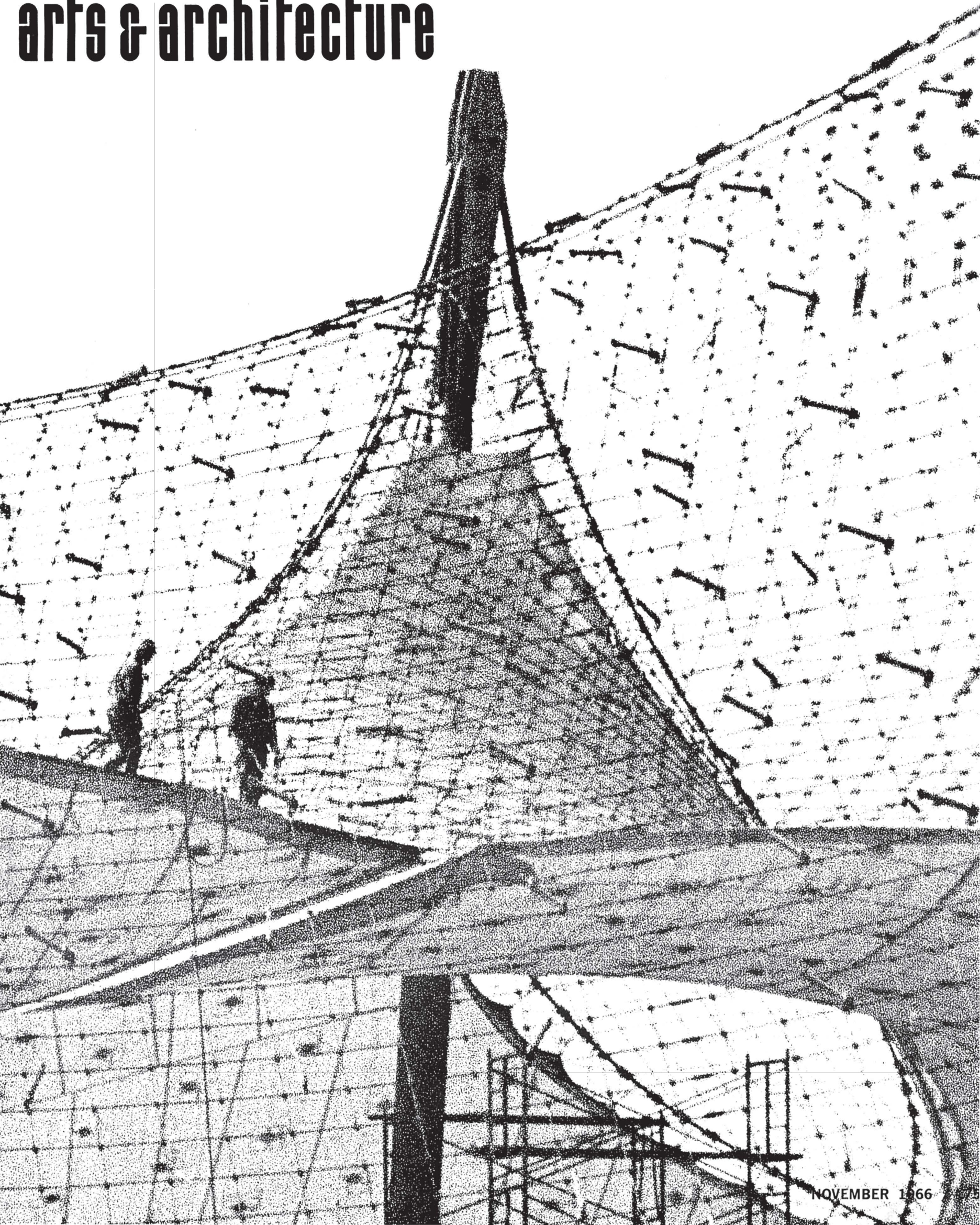


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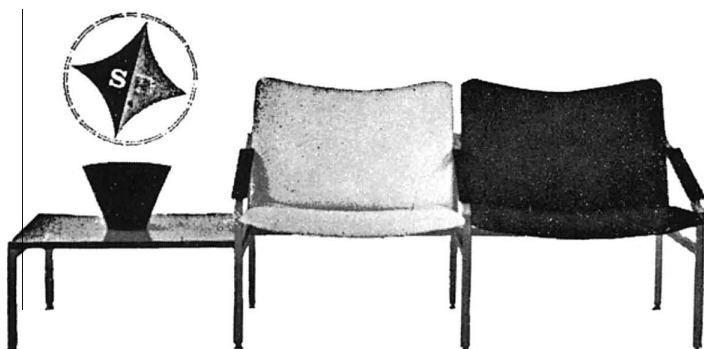
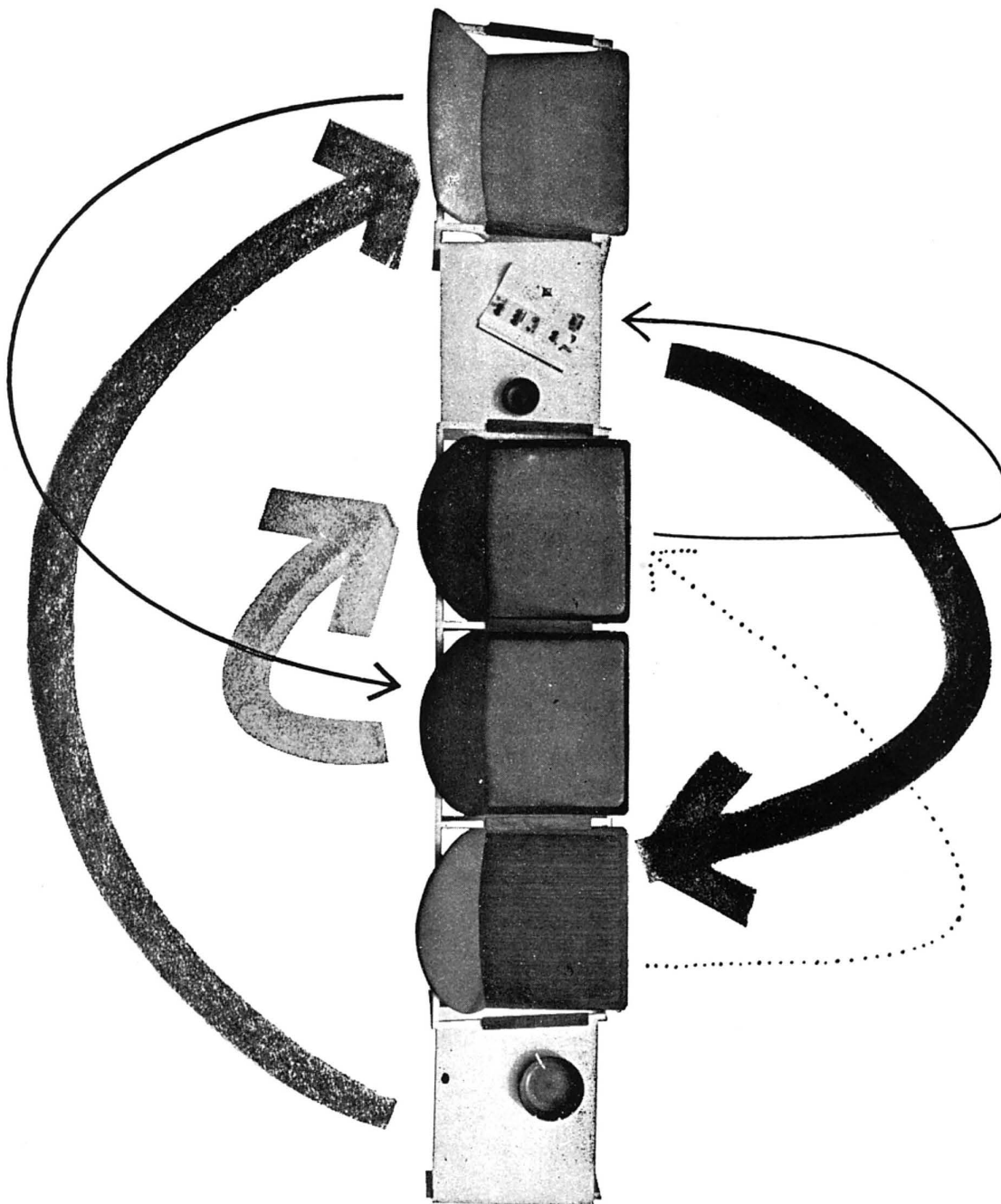
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art

DORE ASHTON

In the brown studies of 19th-century Germany the philology industry flourished. There were more professors engaged in philological research than most original minds could countenance, and we have oblique complaints from Goethe, Nietzsche and, retrospectively, Thomas Mann. The hair-splitting mentality of the philologist defeated more than one creative thinker seeking a university post.

What was wrong with the bookkeeping philologist was his inordinate love of classification. A man could spend a lifetime making subdivisions within subdivisions, worrying far more about finding a polysyllabic category term than about dealing with the materials the term was devised to cover.

I don't like to think so, but the evidence compels me to believe that critical thinking today is bogged down in misunderstood Aristotelianism. Most critical energy seems to be going into the creation of new categories, ever more finely distinguished, with endless subcategories appended. All sensible limits have been exceeded in this academic pursuit. The footnote mentality has taken over.

A glaring example of scholarly obscurantism is Lawrence Alloway's catalogue essay for the exhibition of what he calls "systemic painting," at the Guggenheim Museum. Alloway epitomizes the philological (from the Greek meaning fondness of talk) weaknesses all down the line. Not only does he contribute yet another label to the brand-name-ridden culture, but he reviews and annotates everyone else's labels manufactured during the past decade.

Systemic painting, while never rigidly defined by Alloway, emerges as an illustration for his cavilling points concerning the nature of painting since the focal years of Abstract Expressionism. Picking my way through his text, I was unable to discover the essential difference between his views he discusses (Langsner, Fried, Greenberg, Arnason, Sandler, and for some reason, the collector Ben Heller). He omits the succinct characterizations offered by Barbara Rose altogether, and prefers to select a sentence here or there from other critics to tilt against.

In all this polemical verbiage, Alloway does little to clarify the *raison d'être* of the exhibition. He does, however, offer a subcategory in the body of his text, in a discussion that is largely esthetic. He persists in giving Barnett Newman a lion's share of charisma:

"The essentializing moves made by Newman to reduce the formal complexity of the elements in painting to large areas of a single color have an extraordinary importance. The paintings are a saddle-point between art predicated on expression and art as an object."

Art as an object, Alloway maintains, is seen "in opposition to the process of signification." Meaning then comes from the mere presence of the work of art, and "has to be sought in other ways." This leads Alloway into his proposal of the subcategory, "One Image" art.

In One Image Art, the meaning is located over a run or a set of paintings. "One Image art abolishes the lingering notion of History Painting that invention is the test of the artist." Form in One Image paintings, Alloway tells us, becomes meaningful not because of ingenuity or surprise but because of repetition and extension.

If this is so, it may well be asked why he mounts an exhibition with only one work by each artist. If meaning is indeed there, and there in series, why then, perform a tour de force such as this exhibition which seems to be there only to bolster Alloway's polemic?

Hairsplitting in esthetics is part of the function of esthetics, so that Alloway's point about the way object art is apprehended is of some interest.

Art is often seen first as an object, and only after as a signifying entity. A painting, for instance, is at once a made thing, put together by craftsmanship and finished by means of skill, and it is an image of some sort transcending its material base. Seeing an object—that is, *really* seeing an object, and not just absent-mindedly registering it—immediately entails signification. It doesn't require the bland ministrations of a One Image painter to bring out the object side of a painting. It is always there.

It is in the nature of esthetics to generalize whenever possible. There are books by philosophers exclusively devoted to esthetic problems in which no single work of art is discussed. Alloway's tendency—he is one of many at the moment—is to move further and further away from the single work of art into the realm of abstract ideas in which dialectics take over.

From this tendency comes my chief objection to the exhibition. It is clear that no single work is there because it has evoked some peculiar strong reaction in him. Most of the works are there because they represent a point in the abstract argument. Consequently, it is very difficult to look at the paintings individually at all. The set approach is dictated by the very title, not to mention the way the pictures are installed.

This alienation worked strongly on me in the case of a few artists

From left

Thomas Downing, "Reds Escalator," 1966. Acrylic on canvas, 105" x 60"

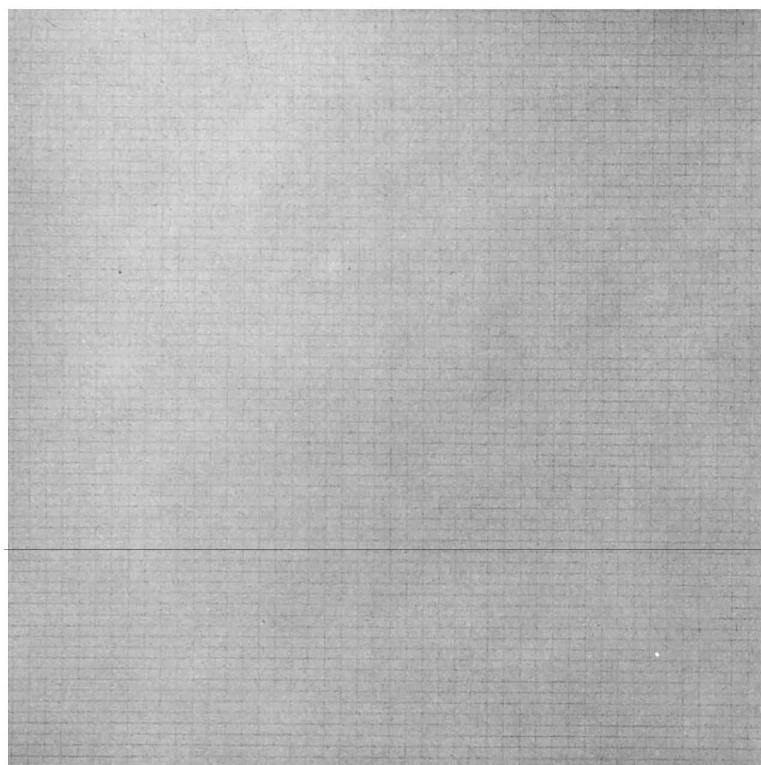
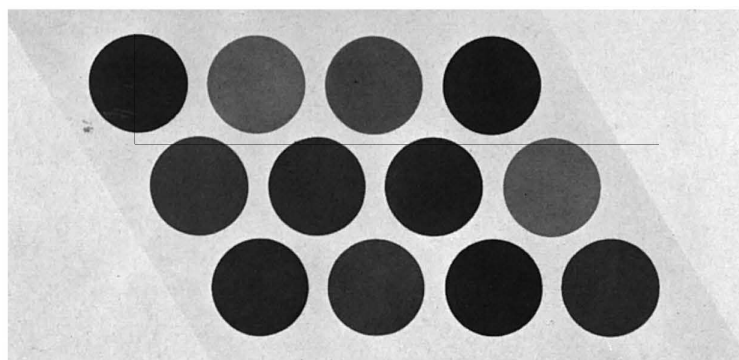
Agnes Martin, "The City," 1966. Acrylic on canvas, 72" x 72"

Al Held, "The Big End," 1966. Acrylic on canvas, 108" x 108"

Frank Stella, "Wolfboro IV," 1966. Fluorescent akdy and epoxy on canvas, 160½" x 100" x 4"

Jack Youngerman, "Blue White Red," 1965. Polymer emulsion on canvas, 108" x 87"

All photos courtesy The Solomon R. Guggenheim Museum



Alloway threw in to prove the broadness of his definition. For instance, there was a painting by Al Held, "The Big End." By definition, I suppose it belongs with Alloway's Field painters, but by history, by method, by what we know of the artist's temperament, by the artist's own previous statements, and by common sense, it is impossible to lump Held with the systemic painters. If there had been more than one painting by Held, his work would be easily disqualified from the systemic system.

