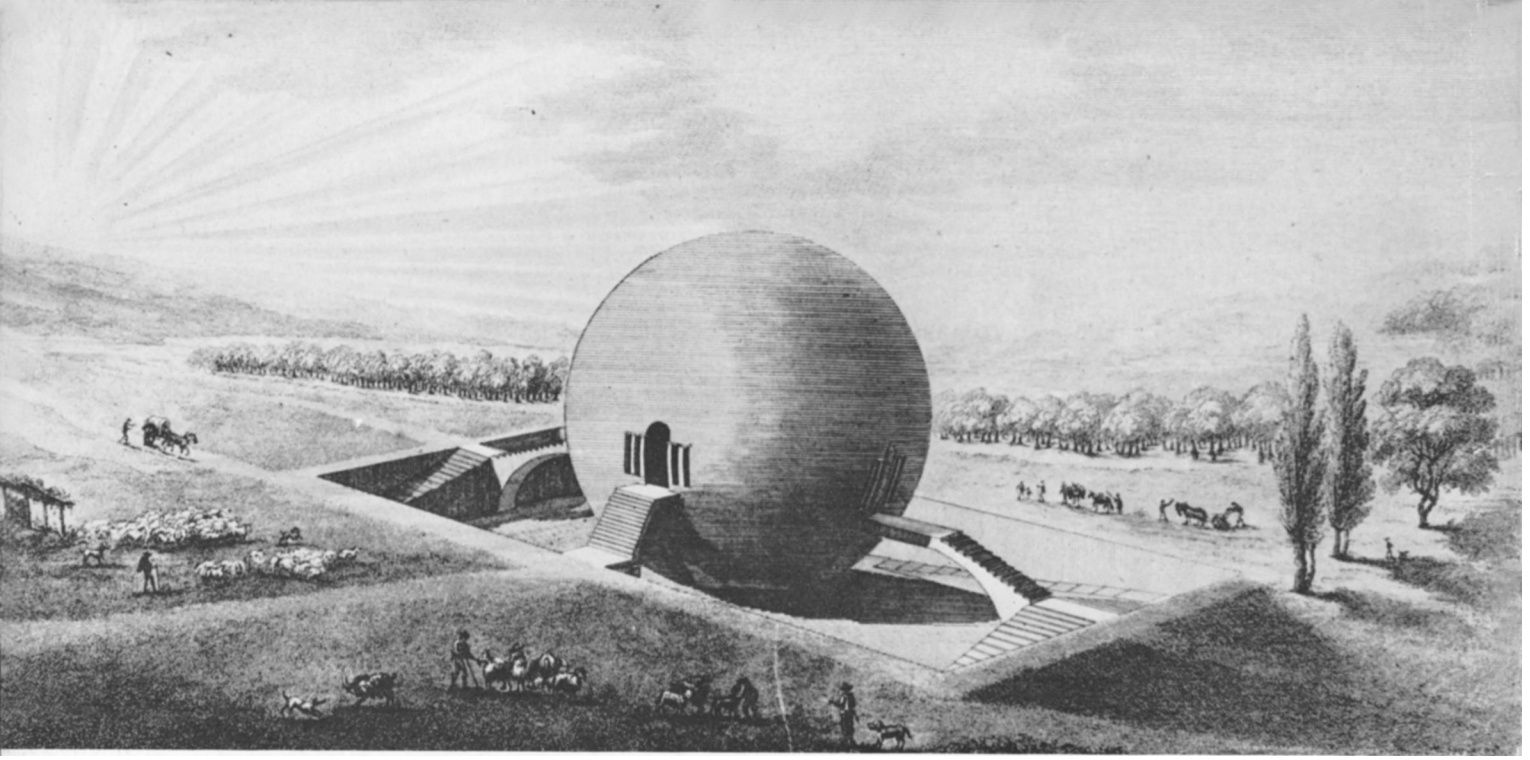
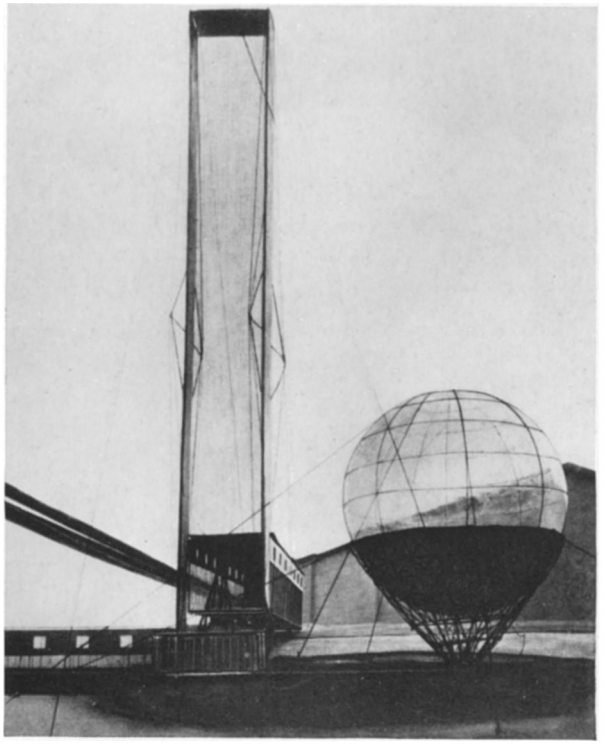


APRIL 1968

The Metropolitan Museum of Art BULLETIN



This Bulletin is devoted to architecture and environment, a theme suggested by the exhibition *Visionary Architects*, now on view at the Museum. The 147 drawings and prints in this exhibition give a glimpse of the imaginative schemes for schools and palaces, sepulchers and pavilions, that were concocted by French architects of the late eighteenth century who rebelled against the traditional ideas of their contemporaries. The show was conceived by Jean Adhémar and J.-C. Lemagny of the Bibliothèque Nationale in Paris, which owns most of the material, and was brought to this country at the initiative of Dominique de Menil of the University of St. Thomas in Houston. It will be at the Metropolitan Museum from April 16 through May 13.



OPPOSITE PAGE:

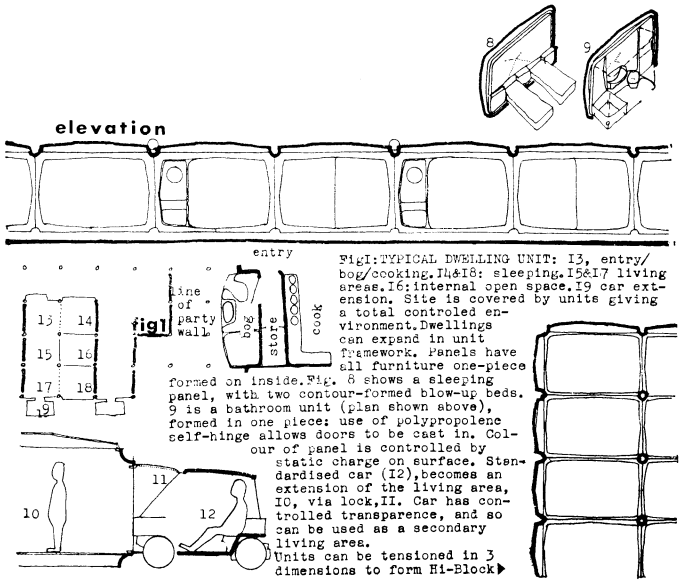
1. *Quarters for Rural Caretakers, 1780, by C.-N. Ledoux (1736-1806), French. Engraving by van Maëlle, 17⅛ x 10⅝ inches. Bibliothèque Nationale, Paris. No. 55 in the exhibition*

2. *Model of the Lenin Institute, Moscow, 1927, by I. I. Leonidov. The opaque lower portion of the globular structure is an auditorium seating 4,000. From Russland, Europa, Amerika (Berlin, 1929) by E. Mendelsohn*

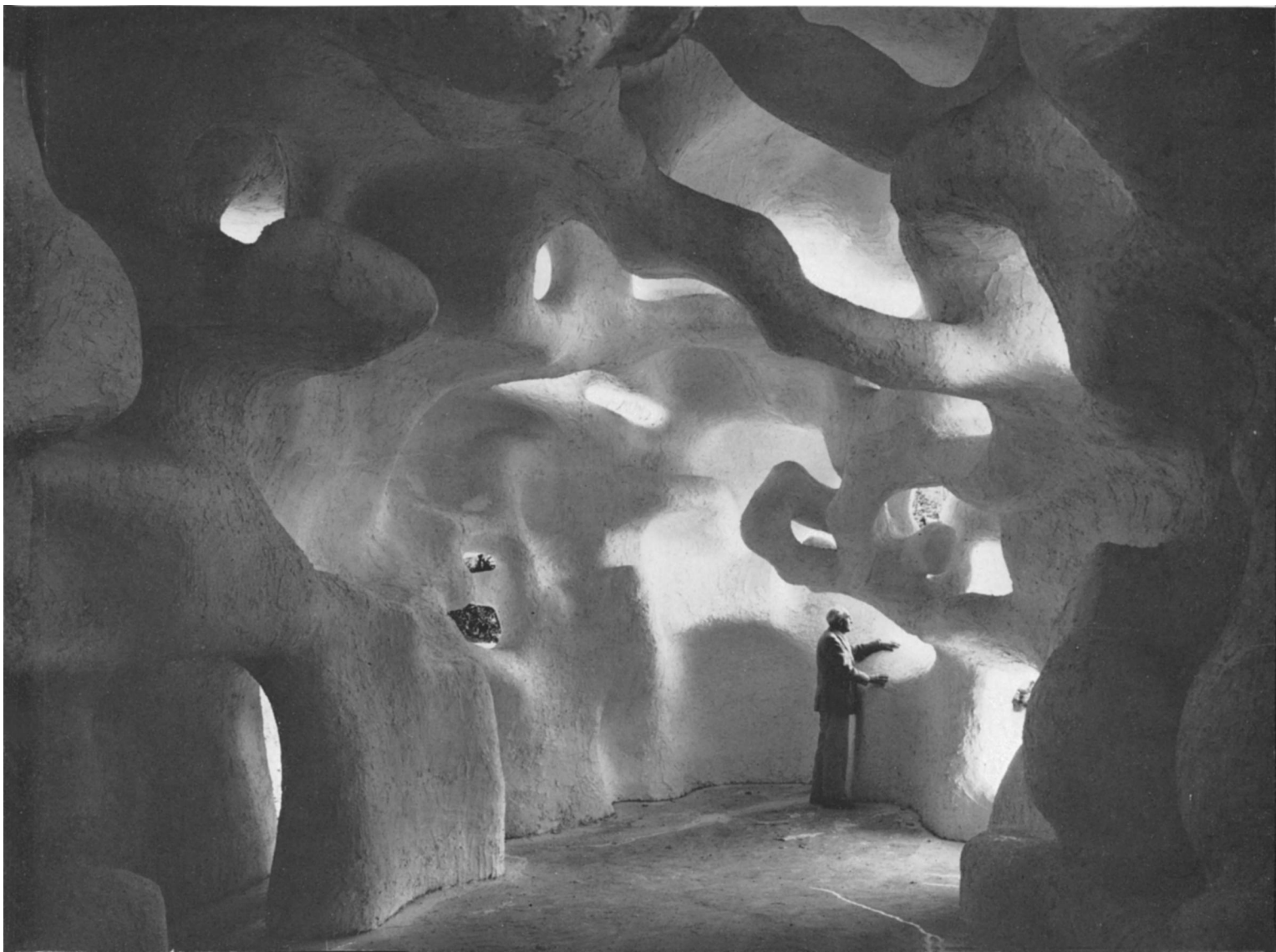
THIS PAGE:

3. *Motown House. A prefab dwelling unit of plastic and foamed glass assembled, Detroit-style, from equipped panels. The family car (12) hooks on at 19, enlarging the living room (15-17). From a project by Stuart Passey in the Architectural Association's Clip-kit (London, 1966)*

4. *Sculpturally conceived house in Meudon, France, 1962, by André Bloc. Photograph: Copyright Léni Iselin*



FigI:TYPICAL DWELLING UNIT: I3, entry/bog/cooking.I4&I8: sleeping.I5&I7 living areas.I6:internal open space.I9 car extension. Site is covered by units giving a total controled environment.Dwellings can expand in unit framework. Panels have all furniture one-piece formed on inside.Fig. 8 shows a sleeping panel, with two contour-formed blow-up beds. 9 is a bathroom unit (plan shown above), formed in one piece: use of polypropolene self-hinge allows doors to be cast in. Colour of panel is controlled by static charge on surface. Standardised car (I2),becomes an extension of the living area, I0, via lock,II. Car has controlled transparence, and so can be used as a secondary living area. Units can be tensioned in 3 dimensions to form Hi-Block▶



The Visionary Tradition in Architecture

GEORGE R. COLLINS *Professor of Art History, Columbia University*

Contents

ON THE COVER:
Photograph by Bruce Davidson for Magnum. Courtesy of the Ford Foundation

The architecture of our day is noteworthy for its tendency toward the poetic and visionary. This has become a universal phenomenon, and has been encouraged by a wide spectrum of professional and popular publications that have exerted themselves to present the most *outré* and implausible products of the designer's fantasy. The result is that – as with pop painting, kinetic sculpture, and electronic music – our very definition of what the art is or can be has been exploded, opening up enormous possibilities for creation and expression.

The range of contemporary architectural imagination is a broad one, extending from a fascination with the sheer efficiency of a modern technology that can allow each person an inexpensive residence of maximum serviceability (certainly a dream, but see Figure 3) to a rejection of all systematic technology, in pursuit of the ultimate in architectural arbitrariness (Figure 4). It is clear that both these types of designing aim at a total transformation of our environment, and that such urbanistic-architectural effects reflect the basic social inquietude that today stretches from the "dispossessed's" demand for minimal living standards to the middle-class flower child's rejection of all "norms."

It should be noted, however, that not all the architectural fantasy and protest of our century has been so entirely novel, that certain tendencies are either remarkably analogous to or actually derive from the awakening social consciousness and artistic indi-

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viduality of the late eighteenth century as interpreted by avant-garde architects of that day. The products of these eighteenth-century visionaries, which also ranged from the exercise of pure reason to the most capricious fancy, are well represented in this spring's exhibition in the Museum.

Most striking to the twentieth-century eye is, perhaps, their tendency to compose buildings in terms of pure geometric forms, as simple as possible, and to shape all the parts with such planar surfaces or render them in projects with such crisply silhouetted lights and darks that the elementarism of the forms become more apparent (Figures 1, 5, 13, 15). These prismatic, cylindrical, spherical, and pyramidal elements were then so deployed that they seemed to confront each other in wilful and often surprising relationships – quite devoid of the effects of continuity and of transition between parts that had characterized the baroque styles against which they were reacting. Although still true to the classical orders, in stripped-down form, the ruthlessly axial buildings of Boullée, Ledoux, and others seem to hark back to before the classical period, to some imaginary – almost Egyptian – primitive architecture of simple blocks.

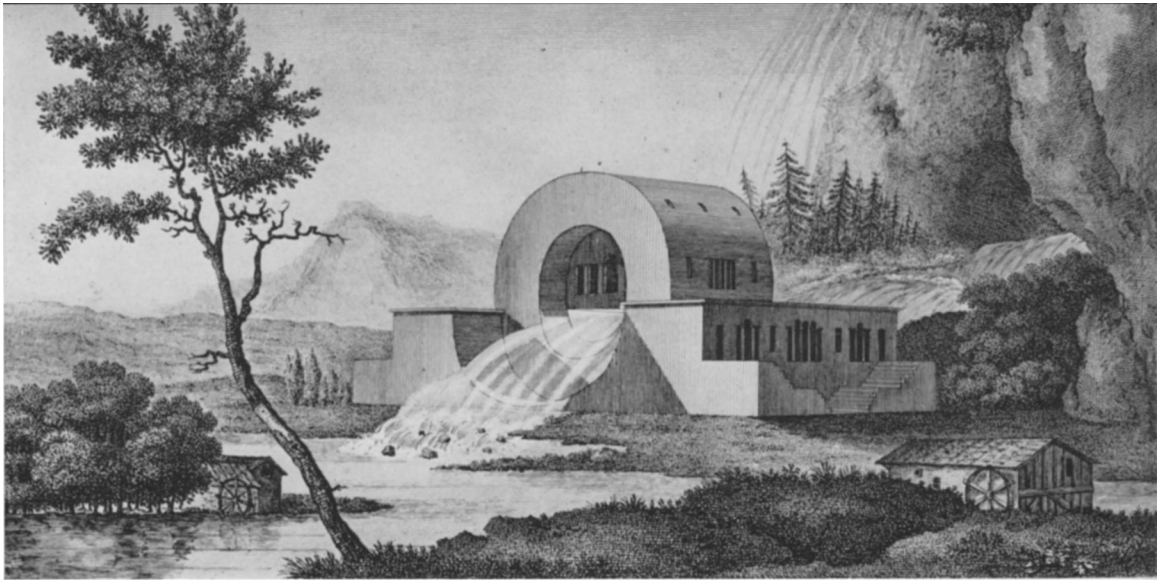
The subjective and arbitrary manner in which the elements were added together or interlocked reminded their first admirers in our century of the revolutionary International Style then flourishing. The association of functional efficiency with simple mass and unornamented surface, a late eighteenth-century theory about architecture, seemed strikingly similar to the purifying process that modern design went through in the 1920s. As the architect Dufourny said in 1793, "Architecture must regenerate itself through geometry."

But the visionary nature of the eighteenth-century movement did not reside so much in this radical formalism as in the bizarre conceptions in which the architects indulged, and their delight in projects of vast size. Not only were many of their proposals ideal in the sense of being dedicated to civic virtue, but they were often rendered on a gigantic scale that defied both man's comprehension and his building techniques (Figure 15). They were overwhelmingly utopian and fantastic. Mme de Stäel caught the spirit of these architects when she wrote, "All those gradations, those prudent manners and nuances that are to prepare for the great effects – are not to my liking. One does not arrive at the sublime by degrees."

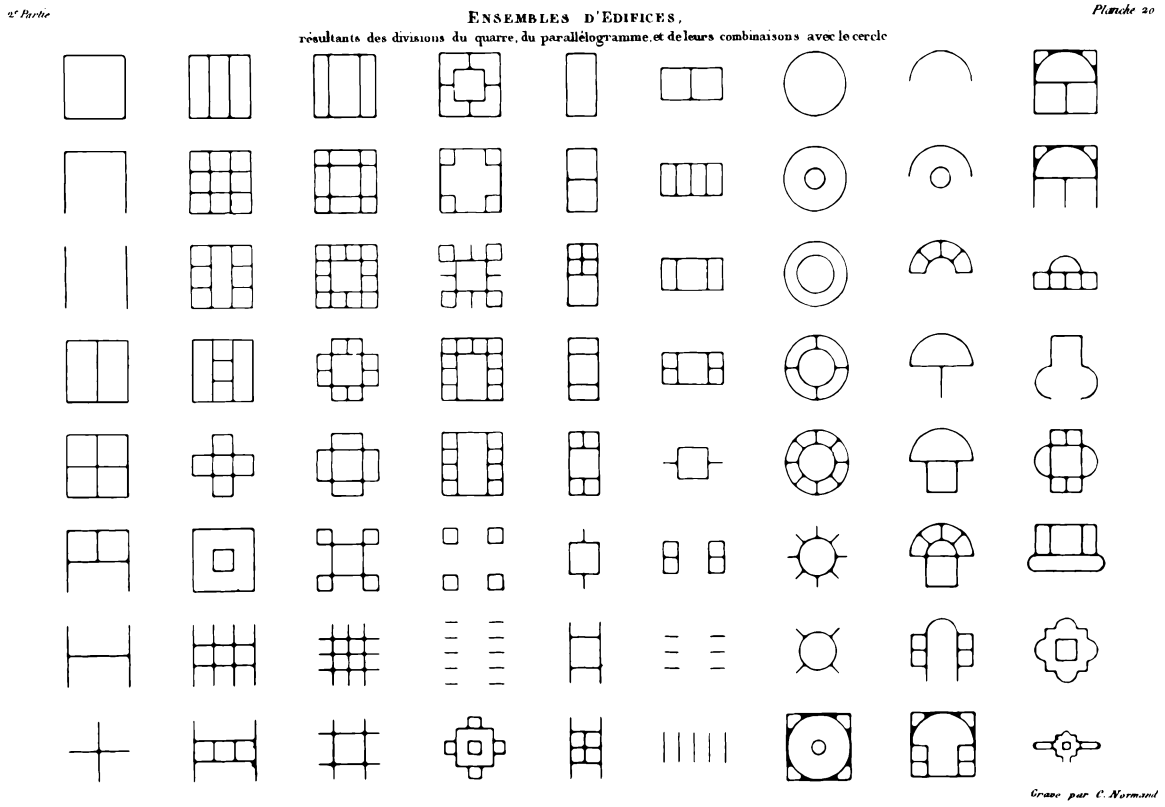
The sense of fantasy is often enhanced by surprising symbolic meanings that are achieved by making the whole form of the building speak: Ledoux's tubular house for the director of waterworks (Figure 5), Boullée's celestial sphere as a cenotaph for Newton, or Lequeu's stable in the form of a cow (Figure 17). This desire to reveal the purpose of a building mimetically was called *architecture parlante* in the eighteenth century, and represents a hoary tradition extending from Roman bakers' tombs in the form of ovens to modern highway refreshment stands in the shape of ice-cream cones and an airport terminal that looks like a poised eagle. Pop art.