As a matter of fact, even the painting chosen—a glistening, bumpy expanse of white with a tiny triangular shape centered at the top and one slightly larger triangular form at the bottom—eludes the definition Alloway and so many others insist upon: non-relational, or sometimes called non-hierarchical painting. The point and essence of Held's composition is precisely the moving effect produced when a very small element is put into tension with another very small element far away on the picture plane. This is relational painting par excellence.

Still, it didn't feel right, hung there in its solo maverick position. Nor did Jack Youngerman's "Blue White Red" seem quite at home. There is definitely a "hierarchical" quality to his shapes. The sense of vast field derives from Matisse not from Newman. He is closer to Clyfford Still in fact, than to Newman or younger versions of non-relational painters.

Among the more orthodox "systemic" painters, it is not surprising that Frank Stella leaps out of the context as a vigorous and inventive painter, despite Alloway's abolition of the notion that invention is the test of the artist. Stella's painting, "Wolfeboro 4," is a shaped canvas of the usual thickness (four inches deep) in which the disposition of forms is complex, ambiguous, bold and inventive. Obviously Stella works intuitively, arranging shapes and colors so that they satisfy inherent compositional demands. Whether or not he works it out in graphs first is beside the point. What comes across is a robust sensibility, striking out into painterly space to present an arresting image.

Several paintings illustrate the serial ideal, including the late Paul Feeley's four canvases with identical clover motifs and Thomas Downing's rhomboid carrier of identical circles in differing shades of red. These are relatively innocuous essays into an idea which command little attention. But the more obsessive application of the serial idea in terms of the grid, as offered by Agnes Martin, has the outstanding virtue of compelling contemplation. The thinness of her graph lines, the hypnotic paleness of the image, the regularity draw the eye into the web with subtle insistence.

I have not been able to figure out Ellsworth Kelly's intentions in his new work. Here, he exhibits five canvases, each identical in

size, flush against one another. They read from left to right, blue, green, yellow, orange, red. Each face is painted smooth, but the smoothness and single intensity of each color do not encourage reading the polyptich as what Alloway loves to call a "wholistic" image. Here the non-relational dogma makes no sense to me.

Bulletin: As I write this, a catalogue arrives in the mail. It is the 20th Anniversary Catalogue for Betty Parsons' Gallery, and it is written by none other than Alloway, who this time is presenting "Pattern Art."

It is instructive to see this catalogue as a post-script to the systemic opus. Here, Alloway is definitely carving his version of history in sharply faceted planes. He tells us that in the late 1940s and early 1950s, the artists Betty Parsons showed "included the non-expressionist painters of the now famous 1903-1913 generation: Newman, Pollock, Rothko, Still, Tomlin." (This leaves only that uncomfortable figure, Bill deKooning, in the other backyard.)

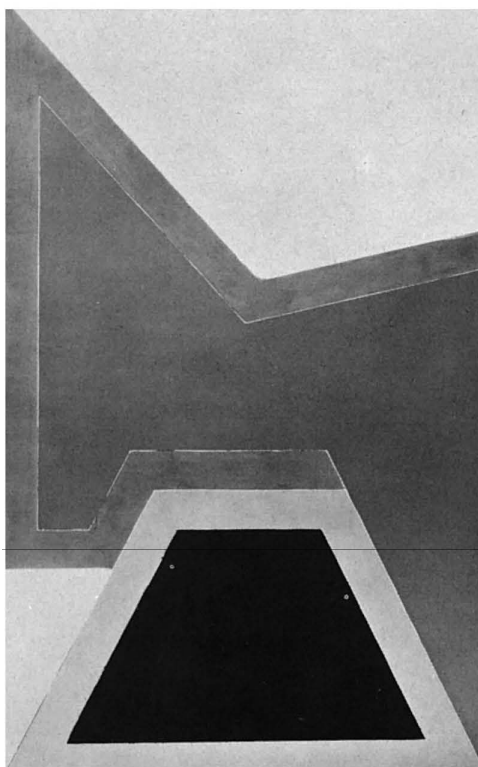
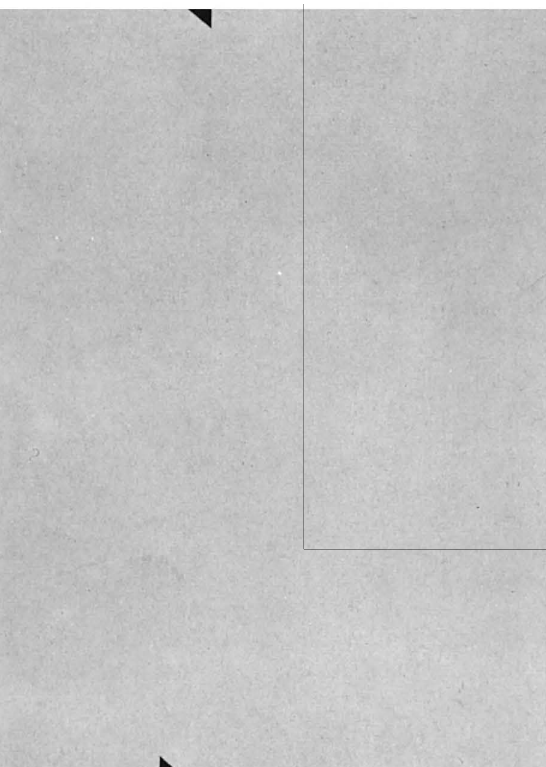
After this first period, Alloway comments, she showed Hard Edge painters, of which the present exhibition is a continuation. The artists in it are "part of the current of post-expressionist, systemic art." It turns out that "Pattern Art" is systemic art, so now we are graced with yet another label.

"In art the pattern, or model, originated by the artist can take the form of diagrammatic instructions to workmen or of visual analogues to the projected work. Once the pattern is set there will be random factors in its translation to the final state, a process that can be done either by the artist himself following his own instructions or others."

Like Greenberg, Alloway seems to have a carefully disguised physical antipathy for idioms that are not as neat, as hard, as unequivocal as pattern art. This can be seen in his diction:

"However, control of a work of art is possible apart from physical encounters in a paint-smeared present." His distaste for paint-smeared presents is all too apparent, as is his exclusivity as a critic. Somehow the harsh strictures seem out of place when applied to artists as thoughtful, as sensitive and broadminded as Robert Murray, Lyman Kipp and Jack Youngerman, all of whom are represented in the exhibition.

These perpetual rule-books issued by the contemporary critic seem to me to have cluttered up the discourse, and rendered almost useless the critical act itself. They have led to doctrinaire exhibitions, doctrinaire criticism, and a doctrinaire-brainwashed public. There are other ways, just as contemporary, just as cognizant of the shift in sensibility, which could be brought to bear on the problems of contemporary art. But they will have a hard time being registered in the intellectualistic scene today.



books

THE CENTERS OF CIVILIZATION SERIES, (University of Oklahoma Press, \$2.75 each):

BUKHARA, THE MEDIEVAL ACHIEVEMENT by Richard N. Frye

VIENNA IN THE AGE OF FRANZ JOSEF by Arthur J. May

EDINBURGH IN THE AGE OF SIR WALTER SCOTT by Douglas Young

This commendable series of small, informative books, of which these are the 17th, 18th, and 20th volumes, enables the reader to roam about the earth as a tourist of unlike cultures, each at its most distinctive period, taking in the sights of the times and a list of famous persons with some identifying actions. Each begins with a chapter of historical background, those for Bukhara and Edinburgh running back a couple of millennia, that of Vienna a portrait of the city in 1848 when Emperor Franz Josef commenced his 68-year reign. The Scottish volume surveys the early mixing of peoples in that country in such detail as I had never known: the original southern Brittones and northern Picts, who spoke Welsh, Saxons who came from Germany and Scots from Ulster, and so on to the Vikings from Denmark and Norway, the Normans and English. "It is a paradox that the earliest literature extant from Scotland is in Welsh, and the oldest Welsh literature extant is from what is now Scotland." There was also a great mixing of languages, including Greek and Latin brought in by the cultivated monks from Ireland who followed St. Columban to convert what came as a result of their successful labors to be called Scotland.

Richard Frye has his problems in keeping distinct the contributions of Bukhara to successive cultures actively centered in Samarkand or Baghdad. Indeed, each book of the series goes back and forth between city and region, city and nation, between the locality and its accompanying civilization, so that Douglas Young is as often writing about the Scots as about Edinburgh. On the whole, one observes, Vienna the most thoroughly dominated and focussed the surrounding culture. Sensibly, the authors include, with more or less information, communities of names, historical, literary, scientific, religious, institutional, which can serve as guides to further reading. Yet each volume, running from 150 to 200 pages, is satisfactorily informative if one intends to go no further. These are not guidebooks but miniatures of history, to be commended to the traveler in time who likes getting about rapidly.

THE VOICE OF THE PHOENIX by John Burchard (The M.I.T. Press, Cambridge, 1966, \$12.50)

I thoroughly enjoyed this book; picking it up from a pile of new books for review I could not lay it down until I had read most of it. As Dean Emeritus of the School of Humanities and Social Science at MIT, the author had not his job to think of or protect; he writes with biting and often bitter frankness about the remarkable German restoration of their cities and applies the same opinions and lessons to American work of the same period. He discusses in great detail, with explicit examples, the alternatives of reconstruction, whether to tear down the old building or restore it, whether to combine the ruins with new construction or mingle restored buildings with new buildings. He shows in each case where the job has been well done, where satisfactorily all things considered, where unfortunately, and where the effect is eyesore. He had known the architecture of pre-Hitler Germany and he was invited to tour the occupied zones in 1945 before reconstruction commenced. His criticism has the advantage of this historical perspective; he has also an unusually thorough acquaintance with American building. I find him occasionally uncharitable but usually with purpose. He has more praise for the Hermkes greenhouses at Hamburg and their park surroundings than for most of the historical restorations which draw tourists to the ancient civic

centers. He praises the cathedral square at Freiburg but deplors what happens when, every day, it is jammed with parked automobiles. He emphasizes the advantage of holding open competition among architects, often with a low cost level to be surmounted, as compared with our habit of assigning jobs to architects of fashionable reputation, often unmerited, or to the skilled advances of big architectural firms. In general, he is a conservative whose heart is in the middle ages, who prefers the large, old-fashioned German hotel bathtub to Knoll International hotel furnishings, who esteems comfort; yet he does not resent the new or the unusual when he thinks it graceful or appropriate, and he admires the Le Corbusier intrusion into the complacencies of Harvard.

Churches and theaters provide, as might be expected, the most interesting architectural comparisons; he has visited a great number of them. "The Beethovenhalle at Bonn is reminiscent in principle but not detail of the Royal Festival Hall in London. We have no match for either in pleasure—least of all in the pseudosophisticated, snobbish, new Philharmonic in New York—but not in Boston's ritualistic and soporific Symphony Hall, either."

"Certainly we do not compare favorably with the German achievement if we must cite Frank Lloyd Wright's disasters in Dallas and Phoenix; the clumsy, if functional campus theaters of Harrison and Abramowitz; the inflexible auditorium at MIT; the vulgar contemporary version of the Diamond Horseshoe conceived in other terms that is emerging at Lincoln Center in New York; or the vulgar 'Pavilion' in the new Los Angeles Music Center, at whose opening, a performance of Respighi's 'Roman Festivals' seemed entirely appropriate to the architecture. The fact is that any American architect has to deal with an attitude toward opera which is essentially one of fancy dress. The ushers at Los Angeles wear Nehru coats and hats . . . As long as American opera houses have to be endowed with private Founders Rooms . . . we cannot expect that our opera houses and theaters will match those of Germany any more than what is done inside them matches the German accomplishment."

While I might mitigate the plea slightly in favor of the Pavilion (entering it does lift my spirits, foyer, mirror-enclosed grand staircase, balconies, and particularly the auditorium with its good acoustics, better in the high, cheaper seats than in the orchestra), this indictment is accurate. "The buildings of Lincoln Center are tombstones of American cultural pretensions," one of the participating architects said to me a couple of years ago. It is one of the most graceless public areas in the world. The theaters at Gelsenkirchen and Munster created by their existence a fresh theatrical presence, the potential of new art.

The surge of German church building between 1945 and 1960 is fading into architectural "caprice." During this period "the Germans wanted churches more than we did, and so they got better ones just as they got better group housing, theaters, swimming baths, and parks, and we got better freeways, schools, and some office buildings." On the whole he tells that, although the range between good and bad in American architecture is greater than in Germany, we have no more first-rate architects and many more routine, callous, and bad builders. The text is supported by a wide selection of on the whole excellent photographs.

AN ALPHABET OF VISUAL EXPERIENCE, an Examination of the Basic Principles of Design by Robert C. Wilson (International Textbook Company, Scranton, Pennsylvania; no price given)

The author discusses "the basic elements of design": line, shape, texture, and color, in positive and negative space. Most of the 225 pages include a visual design and brief text, thus avoiding the danger of explaining in words to the exclusion of immediate graphic demonstration. The layout is forceful but sloppy in both color and black and white, not bad for a potential advertising designer but inadequate for anyone who may be intending to go on into the fine arts, nothing of the subtlety of Paul Klee in his work of similar purpose.

(Continued on page 33)

It is self-evident that architecture today as practiced by those big-name academicians, so like free-wheeling clothes stylists, is a trivial business. On this New Frontier, Sert with his Corbu pastiches, Rudolf, Yamasaki, Stone, the latter-day Gropius, Saarinen — as designers these men have become interior decorators who worked in the rain.

Young architects, reared on hoary travelogues presented as news, and pseudo-syntheses which reshuffle global resources between the mandatory pictures of missile and peasant, are alarmed that the world does not feel it owes them a living. They are not alone. These group neuroses are equally common to the scientist. Herein is the great paradox of specialism, the struggle between the whole man and the superman.

If our visual linkages atrophy further, we shall become incapable of accepting an image unless it is first reduced to two dimensions. Already the word touring is preferred to holiday, and even that is a hurried prelude to enjoyment of the real experience in photographic retrospect; the raw material of our engines of propaganda emerges larger than life, generalized character-drawing turns individuals into spokesmen, we are invited in exalted terms to man mythical barricades, and standardized copy squeezes from anyone the essence of something or other.

The emotional development of a society is in the hands of its artists. Just as there should be a tradition of fine thought, so there should be a tradition of fine feeling.

Art is not therapy. There is a big difference between the man who discovers for himself and the man who arouses emotion in a way in which he himself is not necessarily affected. That is the persuasion industry: architecture is action.

Conventional architectural wisdom is being undermined from social and technical ends.

We can no longer be concerned simply with the addition of single buildings for isolated functions. The static approach of uncoordinated individual uses is irrelevant in urban agglomerations of millions or tens of millions.

Pressures are being felt from the development of lightweight assembly techniques, regulating systems for component design, three-dimensional jointing problems. Systematic relation-

ships, additive growth patterns, clusters, and families of related assemblies are extending our experience beyond three-dimensional rectilinear systems.

The Frontier of Architecture now is not stylistic, it is defined by technological advance and the real needs of an urbanizing world.