Some of the representational projects to be seen in the current exhibition are, however, a mere scherzo or *Formspiel*, and would seem to be toying with our credulity as our contemporaries do (Figures 18, 19). For instance, our Figure 10 is the house for a "cosmopolite," drawn by the architect Vaudoyer in the album of a traveler in Rome. When

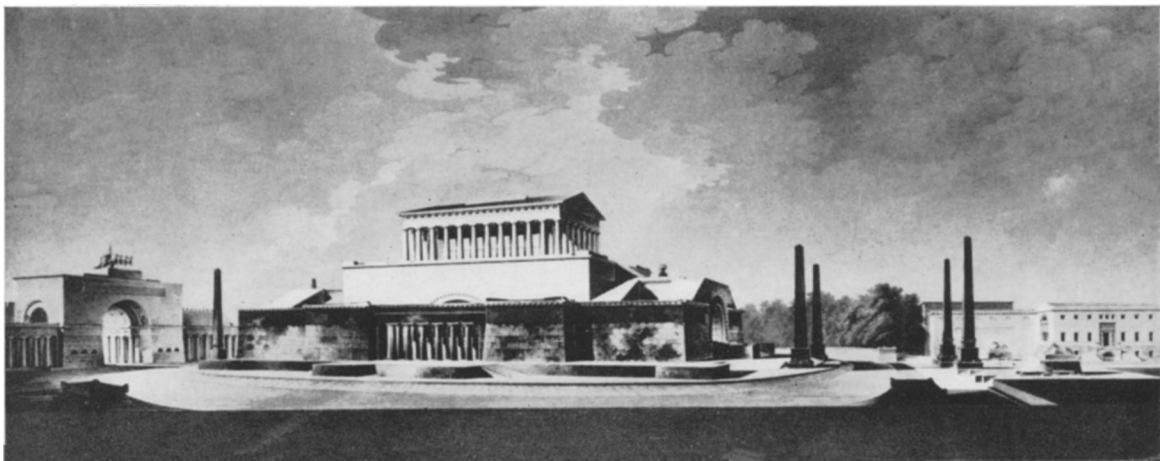
5. *House of the Director of Waterworks at the Source of the Loüe, 1773-1779, by Ledoux. Engraving by van Maëlle and J.-L. Maillet, 18½ x 11¼ inches. Bibliothèque Nationale, Paris. No. 83 in the exhibition*



6. *A page of diagrammatic ground plans, by J.-N.-L. Durand (1760-1834), French. Plate 20 from the second volume of Précis des leçons d'architecture (Paris, 1809 ed.). Engraving by C.-P.-J. Normand. Photograph: Taylor & Dull*



7. *Project for a monument to Frederick the Great, 1797, by Friedrich Gilly (1772-1800), German. From Friedrich Gilly (Berlin, 1935) by Alste Oncken. Technische Hochschule, Berlin. Photograph: Taylor & Dull*



the sketch was originally published, in 1802, it was considered to be merely the "picturesque" use of a sphere by Vaudoyer in an effort to avoid the clichés with which the album was otherwise decorated, but a recent study suggests that the structure is that of an enormous celestial globe of the armillary, astrolabe, or planetarium type. The house, in fact, rests in a columned ring (as was common with the actual instruments) inscribed with the signs of the zodiac and provided with four bearings on which the sphere would tilt. Stars perforated in the shell recall celestial globes into which the head could be inserted or one could even walk. A cosmopolite indeed! Here an object from his library or garden is inflated out of all proportion, and the plan itself becomes an exercise in Euclid. The exhibit testifies to the popularity of the sphere (compare Figures 1, 11), both as a perfect geometric shape and as a symbol of the cosmos.

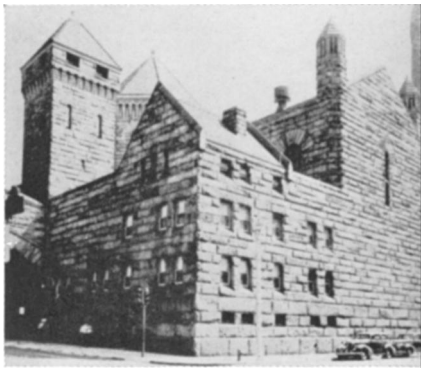
Although the dates of many of the works of these "romantic classicists" in the exhibit are elusive, it would appear that the visionary projects of Boullée, Ledoux, and some of their followers (Figure 10) began in the early 1780s. The latest dated item in the show seems to be of 1807-1808, a project by F.-J. Bélanger.

The design principles of these architectural innovators, in all their revolutionary simplicity of form and composition, were transmitted to succeeding generations through the teaching and publications of Jean-Nicolas Durand (1760-1834). Boullée's draughtsman and favorite, Durand became the teacher of architectural theory in the new Ecole Polytechnique. His lectures were published in summary form in 1802 and went through numerous influential editions. In his pursuit of sober, "functional," and economic design, Durand advocated planning in terms of simple elements and axes. Figure 6 illustrates his mode of assembling plans from squares and circles intersected by axes, with various parts then suppressed. The model buildings in his books, although sometimes grandiloquent in scale, are more often of modest size and are always trim in appearance, relying for effect on geometric masses perforated by sets of windows or colonnades, rectangular or round-headed. Our Figure 6, schematic as it is, represents favored forms to be found in Durand's elevations as well, and sums up his tastes.

This sensibility marked much classical architecture of the early nineteenth century. In England we find it in Sir John Soane (who inherited his simplicity in part from local British tradition), and in Germany in the work of Friedrich Gilly and Karl Friedrich Schinkel. The exchange of influences among these men and the French is well known. A project by Gilly that illustrates the closeness of his temperament to the contemporary French visionary architects is his Monument to Frederick the Great (Figure 7). The propylaeum to the left resembles the gate Soane designed for a country house at Tyringham during the immediately preceding years, attesting to the identity of taste that pervaded classicism of the day. Of later nineteenth-century architects, perhaps Henry Hobson Richardson (Figure 8) best exemplifies this composing in terms of heavy contrasting masonry masses, imposing round-arched entrances, and geometric clarity of plan.

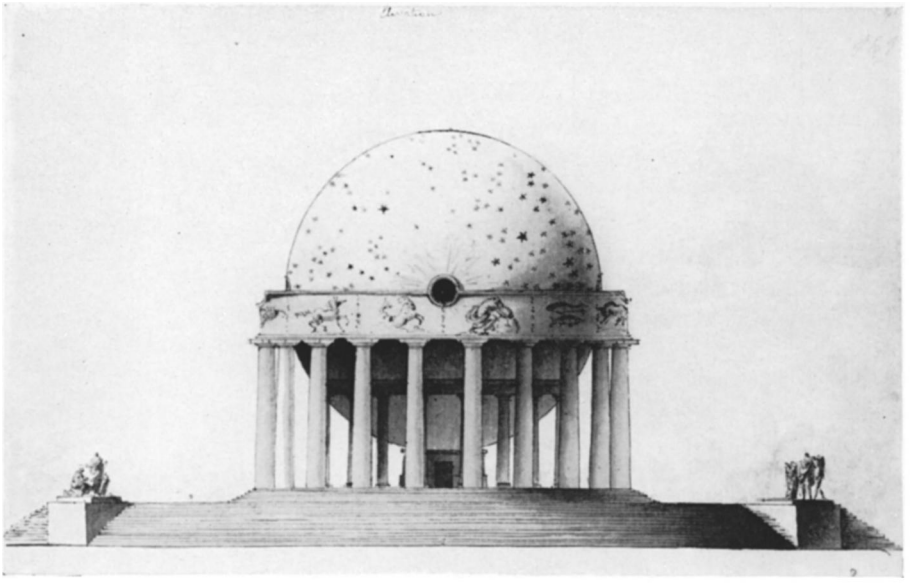
Our purpose is not, however, to trace the ripples of eighteenth-century visionary architecture in buildings and projects of the nineteenth century, but rather to compare the eighteenth-century movement with fanciful tendencies in our own times.

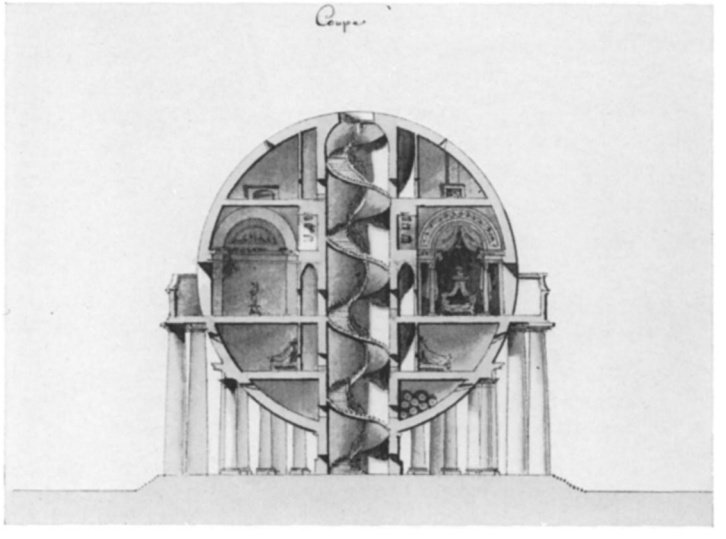
In twentieth-century architecture, before the present moment, there have been three episodes of visionary activity: Italian futurism, German expressionism, and Russian constructivism. Of these the first, futurism, does not bear much relation either formally or programmatically to the eighteenth-century revolutionaries, to judge from the projects of Antonio Sant'Elia, the major architectural representative of the movement. While some of his renderings do have a certain geometric quality to their volumes as well as a free and arbitrary interlocking of elements and an overpowering scale (Figure 9), the similarities stop there. Sant'Elia sought dynamics rather than stasis, skeleton rather than mass, instantaneity rather than elementarism, and, above all, impermanence, which is the negation of the romantic-classic tradition.

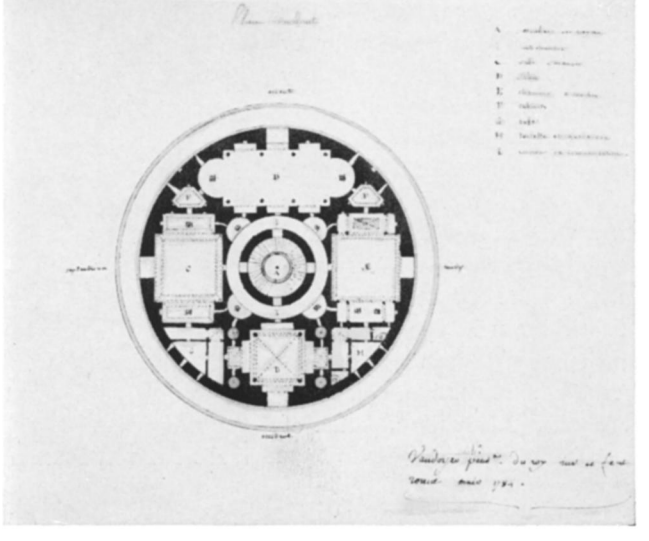


8. Exterior of the Allegheny County Jail, Pittsburgh, 1884-1888, by H. H. Richardson (1838-1886), American. From The Architecture of H. H. Richardson and His Times (Cambridge, Mass., 1966) by Henry-Russell Hitchcock. Photograph: Taylor & Dull

9. The New City, 1914, by Antonio Sant'Elia. Ink, 20⅞ x 21½ inches. Musei Civici, Como. Photograph: Ghizzoni di Scotti







It is, rather, with the German expressionist architects, when their attention turned to elaborate paper utopias during and after World War I, that we sense affinities in spirit and form with Boullée, Ledoux, and their followers. It is curious that this most baroque of twentieth-century movements should show parallels to earlier artists who were trying to overthrow the baroque, but it may stem from the student experience of the expressionists, since they were probably schooled in the precepts of Durand and Schinkel at the Technische Hochschulen. The analogies are vivid and derive from certain common tendencies: a desire to play with form and a search for transcendental effects of scale – in which the expressionists outdid the wildest visions of their predecessors by designing architecture that embraced entire Alpine valleys or a whole cordillera.

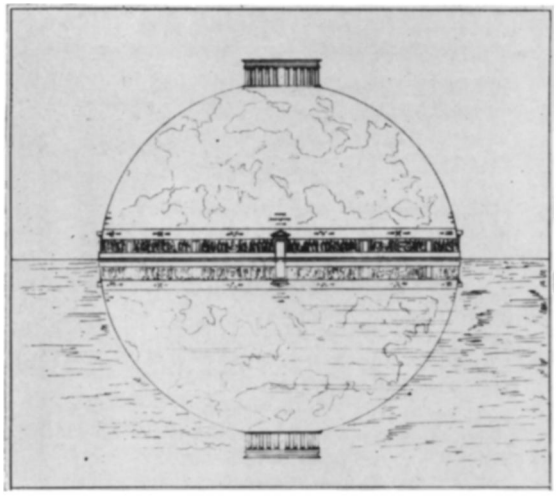
Both analogies and contrasts can be made clear by a comparison of two very similar projects. In one of the illustrated "utopian" folios that the German architects circulated among themselves during the early 1920s, Wenzel Hablik etched an "explorers' settlement" (Figure 12), a "floating metal globe, light as aluminum, hard as steel, transparent as glass." Compare to this Jean-Nicolas Sobre's Temple of Immortality (Figure 11), a large hemisphere, also belted by an equatorial ring, that was supposed to appear as if it were floating. Sobre included a number of classical and astrological ideas: a sculptured frieze representing the produce of the earth, the signs of the zodiac above the frieze, and a terrestrial map traced on the exterior. Bronze doors at the four cardinal points admit one to a theater that would accommodate an "immense number" of spectators; the interior of the dome represented the celestial vault. The twentieth-century artist, however, cuts his floating globe

10. House for a cosmopolite, 1785, by A.-L.-T. Vaudoyer (1756-1846), French. Drawings on pages 161-163 of an album of a German traveler, von Brack. Museum für Kunsthandwerk, Frankfurt-am-Main. See nos. 141 and 142 in the exhibition

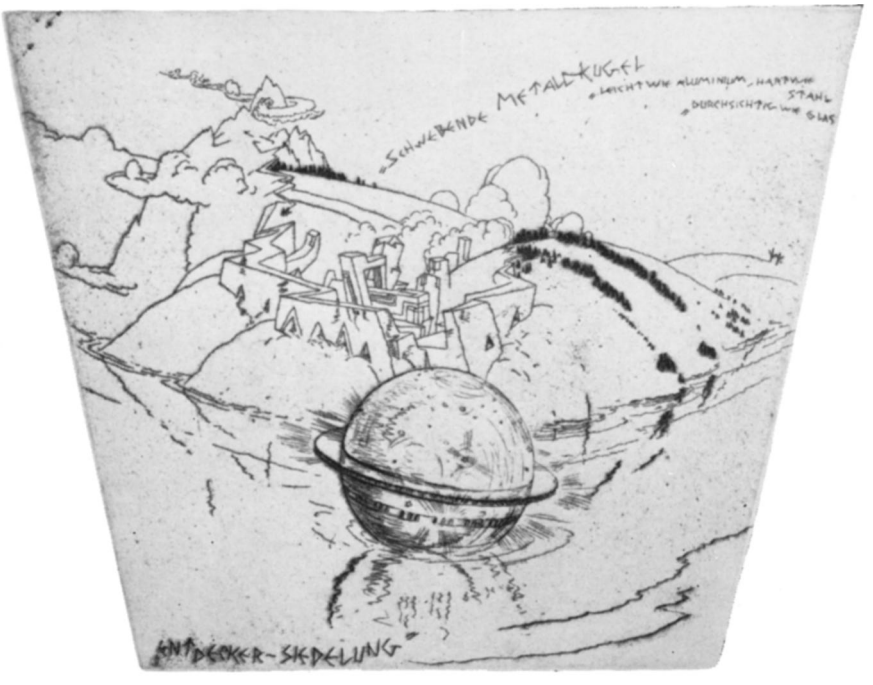
loose, lets it tilt, and abandons exact detail and literal symbolism for the expressive impact of the etched lines.

The weightless, poised globe had special meaning for both groups of architects: they could even envision architecture orbiting in space. Again characteristically, when Ledoux rendered this idea in a "celestial vision," the spheres consisted of the old-fashioned earth and other planets, but when Bruno Taut drew his spherical Cosmic Carousel of 1920, it was the archetype of the Telstar of the 1960s, pierced by a shaft equipped with radar-like propellers.

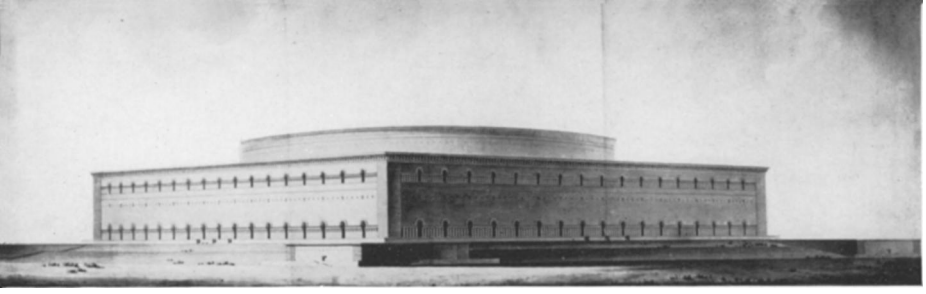
The twentieth-century movement that most closely approximated the French utopians was, however, Russian constructivism of the 1920s; although the materials employed were quite different, the forms and intent were remarkably alike. Our popular conception of this phase of Russian architecture is of openwork, pavilion-like structures with strident placards and public-address systems – which indeed was often the case – but the more one studies constructivist projects, the more one feels at home in the eerie pyramid-studded landscapes of Boullée and Ledoux. It is informative to compare the Vesnin brothers' project for the Palace of the Soviets (Figure 14), with Boullée's Municipal Palace for a Great Empire (Figure 13), two edifices with a strikingly similar purpose. The differences are obvious: the Vesnins wanted to articulate the mass and "mechanize" it by means of a set of projections at each level. Boullée, on the other hand, would not allow the sheer surfaces of his prism and cylinder to be ornamented by anything but continuous strips of windows. The overall similarity, however, is not fortuitous. Russia had been permeated with French influence during the ascendency of romantic classicism: Ledoux and others dedicated their treatises to the czars; Russian architects were encouraged to study in Paris during the nineteenth century; prominent Russian structures of the early nineteenth century (such as the Bourse and Admiralty in St. Petersburg) are in the French Grand-Prix style.

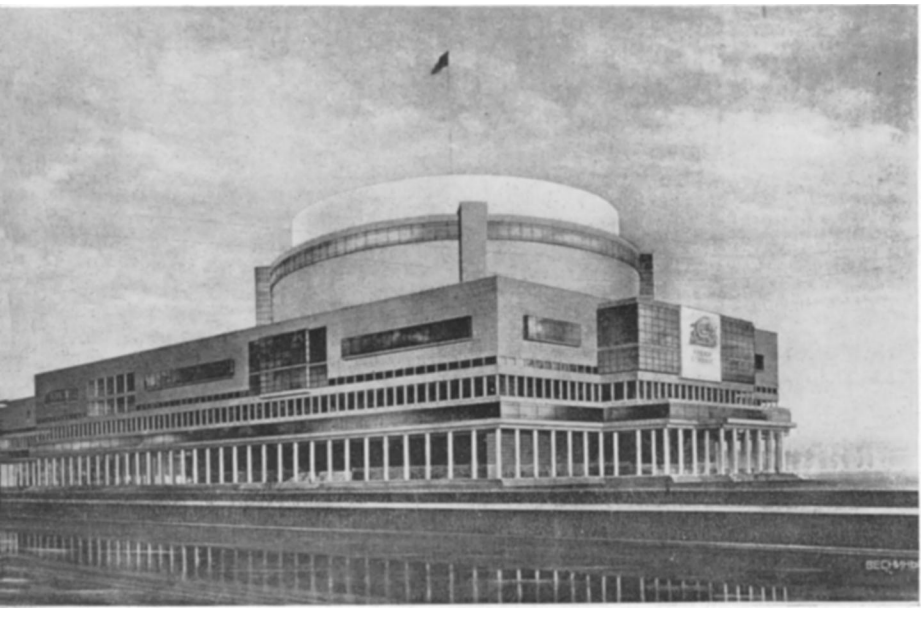


11. Design for a Temple of Immortality, dedicated to great men, by J.-N. Sobre, French. Measuring 260 feet in diameter, the temple was to be erected on the Champs Elysées, in a lake so large that its reflection would give the spectator the effect of a complete globe, afloat. Engraving by C.-P.-J. Normand in Annales du Musée, 3 (Paris, 1802). Photograph: Taylor & Dull. No. 143 in the exhibition



12. Floating "Explorers' Settlement," by Wenzel A. Hablik. From Architektur, a set of etchings of the early 1920s. Photograph: Ulrich Conrads





UPPER:

13. Municipal Palace for the Capital of a Great Empire, 1792, by E.-L. Boullée (1728-1799), French. Ink and wash, 21 13/16 x 60 1/2 inches. Bibliothèque Nationale, Paris. No. 25 in the exhibition

LOWER:

14. Project for the Palace of the Soviets, Moscow, 1931, by the brothers Vesnin. From page 9 of Arkhitektura SSSR, 1 (1933)

A typical constructivist project was for the Lenin Institute of Library Science. The design was by I. I. Leonidov (Figure 2), and it was shown in the first Exhibition of Contemporary Architecture in Moscow in 1927. In it we see the constructivists' delight in setting autonomous geometrical shapes into starkly rectangular relationships to each other – effects that, aside from the factor of asymmetry, are comparable to a Boullée or Ledoux (Figure 1), even to the same teetering installation. In this case the modern project is the more overwhelming in scale, with its great auditorium and glass dome (which can be used as a planetarium).

One of the remarkable similarities of many Russian constructivist designs to those of the eighteenth century is the overt symbolism of their various elements. Two of the most obvious examples of *architecture parlante* in the twentieth century are Tatlin's thirteen-hundred-foot-tall spiral and rotating monument to the Third International (an allusion to the Socialist metaphor of the Revolution as a spiral), and the Vesnins' projected buildings for *Pravda* in Leningrad, whose external design relies heavily on signboards and other instruments of news communication. This type of radical design ceased in the USSR during the 1930s, and it is not surprising that when the older academic architects then took over, there should be a shift back to a literal use of the heroic forms of the old romantic-classic style that had characterized the Czarist schools; Nazi Germany at the same time turned back to Schinkel.

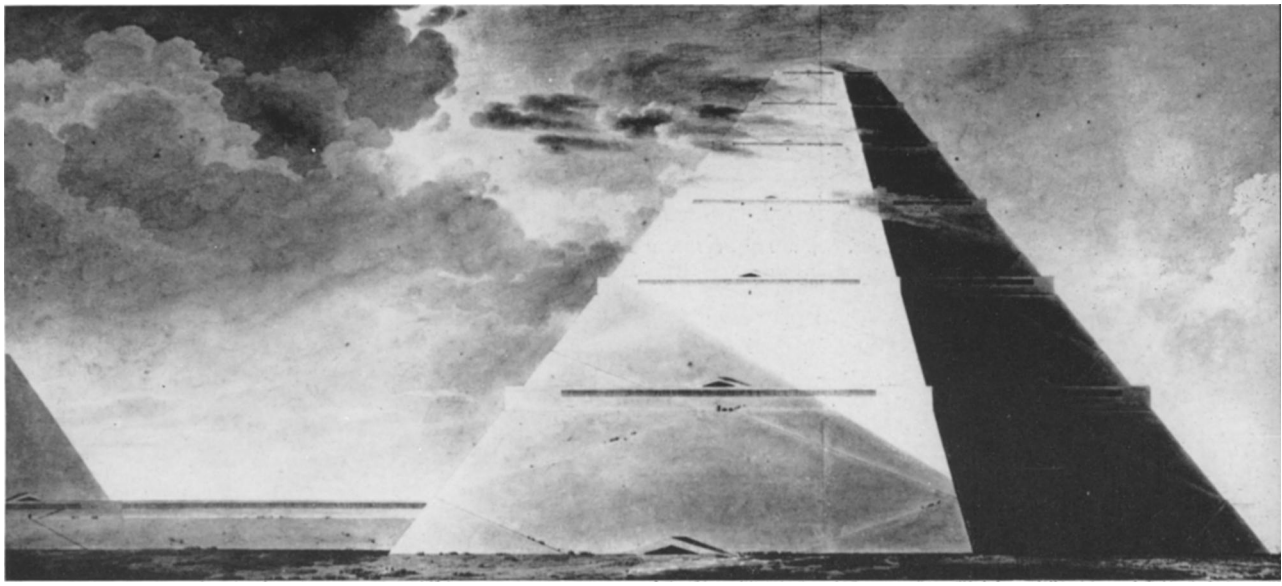
It is amusing to see that the first efforts to associate the work of the eighteenth-century revolutionaries with twentieth-century architecture involved our "mainstream" modernists of the so-called International Style. Actually, the analogies are as strong and perhaps more profound with the other, more neglected movements that we have just discussed. This earlier twentieth-century fantasy architecture was quite local, restricted largely to one country in each case, whereas today the taste for more imaginative expression is almost worldwide. It seems to have begun in the 1940s and 1950s with the revived interest

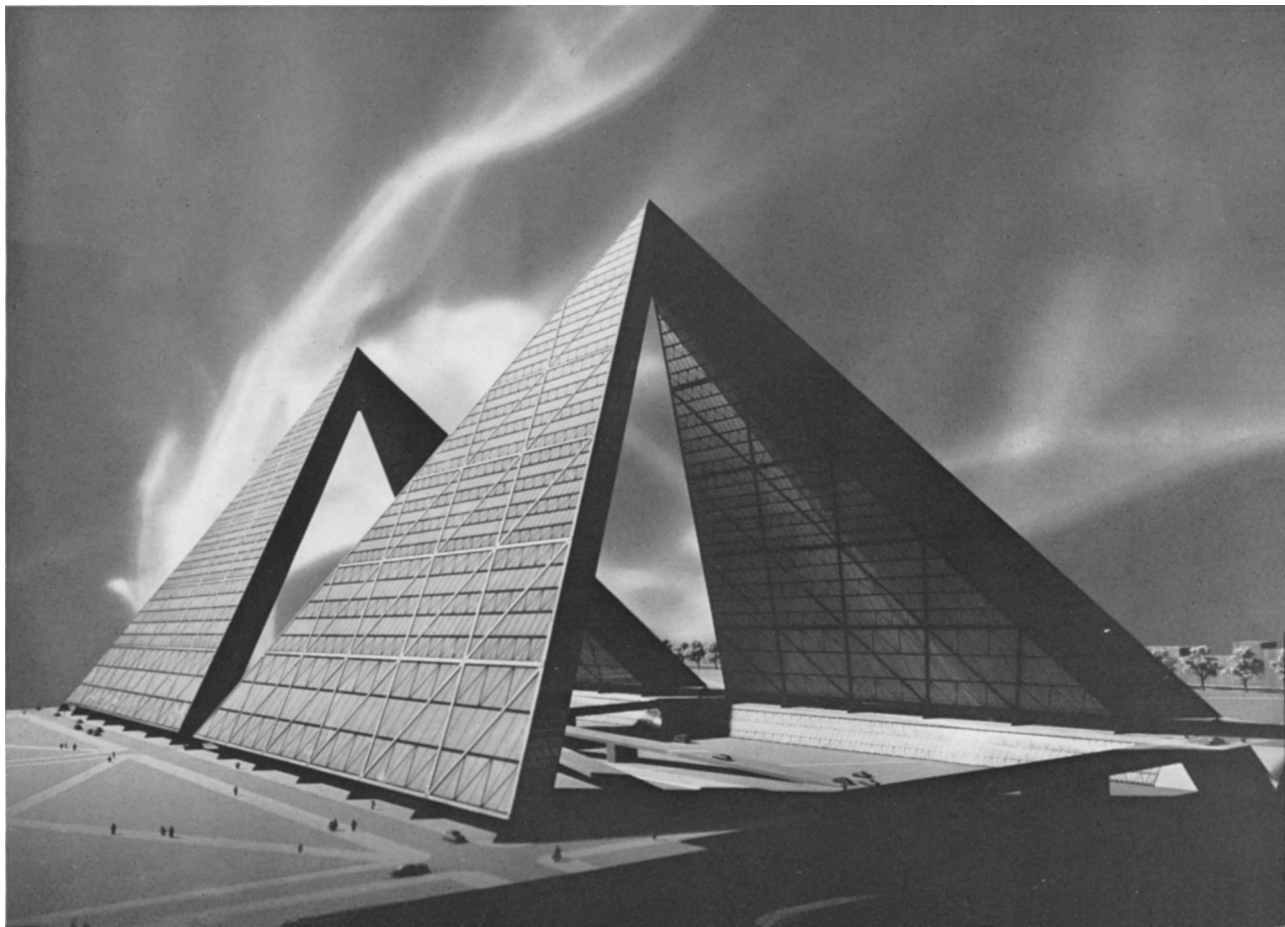
UPPER:

15. *Cenotaphs in the Egyptian Style, by Boullée. Note that each side is divided into six superimposed levels. Ink and wash, 17½ x 42 inches. Bibliothèque Nationale, Paris. No. 4 in the exhibition*

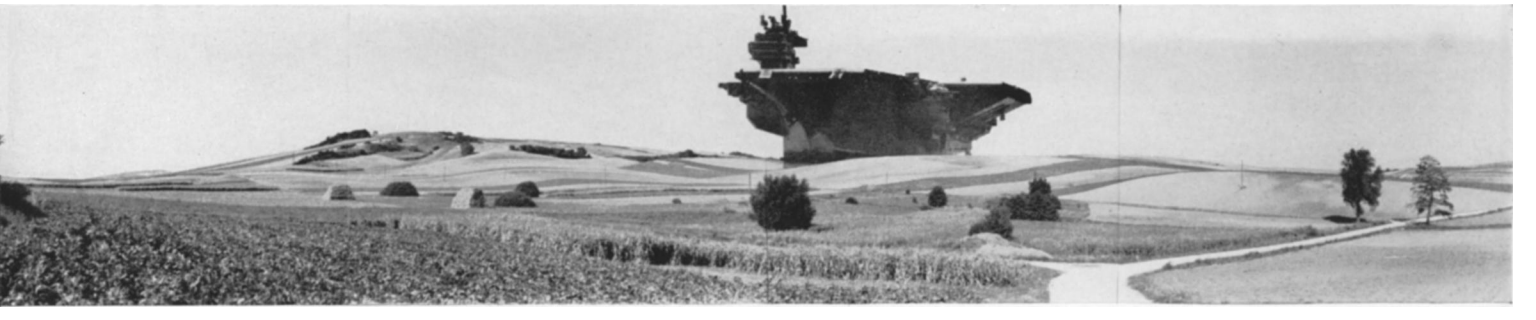
LOWER:

16. *Instant City, 1966, by Stanley Tigerman. Photograph: Balthazar Korab*





17. Cow's stable, by J.-J. Lequeu (1757-1825?), French. Watercolor, 8 5/16 x 11 1/16 inches overall. Bibliothèque Nationale, Paris. No. 118 in the exhibition



ABOVE:

18. Carrier City in Landscape, 1964, by Hans Hollein. Photomontage, 8½ x 39⅜ inches. Museum of Modern Art, Philip Johnson Fund

RIGHT:

19. High-rise Building: Theodolite, 1964, by Hans Hollein. Photomontage, 6¾ x 17½ inches. Museum of Modern Art, Philip Johnson Fund

in the art nouveau and the work of Antonio Gaudí, a concern with "free" form (compare Figure 4) that would at first appear to be at variance with the tradition we have been examining. The basis of Gaudí's forms, however, is ultimately as geometric as it is whimsical, and it was not long before the new movement began to indulge in visions somewhat more comparable to the eighteenth century.

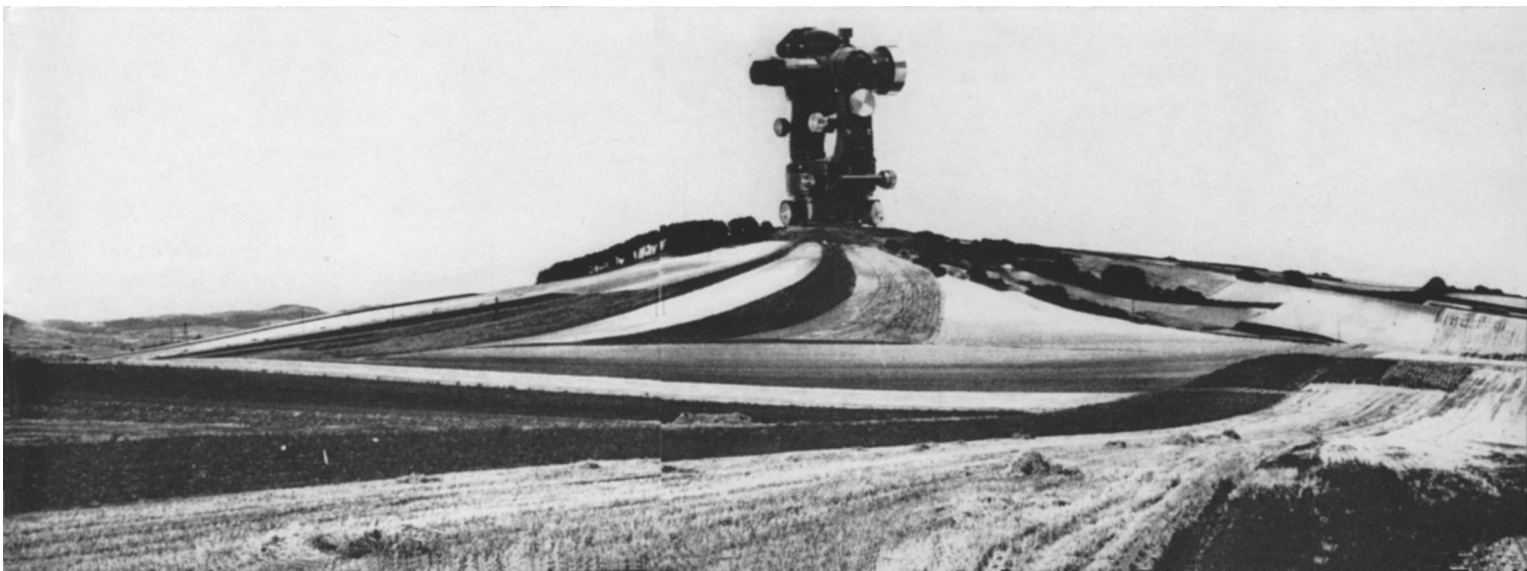
Basically what the public and profession were seeking was a heightened, more personalized environment – a search that also gave rise to the Townscape movement of picturesque effects. Also, the architect was eager, with the technological advances at his disposal, to let his ingenuity as artist and philosopher operate as freely as in any other art. Finally, we have all been overwhelmed by the inhuman megalomaniacal scale on which our urban environment presses down upon us; this has stimulated some among us to strike back and to design a substitute world of the same size, but ideal in form and perfect in its functions. The resultant gigantism recalls the early visionaries.

It was about 1960 that the new visions began to appear in exhibits and publications. Nearly all of these publications and exhibitions, in particular those of the Germans, at the same time revived the almost psychedelic drawings of the expressionists and certain key projects of constructivism, like our Figure 2. Not to be discounted among the stimuli to the new style are the late works of Frank Lloyd Wright and Le Corbusier.

Much of this interest has been focused on such frilly new structural devices as folded plates, on the radical use of transparency, delicate spidery space frames, and erratically warped surfaces of double curvature; our visionary vocabulary has been enormously expanded. Let us consider a few examples that have something in common with the creations of the eighteenth-century visionaries.

One of the most dramatic recent developments has been the concept of megastructure. A megastructure is a large structural frame providing shelves that can serve as sites for buildings, neighborhoods, or whole villages. It thereby frees the surface of the earth for other purposes besides building, and provides additional acreage aloft for just that purpose. An unusual scheme of this type is the Instant City by Stanley Tigerman (Figure 16). The two inclined triangular truss-slabs that make up each pyramid are composed of six superimposed megastructural units of trapezoidal shape, each of which has six internal floors and will accommodate a different set of functions – residential, commercial, recreational, and so forth – that go to make up the entire city. The resemblance of a line of these to a line of Boullée's huge pyramids (Figure 15) is admittedly coincidental and almost purely formal. Boullée's are apparently sepulchral only and are built to last; the material of Instant City is featherweight and designed for rapid assembly, as its name indicates.

Another tendency, the latest twist, is shown in the visions of such modern artists as Claes Oldenburg and Hans Hollein. Into landscapes



and cityscapes they put tremendously expanded versions of all sorts of things – sometimes, as in Figure 18, an instrument of destruction, to form an ironic type of city. Such serio-comic ideas remind us of the freer fantasies of Lequeu (Figure 17), which recently have come much into vogue.

On the whole it must be admitted that, stimulated though our visionaries may be by the eighteenth-century projects – and the increasing attention paid them indicates this – architectural fantasies of today are more concerned with dynamics and processes. This is epitomized by the science-fiction tendencies of the Archigram Group, in which flow and interchange, controlled obsolescence and rebuilding have become the constants, and the verities of Plato's solid geometry no longer hold any meaning (see the "walking city," on page 327).

The old values are still viable, however, as civic and imperial symbols. The twentieth-century project that seems to resemble most exactly the eighteenth-century visions is Brasilia, its major difference being the fact that it is actually being carried out. The similarities are remarkable. Brasilia's overall layout, or ground plan, is in the shape of a swept-wing aircraft: *architecture parlante.* Where the cockpit would be in the plane stands the government center (Figure 20), a wilful juxtaposition of primary, improbable, geometric forms set up on a flat plane in endless space. The effect is that of sleek mathematical efficiency, and the scale of the whole city is so enormous that even these great prismatic and curved elements barely hold the ensemble together: "One does not arrive at the sublime by degrees."

NOTES

Emil Kaufmann drew the parallel with the architecture of the International Style in his several publications on the eighteenth-century visionaries, and especially in 1933 in the book "From Ledoux to Le Corbusier: Origin and Development of an Architecture of Autonomous Elements." Mme de Staël's observation is quoted in Kaufmann's "Three Revolutionary Architects, Boullée, Le Doux, Le Queu" in *Transactions of the American Philosophical Society*, n. s. 42, Part 3 (1952), p. 472. He cites Dufourny's remark on page 196 of *Architecture in the Age of Reason* (Cambridge, Mass., 1955).

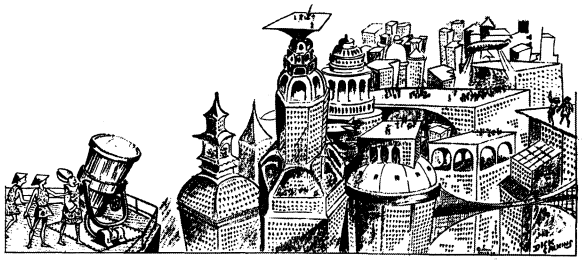
The modern study of spherical structures to which I refer is H. G. Sperlich, "Kugelphantasmagorien" in *Baukunst und Werkform* 7 (1954), pp. 87-93. Our illustration of the Vaudoyer house is taken from photographs of the original drawings in the Museum für Kunsthandwerk in Frankfurt-am-Main. Although Landon identifies the traveler as a "citizen Debracq," Sperlich considers him to have been a German, a view confirmed by Peter Wilhelm Meister, Director of the Museum für Kunsthandwerk, who writes that the drawings belong to an album of "a German, von Brack." The exhibition uses the version that was engraved by C.-P.-J. Normand for C.-P. Landon's *Annales du Musée* 2 (1802), pp. 123-128, in the tight, linear style of Durand, for whom Normand also worked (our Figure 6). It appears that Normand took liberties with the sculptural groups at the sides. Landon's article was republished in English – with sly comments – in the *Journal of the Royal Institute of British Architects*, n. s. 3, 42 (1935), pp. 774-777.

The dating of Ledoux in particular is discussed by W. Herrmann, "The Problem of Chronology in Claude-Nicolas Ledoux's Engraved Work" in *The Art Bulletin* 42 (1960), pp. 191-210. The publications of Helen Rosenau are also an invaluable aid toward understanding the work of the architects represented in this exhibition.

All of the information here concerning Russian constructivism has been supplied by Arthur Sprague, who is completing his doctoral dissertation on the subject at Columbia University. One pertinent connection between the constructivists and the French Academic tradition that Mr. Sprague has noted is that early drawings by K. S. Mel'nikov, designer of the famous 1925 Paris Exposition Pavilion, look as if they were based on the plates in Durand's *Précis*.

During the 1960s the work of the modern visionaries was brought to public attention by exhibitions like the *Visionary Architecture* show (1960) at New York's Museum of Modern Art. In the same year Ulrich Conrads and H. G. Sperlich published their landmark *Phantastische Architektur*, which I helped make available in English (1963). Meanwhile, André Bloc's *Aujourd'hui* and *Architecture d'Aujourd'hui* in Paris and *Architectural Design* of London were carrying almost continuous features on the new taste. The publications of Michel Ragon and, more recently, the activities of the British Archigram Group have been of particular importance.

20. *Brasilia, National Congress area: the dish-shaped Chamber of Deputies is at the right, the Senate dome at the left. Architect, O. Niemeyer; engineer, J. Cardozo. Photograph: Pan American*



First announcement, 1929, of the science-fiction strip Buck Rogers. Photograph: Robert C. Dille

The New Visionaries

ARTHUR ROSENBLATT *Administrator for Architecture and Planning*

Ralph thinks he is to be named Racc... of the Year. Ralph: Jackie Gleason.
13 SPECTRUM—Science
COLOR Conclusion of a two-part program on the search for effective drugs to fight cancer. Animated films show how cancer cells are destroyed by selective drugs that leave normal tissue unharmed. **Also: "Life Island," a plastic bubble where leukemia patients are kept in a germ-free environment to prevent infection.** Host is David Prowitt.
31 AMERICAN HISTORY
"The N... Immigra... disco...

Program announcement in TV Guide®, February 22, 1968. Reprinted with permission. Copyright© 1968 by Triangle Publications, Inc.

What was visionary a decade ago is commonplace today. What we now think of as visionary is, more often than we know, not potentially but immediately feasible.

Structures of indescribable complexity exist at Cape Kennedy, as fantastic as the rocket and satellite devices they serve. Industrial cities hover above water in search of oil and sulphur, harboring, in addition to equipment, shelter and recreation for the people who man them. Capsules sustain life, couple in space, land on the moon.

It must have seemed to Boullée, Ledoux, and Lequeu that centuries might pass before what they dreamed became reality. And innovative though their structures may have been, the form they took often reflected familiar architectural themes: Egyptian pyramids, for instance, or classical columns. And these architects were, in the main, concerned with individual buildings.

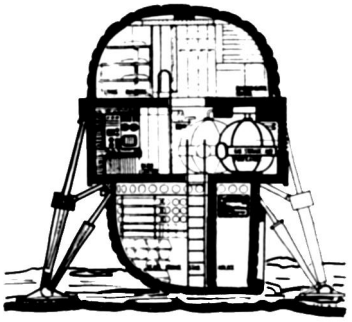
What is extraordinary in the visionary architecture you are about to see is its almost complete independence of the past. Its allusion is to a supertechnology of the "instant" present and future. It recognizes and reflects the newest of materials – ultralight, ultra-

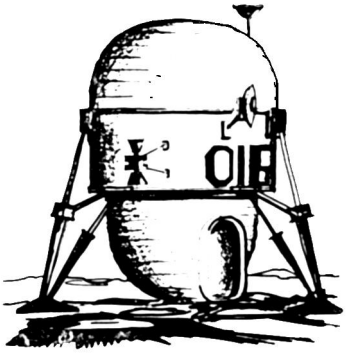
strong; computer techniques; thermonuclear power; control of weather, of genetics, of fertility; the mining of the ocean and the desalinization of its water; a limitless use of technology.

The designs seem a denial of form as we have known it. These modern visionaries, however, are working with a new kind of form: the functional logic of the printed circuit or the rocket-launching device. Lines – structures, pathways, utilities – go where they have to go, exposed and direct. The concern is not with the "aesthetically correct" but with what works best.

The concern, too, is geographic in scope. It is almost as if these architects were saying: "How can we spend time on single buildings when whole cities need our help?" New communities are envisioned with independent motor systems ("the walking city"), for previously unusable ground, or on top of existing cities.