The Way Out

The bridge is Urban Design. Giving form to policy at city-scale, it is by definition the design of urban sectors, structures, and channels of movement, seeing the city as a combination of land-use systems. It is increasingly concerned with programs and processes. It has little to do with the cosmetic treatment of space left over between buildings and much to do with the creation of whole environments. It is not townscaping but townmaking.

The aspect of the present-day college campus is symptomatic of widespread breakdown. Post-war British universities have been described as the Middle Ages with 13-amp. power points. At M.I.T., instead of a micro-city of technical elegance, we have a collection of ex-World Fair stock. On C.I.T. campus, while we still see the vestiges of Hornbostel's plans for an academic powerhouse, this Institute is underbuilt. But it is no longer an adequate solution to pursue distinction by infilling piecemeal the left-over spaces. A long-range strategy for physical plant is essential. In areas of high concentration, the day of the independent building at grade is over.

An increasing degree of organization, while facilitating participation in creeping change, handicaps large-scale innovation. In a pragmatic society like the U.S.A. where all things are considered possible, all things should be possible.

It is not the difference between working in two, three, or four dimensions. Nor does it matter under what label you hire—the scale of operations can be satisfied by nothing less than big team effort. Distinguished solo careers, uncircumscribed by institutional considerations, are hard to come by in a world of staggering complexity which cannot afford the luxury of being casual about the uses of knowledge.

Geoffrey Copcutt
Carnegie Institute of Technology
Excerpted from the *Carnegie Review*

The three principal exhibition areas at Canada's World Exposition, Expo 67, in Montreal (April 28-October 27) are on land reclaimed from the St. Lawrence River—two are islands and one a spit of land on the north bank of the river. One of the islands is completely man-made; the other, Ile Ste-Helene, has been widened and lengthened. Water has become the visual theme of the exposition and canals, lagoons and lakes carry this visual element into the interior of the islands.

The central ideological theme of the World's Fair has been borrowed from the title and content of a book by Saint-Exupery, "Man and His World"—his hopes, his fears, his aspirations, his ideas and endeavors, spiritual and material. Four sub-themes result: Man the Explorer, Man the Creator, Man the Producer, Man and Society—each developed in separate exhibitions by the host country. Expo 67 is to express that the world is a "World of Men" rather than a "World of Nations" competing with one another. Accordingly, the sub-theme buildings in Montreal shall determine the over-all order and national pavilions shall subordinate themselves to this order and shall address themselves to the given theme as closely as possible.

The site allotted to the Federal Republic of Germany consists of a large pavilion area, on the edge of the lake on Ile Notre-Dame, and beside it a small island. Both the exhibits area and the small island are covered by a giant tent-

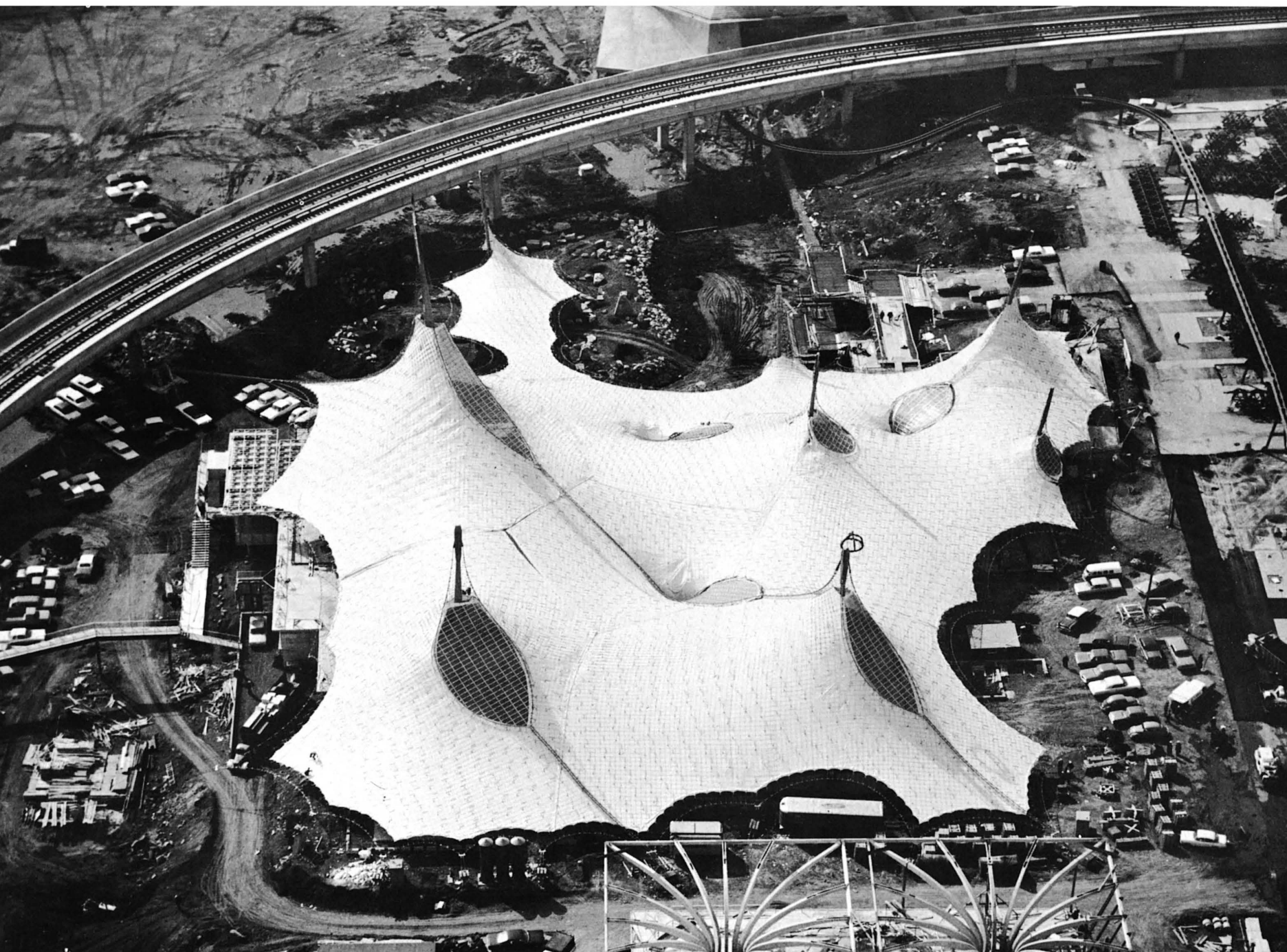
like mesh supported by a number of trussed masts. A skin of heavy translucent fabric is suspended from the mesh.

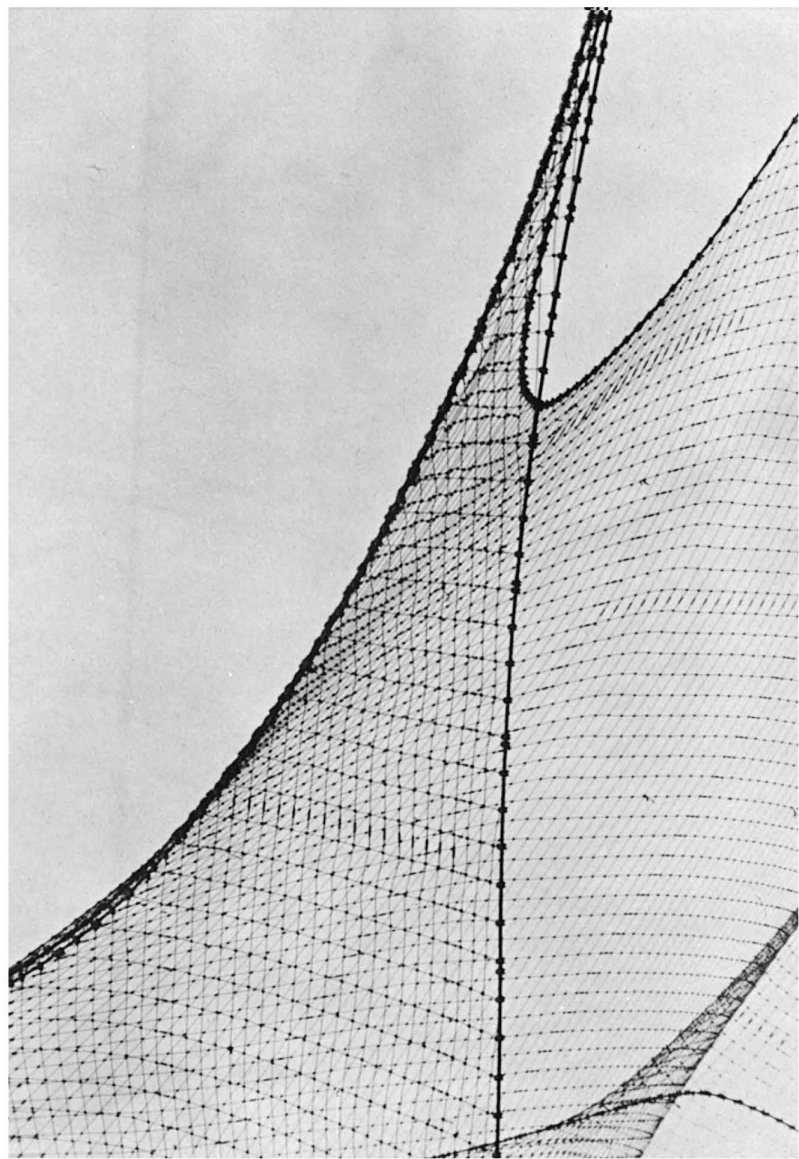
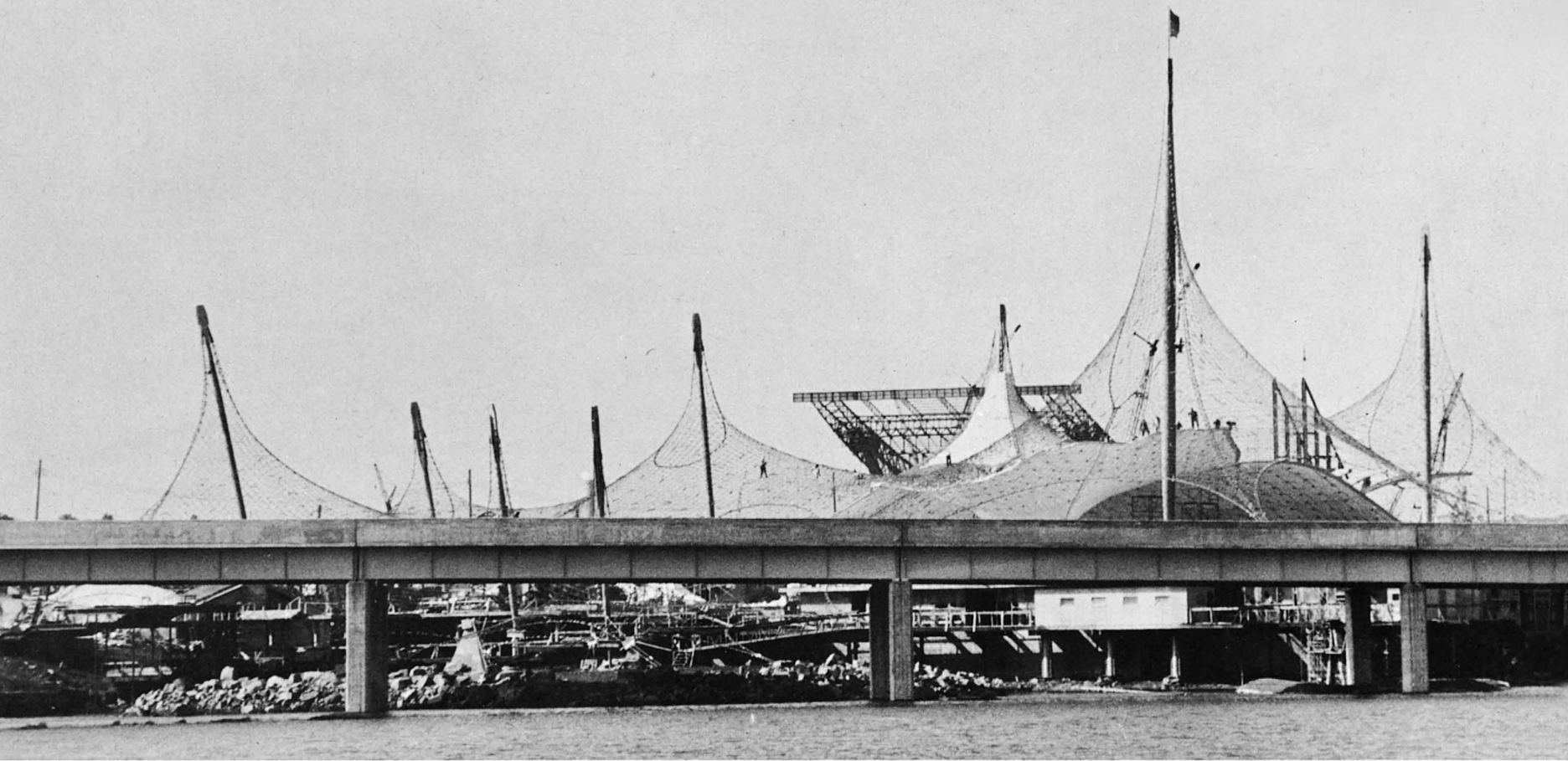
Visitors enter the pavilion from a plaza overlooking the lake, into the central foyer of the main building. Individual display areas are located freely on a terraced landscape at ground level. Within the framework of Expo's general Theme, "Man and his World," the German exhibition will illustrate its land and its people, art, science, the economy and the German way of life, the problems facing the nation and how they are solved.