Today, man's vision can no longer be determined by what is probable or possible; as the accompanying pictures show, the visions now are of what is necessary and desirable. The problems of a population explosion, impending world war, and decreasing food supplies all find expression in the visions of these architects, visions not for structures but for megastructures.





Moon-shelter ideas, by students at the Northern Polytechnic School of Architecture, London. A final-stage rocket lands on stabilizing legs (before manned vehicle arrives). The rocket motor is ejected and the central canister, containing communications and environment-control equipment, expands pneumatically to provide living quarters above and to give space for storage, laboratory, and air lock below.

A. Cook, A. Eyles, J. Jones, P. Reynolds, S. Shelter, J. Wailling, in *Architectural Design* (February 1967)

The Grand Isle mine of the Freeport Sulphur Company in the Gulf of Mexico, before completion. The islands, bridges, and towers are prefabricated on land in sections, floated out to sea, and lifted onto steel piles. The living quarters of the workmen are shown at the upper right, and a drilling platform is in the distance. Photograph: O. Winston Link

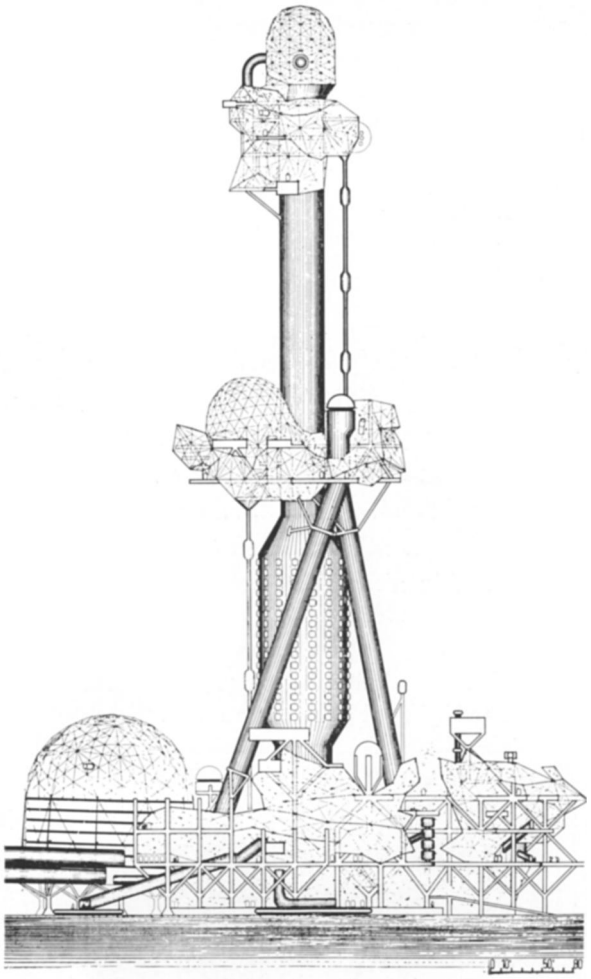
Proposed waterfront complex on the Hudson River, Manhattan. It is designed to be built of factory-fabricated units (about 24 x 60 feet), probably of aluminum, suspended from concrete trusses that project from the central service cores.

This is an example of a trend that will become increasingly important in urban redevelopment: horizontal, single-plane zoning is replaced by vertical, multilevel zoning. Here, light industry is housed on the ground levels, adjacent to transportation, while apartments occupy the upper stories and are also built on the pier over the water. Photograph: Ezra Stoller

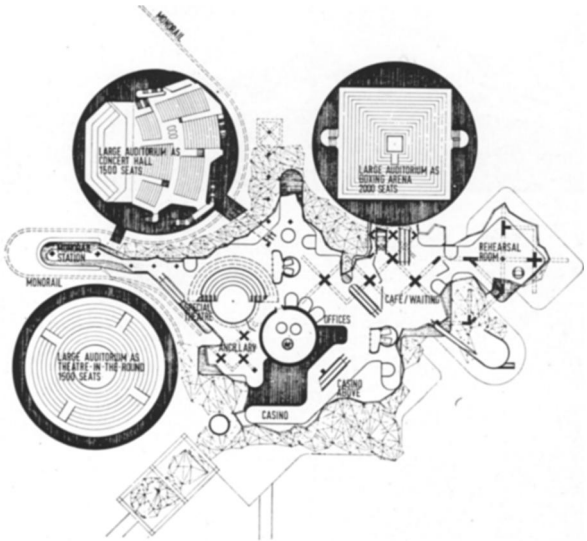
Paul Rudolf, architect, New York, 1967

The Archigram Group is made up of young English architects concerned with exploring the future possibilities of urban development without the restraints of a client or specific projects. More than any other group, they have excited the interest of architects and planners throughout the world. Many of their most daring designs were done after a visit to Cape Kennedy.

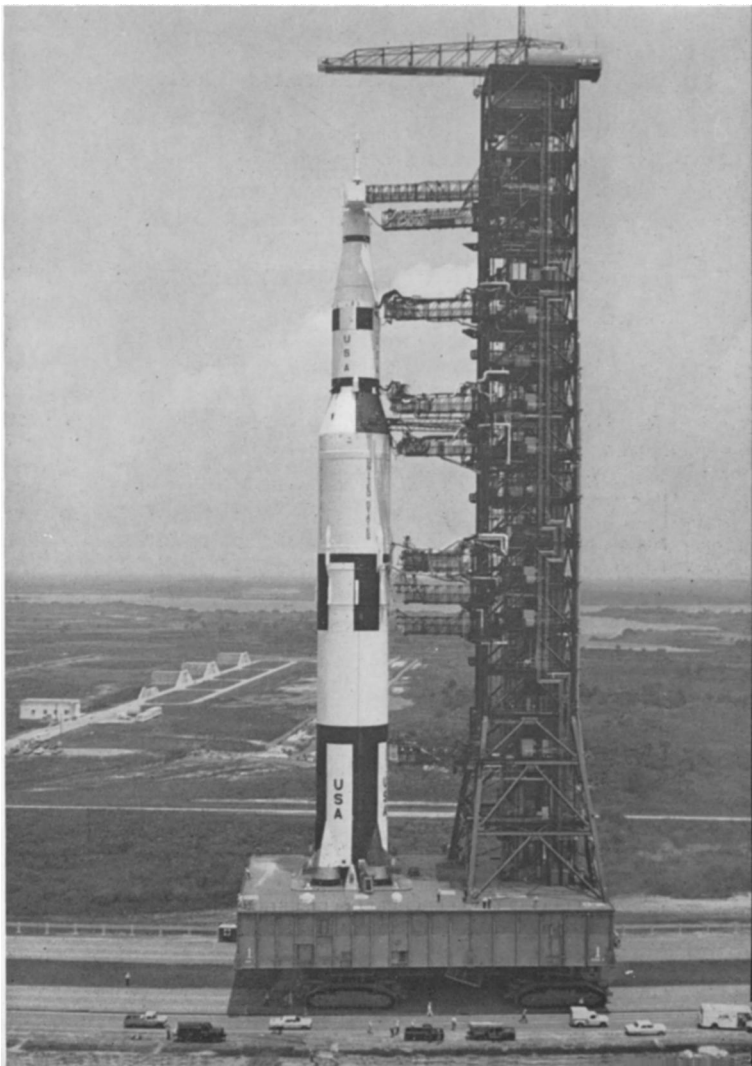
Archigram Architects and Designers: Warren Chalk, Peter Cook, Dennis Crompton, David Greene, Ron Herron, Michael Webb and Associates

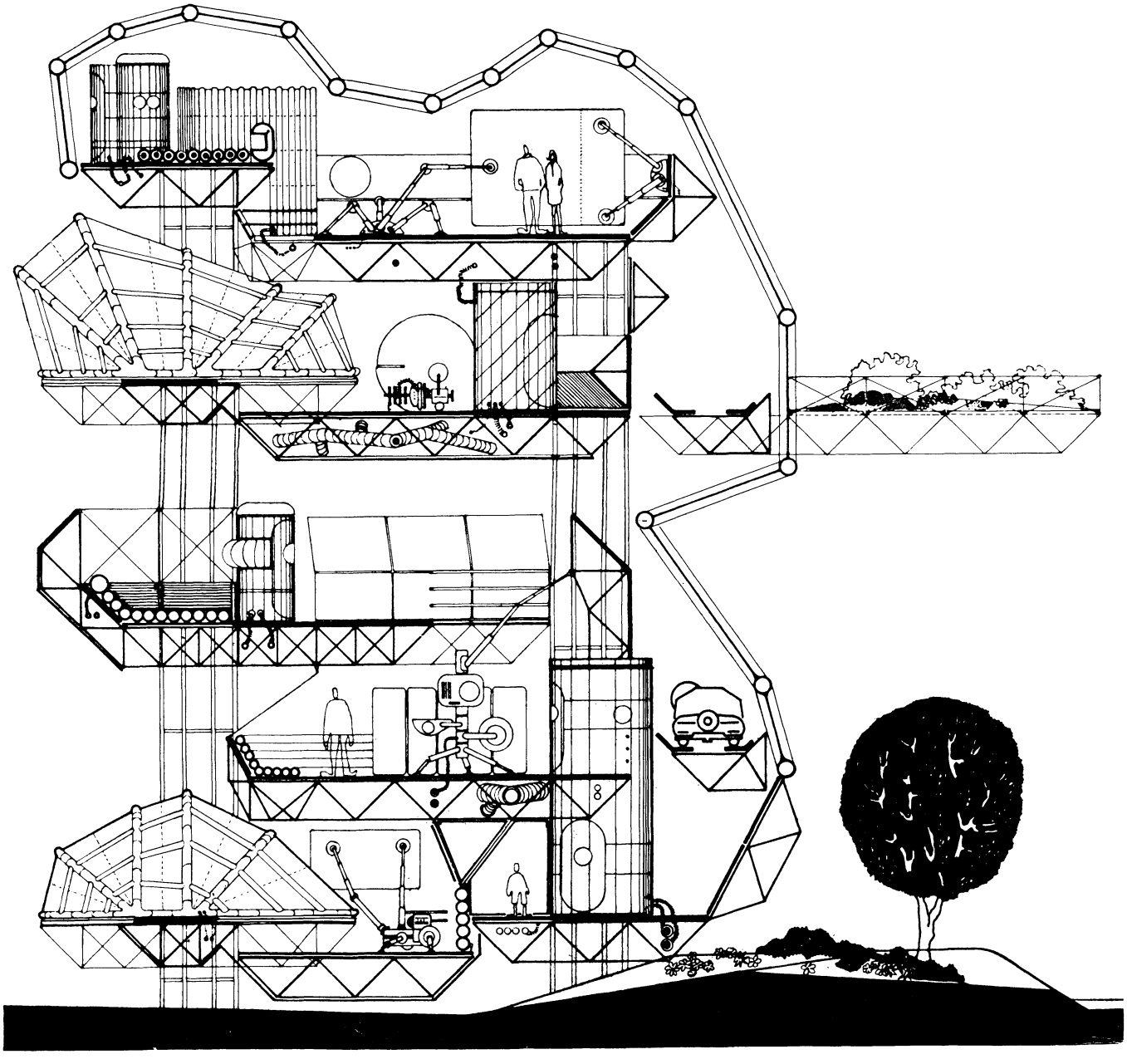


This entertainment center, designed for Expo '67 at Montreal, is an example of the Archigram Group's complete denial of any preconceived aesthetic in favor of industrial forms – the forms of an oil refinery or rocket ship – that have never been thought of as "architecture." Peter Cook, Archigram Group



The 365-foot-tall Apollo Saturn 500-F and its launcher being moved from the assembly building to the launch pad at the NASA-Kennedy Space Center in Florida. Photograph: National Aeronautics and Space Administration





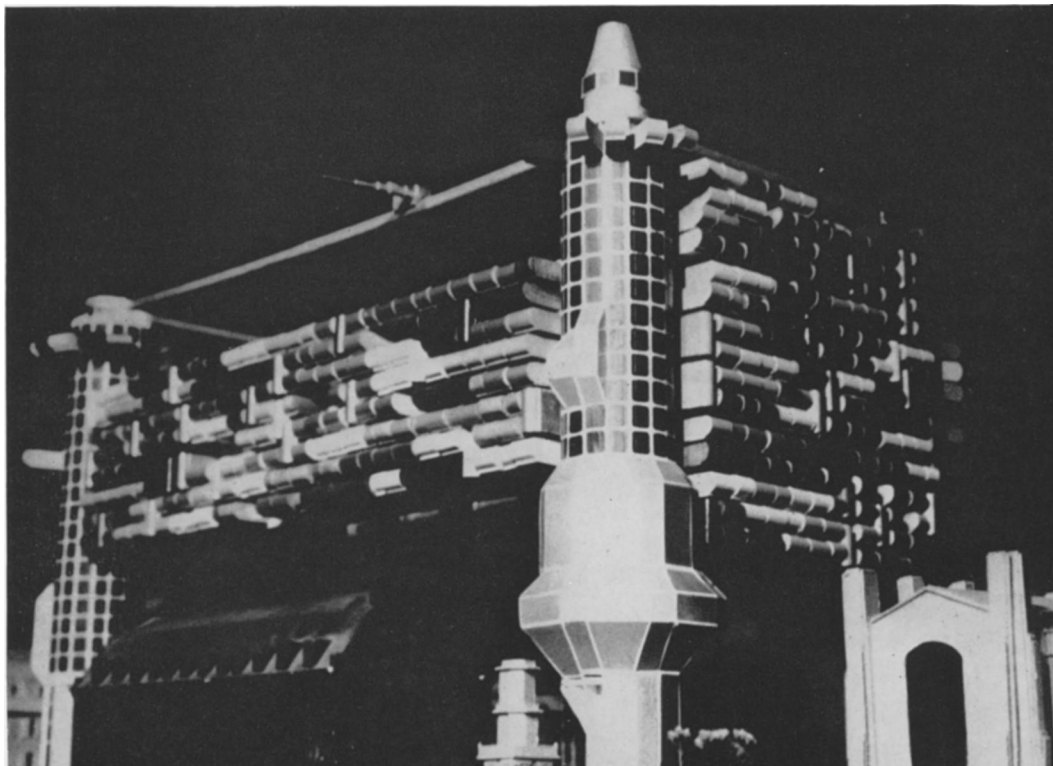
What looks like an industrial plant is actually a complete dwelling. The unit is transportable and utterly self-contained: even automotive traffic is enclosed within the structural envelope.

Warren Chalk, Peter Cook, Dennis Crompton, and Ron Herron, Archigram Group, 1967

"Walking cities at New York." What's important here is the contrast between the city as we know it and these wild city-machines, seemingly planned by engineers rather than architects, unconcerned with fashion or an acceptable "aesthetic." Communication between buildings, for instance, is not accomplished through elegantly arranged streets in the sky, as in the plans on the following two pages: here they are telescoping tubes, reaching out wherever they are necessary. Sewers, elevators, ventilators are handled the same way. The structure has become much more of a living organism than anything we've ever encountered. Ron Herron, Archigram Group, 1964

The Archigram proposals have had wide impact. In this illustration, young architects at Yale demonstrate that urban renewal can take place without urban removal: existing buildings can be independent of land-value pressures. A framework is erected above existing structures, and prefab office-apartment units are inserted within this fully serviced grid.

A. Golding, C. Hodgetts, D. Michels, Yale Graduate School, Project for Maxx Housing, 1966

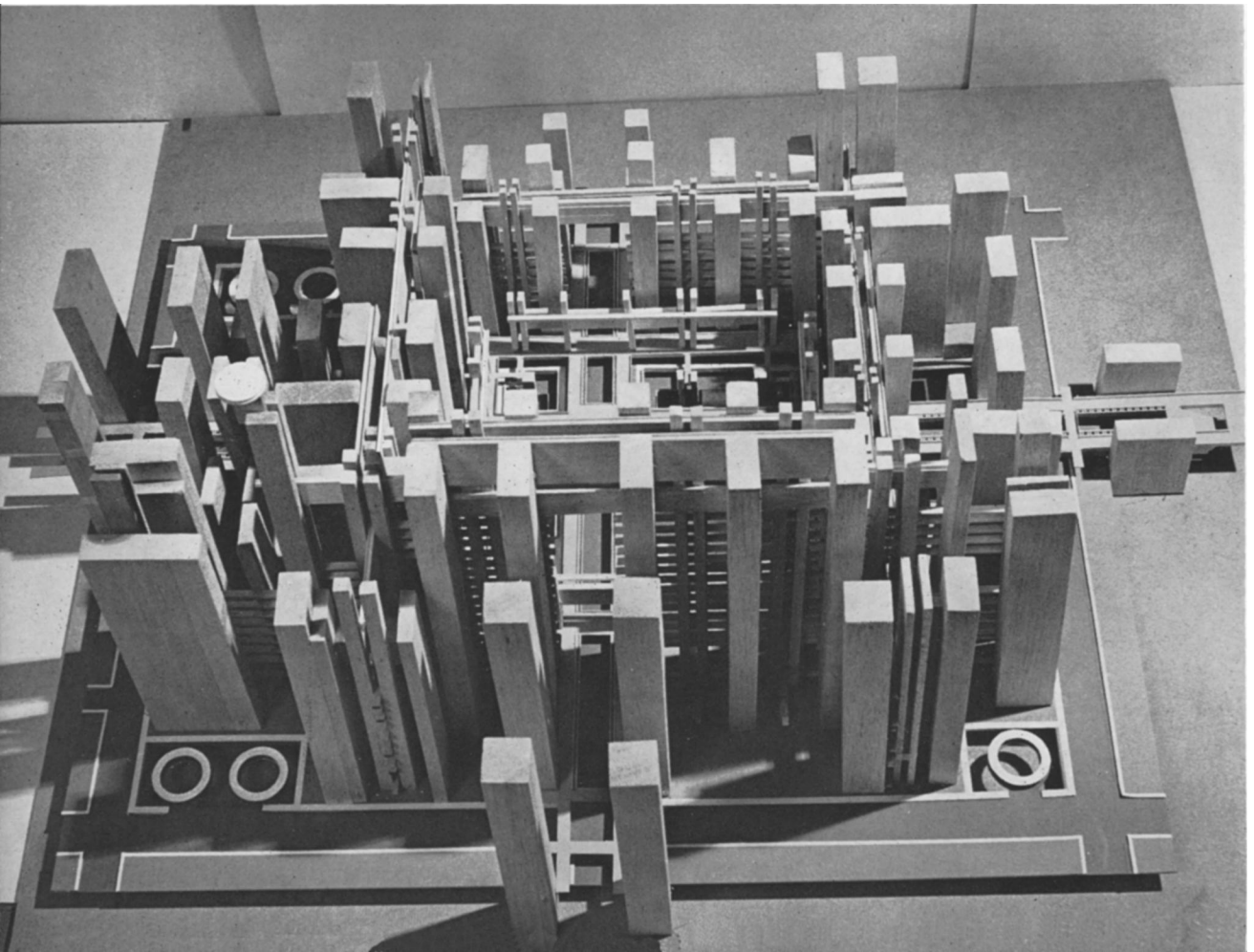


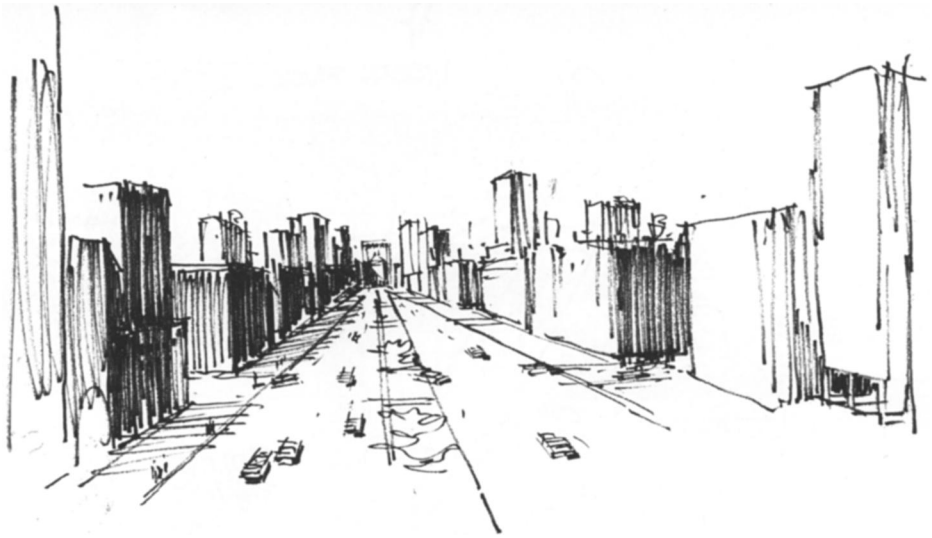
The construction of a straddle structure above an existing city: here, a community center integrally tied to the neighborhood below, yet structurally independent of it.

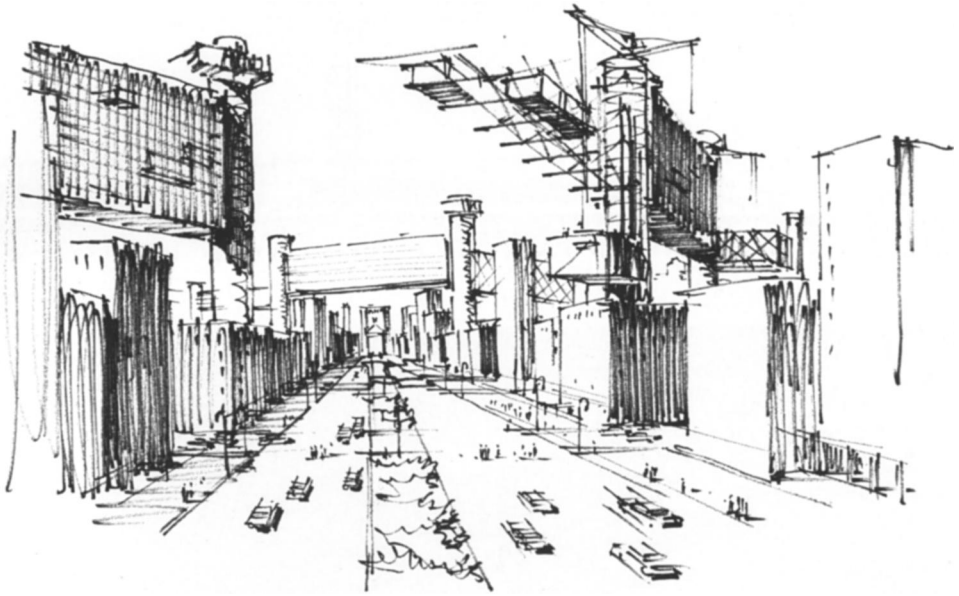
Hugh Hardy, architect, New York, 1968

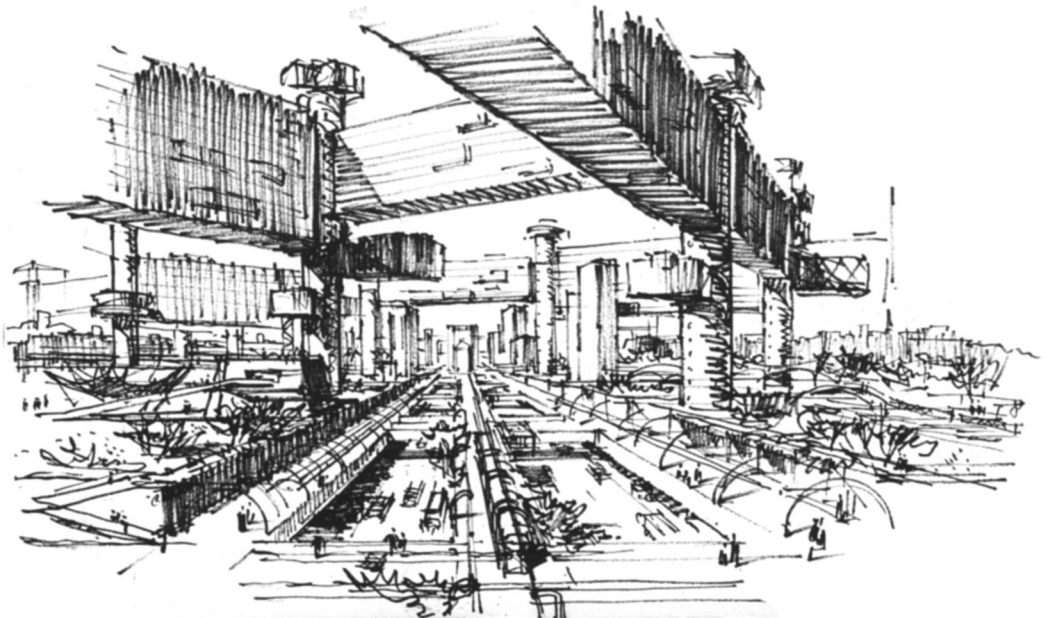
Plan for the redevelopment of the midtown Forty-second Street and Times Square area, showing the creation of many zoning planes above the existing grid plan. In effect, the installation of multiple street patterns and urban-use districts, one on top of the other. Photograph: Copyright Jeremiah O. Bragstad

Rai Okamoto, Design Consultant, Regional Plan Association, New York, 1968









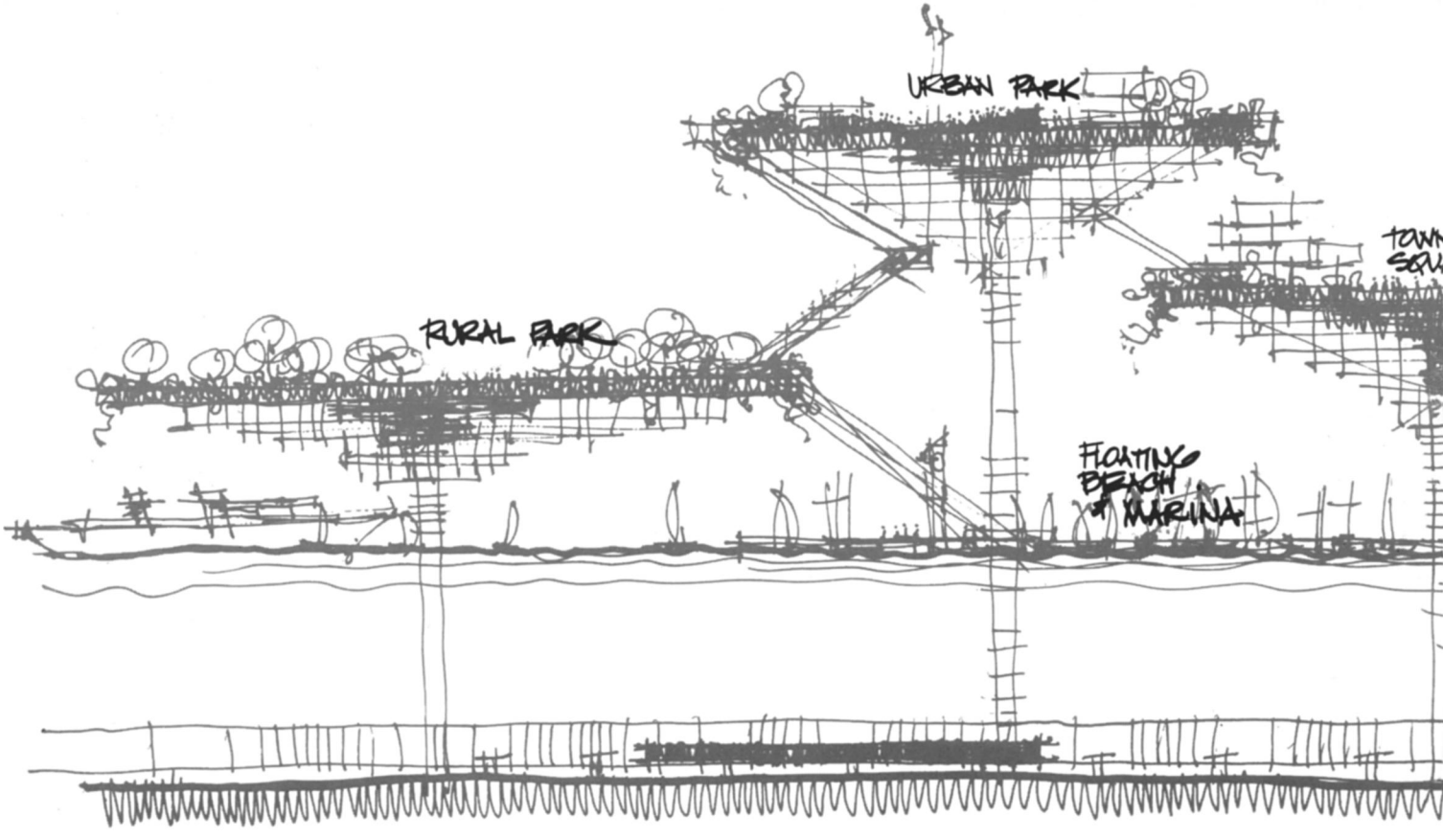
"*Leapfrog City*": *proposed transformation of Park Avenue, New York.*

A. Park Avenue as it is

B. The erection of a megastructure above it

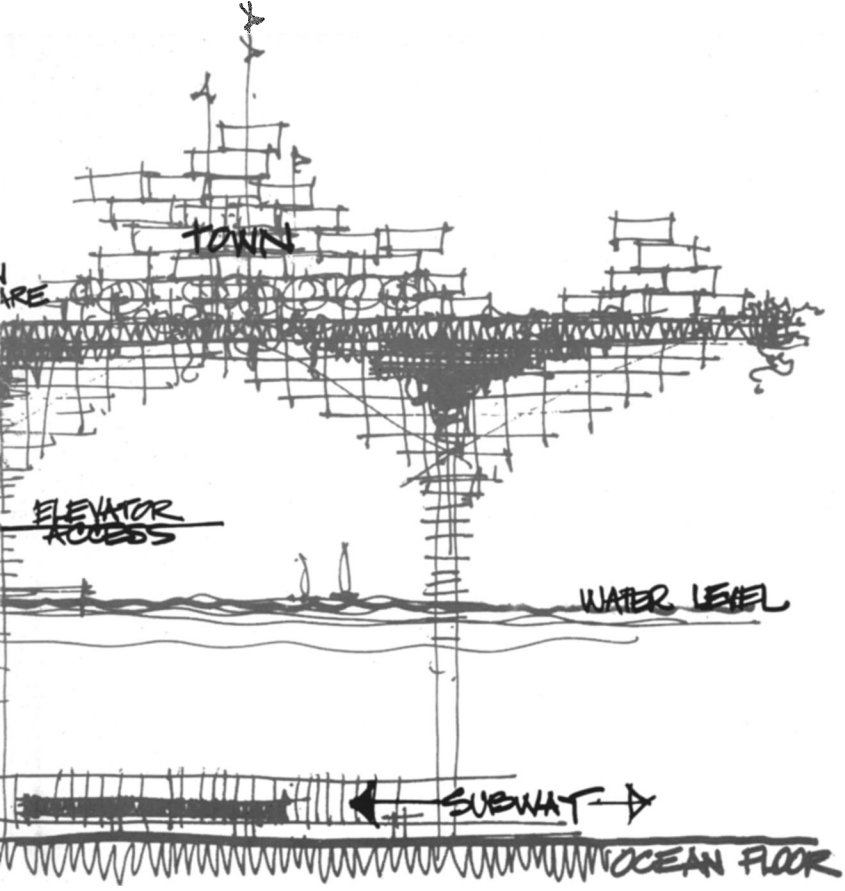
C. The completed megastructure, with all buildings underneath removed, allowing for the return of trees, grass, and sunlight

John Johansen, architect, Connecticut, 1966



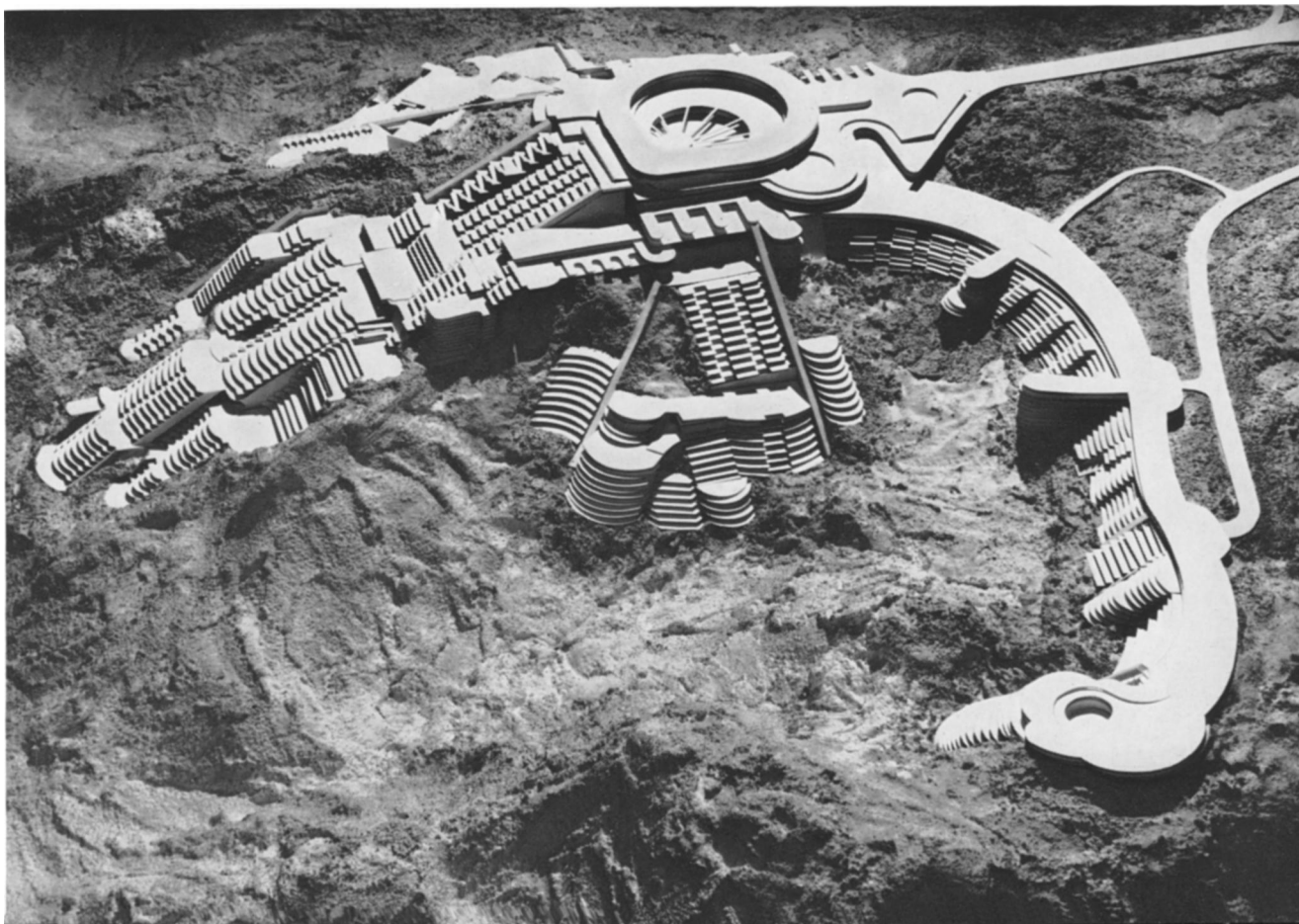
Proposed urban nucleus at Sunset Mountain Park in California. This self-contained urban center is not built above or near existing cities, but is designed for a new location, on previously inhospitable terrain.

Cesar Pelli, Director of Design, Daniel, Mann, Johnson, & Mendenhall, 1967



We asked Paul Friedberg to send us sketches of what he would like to see built in New York Bay. This drawing, of a floating waterside community, is one of his visions.

M. Paul Friedberg, landscape architect, New York, 1968

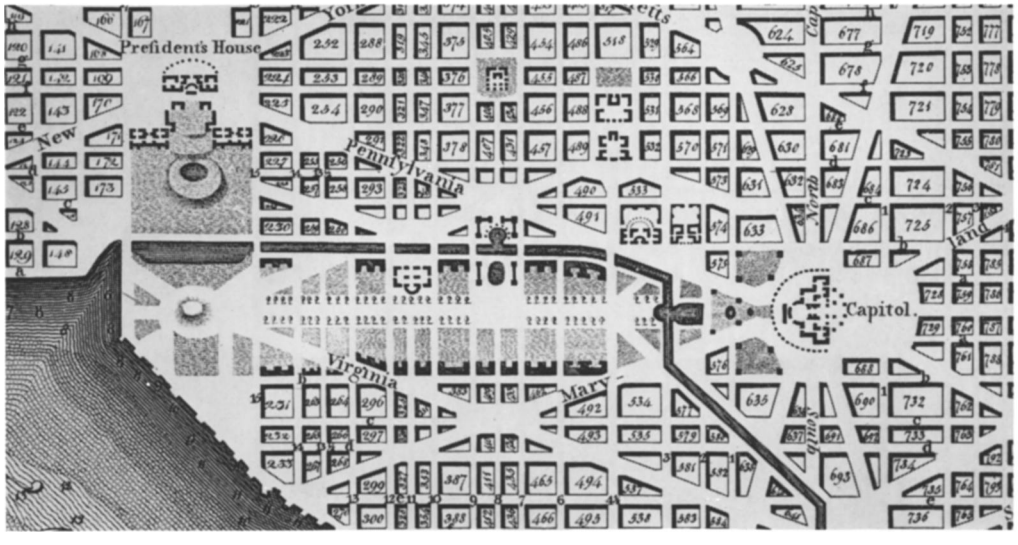


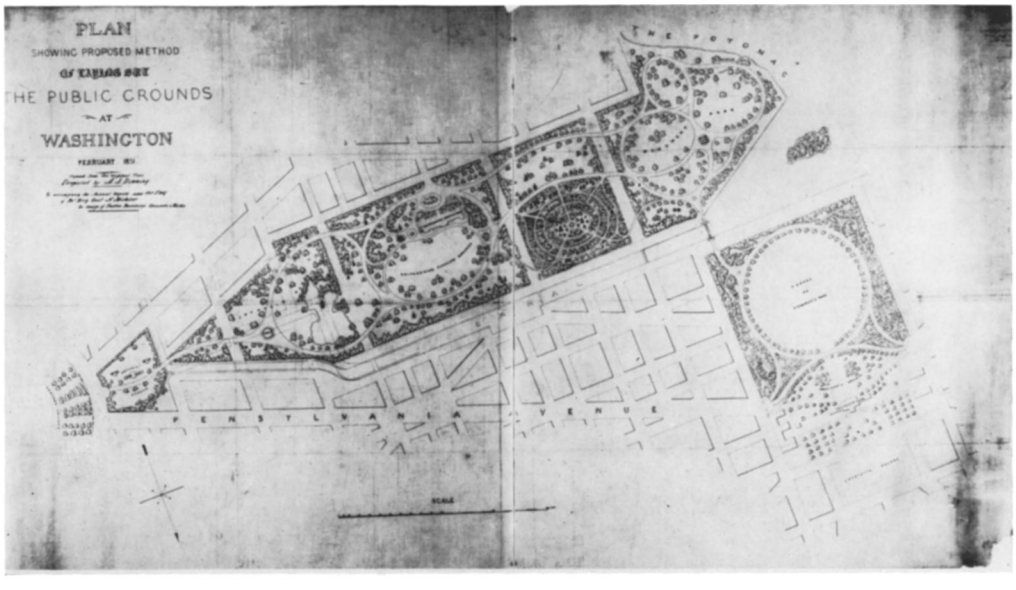
UPPER:

1. *Detail of the Andrew Ellicott Plan of Washington, 1792, based on the original design for the American capital drawn by the Frenchman Pierre Charles L'Enfant in 1791. The French planning tradition is reflected in the formal disposition of streets, public buildings, and open spaces. The Mall, in the center of the design, was planned as a vast avenue of lawn framed by a series of federal buildings. Reproduced from an engraving in the Cornell University Library. Photograph: John W. Reps*

LOWER:

2. *Plan for the Public Grounds at Washington, 1851, by Andrew Jackson Downing. This plan departs from the L'Enfant conception in favor of the more romantic English landscape garden. Downing had to design around two buildings that were already standing on the Mall, the Botanic Garden at the foot of the Capitol and the Smithsonian Institution. National Archives, F 116, Record Group 77, Records of the Office of the Chief of Engineers*



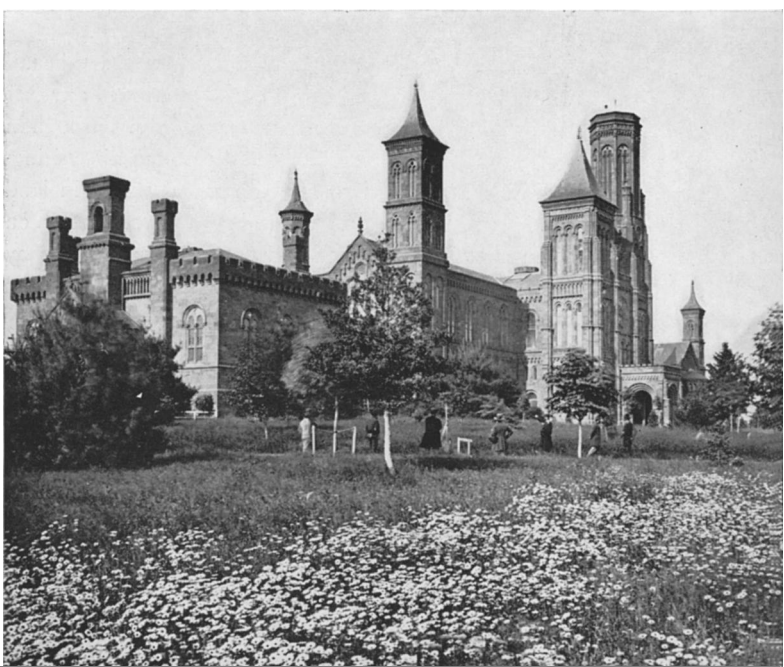


The Museum in the Park

JAY E. CANTOR
Chester Dale Fellow, Department of American Paintings and Sculpture

The nineteenth century is often rebuked for looking at itself through glasses ground in historicism and tinted by a sentimental harking back to the glories of earlier epochs. The predominating image is of dark parlors, with massive furnishings and heavily draped windows, not only keeping the sun from entering but also concealing the dark personalities of the inhabitants of that era. This Dantesque image takes no account of the positive contributions of the century, treating the fantastic political, social, scientific, technological, and cultural strides of the period as accidents of history and not as the products of its specific concerns. The weight of millennial expectancy and the dirges of the prophets of doom are cited as proof of the era's repressive instincts. To dispel these myths, one need but list the many public institutions that were founded during the last century with the intention of bringing the past and present more clearly into focus and of engendering a vision for the future.

In the United States, the first federal involvement in the creation of a nongovernmental enterprise dedicated to "the increase and diffusion of knowledge among men" came with the establishment of the Smithsonian Institution. After a series of setbacks, it was finally chartered on August 10, 1846, seventeen years after the death of James Smithson, the Englishman whose benefaction had made its founding possible. The Smithsonian was meant to house a natural-history museum, a library, lecture rooms, laboratories, and a gallery of art. Although certain aspects of the Institution would have had but narrow local appeal, particularly the museum, gallery of art, and lecture rooms, national interests were to be served through the sponsoring of experimentation and publication in areas relating to agriculture and mechanics. The national character of the Institution was further emphasized by the decision to locate it on the Mall in Washington.



3. *The Smithsonian Institution from the northeast. Photograph, about 1860, by Matthew Brady. This view shows some evidence of the plantings described by Downing, but progress had been slowed by his death and subsequent lack of direction on the project. The intended harmony between building and landscape is, nonetheless, effectively demonstrated. National Archives, U. S. Signal Corps, 111-B-4672*

The Mall had been created in the plan for Washington drawn up in 1791 by Pierre Charles L'Enfant (Figure 1). It was designed as a grand *allée* lying between the Capitol and a monument to George Washington. The Mall's function reflected its source in French classical planning concepts: it was to provide a formal space affording a dramatic vista of the Capitol and was also to provide a link between the legislature building, the symbolic center of the working co-operation of the separate members of the Union, and the monument to the first president, the symbol of the Union on the heroic and personal level. By placing the Smithsonian between these two national symbols, the Regents (the managing board of the Institution) were demanding equal status for their enterprise and calling attention to this new type of federally sponsored organization.