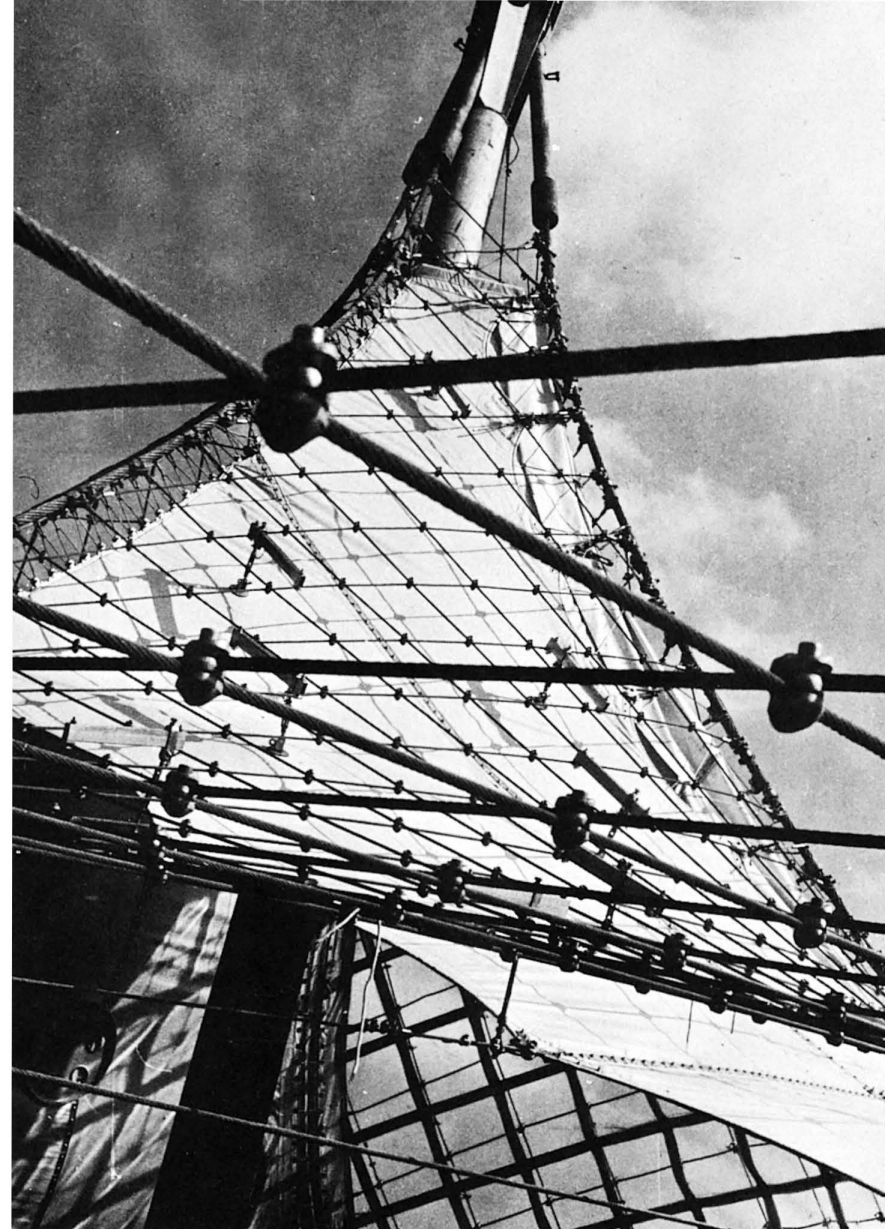
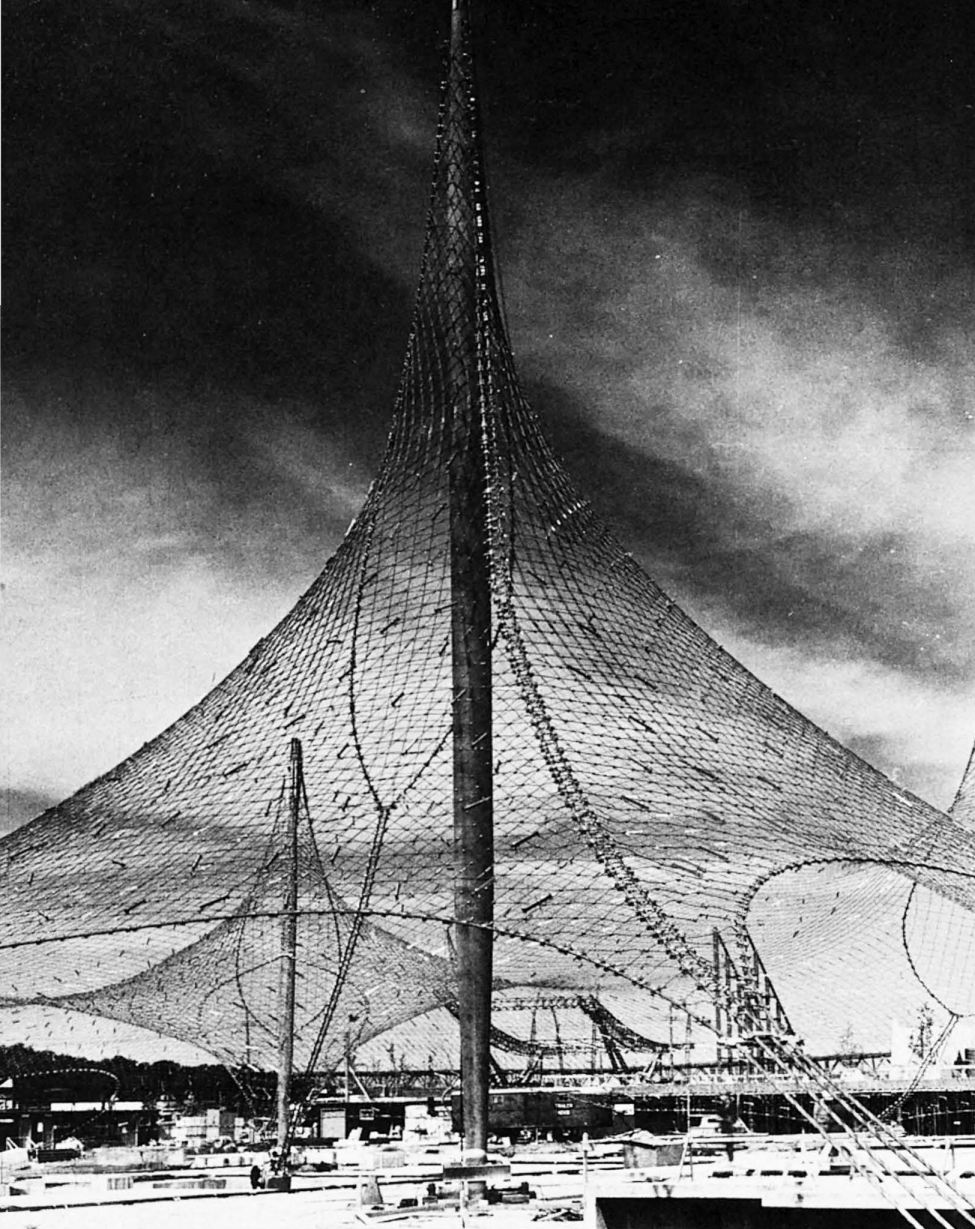
A series of multi-level platforms over the terraces in the interior, connected by means of walks, galleries and stairs, provide a view of the exhibition grounds. The lookout platform in the center of the pavilion provides a view of the interior display areas and of the site. A 250-seat auditorium will house film shows, lectures and concerts by chamber orchestras, soloists and so on. Restaurants are situated at key points throughout the pavilion, overlooking the water.

The transparent skin, supported by a prestressed cable net, transforms the pavilion into a luminous symbol at nighttime. The cable "eyes" at the high and low points of the tent are covered by reinforced transparent acrylic glass. The construction of the terraced landscape consists of steel-tubing frames and wire mesh. Every extraneous structural element has

GERMAN PAVILION AT EXPO 67 FREI OTTO AND ROLF GUTBROD





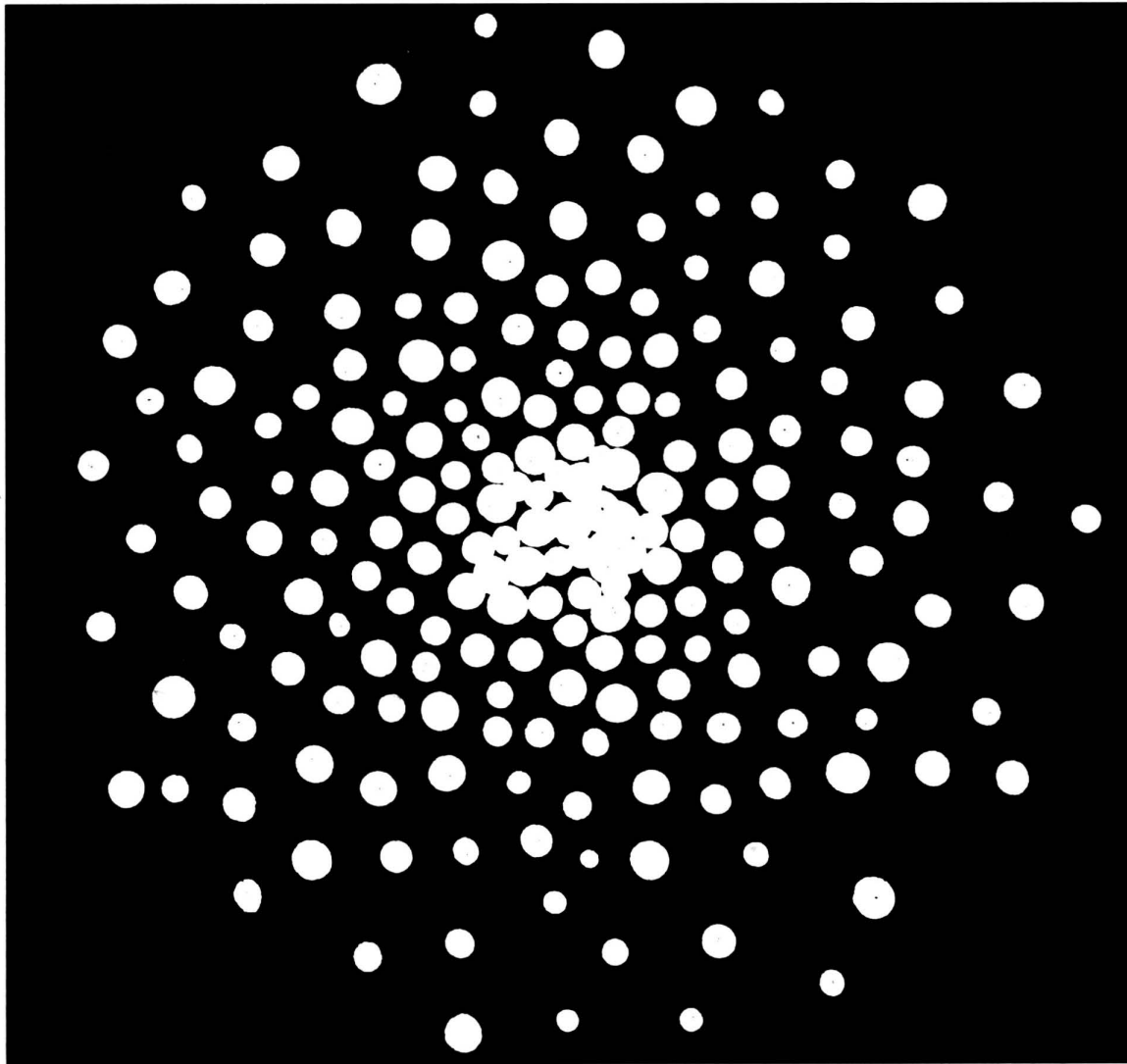


been avoided. The chosen method of construction is unusually light in weight for purposes of transportation. Quick assembly is possible, even in winter weather. Snow and wind loads can be absorbed.

The main space of the pavilion will be kept open at the sides, weather permitting, but is protected by glass screen walls. The openings can be closed by heavy curtains. The pavilion can be dismantled and reassembled either in identical or different form. Heating is provided by electric radiant heaters. For air circulation cold air is piped in at the bottom and used air is exhausted at the top.



The author proposes in this paper abstracted from his book, "The Solar System... a New Model," soon to be published by The Philosophical Library, that there is a striking parallel between the form and function of the solar system and the structure of quantum level atoms. The evolution of the solar system appears to match the progression of the Periodic Table of Elements with planet-moon systems as the counterpart of the electron-shell sequences of atomic particles. Moving down the periodic table (back in time), the analogy indicates that the solar system was once a planet-moon system and suggests that planet-moon systems evolve within the matrix of their solar systems into stellar maturity themselves in a continuous pattern of growth and replication not unlike repetitive crystal formation. This in turn implies a universal Determinism, which is, of course, anathema to the scientist at work. Ed.



Equilibrium Distribution of Points in Space. Diagram serves equally well to represent a 3-dimensional star cluster and a typical electromagnetic distribution of points in space. This similarity started Einstein on his lengthy but unsuccessful attempt to unify the laws governing gravitation and electromagnetism.

Sam Elton is an industrial designer and off-hours theoretical physicist associated with the California Museum of Science and Industry whose last work to appear in A & A was the Feb./Mar. 1966 issue cover article. Having been trained in the belief that "design is problem solving," he began a search for the biggest problem existing in contemporary science. This article and his book, which also will be published this month, are the result.

In the early days of atomic exploration the familiar solar system served as a model for the invisible systems within atoms. The functioning of atoms could be observed but not their internal forms; the form of the solar system had long been observed but its function was obscure and it seemed as if the analogy might be a very useful problem solver. Unfortunately this promising parallel soon collapsed when the interior design of atoms proved to be far more complicated than our traditional picture of the solar system.

It was somewhat surprising, then, when a high-speed solar system projector that I was working on projected a typical atomic pattern on the viewing screen. The projector itself merely showed the members of the solar system orbiting around the sun but when the projection was accelerated a pattern of concentric light-rings appeared, a pattern similar to those produced by the diffraction of light waves, x-rays or an electron beam. The crucial point about patterns of this type is that they are wave patterns and thus the projector was telling me (in effect) that the solar system is a wave system, not a system of giant "particles" as tradi-

tionally visualized. I decided to investigate the possibility that the atom system-solar system parallel might have been abandoned too hastily but with this difference: that the analogy be reversed. Instead of classical celestial mechanics being made to serve as a model of mechanics within the atom that modern atomic information (quantum mechanics) might be useful in the construction of an entirely new model of the solar system.

A New Parallel. The fundamentals of quantum mechanics are very simple and of extraordinary interest from a design point of view. Electrons orbit around the nucleus at distances and in groups that are all determined by the squares of 1,2,3,4,5, etc. In practice this n-squared rule, as it is called, indicates that the third group of electrons, for example, shall be nine times as far from the nucleus and contain nine times as many members as the first group and so on for other electron groups or shells. Now the original Rutherford-Bohr Solar System parallel equated planets with electrons and this factor may well have led to the quick demise of the theory. Planets quite apparently do not come in assorted groups. However, if we equate moon groups with electron groups (as, surprisingly, no one has attempted to date) we discover an astonishing parallel. The Saturn system for example is almost exactly nine times as far from the sun as the earth-moon system and it possesses nine moons in contrast to our lonely lunar companion. The Jupiter system is a little over four times as far from the sun as we are and contains four significantly large moons (its ultra-small fragmentary moons are undoubtedly captured asteroids). It begins to seem as if there is an almost exact parallel between atom system and solar system! Below is a list of significant planet-moon systems, their distances from the sun in unit of 100 million miles and for comparison an atomic n-squared list.

Earth-Moon System	Jupiter System	Saturn System	Uranus System	Neptune System	Pluto*
.93	4.83	8.87	17.83	27.95	36.75
1	4	9	16	25	36

From these nearly similar lists it can be seen that a scaled down plan of solar system orbits and a scaled up plan of idealized electron orbits would almost match. To paraphrase Kepler when, using his laws, he was faced with roughly similar situation regarding deviation from his calculations of the distances of the planets from the sun, "no one will wonder at the slight discrepancies considering the great distances involved."

Before we can continue investigating the new parallel a few more points about atomic design should be mentioned. While it is true that the number of permissible electron orbits follows the sequence 1,4,9,16 it happens that two (and only two) electrons may occupy any one orbit and then only if the two are spinning in opposite directions. Thus typical electron shell populations are described by number sequences like the following: 2-8 neon, 2-8-18-8 krypton, 2-8-18-18-2 barium, 2-8-18-32-18-8-2 radium. It is clear that the outer shells are limited in membership by another basic property governing atom design: overall symmetry. For example, in the solar system we do not observe two moons in the same orbit (with or without opposite spin) and thus in our comparisons we will use n^2 rather than $2(n^2)$. The element strontium contains electrons grouped as follows: 2-8-18-8-2. For solar system comparison the sequence reduces to 1-4-9-4-1; it is instantly clear that moons (at least 200 miles in diameter, anything smaller being considered an asteroid) are distributed in the solar system similarly. Earth-1, Jupiter-4, Saturn-9, Uranus-4 and Neptune-1.