The Smithsonian was distinguished from its partners on the Mall by being built not in the classical vocabulary but as a Norman castle (Figure 3). Construction began in 1847 and, as the building progressed, it became apparent that this medieval structure, with its picturesque massing of asymmetrical towers, was distinctly out of place on the classically defined Mall. And so, by 1849, before the Smithsonian was completed, plans had been made to give it an environment sympathetic with its medieval forms. Money was appropriated for a variety of plantings, including about one hundred and fifty species of trees and shrubs, to be enclosed by a hedge. An overall design was wanting, however, and progress on the planting was haphazard and slow. Many Washingtonians were concerned about the fate of this attempt at ornamenting the city and reclaiming the Mall from the dreary wasteland it had become. Discussions led to the decision to invite Andrew Jackson Downing to create a design for the public grounds in Washington.

To chronicle Downing's qualifications for this task would be to trace the history of the interest in romantic landscaping in nineteenth-century America. Through his work as a landscape architect and through his writings, Downing attempted to establish moral values in landscaping: the rural world was to be improved into an environment in which man and nature were in harmony, the product being a garden landscape in which a mean was struck between savage wilderness and congested city. In the process, Downing did more than any other individual to mold America's taste in rural architecture and landscape in the nineteenth century.

Downing was concerned not only with rural landscape but with improving the urban environment as well. He was one of the great proponents of the establishment of city parks, and he recorded his thoughts on this subject in an article published in October 1848 in the *Horticulturist*, a magazine of which he was the first editor. In this essay, entitled "A Talk about Public Parks and Gardens," Downing assumes the role of a traveler returning to America after a long residence on the Continent. He is questioned concerning his observations of America and he asserts that he is glad to be free of the political turmoil of Europe and pleased to find no such unrest at home. His greatest reservation about his return is his awareness that America has been lax in the establishment of public parks. He emphasizes the egalitarian values that parks inspire and calls for the creation of "refined public places of resort, parks and gardens, galleries, libraries, museums, &c." These, he believes, create a "community of rational enjoyments."

When Downing was asked to design the public grounds in Washington, he was granted the opportunity to create the first urban landscape park in America, an honor magnified by the fact that this was to be a national park. Downing inspected the grounds at Washington in November 1850 and then returned to his home in Newburgh, New York, to prepare the plans. On February 27, 1851, Downing's design (Figure 2) was presented to the Board of Regents of the Smithsonian, and the following week Downing dispatched his "Explanatory Notes," addressed to the President. In these notes he proposed:

> 1st: To form a national Park, which should be an ornament to the Capital of the United States; 2nd: To give an example of the natural style of Landscape Gardening which may have an influence on the general taste of the Country; 3rd: To form a collection of all the trees that will grow in the climate of Washington, and, by having these trees plainly labelled with their popular and scientific names, to form a public museum of living trees and shrubs where every person visiting Washington could become familiar with the habits and growth of all the hardy trees.

Following this plan, Downing would fulfill the stipulations that had already been expressed in connection with the Smithsonian's design: that function (in this instance, instruction and the improvement of taste) be coupled with ornament.

Downing detailed the variations of greensward, planting, and water elements in six distinct areas: The President's Park, or Parade Ground; Monument Park; The Evergreen Garden; Smithsonian Park or Pleasure Grounds; Fountain Park; and The Botanic Garden. This panoply of landscape features was at its most formal in the President's Park, while for the Smithsonian Park, Downing suggested more natural plantings:

> An arrangement of choice trees in the natural style, the plots near the Institution would be thickly planted with the rarest trees and shrubs, to give greater seclusion and beauty to its immediate precincts.

Although Downing felt the landscaping would be as effective an instructing device as the Smithsonian itself, he thought of parks as providing a range of public benefits, not limited solely to landscape. His remarks about his plan concluded:

> A national Park like this, laid out and planted in a thorough manner, would exercise as much influence on the public taste as Mount Auburn Cemetery near Boston, has done. Though only twenty years have elapsed since that spot was laid out, the lesson there taught has been so largely influential that at the present moment the United States, while they have no public parks, are acknowledged to possess the finest rural cemeteries in the world. The Public Grounds at Washington treated in the manner I have here suggested, would undoubtedly become a Public School of Instruction in Every thing that relates to the tasteful arrangement of parks and grounds, and the growth and culture of trees, while they would serve, more than anything else that could be devised, to embellish and give interest to the Capital.

Washington was not alone in its eagerness to provide public parks for its citizens. During the 1840s, there had been much agitation in New York for a park, a bastion of air and space in the constantly expanding city. The city was undergoing a trying period of urban adolescence that would result in its maturity as the financial capital of America. The rising tide of immigration to the United States that had begun in the 1840s had deposited large numbers of urban poor in New York. The ensuing conditions of poverty and disease proved a burning social issue and a test of the power of the city to survive.

Downing had been keeping an eye on the controversy, and in August 1851 he addressed himself to the problem of a New York park. He believed that sociological imperatives demanded the creation of such a park, for the contrast of poverty and wealth was much in evidence, and he believed a park would engender a leveling tendency in both directions. In July of 1851 the state legislature had authorized the acquisition of property between Sixty-sixth and Seventy-fifth streets, stretching from Third Avenue to the East River. Downing objected. He insisted that a larger, central park was in order, and called for the acquisition of a tract of about 500 acres in the middle of the city. "*Five hundred acres*," he asserted, "is the smallest area that should be reserved for the future wants of such a city, *now*, while it may be obtained." He saw that it would take a park of that dimension to provide an escape valve for the pressure of urban concentration. He envisioned a park that would be both an ornament and an asset to the city:

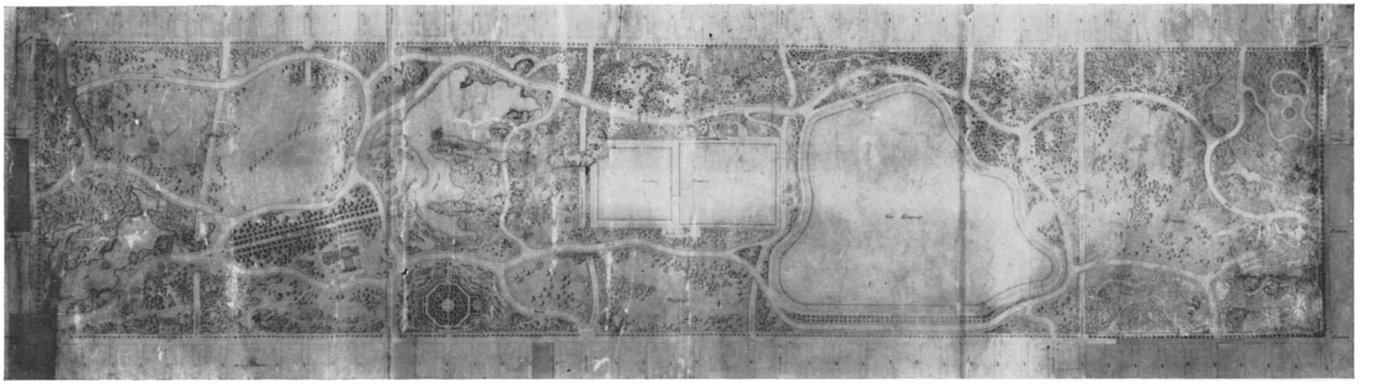
> The many beauties and utilities that would gradually grow out of a great park like this, in a great city like New-York, suggest themselves immediately and forcibly. Where would be found so fitting a position for noble works of art, statues, monuments, and buildings commemorative at once of the great men of the nation, of the history of the age and country, and the genius of our highest artists?

He foresaw the establishment of "winter gardens of glass, like the great Crystal Palace" (at that moment the sensation of London's innovating international exhibition), and suggested that "great expositions of the arts would take place in spacious buildings within the park, far more fittingly than in the noise and din of the crowded streets of the city." The park would also provide a place for zoological gardens, and for meetings and exhibitions of horticultural and industrial societies. This was Downing's most mature vision of the ideals of an urban park. A year after he wrote it he was dead.

Downing's death and subsequent lack of direction caused a delay in the completion of the Washington park, but progress on the New York park continued. After a preliminary survey and plan were completed by Egbert Viele, chief engineer of the park, a design competition was announced. The scheme finally accepted for the park in 1858 was created by Calvert Vaux (who had been brought here from England by Downing) and Frederick Law Olmsted. Although the park's designers acknowledged their debt to Downing's landscape ideas, they did not plan to incorporate the variety of features he had suggested. Their plan (Figure 4), submitted under the name "Greensward," attempted to preserve and enhance as much of the natural configuration of the site as possible. They realized the park would eventually be surrounded entirely by the grid pattern of streets, and they hoped to create a landscape setting that would contrast as much as possible with the regularity of that future development. Their concession – a grudging one – to the formalism of urban design was the Mall, which ran from Sixty-sixth to Seventy-second streets:

> Although averse on general principles to a symmetrical arrangement of trees, we consider it an essential feature of a metropolitan park that it should contain a grand promenade, level, spacious, and thoroughly shaded.

Greensward was not an urban park, interrelated with the city: it was a patch of landscape, artfully improved,



4. *"Greensward," competition design no. 33 for Central Park, 1858. Submitted anonymously by Frederick Law Olmsted and Calvert Vaux, this plan was used as the basis for the landscaping of Central Park. This design continues in the tradition of Downing's landscaping ideas, but the vast extent of the site allowed for a greater variety of natural features than was possible at the Mall. Years later Olmsted remarked that the site was ill-chosen and was topographically unsuited for the park. The City of New York, Recreation and Cultural Affairs Administration, Department of Parks*

and snatched from the belly of the all-consuming urban monster.

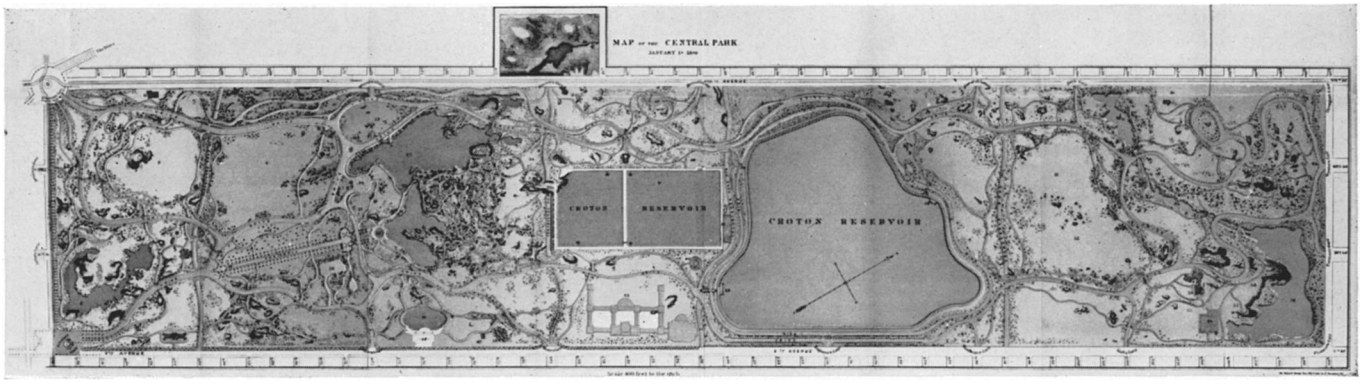
Thus, the buildings and monuments that Downing had felt would make the park of greatest service to the city's inhabitants were conspicuously absent from the Vaux and Olmsted plan. The conflict between these two points of view about the park's purpose first became the subject of public discussion during a controversy over the design of gateways for the park. Vaux and Olmsted advocated simple gateways and iron fences. But the Park Commissioners, wanting to provide a better integration between the park and city, announced a competition for more imposing gateways for the southern entrances. The competition was won by Richard Morris Hunt in 1863, with designs that were criticized by opponents as too monumental, too elaborate, too expensive, and too French (Figure 6). Although Vaux and Olmsted resigned in protest (something they did with great frequency during their tenure in the park commission), the Park Commissioners accepted Hunt's designs – which, however, were never carried out.

The debate between advocates of the park as landscape and the park as a place of recreation has continued through the years. Vaux and Olmsted's intention was "to provide the best practicable means of healthful recreation for the inhabitants of the city, of all classes," but they did little to implement this beyond the creation of the landscape. They soon came to regard all nonlandscape additions to the park as detrimental to its basic purpose. Downing's interpretation of what an urban park should be gradually won pre-eminence; this conception was summed up by "Civis," who wrote in *The Evening Post* in 1865 and 1866:

> And in the future, when this shall be the resort of two millions of people, when the roar of traffic through the transverse roads shall drown the singing of birds – when the restaurants and summer houses, and music halls, and conservatories, and winter gardens and museums shall be greatly multiplied – when statues and busts, and monuments and columns shall crowd the avenues, the Central Park will become one great open air gallery of Art, instead of being, as some dreamers fancy it, a silent stretch of rural landscape caught up and inclosed within the raging tumult of a vast metropolis.

Advocates of Downing's ideas felt the park must be functionally adaptable to the future city, and rejected the idea that the values of landscape per se must be held above the needs of the city's residents. As the populated area came to surround it, the park would seem smaller, and, "Civis" noted, "As it becomes apparently smaller, it will also become more artificial and less rural; more of a garden and less of a park." "Civis," and many of his contemporaries, believed that the park must be treated as a part of the city's design rather than be set off from it, as was required by the Greensward plan.

In discussing the proper uses of public parks, Downing had referred to the contemporary example of the Crystal Palace. This great exhibition hall, built in the middle of



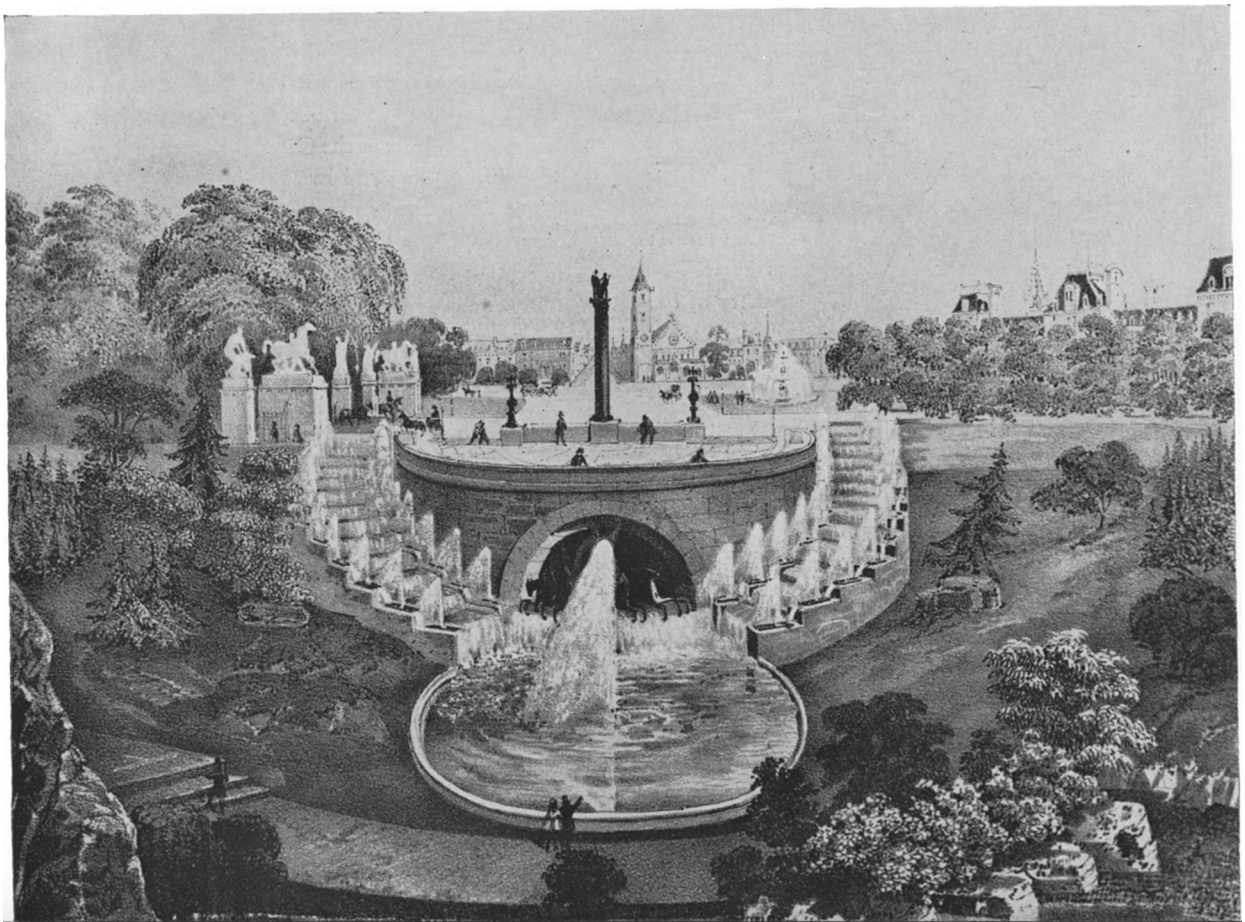
5. *Map of Central Park. Lithograph by Major & Knapp, New York, 1870, published in the Annual Report of the Commissioners of the Central Park for the Year 1869. This map shows the progress of the landscaping and the extension of the park from One Hundred and Sixth to One Hundred and Tenth streets, as well as the inclusion of the Manhattan Square area between Seventy-seventh and Eighty-first streets. The Commissioners' plan for a museum building is in the lower central portion of the map (where the Metropolitan Museum stands today).*

the pleasure grounds in Hyde Park, London, was meant to call attention to the state of national manufactures and to promote progress in arts and industry. This idea of an exhibition structure in public lands, created with the intention of displaying the wealth of contemporary arts and encouraging both the creation and appreciation of the arts of design, not only fathered the South Kensington Museum (now the Victoria and Albert) but also became the cornerstone for the planning of public museums in America. In this country, the establishment of public museums coincided with the evolution of the concept of the urban park. That the purposes of museum and park were, from the beginning, considered integrally related, demonstrates the nineteenth century's pervading educational and humanistic concerns.

New York had its own version of the Crystal Palace in 1853, with an exhibition of fine and applied arts held in Reservoir Square, now Bryant Park (the site of the New York Public Library then being occupied by a reservoir). The New York Crystal Palace was the first international exhibition to show paintings as well as sculpture. It may, in fact, have been the specter of the rather poor quality of the art in this exhibition, coupled with the success of a temporary art gallery at the Metropolitan Fair of 1864, that spurred an increasing discussion in favor of forming a permanent public collection in New York. Exhibitions had become an arena for aesthetic controversies, and independent pavilions were organized by artists such as Courbet and Manet at the Paris exhibitions of 1855 and 1867. And it was in Paris in the mid-1860s that a group of American citizens initiated the movement that resulted in the founding of The Metropolitan Museum of Art.

It is significant that one of the first steps taken in New York for the establishment of an art museum was an action of the Commissioners of Central Park, who in 1860 accepted eighty-seven plaster casts of the work of Thomas Crawford, a sculptor then held in great respect (Crawford was the creator of the figure of Freedom that stands atop the dome of the Capitol in Washington). The casts had been presented by the sculptor's wife on condition that they be displayed together in some suitable place, and by 1868 they had been installed in a gallery in the former chapel of a convent at Mount St. Vincent, in the northeastern corner of the park. A more decided step in appropriating public lands for public institutions came with an act of March 25, 1862, when, in answer to a petition, the New-York Historical Society was granted the use of the old State Arsenal (at Sixty-fourth Street, now surrounded by the zoo) and adjacent property in the park for a museum of antiquities and science, and a gallery of art. (The Arsenal, built in 1848, had been retained in the Vaux and Olmsted plan for exactly such use: "The Arsenal itself," they wrote, "although at present a very unattractive structure, and only tolerably built, contains a great deal of room in a form that adapts it very well to the purposes of a museum.")

In commenting on the prospect for the creation of



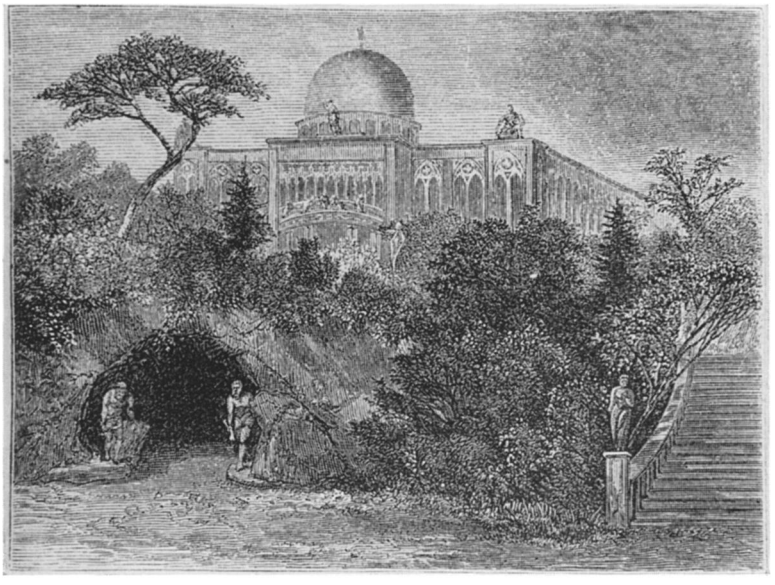
6. *Entrance to Central Park at the Corner of Fifth Avenue and Fifty-ninth Street, and Terrace of the Fifth Avenue Entrance from the West, 1863, by Richard Morris Hunt. Hunt's designs for the gateway entrances at Fifth, Sixth, Seventh, and Eighth avenues won the competition sponsored by the Commissioners of Central Park. The Commissioners had specified gates dedicated to Scholars, Artists, Artisans, and Merchants, but Hunt altered the dedications to more abstract concepts: Peace, Commerce, War, and Artists. The lower view demonstrates Hunt's attempt to create an integration of formal architectural and sculptural ornaments with the more natural features of the park landscape. Hunt chose his sculpture from existing European monuments and was criticized for his borrowing.*

this gallery, James Jackson Jarves, an important collector and critic, stressed the suitability of the park as a site for the museum. He noted that the need for a fireproof structure that provided a suitable amount of natural illumination and space for expansion could not be met by a location on a city block. He did not feel that the museum would conflict with the purposes of the park, since the park was, in large part, the creation of art and science and owed nothing to nature except a "barren site." The museum and park would work together as educating and humanizing forces.

The Historical Society decided that the Arsenal was inadequate for its purposes and asked for a site on which to erect a new structure. In April of 1868 legislation granted them land in the park just west of Fifth Avenue between Eighty-first and Eighty-fourth streets. This was not much of a gift. The park designers had been at a loss as to the best treatment for this narrow strip lying between the dominating hulk of the old Croton reservoir and the undeveloped avenue. Although it appeared in the Greensward design as a playground, suggestions for its improvement ranged from the placing of a casino on this spot to its use as a deer park. It appears on numerous early maps of the park as undeveloped ground.

In 1869, the Commissioners of the park reported that the Historical Society had not yet taken measures toward the founding of a gallery, and sought legislation, which

7. *Design for an Art Museum in Central Park, by William H. Beard, published in Scribner's Monthly (August 1871). Beard suggested an intriguing coordination of park and museum by providing a tunnel entrance from the park, with appropriate sculptural tableaux of man's awakening consciousness art of history and*



was passed on May 5, authorizing them "To erect, establish, conduct and maintain on the Central Park a Meteorological and Astronomical Observatory, and a Museum of Natural History and a Gallery of Art, and the buildings therefor. . . ." The Commissioners had no difficulty in immediately carrying out the first two proposals. Work was begun on the meteorological observatory (the Belvedere on Vista Rock, still standing near the Delacorte Shakespeare Theater). And the natural-history museum was, in fact, already in existence, for on April 6 the American Museum of Natural History had been chartered, and two days later the Commissioners had given it permission to deposit its collections in the park, the Arsenal being appropriated for this purpose.

When The Metropolitan Museum of Art was chartered in April 1870, the trustees decided to act conjointly with the Museum of Natural History (which, like the New-York Historical Society, had come to the conclusion that the Arsenal was unsuitable) in petitioning for the erection of buildings guaranteed by the law of 1869. In April 1871, further legislation was passed, authorizing the Department of Public Parks (the body that succeeded the Board of Commissioners of Central Park) to erect buildings for both museums "in and upon that portion of the Central Park formerly known as Manhattan Square [on the western edge of the park between Seventy-seventh and Eighty-first streets], or any other public park, square or place in said city. . . ."

In August of the same year, designs for a subterranean entrance to the museum in the park were published in *Scribner's Monthly* (Figure 7). Great guardian figures of Ignorance and Superstition were stationed at the entrance to the tunnel, and once past these obstacles, the visitor would have witnessed a sculptured chronicle of man's progress toward enlightenment until the actual door of the museum was reached. This rather fanciful project did not appeal to the trustees of either museum, who had, moreover, already decided that the needs of their institutions were so distinct as to require separate structures. In consequence, the Metropolitan asked the Parks Department if its building could be located in Reservoir Square (where the 1853 New York exposition had been held). At a meeting on March 20, 1872, the Commissioners decided to retain the Museum of Natural History in Manhattan Square (its present location) and to establish The Metropolitan Museum of Art "on that part of the Central Park between 79th and 84th streets, and the Fifth Avenue and the Drive." The Metropolitan's first permanent building was designed for this site by Calvert Vaux (Figure 8), and by 1874 construction had begun. Twenty years after Downing's death, his vision of an urban park was on the verge of realization.

8. *The first building of the Metropolitan Museum in Central Park, built between 1874 and 1880, by Calvert Vaux. This building, constructed by the Commissioners of Public Parks, was meant to be the nucleus of a structure that would be erected wing by wing, eventually occupying the entire site granted by the legislature, between Fifth Avenue and the Drive, and Seventy-ninth and Eighty-fourth streets. The facade of this building, minus the wooden porch, is still visible from the park.*

Kafka on the Municipal Badminton Court

JAMES DELIHAS

"The ordinary city construction project requires no fewer than 49 steps of approval, creating a triangular game of badminton among the Mayor's Office, the office of the Budget Bureau, and the initiating agency – and if any of the players misses a shot the game stops."

THE THREATENED CITY, *a report on the design of the City of New York by the Mayor's Task Force, February 7, 1967*

Nobody likes the game. Not the Mayor, not the President of the City Council, not the Comptroller's office, the City Administrator, the Bureau of the Budget, not the Board of Estimate, the City Planning Commission, any city agency, nor the construction industry. And neither does Arthur Klein.

Everyone admits that it's costly, demoralizing, wasteful of energy, enervating of talent, and, as one city aide would have it, breathtakingly Kafkaesque. Put very simply, there has always been a frustrating lag between the time money for a project is allocated in the city's capital budget and the time the actual construction of a school, park, hospital, or police station begins. The backlog in school construction funds, for example, has grown from $51 million in fiscal 1965-1966 to a projected $225 million next July 1. In the Bronx, where the construction of the new Lincoln Hospital has been hopelessly slowed, Herman Badillo, the borough president, told a *New York Times* reporter that the hospital was one of 128 capital projects that were behind schedule in his borough: "And there are only 128 projects in the Bronx," he added. "Some have been budgeted since 1964, but nothing is being done, nothing is being built." The Department of Public Works, which oversees all construction for the Health, Police, and Fire departments, as well as covering court, sanitation, and library facilities, has about 200 projects in what is known as the pipeline. Officials who should know can only guess how much the understaffed Parks Department has backed up; when pressed, they will what they call "ball park" the figure, estimating the time element as ten, twenty, or thirty years. And, in fact, this is the reason the Mayor gives for the relatively small number of new projects recommended in the proposed 1968-1969 budget. According to the City Planning Commission, the city's agencies have yet to spend $1.2 billion previously allocated. There are limits even to the city's patience, and allocations that have gone unspent for too long are often dropped: some $71 million is being rescinded this coming fiscal year. No one is more concerned over the situation than the Mayor, who notes in his message on the 1968-1969 budget: "The complexities of the municipal capital construction process have slowed to a crawl the pace at which capital projects are completed. A major goal of my Administration has been to break up this log-jam." The system, experts report, is notoriously hung up in bureaucratic red tape, approvals, and superapprovals. "The process," quips David Grossman, Assistant Director of the Budget, "was originally designed not to get anything built."

A critical breakthrough in beating the system occurred one day in April 1966 when Arthur Klein, who is the Metropolitan Museum's Supervisor of Plans and Construction, met in his office at the Museum with Thomas P. F. Hoving, then in his fifth month as Commissioner of Parks. Although Hoving was already, in the words of *The Threatened City*, "blithely ignoring a fusty tradition and reaching again for top architectural talent," he was having his own troubles getting that talent translated into completed facilities. Klein was about to start the processing of paperwork for the reconstruction at the Museum of 38,000 square feet of ground-floor space and its conversion into galleries and offices. The project, known as Wing D Corridors, was to cost $700,000, a relatively small item in the city's billion-dollar capital budget, but one that would probably jump up another $70,000 – the standard ten per cent surcharge (the annual increase of construction costs) for the expected

year-long game of badminton that was about to begin. Klein, who has been at the Museum since 1950 and has handled some twenty million dollars' worth of construction, was determined this time to revise the game. Klein outlined a plan of such daring simplicity that Hoving, impressed by its "irreducible logic," took the plan to the Mayor who, equally impressed, immediately designated Wing D Corridors a pilot program under the new system. Shortly thereafter, in June, Klein held another meeting at his office, this time with a group of city officials who officially shouldn't have been there. (The politics of the absurd, incidentally, long preceded the literary movement.) Seated around a six-foot-long table where Klein stretches out his plans and blueprints were Arthur Rosenblatt, an architect and Hoving's Design Consultant (who has since joined the Museum as Administrator for Architecture and Planning), James Cass of the Bureau of the Budget, members of the Museum's staff, and the architects and engineers who designed the project. Although each of the city departments represented had to review and approve plans and drawings (in this case Wing D), such review had never been done simultaneously, with all parties facing each other across a table, and able to get immediate answers and explanations to any questions. "What would have taken several months," Klein recalls, "took several hours." Subsequent drawings and documents were similarly processed and in a matter of weeks Wing D was ready to be put out to bid. Adding insult to bureacratic heresy, the project was expected to come in under budget. "An interdepartmental disagreement over auditing the job held us up six months, but in the end we still managed to save the Museum and the city some $40,000."

The new system was tried again a year later with "Wing H," a massive $5 million project involving complete reconstruction of the Costume Institute on the ground floor, the Egyptian galleries on the first, and Islamic and Far Eastern on the second. Klein maneuvered the necessary approvals through the city in a record seven weeks during the summer of 1967. The saving this time was close to half a million dollars.

The Metropolitan Museum's example of not only getting its projects built but built on time and efficiently is a phenomenon probably without precedent in the memory of anyone now in city government. It is impossible to read any account of the tortuous procedure of capital construction that does not make reference to what has become the classic text on the subject. It is a five-page, tightly written, tightly reasoned letter dated October 5, 1965, from Klein to Elinor Guggenheimer of the City Planning Commission. This commission is all-important because it screens and evaluates all proposed capital construction before any item ever gets into the draft capital budget. Once in, it is then combed over by the Mayor, the City Council, and the Board of Estimate and is subject to public and closed hearings. The whole business must pass through the sieve by April 20, on which day it is certified and then published. The current proposed capital budget, still in hearings at this writing, will come to just under $1 billion. This sum, together with the funds for the expense or operating budget, which is five to six times as big, makes New York City's total expenditures second only to the federal government's. Besides public construction, the money will go for repairs and rehabilitation of the city's physical plant, and for equipment purchases such as subway cars. On July 1 the budget goes into effect and the involuted procedure of trying to spend the money begins. And this is the procedure that the letter to Commissioner Guggenheimer, recently called "Klein's masterpiece" by *Progressive Architecture* and known in the trade as the "39 Steps," attempts to short-circuit.

The thirty-nine steps, said the magazine, "read like a satirical ballad with a constant refrain: An *idea* goes from the agency to the Mayor, to the BOB (Bureau of the Budget), and back to the agency again. The *design contract* goes from the agency to the Mayor, to the BOB, to the Mayor, and back to the agency again. The architect's *preliminary drawings* go from the agency to the Mayor, to the BOB, to the Mayor, and back to the agency again . . . and so on through *working drawings* and *final contract*" (author's italics).

There are thirteen privately endowed cultural institutions that receive support form the city, among them the American Museum of Natural History, the Zoological Society, the Museum of the City of New York, The Brooklyn Museum, The Brooklyn Academy of Music, as well as The Metropolitan Museum of Art. The Metropolitan, however, is the only institution that matches 50/50 the city's contribution for capital improvements with privately raised funds of its own – an amount that, since 1950, has reached $10 million. All institutional capital projects, from repairing a leaky roof to building a new wing, are processed through the city by the Department of Parks and must survive the thirty-nine steps. It is an agonizing pilgrimage and only the faithful and the persevering make it to the top. Klein, who apparently does it on drive alone, explains that the system was originally established as one of scrutiny to eliminate unfair practices, collusion, and inflated costs.

"The only trouble is," remarks a high city finance official, "the delays and paperwork cost more than any civil servant could possibly steal." Furthermore, the task force headed by William S. Paley, concerned as it was with the shoddiness of urban design in New York, declared in its report, *The Threatened City*, that the multiple checks and approvals actually "sapped creative ambition."

The letter to Guggenheimer galvanized the bureaucratic infrastructure. "I got enough calls on it to know that it was a thorn in a lot of sides," remembers Klein. Commissioner Guggenheimer, who had requested it from Klein because "he's probably as savvy as they come and the one I would consult," regretted the other day that so little change has since come about. "The process is still hopeless, but at least Mr. Klein's assessment – which, if anything, was kind (there are 17 steps within the Budget Director's Office alone) – focused attention and offered something of a solution. It's still the document on which to base future reform." It is significant that *The Report of the Mayor's Cultural Committee* (better known as the Black Report, after Eugene R. Black, Jr., the group's chairman), when it published its comprehensive review of the city's cultural life in November 1966, in effect endorsed Klein's proposals, and indeed included the letter in full as an appendix.

Klein suggested, among other things, that the procedure be cut in half; that a joint review be held by all the departments involved so that one detailed briefing could obviate a succession of separate, time-consuming meetings; and that the Budget Bureau's approval be limited only to preliminary drawings. Only the latter proposal has become a city-wide standard operating procedure, although the Mayor does apply the others to sensitive projects. It was reported in the press recently that when he ordered a speedup of the Lincoln Hospital job, primarily by having the Hospitals Department and the Budget Bureau review the plans simultaneously, the project still languished for nine months, partly because of a disagreement among other departments over the number of beds to be included, which ranged from 850 to 950. Meanwhile, back at the City Planning Commission someone was wondering where it would all end. Lincoln Hospital was entered in the 1965-1966 capital budget at an estimated cost of $42 million. On page 95 of the 1968-1969 budget it appears just short of $74.5 million. And at City Hall the Mayor worries these days about how to get Albany to raise the city's debt-incurring capacity, and how to pry more money out of the state and federal governments, because "as we succeed in reducing the capital budget backlog, we shall be faced with serious difficulty in funding committed and urgently needed projects." Unless something is done, he foresees a financial crisis within five years.

The Mayor must certainly be credited with political courage and close to impeccable candor in facing up to the city's problems. Whatever success he achieves in solving the urban mess – and this is increasingly a regional problem, contingent on cooperation not only from Albany and Washington but from neighboring states as well – at least his administration has never been one of government by malaise.

Realizing that the backlog problem is caused largely by a feedback into the bureaucratic system of its own inefficiency, he has been bringing systems analysis and operations research teams to work in various city departments to coordinate and streamline operations. By the fifth month after Lindsay took office, a Management Science Unit was set up in the Administrators Office at 250 Broadway. Frederick O'R. Hayes, who has had experience with the new technology under the Federal Bureau of the Budget, was appointed city Director of the Budget to revamp the budgeting system. Meridian Management, Inc., a New York firm that has done studies at Cape Kennedy, was retained in January 1967 to work with Hayes, and systematize the capital budget programs in New York City, and specifically to try to get the projects backload moving. Meridian has since been applying systems analysis techniques to the chaos and has come up with methods that are extremely close to Klein's home-grown technology.

Meridian's first attempt to apply its proposals was in the Department of Public Works under Commissioner Eugene E. Hult, a man whom *The New York Times* singled out as "becoming the city's expert in the long and recurring battle against bureaucracy." As reported in the press, DPW has been remarkably successful in reducing the design stage (roughly the same block covered in the 39 Steps) from five years to three. According to the Metropolitan's records, the Museum has been doing it within the Mayor's hoped-for target performance of close to two years. One of the reasons given for the speedup is the elimination of a review of the final plans by the Bureau of the Budget, originally one of Klein's most strongly argued points.

"When Meridian got around to us," Klein remarks, "they were convinced we had some sort of gimmick.

They looked at our records and project charts and God knows what they thought we were doing to push this stuff through. But what you do is push and push; chase after it and chase after it. The Parks Department has a back-breaking load of work, a backlog of 400 jobs, including sixty for museums. They've got to worrry about thirteen other institutions in addition to their own projects. They're damn cooperative – and Budget's cooperative, so is the Comptroller's office. But the system demands a lot of hustle out of you too. You've got to move along a hundred different fronts because there are a hundred and one places a project can get hung up.

"We don't sit and wait. I've got a little black book and once a week I get on the phone and talk to one bureau after another. You just have to keep moving. We're at a point now in Wing H where the rest of the construction can't proceed until the steel detailing for the elevator has been completed, but the elevator contract hasn't been officially approved yet. Well, what do you do? The contractor isn't going to come in without a contract from the city, which might take another three months, and if you wait for the city the job will get held up three months here, four months there. In five years you've still got an unfinished building that's costing you twice as much. What I do is write the contractor a letter legally binding the Museum to compensate him if, for some reason, the city should fail to award the contract. It won't, and we don't lose time. It's an unorthodox procedure and it's going out on a limb. I don't know anyone else who does it. But in this business you acquire a sixth sense about limbs."

At the moment Meridian is at a sensitive stage in its operations and somewhat guarded about releasing statistics and making comparisons. "Let me say this much," admits Thomas F. Meade, the firm's Projects Manager in New York City, "you people do better than most agencies and better than any institution." One trouble, he says, is that too many agencies depend on the Bureau of the Budget to doublecheck their plans and specifications. Martin Freidheim, a young city planner in the Bureau, is more explicit: "Generally, people have only a vague idea of where they are going. The agencies don't really have the personnel to evaluate their own roles." High among the Mayor's priorities is a master plan for the city, which has been gestating slowly within the City Planning Commission. Without it no intelligent long-range planning or growth is possible. This is just as true of libraries, hospitals, and museums, and last year the Metropolitan hired the architectural firm of Roche and Dinkeloo, which, with the help of Arthur Rosenblatt, is preparing a comprehensive master plan that will take several years to complete.

The lack of preplanning is a growing worry among the Mayor's aides. The implications of the problem loom frighteningly when you consider that virtually every solution to the urban plight, whether it be pollution, housing, slums, police, or schools, is largely a solution involving capital construction, the building of new facilities. Just last month, when $26 million for a new police headquarters was struck from the proposed budget by the Board of Estimate and the City Council (which charged that the project would not proceed far enough next year to need the appropriation), Lindsay decried the move as a "major setback in our fight against crime." That same day the Mayor appointed DPW Commissioner Hult as head of a task force to speed lagging school construction. Said Hult, "We'll just have to go back and start cutting red tape again, take calculated risks, make phone calls, and hand-deliver papers instead of going through the normal routine." If this sounds like Klein's technique, the similarity doesn't end there. Both are self-made men and neither is a licensed engineer or registered architect. Both operate on the principle of direct, immediate communication.

Klein is a man in his late forties, slight of frame, and quick of movement. His voice has an unhurried New York melodiousness, but he can put behind it, one Park Department official says, "all the authority and persuasiveness of a jackhammer." He has such a reputation for coordinating and dovetailing the multiple phases of a construction project, during which there may be as many as forty contractors on the job at one time, that more than one agency has tried to lure him away from the Museum.

His work at the Museum, he insists, is very much a team operation, involving technical personnel, the Director, Vice-Director, Treasurer, the new Administrator for Architecture and Planning, a city liaison man, and Klein's own staff of two highly competent assistants. If he's been more successful than most at his job this is in no small part due to a subtle knack for getting people to work with him, and to a pragmatic feeling for the vagaries of the political process. Last year he was appointed a member of the American Arbitration Association.

Within the context of the dilemma the city faces today, with urban decay advancing faster than corrective measures and the ultimate manageability of the urban complex open to serious question, a good many people believe that what the Metropolitan Museum has succeeded in doing is not of parochial interest but applicable in spirit and in practice to a very fundamental problem of municipal government.

What part should museums play in their communities? More specifically, what is the role of the Metropolitan in New York City life? Here are some thoughts on this subject, a subject of increasing discussion and concern

The Museum as the City's Aesthetic Conscience

BARBARA Y. NEWSOM *Public Affairs Consultant to the 100th Anniversary Committee*

As the Metropolitan Museum prepares for its one-hundredth anniversary and begins to look beyond the centennial to the new demands that will be made on it by this restless society, it might be well for us all to reflect on the possibilities for an expanded role for the Museum – particularly with respect to the changes now taking place and being contemplated in our physical environment.

In the next ten to fifteen years, we are told, large areas of our cities will be torn down and rebuilt. Most of this work will be done in the ghettos and slums – for example, in New York's Harlem, Bedford-Stuyvesant, Brownsville, and the Lower East Side. Across the river there is talk of a new community in New Jersey's Meadowlands and rehabilitation of the Newark-Jersey City complex.

The precedents for such urban renewal in this country are not auspicious. There are very few urban developments of which Americans can feel proud. This is not the architect's fault, nor the city council's: it is everybody's fault. We have learned how not to see. We have learned to make a neat and clean division between what satisfies the eye and what fills the purse. And so we willingly turn the development of our most valuable real estate over to "those builders and investors," as Ada Louise Huxtable says, "whose sense of environmental esthetics is limited to the calculable beauties of rentable square footage by the square block, and who do more to plan, construct and seal the fate of this city than any combination of officials and municipal agencies theoretically entrusted with the job."

The result tends to be a monotone of glass office buildings and faceless housing projects. Pretty soon we may have a large city, indistinguishable from many others, that will have lost its sense of the past and its interest in either the present or the future. More than anything else, it will be a boring place to live in.

"The Application of Arts to . . . Practical Life"

When the Metropolitan Museum was founded, the speeches of its advocates and the charter itself abounded with references to education, to the "wholesome" and "ennobling" influence of works of art, to art as "the vital and practical interest of the working millions," to the humanizing and refining of "a practical and laborious people," and to "the application of arts to manufacture and practical life." In the 1880s and 1890s the Museum not only held exhibitions of contemporary American design and devoted an entire gallery to the Levi Hale Willard Museum of Architecture, but even founded and supported industrial art schools in the city.

Yet now, in spite of all the lectures, gallery talks, publications, school children, and visitors, there is little relation between what goes on in a great art museum and what happens to our daily environment. It isn't enough that this institution exist as a receptacle of the past and an oasis in the present. It isn't even enough that the Museum become more aggressive and enlightened in its educational programs. The fact is that this country's cultural institutions are not meeting the competition. They are proving to be no substantial antidote to an incentive system that rewards the short-term speculator or to the great "masscomm" that molds opinions and shapes lives. Quality, as this museum understands the word, is by and large an old-fashioned curiosity; it has been replaced by planned obsolescence in almost every area of American productivity, from appliances and automobiles to art.