The Conflict of Two Sciences. In view of the above similarities is it not reasonable to suspect that similar sets of rules govern the form-function of both atom systems and solar systems? If the paral-

*Moon-less Pluto is included to show overall consistency of n^2 spacing.

lel developed so far is more than just an entertaining coincidence or number game it may suggest a way out of the major scientific dilemma afflicting contemporary physics which must still utilize two conflicting sets of rules when dealing with micro and macro systems: gravitational laws govern large quantities of matter but very different, energy laws are applied to sub-microscopic matter.

We have shown that, in spite of a vast difference in size, the physical forms of the solar system and atom are similar; we have yet to show that they function in a similar manner. If we assume that they do function similarly it follows (from the basic fact that the orbit of an electron expands when the electron rises in energy state) that a planet or moon with a rising mean energy state should recede from its primary. Existing gravitational laws do not make any such prediction. Curiously enough it is now known, however, that our planet *is* rising gradually in respect to its mean energy state *and* receding from the sun, as indicated by our expanding "years," i.e., period of revolution. Our moon also recedes from the earth a few inches per year and thus the parallel predicts that the moon's energy state, while unquestionably lower than earth's, is rising at a relatively more rapid rate. To test the validity of these large scale predictions from an atomic rule it is only necessary to put an artificial satellite in earth-orbit and then heat the satellite to a high degree. If our analogy is valid the orbit of the satellite will expand and thus its period of revolution will increase enabling us to measure the effect of energy state change upon earth-satellite gravitational coupling. Of course the same line of reasoning predicts that an unheated satellite will, in long spans of time, acquire a contracting orbit in response to earth's very gradual mean energy state rise. Many years of observation would be required for this experiment but it is already known that one, and possibly both, of the ultra-small Martian moons have contracting orbits (as does Jupiter V, a very small asteroid-moon located nearer that planet than the four very large moons of Jupiter).

The above can be summed up by stating that we have added relative plus and minus energy state signs to mass in Newton's most famous equation, $f=gm'm"/d^2$. This move has the effect of making the gravitational law function like Coulomb's law of electrostatic charges with relatively different energy states taking the place of electrical charge values. In this picture the members of the solar system are treated exclusively as "concentrations of energy" and their interactions are governed by a characteristic energy law, a not unreasonable treatment when we recall that each member consists entirely of atoms which are themselves exclusively energy systems. However, to prove successful this new "gravitational charge" formula must overcome some serious obstacles; while achieving unification with a basic electrical law it destroys the concept of absolute mass, changes the gravitational constant (g) into a merely mathematical constant and states that gravitation is polarized.

It will help at this point to bring the abstract atom parallel down to a concrete level. We predicted that a satellite remaining in orbit for many years would be drawn closer to earth as earth's temperature gradually increased. The illustration using an unheated satellite moving closer to earth indicates, according to our gravity "charge" approach, that earth's gravitational field strength rises in time. If we extend this concept back in time two or three billion years we arrive at a weaker gravitational field resembling say that of Mars; if we likewise extend the important evidence of an expanding earth back in time we arrive at a smaller earth quite probably resembling Mars in size. Thus we arrive at a picture of earth quite apparently rising in "mass" during the last few billion years; this is an example of what was meant earlier when we said that the charged gravity formula destroys the concept of absolute mass.

The idea that gravity, like electricity, is polarized can be illustrated this way. Conventional gravitational thinking completely ignores the very steep

energy gradient (or temperature gradient) between earth's core and its relatively cold surface layers. With our approach we must be very seriously concerned with the distribution of energy levels in any one astronomical object; in brief we must picture that earth's high temperature inner-core is the *positive* gravitational pole and that the cold surface layer is the *negative* gravitational pole distributed over the surface as in analogous electrical situations. If the heated satellite test is successful it will mean that this bi-polar concept is valid. It might be imagined that existing observations and tests would have already decided this issue but such is not the case. We, and all our measuring instruments, have been so immersed in a negative gravitational domain that we would not even suspect its existence.

A New History of The Solar System. The high speed solar system projector can now portray the history of the solar system with a high degree of precision. Earth's expanding orbit plays an important part in this history, because it is known that earth's surface temperature has been remarkably constant for at least two—possibly three—billion years it becomes necessary to visualize a steadily rising solar energy output during this time. Going *back* in time, with our projector in reverse, we must diminish the intensity and size of the sun image; we will do likewise with the planet images for reasons that follow.

As the solar system pattern on the screen uniformly contracts the small planets and moons in the system soon become too faint to be observable. We reduce all intervals in the system by one-half, then half again; we are in effect retracing the "half-lives" of the system. After about 10 such reductions we turn off the high speed mechanism and study the results. There on the screen is a perfect reproduction of the present Jupiter system! The diameter of the sun is reduced to about one-tenth its present value, and the four "giant" planets are now merely large moons. These satellites are now in typical lunar orbits and the sun is a jupiter-type planet.

The remarkable conclusion arrived at is that the complete history of the solar system—past, *present* and future—can be found by a brief inspection of the Periodic Table of Elements. Previously we mentioned that the electron shells of strontium (minus the opposite spin factor) correspond to existing moon groups in the solar system 1-4-9-4-1 (Earth-Jupiter-Saturn-Uranus-Neptune); moving down the periodic table (back in time) we see that krypton has the shell sequence 1-4-9-4 (E-J-S-U). Going back further we arrive at the sequence 1-4-9-1—the Uranus system had only one moon. Continuing down the table and back in time we find the Saturn system dwindling as per 1-4-4-1 (Calcium). The implication is that the Saturn and Uranus systems have been building up gradually during the last two billion years or so, thus accounting for the graduated sizes of their moons. In addition, the atomic analogy states that the Earth-Moon system and the Jupiter system have been "closed shells" (completed) for a very long time.¹

Critical Testing. How do we obtain definite proof in respect to the theory that the solar system has climbed, and is still climbing, a giant periodic table? Except for certain purely technical difficulties the proof should be easy to obtain.

The gradual build-up of the system pictured by the periodic table analogy states that the sun is by far the oldest member of the system.²

¹It is amusing to recall that our analogy with quantum mechanics—with its famous uncertainty and indeterminism—is able to predict precisely how the solar system was formed while the Newtonian approach (noted for its determinism) leaves all these factors about the planets and moons entirely up to chance.

²If we had continued to run the high speed projector back in time, contracting the space scale by a factor of well over one thousand, the sun's nearest stellar neighbors would have been drawn into the picture.

These stars were, at that time, planetary neighbors of the sun in a system resembling our present solar system.

The next oldest members are now the four "giant" planets; in our theory these planets were once terrestrial-type objects which have since expanded due to an internal energization process which can be pictured by projecting earth's mean energy state rise a few billion years into the future. The next oldest members are Venus, Earth and the somewhat younger Mars. The youngest members are Mercury and Pluto and assorted moons. Some of these moons are not yet through with the accumulation or condensation process and thus not "quantum" members in full standing.

Thus the ages of quantum members (above 1000+ miles in diameter) are predicted to be in direct relation to their present sizes. In turn the sizes of full-fledged members are *not* closely linked to amounts-of-matter, as in Newtonian theory; but instead the sizes are the result of the condition of matter: its present state of energization and resulting degree of expansion. Therefore the age, mean energy state and density estimates arrived at by this method differ so sharply from all existing estimates (based on the simultaneous origin of all members 5.5 billion years ago and the Newtonian concept of absolute, non-relative unchanging mass) that a few trips to our nearest spatial neighbors will enable us to arrive at a crucial decision in the near future. The quantum theory proposed here predicts that *all* major solar system members started the same way (as large moons or small planets) but not at the same time and that present, very noticeable differences are fundamentally the result of age differences.

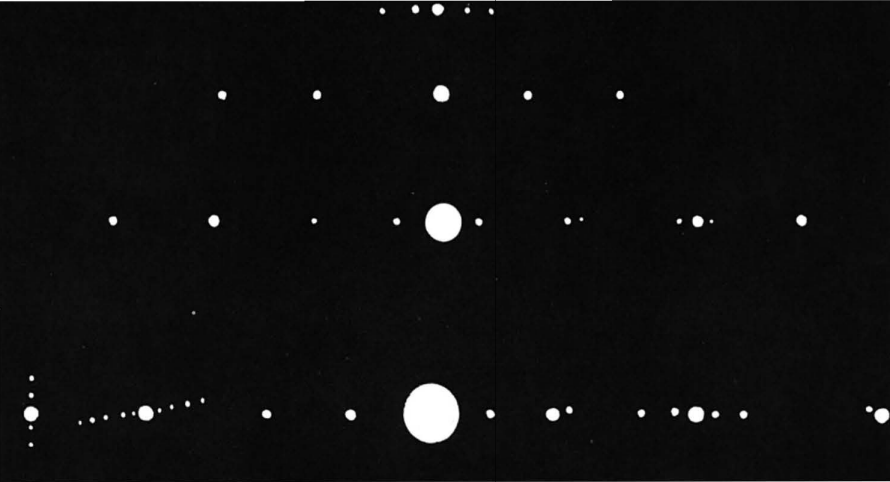
A few months ago in the *Astrophysical Journal* the learned magnetohydrodynamicist, Alfven, suggested that the key to the solar system's history was hidden in the answer to the question "... Why do the planet-and-moons systems resemble smaller solar systems...?" The high speed projector answers this question in a unique way; it goes back in time and "shows" that the solar system once *was* a planet-and-moons system; then the projector proceeds forward in time, augmenting and expanding the system in such a way that it produces several near-replicas of itself. The most exact replica is of course the present Jupiter system. If we now run the machine into the future it indicates that the Jupiter system will inevitably develop into a full-scale solar system. One by one the now giant planets will develop into stars, and their moons will expand and evolve into planets accompanied, in many cases, by "new" moons.

If this appears somewhat incredible consider the following; it is generally agreed that our galaxy contains hundreds of millions of "solar systems." Many of these systems must be older than our own and thus it follows that they should be visible now as small, multiple star groups, according to the above analysis. Hundreds of such systems are well known to astronomers; they look like expanded solar systems with several luminous members. Our approach suggests that that is precisely what they are.

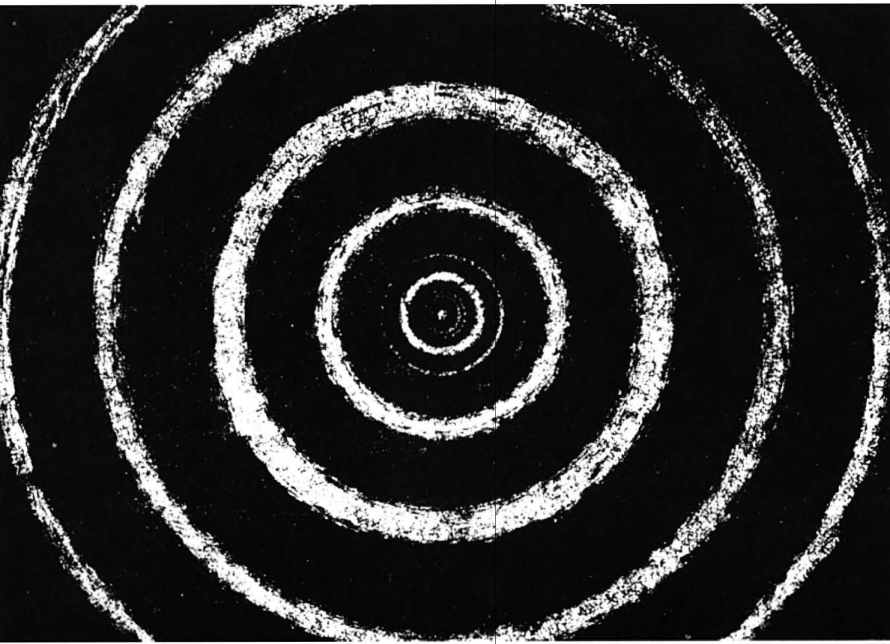
Tentative Conclusions. Perhaps the most significant idea (and most disconcerting to scientists who avoid, for obvious reasons, injecting in their work any hypothesis suggesting determinism) that this new approach offers, beyond the atomic analogy, is that a solar system is a process: an evolutionary and self-reproductive process at that. Small systems expand and evolve.* The formation of moon systems within a solar system is thus pictured as a matrix-guided process. In due time, a solar system thus becomes comparable to a "giant molecule" containing several atoms (these "atoms" were initially comparable to electron groups).

Even now the Jupiter system, which we have defined as a closed electron shell, shows signs of

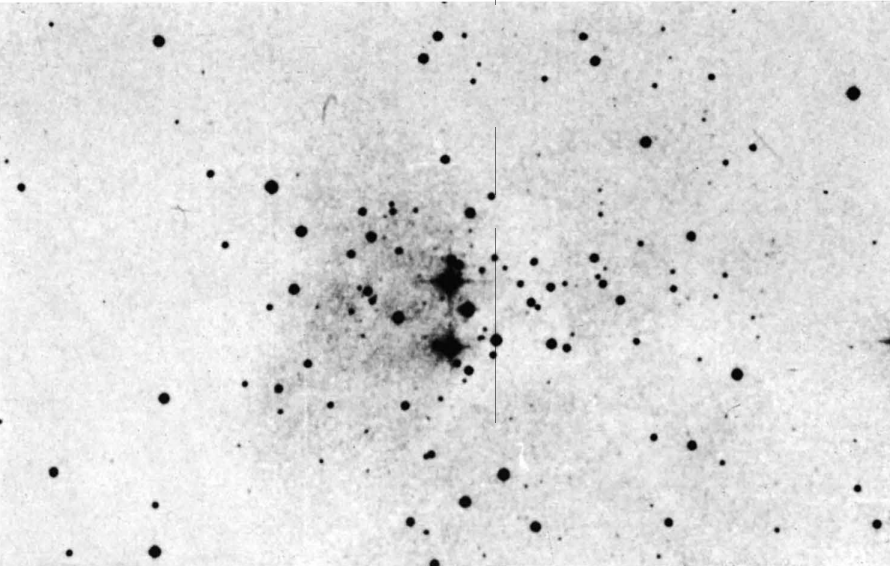
*The analogy that immediately comes to mind concerns crystal formation; large pre-existing crystals aid in the formation of new, small crystals that form at specific locations relative to the larger crystals.



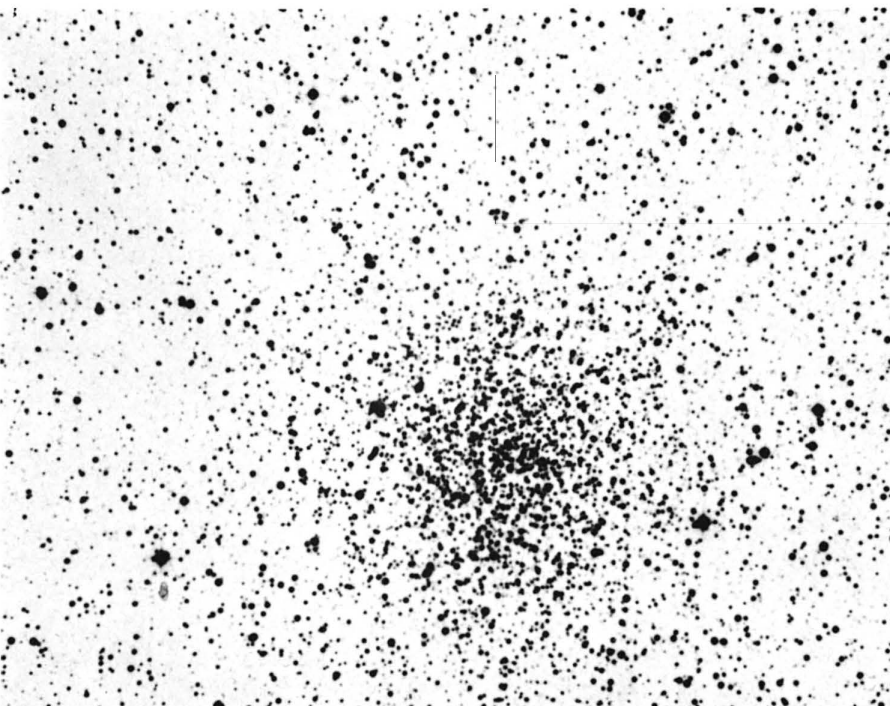
Expanding Solar System History. Line 1: The initial solar system. Line 2: Expanding system (with expansions of individual members). Line 3: The four "inner" planets condense; a few moons are added. Line 4: The solar system at present; left to right, Sun, Mercury, Earth-Moon, Jupiter and Neptune. Note the present Jupiter system resembles closely the initial solar system.



Equivalent Atom—Solar System Plan as seen by an observer in space over a long period of time. It resembles wave diffraction pattern and represents the distribution of electron groups in atom or moon groups in Solar System. Heavy lines indicate orbits of planet-and-moon systems: Earth—1 moon, Jupiter—4, Saturn—9, Uranus—4, Neptune—1. Symmetrical distribution of significantly large moons similar to electron distribution in atom.



Typical Small Star Cluster observed (by chance) in a "plan" view. Note many binaries, triplets, etc. Emulsion exaggerates star sizes.



Spherical Star System in the Making. The more advanced spherical clusters are found above or below the galactic plane and often contain a million or more stars.

future development; inside the orbits of the four large moons there is a single moon about 100 miles in diameter. When the system expands and Jupiter becomes more energetic (thus increasing its gravitational interaction with relatively cold dust and debris within and around the solar system) it will capture and build more members in this "inside" zone. Also, the periphery of the present system there are several small moons; these are pictured as "condensing rings" which will someday produce analogs to Pluto and Triton (the very large satellite of Neptune). As the intervals between Jupiter's major satellites expand it is pictured that they too will build-up assorted moon systems. Eventually the process will result in a system resembling our present solar system—in general but not in every detail. The proton-like charge at the center of the system must attract and build-up an increasing and balancing number of electron-like satellites but the whole system is not critically "sensitive" to the number of permissible, medium energy state planets. In short, solar system "isotopes" are predicted, systems that are approximately similar except for varying numbers of moon-less planets.

If these suggestions and projections are correct the "night sky" should contain many single stars, a great many binaries (projected Earth-Moon and Neptune-Triton systems) and thousands of observable triplets, quadruplets, etc., plus very advanced (many generation) groups containing hundreds and even thousands of stars. Of course observation agrees with these predictions but the essential point is that we arrived at an explanation of stellar associations by a long and rigorous route governed by the principles of energy and quantum physics. By way of contrast, current theory explains individual stars, binaries, etc., solar systems, star groups of all types and sizes and even galaxies by invoking one imagined kind of event: the condensation of a nebulous cloud of gas and dust through the agency of that something called "self-gravitation." It is possible that this popular explanatory device is valid but it contains a fundamental weakness in that the one imagined type of formative event is called upon to create—"ready-made," so to speak—such a diversity of objects and systems. Not too long ago all forms and varieties of living organisms on our planet were "explained" by appeal to an imagined, formative (but arbitrary) creative "event." I believe that this type of explanation, now strongly entrenched in astronomy (except in the single area of stellar evolution), will be replaced by extensive process theories as has already happened in other major branches of science.

So we arrive at possible new insights regarding the form and function of the solar system. Many years ago the scientific community gave up seeking answers to the questions Why does earth have only one large moon? Why does Saturn have nine moons. Neptune one large moon and Venus none? But about the time that these questions were being relegated "forever" to the meaningless category, the precise structure of atoms was being brought to light by Bohr, De Broglie, Schrodinger, Heisenberg and Pauli; their discoveries appeared to destroy the atom-solar system parallel almost completely. However, we see on closer examination that it is precisely their discoveries that enable us to understand the riddle of solar system design. Its "design" is a large scale copy of the quantum level atom. Saturn, Jupiter, Earth and even Neptune have precisely the number of satellites that they should have in accord with their relative distances from the sun and the requirements of overall symmetry. (Uranus has five moons instead of four but one of these could be discounted due to its insignificant size.) As for the larger function of the solar system—a concept not even approachable in contemporary science—our parallel suggests that it has one major, built-in function: reproduction, or replication, the production of near-copies of itself. Crazy? Perhaps, but as a great scientist once said, the basic question is: is it crazy enough?

PAINTINGS BY HERB GREENE

While the relationship of painting and architecture is a limited and tenuous one, a single factor strongly influences both the painting and architecture of Herb Greene: the belief that events which happen independently of each other can be related and made dependent, the collective result helping us to understand better

the individual event.

The starting point for both his paintings and architecture is the selection of events felt to possess significant relevancies, followed by the arrangement of them into an interlocked community. In the paintings, a selection of photographed and hand painted objects and events are presented with the attempt to make the objects in the photographs and in the non-photographed areas exert their influence be-

yond themselves and on to one another, much as past and present combine in our interpretation of events occurring around us. With Greene's architecture, there is an attempt to coordinate forms abstracted from factors such as a clients' collection of, say, Victorian furniture, woodwork, stained glass windows, and forms bearing the impress of the surrounding landscape. Of course, the architect's scale of value judgments influences the choice of the

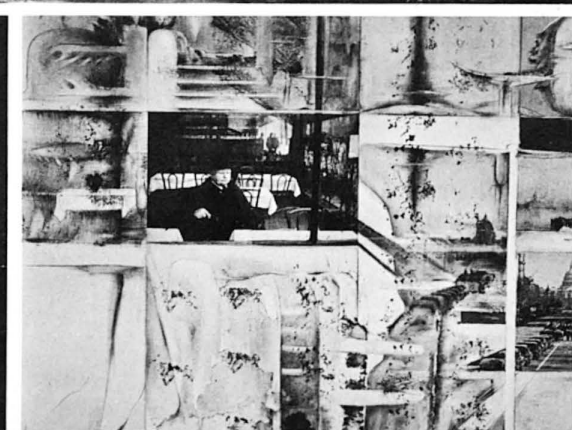


factors and the character of the final form, but the aim is to build up the final form of the work from these several considerations, abstracting the forms selected but not so far as to make them utterly remote from their sources. Also, the things included, such as photographs in the paintings and stained glass windows and Victorian woodwork in the architecture, are cultivated as vivid details. They may merge and yet continue to exert their individuality. It is felt that by harmonizing vigorously contrasting

entities, the quality and possibly the strength of the esthetic experience is furthered. We often harbor a good deal of already harmonized memory experience when we are confronted with an event of high significance from the past. Thus, there is the possibility of setting off deep resonances by adding strongly contrasting elements, strong contrasts which individually contain a wealth of familiarity and memory association. To achieve this effect, Greene involves his painting and architecture

intimately with time. Photographs of events often evoke a strong sense of the time in which they occurred.

Time also plays an intimate role in *experiencing* his architecture and painting. While the overall design strives to make an immediate impact somewhat in the manner of a Rorschach pattern or much abstract expressionist painting, the juxtaposition of diverse elements can require time to comprehend spatial and other relationships of the juxtaposed objects.



1. Montage with Lincoln and Photos Circa 1860 48" x 48"
2. Montage with Hitler; Cartier-Bresson 48" x 72" (Cartier-Bresson—People of Moscow)
3. Montage with Frenchman as German Troops Enter Marseilles; Emil Shulthess 48" x 66" (Emil Shulthess—Africa)
4. Montage with Lincoln and Kennedy Funeral 28" x 48"
5. Montage with Old Woman, 48" x 64"
6. Montage with Rembrandt; Cartier-Bresson—Turner, Kennedy Cortège 48" x 96" (Cartier-Bresson—The Europeans)
7. Montage with Vermeer; Cartier-Bresson 48" x 72" (Cartier-Bresson—The Decisive Moment)





Freeway view of Pico Valley approach to Valencia looking north.

Based on the Garden City, Radburn Idea and the Neighborhood Unit, Valencia's heart will be a multi-decked civic center similar to that of Cumbernauld, and structured as follows:

1. **Subtown.** Levels below the ground level will contain the station stops for the public transportation network, the bus terminal, trucking roads, loading facilities, parking and all utilitarian uses (heating, air conditioning, utility lines etc.)
2. **Downtown** will consist of a two-level cross mall, covered and air-conditioned, and, adjoining it, four levels of parking decks.
3. **Edgetown**, along the borders of the parking decks, consists of terrace housing and high rise apartment towers overlooking the green belt which frames the city center.
4. **Uptown** rises from a platform formed by the roofs of the two-story store buildings and of the four-level parking decks. It consists of office buildings, public buildings, a convention hall, theaters, concert halls, etc.

The three floors of the four department stores and the skylight of the cross mall pierce through the platform. Thus Uptown is divided into four quarters, each of which is enhanced by one or two public or cultural structures. One of the quadrants contains the city hall; one contains the concert hall and theater; one contains a museum and one a sports palace. Private office structures are then grouped around plazas, squares and malls, each enhanced by a landmark structure. All of the Uptown surface is a pedestrian area, but from every one of the buildings elevators or escalators take one to the parking decks, the downtown shopping area, and the public transportation facilities.

This compact, highrise city center will contain the city's major commercial, civic and cultural activities. Surrounding central city will be a series of villages of 6,000, each with its own smaller shopping and recreational centers,

schools (as at Greenbelt, elementary schools will be on $\frac{1}{2}$ -mile radii), libraries, churches and local commercial enterprises.

Each village, in turn, is to be composed of neighborhoods containing 200 to 700 people. The neighborhoods are to be separated from each other by open spaces, parks and lakes, but connected by separated pedestrian paths and—eventually, it is hoped—rapid transit will tie together the whole city and connect it with Los Angeles and the surrounding region. Nucleus of each neighborhood is an elementary school and a park.

A 600-acre industrial park is included in the first phase with an eventual 1000-acre total, sufficient to make Valencia "largely self-sustaining." Two golf courses, a restaurant, and the first village shopping center have been completed. The first group of 40 garden apartments and a number of homes—all in the first "Orchard Village"—will be finished early in 1967.

As at Reston, there is no provision currently for low cost housing (see "Notes in Passing," page 10). Victor Gruen's misgivings on this score are evident in the following statement:

"If the term 'new town' is not to become a meaningless tool for promotional efforts which could be used by every subdivider who builds more than 50 houses at once, it might be useful if we would clarify what the legitimate meaning of the term may be.

1. Though many of them are located within the metropolitan influence region of a large city, they are constructed at some distance from existing conurbations and they are separated effectively from being swallowed up in overall urban sprawl by permanent green belts.

2. They are pre-planned for a definite size, though their construction is implemented in stages.

3. They are at least semi-independent from the economy of the metropolitan city. In most

English new towns, for example, there is an attempt toward complete balancing of population and job opportunities within the town. They also provide civic, social, cultural, recreational and educational facilities on a local scale, though they accept the fact that experiences of the highest qualities in these fields can only be found in the metropolitan core; and most of these towns are therefore connected by effective public transportation to the center of the mother city.

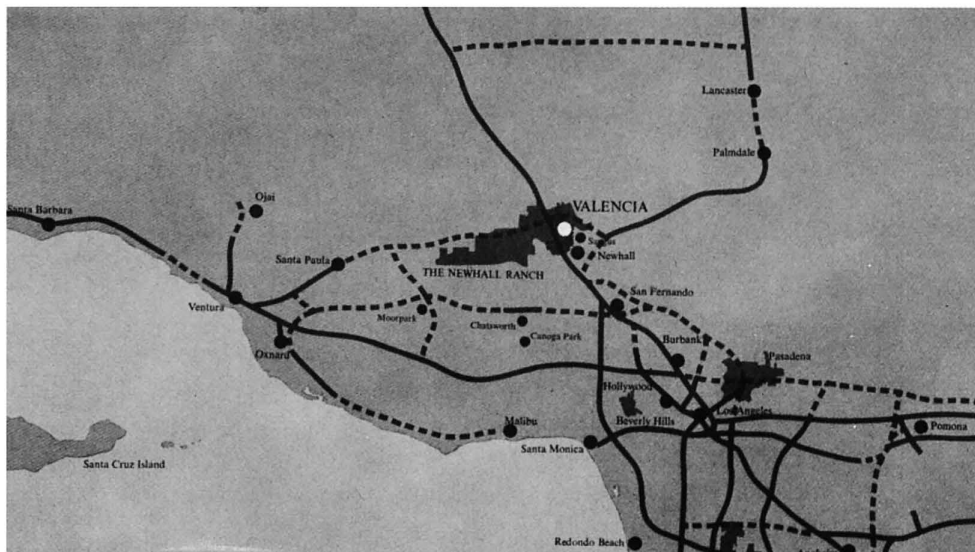
4. In order to make the new towns self sufficient as far as work opportunities are concerned, there is a careful gradation of housing costs designed to coincide with the earnings which various work opportunities offer.

5. Attempts to create superior environments for the enjoyment of living are made to an increasing degree. The newer towns make definite attempts to separate automotive traffic from foot traffic and to provide for extensive footpath systems which also lead to parks and recreational areas.

6. Each of the new towns has a strong nucleus, a center of urban activities, where business, stores, churches, hotels, civic structures, cultural institutions, etc., are concentrated and very often surrounded by the highest density of residential uses.

Most European new towns were either created directly by government or planned by government or, as in the case of Tapiola, Finland, constructed by a non-profit corporation consisting of cooperatives. American new towns are the creation of free enterprise. This fact gives opportunity for the expressions of private initiative, but it also brings up certain problems which private enterprise, unaided by governmental agencies, has difficulties in overcoming. If one reads the announcements and pronouncements connected with new towns in the U.S.A., one must give full credit to their developers

VALENCIA, A PLANNED NEW CITY BY VICTOR GRUEN ASSOCIATES



that they have basically understood the major characteristics of new towns in Europe as I described them before. The big question is whether private enterprise, on the basis of existing legislation and without more positive assistance from governmental sources, can fulfill these high aims.

Let's take the idea of establishing a balanced community—that means one in which a majority of the inhabitants would find work in industrial plants, laboratories, and the various services which the new community needs. There is, for example, no doubt that the new town of Reston, developed by Robert Simon, is in many ways a very courageous effort. The first model village, now completed, shows a tight clusterization of town houses two, three and four-stories high around an urban nucleus consisting of a high rise apartment building and a horseshoe-shaped shopping center which is topped by offices and apartments. The well planned accumulation of structures grouped around a man-made lake evokes in every visitor the impression of an intimate European village.

Reston also has been successful in attracting industry. A number of plants have settled there already and a number more are expected. But up to now, at least, there seems to be no relationship between the wages which these industries might pay and the costs of residing in Reston. If this picture is not radically changed, then the danger exists that the experience of one of the oldest new towns on the North American continent, Don Mills near Toronto, Can., will be repeated. There we find that though the number of jobs available in Don Mills matches exactly on paper the number of breadwinners, in reality 90 percent of the people living in Don Mills work in other places rather far away and 90 percent of the people working in Don Mills live in some places rather far distant. The reason is simply that those work-

ing in Don Mills can't afford the price of the housing units which the new town contains. Those who can afford the houses have executive jobs somewhere in Toronto.