For the individuals and the institutions that care about how our environment looks and feels, the need to join the battle is immediate. It may even be short-term: it is

possible that a more highly educated populace will eventually be the corrective this society can look forward to. At the moment, however, we cannot wait for another generation to demand better aesthetic standards. Too much will have been lost to the bulldozers and the demolition crews. Every day decisions are being made that are irrevocable.

A New Role for the Metropolitan

As one of the most important cultural institutions in the Western world, and as an assembly of people who have developed high standards of aesthetic value, the Metropolitan Museum would seem to have not only a legitimate role in asserting this value in our society but an obligation to do so. In a democracy, where every man is king and is free to act on the dictates of his own taste, someone must advise the king. If our cultural institutions do not succeed, then who? Government, industry, the advertising business, communications, and even education have not proved themselves up to the job by the most lenient standards. It is questionable whether they can ever do it without a great deal of help from institutions like this one.

There are at least five areas where the Metropolitan could begin to move without violating its essential character or disrupting its present responsibilities: commercial television, films and exhibits, the encouragement of architecture, training for ghetto artisans, and involvement in the physical development of New York City.

Commercial Television

Although there may be some dispute about the efficacy of commercial television as shaper of popular thought, the fact remains that television reaches almost every home in the country, and the average viewing audience during prime time exceeds one hundred million people. Commercial television is now our chief method of public communication.

Capturing even a portion of this audience is obviously not easy. But it is crucial that we try.

The Metropolitan might consider initiating a two- to three-year television series on the visual environment of America. These programs would take their viewers on a kind of "God's Own Junkyard" tour of the United States, pointing out at each step what expediency and the quick-profit formula are doing to this country and the people who live in it. The tour would also include, by well-planned contrast, the best of the old buildings and towns as well as the best of the new. It should include a description of what has been lost in the recent past and what this loss represents. Visits might be made to the cities abroad from which we have something to learn. Architects, planners, builders, artisans, critics, and developers could all have their say.

It is important that these programs be non-highbrow. They should be aimed not at the converted but at a public that must be given a sense of the past and a feeling for what is worth preserving, a subtle education in aesthetic standards. The format ought not to follow the stentorian style of the run-of-the-mine documentary. If the intent of these programs is frankly didactic, its methods should be as fresh, contemporary, and fun as the best practitioners of the television art can make them.

Such a series must ultimately be created by the commercial networks, but the impetus for it should come from the Metropolitan. Ideally, however, the Museum should be joined by other museums, professional associations, and corporations that can lend not only their support but their expertise.

Films and Exhibits

Much of what the Metropolitan does with its educational programs attempts to draw the viewer closer to the world of art. It is equally important to try to relate art more closely to the world of the viewer. This is an activity the Museum could afford to work at much harder, particularly with its immediate audience – its daily visitors and the people living in the New York area.

Films: The Museum should develop and assemble a library of very good films (there are several television reprints worth collecting) that have as their theme the relation between art and the social and physical environment. Some of these may be historic, to show how and why men have, in the past, incorporated art into their communities. Other films might go into the ghettos of both the middle and lower classes to demonstrate what happens to areas that have no aesthetic values. The films must include scenes and sights that we are all but inured to, shot in such a way that we are forced to see.

Audiences for these films can be created at the Museum itself. But reprints should be made available for civic groups of all kinds, schools and colleges, corporate boards, labor unions, professional associations, and any promoters and developers that present themselves.

The production of this project might be undertaken by an outside organization in the communications field or by one of the education companies. But the Museum might also consider hiring a film expert who can develop and research film possibilities and choose producers as they are needed. No matter who produces the films, they should be done under the Metropolitan's auspices and bear its seal of approval.

Exhibits: The forthcoming exhibition at the Museum, *Harlem on My Mind*, can be an important first step in helping to create an understanding of the content of urban life. No city can be "renewed" without such understanding. The history, the character, and the needs of its people are basic ingredients of any attempt to create a viable urban form.

Similar exhibits might explore the life of other sections of the city. In addition to the human story, these exhibits ought to include photographs of the visual amenities left in the older neighborhoods – the wide avenues, grillwork, courtyards, brick and brownstone facades – as well as prints and models of buildings in the New York area that ought to be preserved.

Some exhibits could be worked out together with the Museum of the City of New York and other associations – the Municipal Art Society, the local chapter of the AIA, and the Landmarks Commission, for example. They can be traveling shows, dramatized by tours of important buildings and neighborhoods for public officials, the press. and interested citizens.

Other exhibits can be built around the Museum's already extensive collections of architectural prints, drawings, and models. The express purpose of such shows would be to educate the layman to the values of the architecture of all periods, particularly in this country. The Museum ought to try to create a visually sophisticated public that is able to discriminate between exciting and indifferent architecture and that ultimately will not tolerate a banal environment.

These exhibits should be accompanied not only by public lectures, but also by special openings and convocations for architects, builders, real estate developers, students of architecture, and even representatives from the many scientific and technological disciplines involved in the nonaesthetic aspects of social planning. Discussions should center partly on the value of the historical styles, but even more on the human problems such architecture was meant to solve and the human needs it fulfilled. The Museum might consider airing these discussions on local and educational TV.

A Department of Architecture in the Museum

Proposals for the establishment of a department of architecture in the Metropolitan have come up many times since the demise of the Willard museum. But it is difficult to see how the Museum can continue to ignore architecture, particularly now when that art needs so much encouragement in America.

This department could begin with a collection of material developed under the first two proposals: research for and reprints of television programs, a library of circulating architectural films, slides and models from the exhibits (if not the prints and drawings themselves). It could sponsor further convocations and competitions, and encourage the use of related crafts. Under the right leadership, it could become one of the liveliest departments in the Museum and certainly one of the most important.

Training of Artisans

Among the classes of workers whose scarcity is most lamented in America, artisan-craftsmen are high on the list – master builders, stonecutters, wood carvers, cabinetmakers, plasterers, restorers of all kinds. Such people nowadays are rarely found in the building trades; very few are trained in this country. And every new four-square high-rise built in an American city nails the door tighter shut behind them.

In a project like the renovation of Harlem, there is much that can and must be saved. But it will take some loving hands to patch the griffins and the archways and to meld the old with the new. There is work enough for a generation of young artisans. There is more to do beyond reconstruction, too, particularly if architects can be helped to loosen the economic and bureaucratic restrictions that now bind their imaginations.

At the same time, the museum world has its own needs for craftsmen and restorers. The supply is not easy to replenish as older men die and training is harder to come by.

The Museum might consider ways to train craftsmen – perhaps with special emphasis on members of underemployed groups – to work in the building trades and in museum conservation. Courses and scholarships might be worked out with local trade schools that could be persuaded to establish short-term courses in basic skills or to lend faculty members for off-campus instruction. With some of the most talented candidates, there might be a direct apprentice system, several apprentices assigned to work with an amenable older master; more advanced trainees could work with architects and builders on the job.

Museum Impact on the Aesthetics of New York City

In the several commissions that have been organized lately to study the American future – in education, housing, resource development, communications, and the rest

– the analytical disciplines are well represented. Daniel Bell's Commission on the Year 2000, for example, perhaps potentially the most influential of the groups now at work on the future, is studded with political scientists, economists, sociologists, scientists, urbanologists, and lawyers. Except for one editor, there is no humanist, no artist, no architect, no poet. Values and rights are discussed, it is true, but by anthropologists and marine biologists; no one speaks directly for aesthetics. As Joseph Wood Krutch lamented not long ago, "The persons who appear most likely to shape the future are the scientists and technologists who tend to agree that all the culture of the past is irrelevant, and that the world should, and soon will, be a science-fiction writer's dream. Thus the physical, intellectual, esthetic and moral world in which I live seems to be disappearing."

Over the years the American business community has united to form a persistent and highly successful lobby before the public: the principles and values that govern business are now widely held throughout our society. It is time, as our physical environment undergoes more and more drastic changes, for the art community to make its standards felt more forcibly in the world of affairs.

Specifically, in the changes ahead for New York City, there will be opportunities for defenders of aesthetic, noneconomic values to take a stand. Early last year the Paley Commission pointed to the number of "excellent private organizations" ready to take up the cudgels for better design in New York City. What they possess in indignation and energy, however, they seem to lack in coordination and focus. More leadership must emerge if these groups are to be heard.

There is, further, a great need to involve thoughtful New Yorkers in plans that affect their working and living neighborhoods. Newspaper accounts of the changes and controversies do not succeed in making them any less remote for the average apartment dweller. There is now no place where proposed designs can be studied, and little chance to find out more about them. How many people know what the World Trade Center or the new state office complex is going to look like, and who, besides a few vociferous critics, really cares? What happens to those imaginative plans devised for various New York islands and living areas by students in local schools of architecture? Might not something more than a passing newspaper story stir the attention – and maybe the energy – of the citizenry?

There are many ways the Museum could make its influence felt in urban New York. The Museum's trustees, as cultural leaders with a stake in the vitality of this city, could form a committee that would join trustees of other local art museums to give leadership to interested private organizations. A department of architecture in the Museum might make room periodically for models of a redesigned central Harlem, of new housing over the Grand Central tracks on upper Park Avenue, or of some far-out use of Welfare Island. If a model of the Parthenon is relevant to the Museum's interests, why not a well worked-out plan for a contemporary temple of life? The Museum might also open its auditoriums in the evening for discussion of various urban plans; it might cosponsor architectural competitions with other museums, organizations, or neighborhood groups interested in redevelopment; or it might arrange open-forum debates of aesthetic issues as they affect the city.

The Art Community and Change

In all of these activities, or any others like them, the Museum has two rare and important contributions to make: its sense of aesthetic quality and its sense of history. No other institution can match this. In addition, it has the kind of leadership that can make change seem exciting work to a large segment of the New York population; and certainly there are many people in this town ready to work for change.

In a recent article, Cornell biologist Robert Morison talks about the need for changing people somehow so that their sense of loyalty and responsibility be expanded to include more of the human race. Since biological mutation will come too late, Dr. Morison concludes that "we must turn to the more rapid way of changing human behavior and rely on cultural rather than biological evolution." In the past, society has found ways to tie its needs to the emotions of the individual, particularly through religion and art. "Now," he says, "we seem to face unprecedented needs for mobilizing all possible aids to help the individual perceive the needs of society at large and to identify himself with them." Yet today, when society is faced with such large problems and could benefit most from the vision of its most inspired members, Morison finds it "certainly curious and probably rather frightening that so large a proportion of the artistic and literary community has elected to stand aside from society like a Greek chorus chanting over and over again, 'See the unhappy man who can do nothing other than endure the existential suffering forced on him by a hostile and malformed society.' "

It would be an important step indeed if the museum community, at least, could take part in changing a hostile and malformed environment, starting here at home in the streets of New York.

Chess: East and West, Past and Present

Over one hundred chess sets from the Metropolitan's Gustavus A. Pfeiffer collection, together with a few chess pieces from other sources, will be on exhibition at The Brooklyn Museum from April 1 to October 1. This cooperation between the two museums is fruitful in that it enables these engaging objects to be shown in a new setting, at a time when the Metropolitan's own galleries are being extensively reorganized. A major museum like Brooklyn or the Metropolitan might seem too grand a setting for the pieces and boards of a game, and, further, it might be asked what connection there could possibly be between chess and art. For those who think of chessmen in terms of the conventional forms the relationship would seem to be slight indeed. But if one looks at chessmen made in many parts of the world and at various times in history, it will be clear that, although on a small scale, they may be emphatically described as works of art.

Quite apart from the history of chess or the role that chess played in social life, the changes in the shapes and names of the pieces for this universal game are fascinating. Chessmen actually represent the four major parts of an army, an Indian army such as Alexander the Great might have met when he conquered northwest India in 326 B.C., although the game itself was not invented before the sixth century of our era. The four parts were the elephant corps, the cavalry, the chariotry, and the infantry, under the command of a king, called a *shah* – whence our word "chess" – and his adviser, who in Europe became a queen.

It would seem that almost from the beginning some chess sets were carved in realistic form, either elaborate or modified for practical use, and others in nonfigural form. We thus have in chessmen the two major expressions of art living together through the ages, with emphasis on one or the other according to religion, time, and place. The changes in chess – in the meaning and form of the pieces themselves, the design of the board, and the manner in which the game is played – can be seen in the exhibition and the book published to accompany it.

Chess, a game conceived in military terms, became an important social pastime in the age of chivalry, and it begins to occur frequently in art and in romantic literature, in guises far removed from its earlier appearances in books devoted strictly to the problems of the game itself. In later centuries, chessmen came to be used to represent specific conflicts: famous wars, revolutions, and battles, and even opposing ideologies, for they are convenient vehicles for propaganda. There could be frivolous oppositions, such as a conflict between blondes and brunettes, and, more doubtfully frivolous, between the sexes. Chess could be interpreted in terms of morality and the social order, and it was played by men of all religions, not always with clerical favor.

Threshers and Mowers, Austrian, about 1820. The opposition represented by this ivory set is between the pawns only, the major pieces being identical in form. Horn bases and hats are used to distinguish the black side. The bishops, as is common in Teutonic sets, are runners. The inlaid board is German, of the nineteenth century. Gift of Gustavus A. Pfeiffer, 48.174.177

In chessmen one sees the progression of style in decoration, form, and dress, some expressions being direct and others indirect (in that they were conscious reflections of past ages). One can see the West in terms of the East, and the East in terms of the West. In fact, there is no end to the byways of art, history, and life that are revealed in the study of this fascinating game and the pieces with which it is played. Byways usually stem from main thoroughfares, but they also often lead into them, and this is as true in art as it is in travel.

CHARLES K. WILKINSON
Curator Emeritus of Near Eastern Art

Chess: East and West, Past and Present, by Charles K. Wilkinson and Jessie McNab Dennis. 184 pages. 133 black-and-white illustrations, 8 color plates. 8 x 7 inches. Cloth, $8.95; paper, $4.75.

Painting in France, 1900-1967

Curtain for the ballet Parade, 1917, by Pablo Picasso (born 1881), Spanish. Oil on canvas, 34 feet 9⅝ inches x 55 feet 5¼ inches. Collection of the Musée National d'Art Moderne, Paris, Purchase, 1955. Photograph: Réunion des Musées Nationaux

Picasso's curtain for the ballet Parade is an appropriate overture to the whole show. It is an extraordinary document of the magic Ballets Russes, which startled and enchanted Paris for a short decade. Created by Sergei Diaghilev, whose combined love for music, dance, and painting made him an impresario of genius, they set new standards of modern taste. Diaghilev called upon the avant-garde composers – Ravel, Hindemith, Stravinsky – and the best painters of the School of Paris – Matisse, Braque, Derain, Laurencin, and others – for the fabulous ballets, in which Nijinsky was the star. Parade was conceived as a total work of art. It was based on a theme by Jean Cocteau, the music was by Eric Satie and included the noises of sirens and typewriters (not to mention catcalls from outraged audiences), the choreography was by Massine, and the costumes and décor were by Picasso.

Here, Picasso's circus folk are reminiscent of the harlequins and acrobats of his earlier blue and rose periods, but without their hungry, haunting look. They are a gayer troupe, in the playful spirit of the Italian commedia dell'arte.

It seems astonishing that among the many exhibitions of modern French paintings there has never been one to survey the greatest art movement of our century as a whole. *Painting in France, 1900-1967*, opening on April 3 in the Museum's Special Exhibition Galleries, promises to do just that. Presented under the patronage of André Malraux, Minister of State for Cultural Affairs, it includes 152 paintings, by more than one hundred artists, selected by the Minister and his staff. Most of these pictures have never been shown in this country before. It will be on view through May 5.

The exhibition's title has been carefully chosen. The one first suggested, *The School of Paris*, was rejected as not strictly applicable to the generation painting now. Like most art terms, "School of Paris" is vague and can be made to cover a lot of things. A recent dictionary describes it as "referring to the internationalist group of artists, who came from all countries to late nineteenth-century and early twentieth-century Paris. Their art is generally advanced rather than conservative. The name cannot be taken to indicate any one style but rather an aspect of the cultural, social, and political internationalism of the pre-World War I period. It was cut short by the outbreak of war." Today, however, one might speak of a "New School of Paris," for two things are still certain: that painting in France is advanced rather than conservative, and is composed of an international medley of artists who live – at least temporarily – in Paris and there find inspiration from each other. Of the estimated seventy thousand artists now working in Paris, about one third are foreign-born.

France has always shown a genius for artistic assimilation. It is part of her greatness that she is capable of regenerating her powers from foreign contributions and of incorporating them

successfully. This assimilation began with the School of Avignon around 1400, when the Pope, in exile during the papal schism, attracted artists from all over Europe to his sophisticated court. Then came the first School of Paris, of the fifteenth century, when artists – mostly Flemish – created a refined style of painting and book illumination. In the sixteenth century, King Francis I, inspired by what he had seen in Italy, imported Italian artists to decorate his palace at Fontainebleau; there evolved an influential school that developed a style that was elegant, mannered, decorative, utterly French.

Despite the achievements of Louis XIV in other fields of art, France in the seventeenth century did not produce a significant school of painting. On the contrary, the two greatest French painters of that century, Claude Lorrain and Poussin, chose to live and work in Rome. Rome had become the artistic center of the world and was the mecca for artists until Paris took over.

Paris took over about the middle of the nineteenth century. Foremost it was the city itself, the City of Lights, triumphant under

Of the Dance, 1946, by Nicolas de Staël (1914-1955). Oil on canvas, 77⅜ x 44⅛ inches. Private Collection. Photograph: Jacques Dubourg

De Staël has early become a legendary figure in modern painting. A Russian aristocrat and emigrant, he came to Paris from Belgium in 1937, and soon after the war caught the attention of a quickly growing public with his clear, strong canvases. His work evolved from figurative to nonfigurative and back again, always guided by a sure sense of abstraction. His short career ended by suicide, at a time when he was painting his most dazzling and colorful and yet most disciplined images: seascapes and still lifes and the famous football-player series. He never lost the feeling for reality, nature, and man: "I need to feel the presence of life in front of me, and to seize it whole, just as it penetrates through my eyes and skin."

the Third Empire, that attracted not only tourists but artists. The more artists came, the more followed, and one thing led to another: there were more exhibitions, more dealers, more buyers than anywhere else. This beehive constantly attracted new talent in search of recognition and the tests of comparison, criticism, and rivalry. In the years around the turn of the century, to Paris came Picasso, Gris, and Miró from Spain, Modigliani and de Chirico from Italy, Chagall, Soutine, and Pevsner from Russia, van Dongen from Holland, Marcoussis and Kisling from Poland, Kupka from Czechoslovakia, and legions of others from elsewhere, not to mention the French provinces.

This generation entered Paris in the sunset of impressionism and was quick to revolt against it. The influence of van Gogh and Gauguin can perhaps be credited with the riotous outburst of color and movement that earned the young artists the name of *fauves* or "wild beasts," but it was Cézanne, the lonely old man in the south, who had stubbornly perfected his magical vision of pictorial space and paved the way for things to come. Between 1906 and 1912 there was hardly a painter in Paris who did not at some time acknowledge his indebtedness to Cézanne in words or paint. An angry critic wrote in 1910: "A great injustice is being enacted today. It is the widespread publicity given to the name of Matisse, who in reality is simply a disciple of Cézanne." Matisse himself knew this and kept repeating: "*Cézanne est le père de nous tous*" – "Cézanne is the father of us all." He was the first to break up natural forms, whether they represented figures, trees, clouds, or drapery, to fit them into an allover design of tilting, shifting planes compressed into a shallow space. When Picasso and Braque met in 1907, they both knew the work of Cézanne and had shown its influence in some still lifes and landscapes. Abstracting essential formal qualities from it, they both together, in 1908, invented cubism, a name attributed to Matisse, who remarked on the "cubes" in certain pictures by Braque. Cubism and its theories are the greatest single revolution of "modern art." "Many think that cubism is an art of transition, an experiment," Picasso commented. "Those who think that way have not understood it. Cubism is an art dealing primarily with forms, and when a form is realized, it is there to live its own life."

Once the great step was undertaken and form and color liberated from representational duties to state only pictorial facts, a new language was born, the abstract art of our century with its endless variations. While Die Brücke in Dresden, Der Blaue Reiter in Munich, and the Bauhaus group in Weimar were movements of major importance in the history of modern art, they were short-lived. Only in Paris, despite two world wars and the recent rivalry of New York, has the tradition of new ideas and internationalism remained uninterrupted.

The French exhibition is divided into two sections. First, paintings by the great old men who have become classics and whose names, known all over the world, shine as the beacons of modern art: Picasso, Braque, Matisse, Léger, Bonnard, Vuillard, and the others. Almost all these pictures are treasures of the Musée National d'Art Moderne in Paris. The rest of the show – more than two thirds – is devoted to the two generations that followed them. It was felt by the Minister that the work of the first group is well known here, and a wider range of younger painters would be more instructive.

The exhibition cannot, of course, systematically outline the development of modern art, with its phenomenal succession of visual discoveries. No single exhibition could cover this bewildering diversity of style. What it does show, however, is the vitality and variety of what has been created in France during the sixty-seven years since this century began.

CLAUS VIRCH
Associate Curator of European Paintings

Exhibition catalogue: *Painting in France, 1900-1967*. 128 pages. 111 black-and-white illustrations, 10 color plates. 8½ x 11 inches. Paper, $4.75. International Exhibitions Foundation (Washington, D. C. 1968)

THE METROPOLITAN MUSEUM OF ART

Information

THE MAIN BUILDING: Open weekdays, except Tuesdays, 10-5; Tuesdays 10-10; Sundays and holidays 1-5. Telephone: TRafalgar 9-5500. The Restaurant is open weekdays 11:30-2:30; Tuesday evenings 5-9; Sundays 12-3; closed holidays. Coffee hours: Saturdays 3-4:30; Sundays 3:30-4:30.

THE CLOISTERS: Open weekdays, except Mondays, 10-5; Sundays and holidays 1-5 (May-September, Sundays 1-6). Telephone: WAdsworth 3-3700.

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