Thus, even in those cases where an effort is made to balance on paper the number of jobs and the number of living units, the evil which we try to escape from, namely the two-way traffic from outlying areas into the town for work and from the town to outlying work places, will not be stopped. The explanation for the existence of this danger lies in the overall economics of land development and the building industry on the one hand and the average income on the other.

1. Average (median) family income:

	1959	1964
U.S.A.	\$5,660	\$6,569 ²
California	6,726	7,883 ³
Los Angeles County	7,046	8,258 ³
Los Angeles City	6,896	8,082 ³

¹U.S. Census, 1960

²U.S. Census Estimate

³VGA Estimate

2. Approximate annual cost of owning and operating homes of specified values¹ and approximate required gross annual family income before Federal Income Taxes:

Home Value	Approximate Gross Annual Cost		Home Value	Relationship of To Income	
	Monthly	Annual		To Income	To Income
\$20,000	\$150	\$1,800	\$8,000	2.5	22.5%
30,000	225	2,700	12,000	2.5	22.5%
40,000	300	3,600	16,000	2.5	22.5%

Note: Housing costs are approximately 22.5% of gross family income or 25% of family income after Federal and State Income Taxes.

3. In 1964, percent of U.S. families which could afford homes of specified values:

Home Value	Total	White	Non-White
\$20,000	36.4%	38.7%	15.3%
30,000	13.1%	14.1%	4.2%
40,000	6.3%	6.8%	1.8%

4. In 1964, approximate monthly housing cost of specified percentages of families in Los Angeles County in order to fit annual family budgets.

Annual Gross Income	Approximate Monthly Housing Cost
a. Lowest 50% of families	Less than \$155
b. Lowest 60% of families	Less than \$165
c. Lowest 70% of families	Less than \$185

If our new towns can't cure this situation, then we are in serious trouble for a number of reasons. The new town becomes nothing but an-

other bedroom suburbia, depopulated in day-time by its male (and partly female) earning population, with the remaining mothers and children exposed to the atmosphere of boredom which we decry generally about suburbia. With husbands and other money-earners returning in the evening from long trips all worn out, the chances for a lively cultural, artistic, civic and public life are slim.

Speaking from the point of view of our central cities, the new towns like Reston or Columbia become an additional threat to their fiscal balance and the economic and physical health of their city core areas. It is quite obvious, for example, that Reston with its superior environmental qualities will draw out of Washington the more sophisticated city dwellers who up to now have resisted a move into suburbia because of the usual drabness of the suburban environment. Thus, from the point of view of the central city, the better planned and environmentally superior new town is even more dangerous to the existence of the city than poorly planned suburbia was up to now. And inasmuch as our big cities have growing political influence, some protests will undoubtedly be forthcoming and some pressure will be brought on government to develop legislation by which the new towns would be persuaded to take not only the cream of the crop, economically speaking, out of the city, but to invite a mixture of economic groupings.

It would, in my opinion, be one of the tasks of free enterprise to forestall governmental interference by taking these economic fact fully into consideration.

In this respect and in many others the goals and aims stated by the developers of Valencia are noteworthy.

From the description and from the illustrations, you will agree that the overall plan, though taking into consideration our local strongly ex-



pressed popular preference for detached houses, is an ambitious one; yet up to now, it is only a preliminary blueprint reflecting ideals, ideas, and suggested physical treatment. Many problems and questions have still to be resolved before we could safely state that what is so well intended can be just as well carried out. Take, for example, the problem of public transportation. Though it is obvious to all of us that if we could take a magic wand and create the entire city of Valencia with its 250,000 to 300,000 inhabitants, including its villages and its city center, at one stroke, public transportation would pay its way by the immense savings which can be achieved through the productive use of land which otherwise would have to be

devoted to parking areas and expensive parking structures. It is obvious that inasmuch as we do not possess this magic wand, we will have to proceed stage-wise and that public transportation can neither earn its capital nor its operating cost before the city development has reached near maturity. It appears that here Government might be willing to lend a helping hand by (a) demonstration grants, and (b) covering operation deficits during the development phase. Whether or not this encouraging attitude can be converted into a binding obligation will probably only become clear after some time- and money-consuming studies and the elapse of many months.

The realization of aims to create special hous-

ing types for varying income groups, to create meaningful village centers and a dynamic city center will depend on the intensity and quality of planning efforts which will have to consume at least the next 18 months.

The problems of environmental quality will depend on the intensity of design studies concerning street furniture, landscaping, lighting standards, signs, housing types, the pathway system, etc. Thus, up to now, I can give you only the glad tidings that a promising concept for a new city in Southern California has been born. Whether and to which degree this concept will come to realization will depend on the combined efforts of management and planners during the next 18 months especially, on

RESIDENTIAL

- ESTATES
DETACHED HOUSES
PATIO HOUSES
- TOWN HOUSES
- APARTMENTS
(LOW & HIGH DENSITY)

PUBLIC

- INSTITUTIONAL
- COMMERCIAL
RECREATIONAL
- CHURCHES
- MEDICAL CENTER
- OPEN SPACE, SLOPES
PARKS, PATHWAYS, EASEMENTS
- GOLF COURSE
- RECREATIONAL CLUB
- ELEMENTARY SCHOOL
- JUNIOR HIGH SCHOOL
- SENIOR HIGH SCHOOL
- RIVER BEDS

URBAN CENTERS

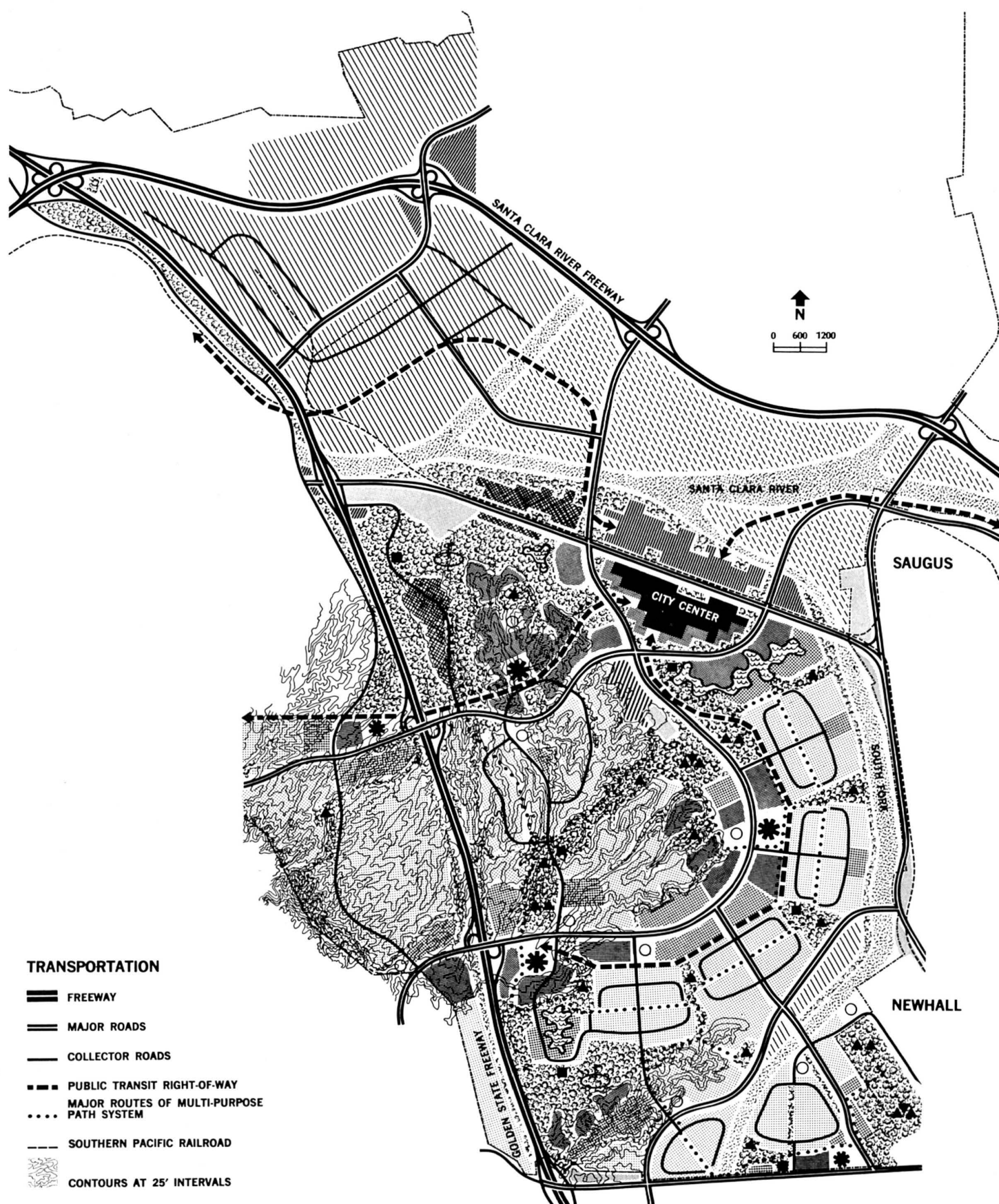
- PRIMARY
(Civic, Cultural, Social,
Retail, Business, Entertainment)
- VILLAGE CENTERS
- SECONDARY
(Services, Automotive, Loft Space,
Building, Home and Garden Supplies)

INDUSTRIAL

- INDUSTRIAL
- RESERVE

TRANSPORTATION

- FREEWAY
- MAJOR ROADS
- COLLECTOR ROADS
- PUBLIC TRANSIT RIGHT-OF-WAY
- MAJOR ROUTES OF MULTI-PURPOSE
PATH SYSTEM
- SOUTHERN PACIFIC RAILROAD
- CONTOURS AT 25' INTERVALS



the willingness of government to be of assistance concerning the public transportation system, and the achievement of lower cost housing. We, as planners, hope fervently that management will give us the fullest opportunity for a successful pattern of cooperation."

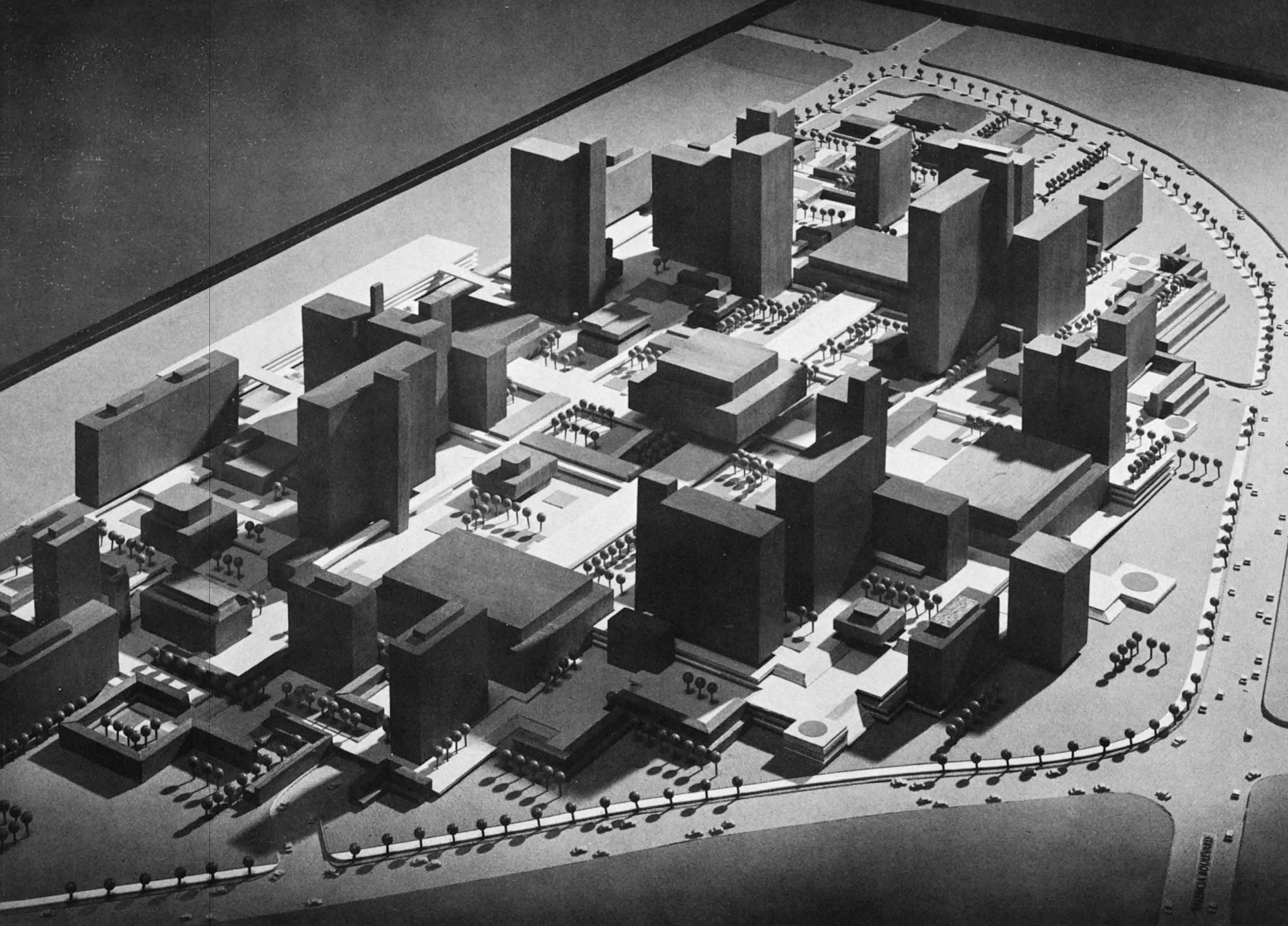
Congress last month passed the New Communities Program Act which will test whether the concept of a truly balanced, self-sustaining new city is realizable even with federal aid. The Act makes available FHA mortgage insurance and FNMA back-up loans of up to 25 million to a private developer for a large-scale new community development such as Reston, Columbia (Md.) or Valencia. A primary objective of the New Communities Program is to induce de-

velopers to provide a full range of housing in order to insure a true economic mix in the new cities and break the white chain around the old. Gordon Edwards, formerly a planner with HHFA, notes that while "critics point out that interest rates and terms are not sufficiently attractive to build low income housing . . . , by using other low income housing assistance programs and an adequately funded rent supplement program in conjunction with Title II, the program has a good chance of achieving this very elusive but very important objective." If the developer wants to take the chance, it should be added.

The availability of government support will require the "enlightened" new town developer

to face uncomfortable social as well as economic issues that he has up to now been able to avoid: low-cost and open housing. If Valencia is a harbinger of the direction new town development will take, the outlook is not good: low cost housing is not now included in its plans.

Valencia's site, the 44,000-acre Newhall Ranch (Pittsburgh: 35,000 acres) which is to be developed over the next 20 years into a city of 250,000, was purchased by Henry Newhall in 1875. Newhall Land and Farming Company, one of the co-developers (the other, California Land Company, was formed by the estate of Newhall's widow), was created in 1883 to administer Newhall's land holdings. The land



Civic Center

has not changed hands since that time and, although re-evaluation for inheritance and other tax purposes and the taxes paid would have increased the property's carrying value substantially, it should still be far from present market value. Unlike developers, such as Robert Simon, who have purchased land for their project in recent years and are forced to

price housing at a level reflecting elevated land costs, Valencia's developers even without government aid would seem to have a gilded opportunity to include low income housing and still make the normal profits. However, the master plan shown here for the first phase of Valencia's development—4,000 acres, 30,000 people by 1972—makes no provision for hous-

ing below the middle-income level. The least expensive houses are priced at \$22,000. Several industries have already purchased sites in the 600-acre industrial park planned for the initial phase, but as with Reston there will be no housing in Valencia for the labor force. The implication to be drawn from Valencia is, then, that there are considerations other than

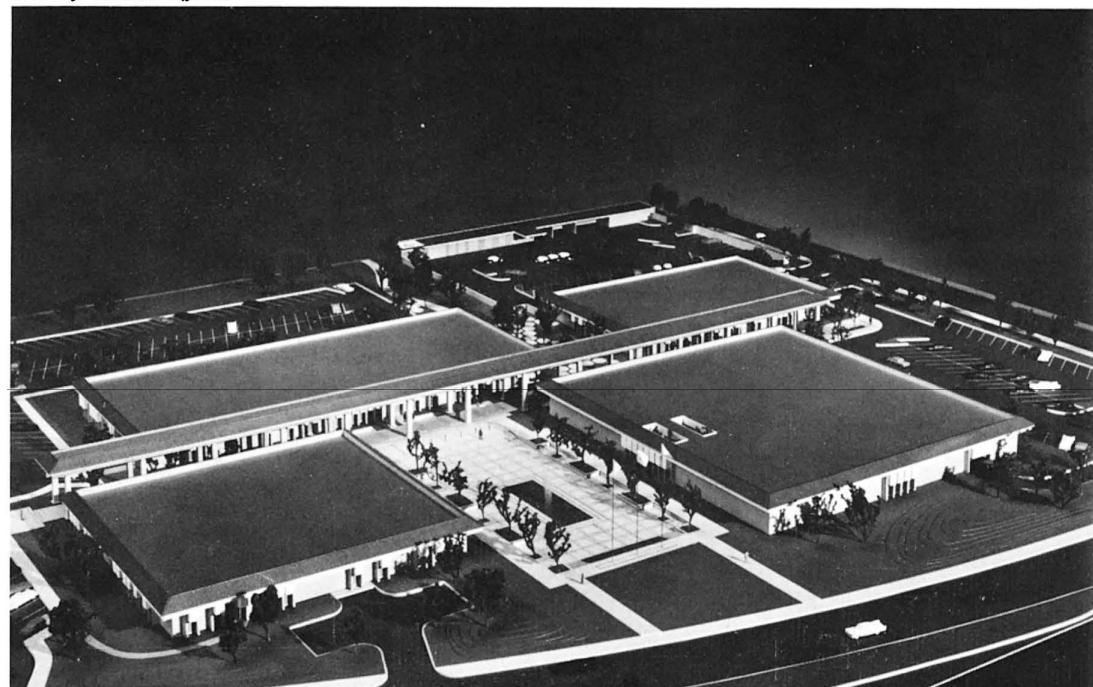
"Orchard Village" shopping center.



Valencia golf course clubhouse.



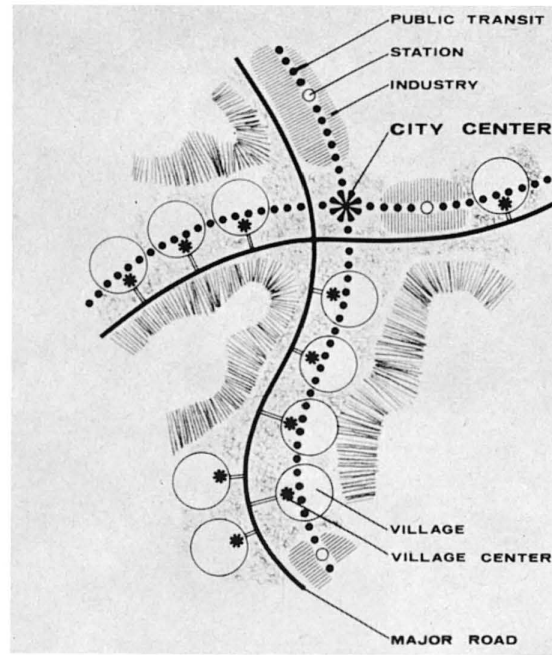
County branch offices



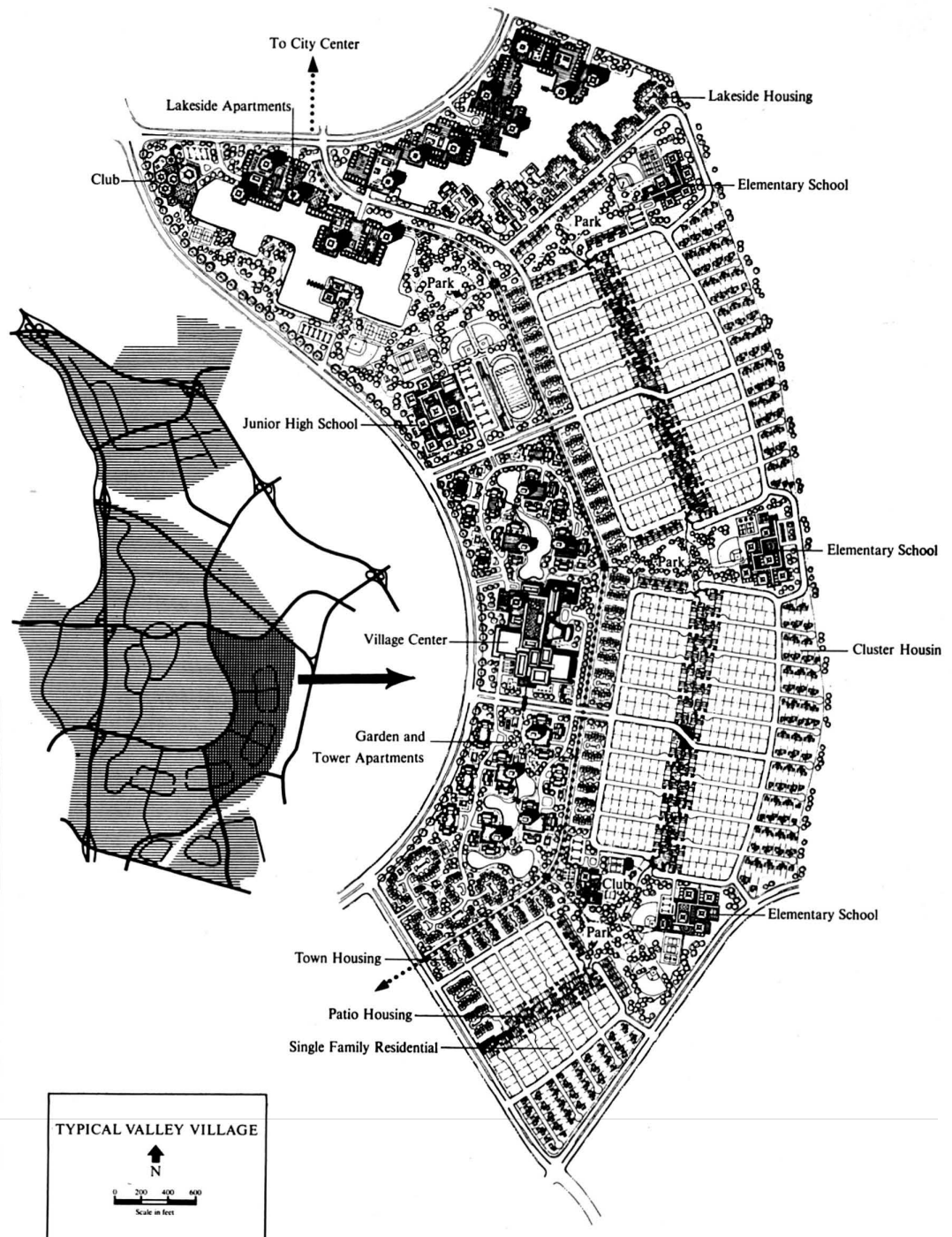
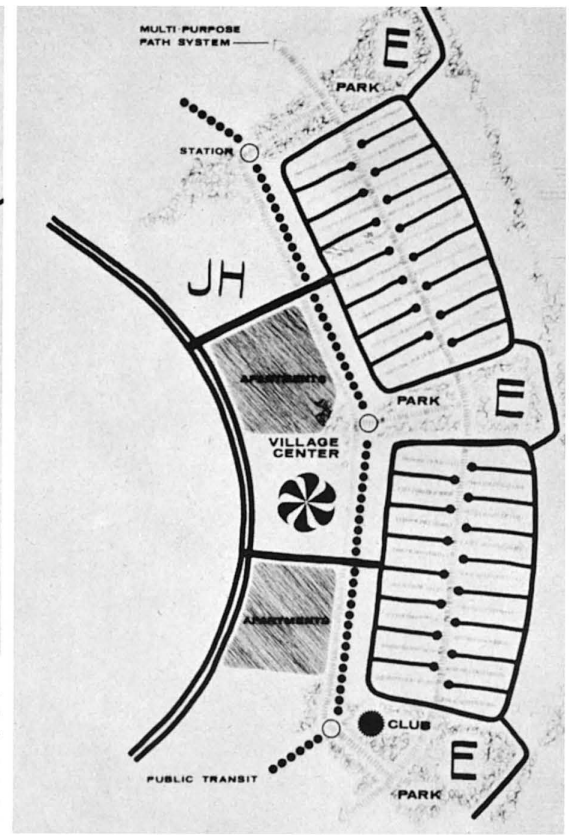
direct cost preventing private enterprise from providing a full range of housing. One such would be the fear that housing within the financial reach of Negroes and other minority groups would depress sales of higher priced housing. If this fear is one of the obstacles, then there is little chance that the New Communities Program, which would require open housing, will have the hoped for effect of breaking the noose of white suburbs.

Ironically, Valencia and other new towns will have the reverse: a multi-colored minority and low-level income ring around the white city—"new cities" indeed! This is borne out by, Victor Gruen's statement that Valencia's "center will serve not only its own population but an additional 250,000 living in the region surrounding the city."

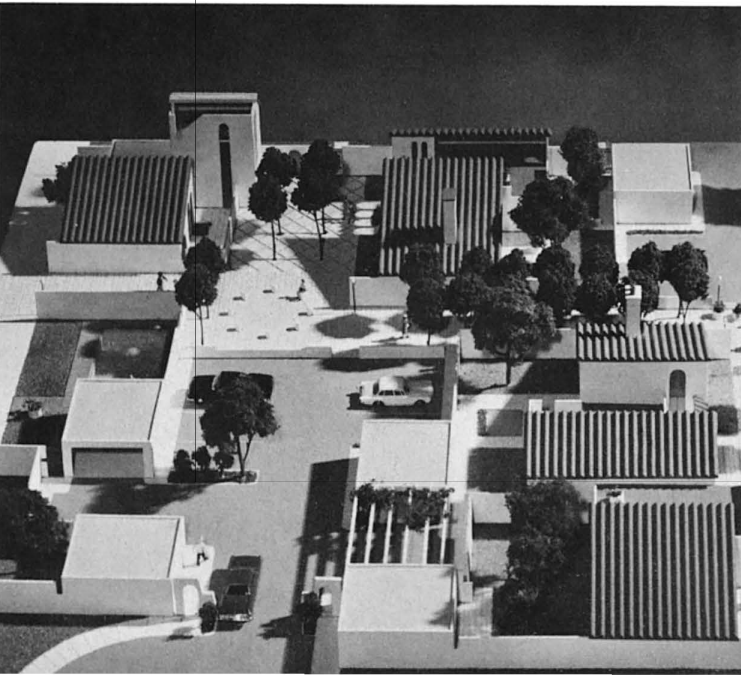
Valencia's reply to criticism on this score is that "we are not engaged in a social experiment." The amenities being designed into the new city—pedestrian paths, underpasses, parks and open spaces amounting to one-third the total land—add about \$1,700 per residential lot to the developer's investment. "We are not in a position to subsidize low cost housing. However, everything possible will be done to achieve it and the question of government support is being thoroughly investigated."

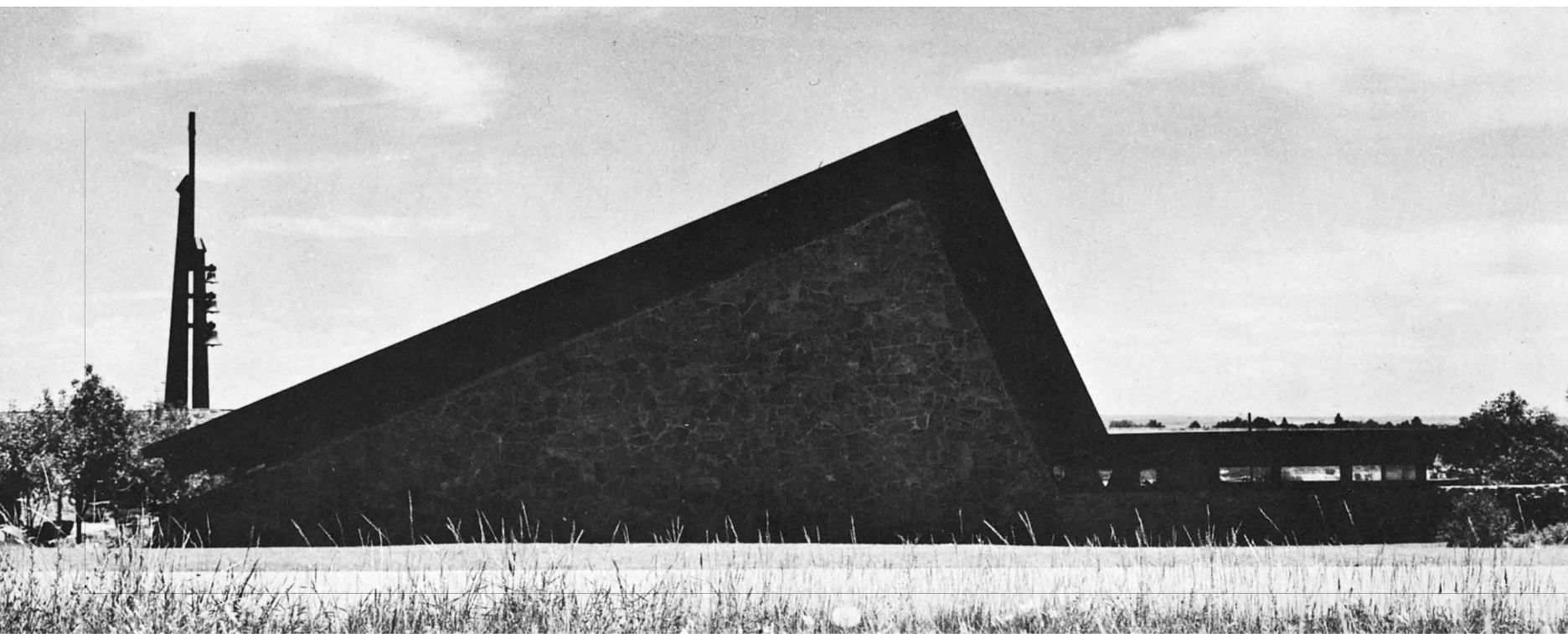


Auto traffic will be channeled from approaching freeways and highways to a wide boulevard around the civic center or to collector roads leading to villages and to cul-de-sac neighborhood streets. Pedestrian traffic will be on path networks which link neighborhoods with village centers, schools and parks. No streets are crossed by children to and from elementary schools.



Cluster housing. Front and side yards have been eliminated.







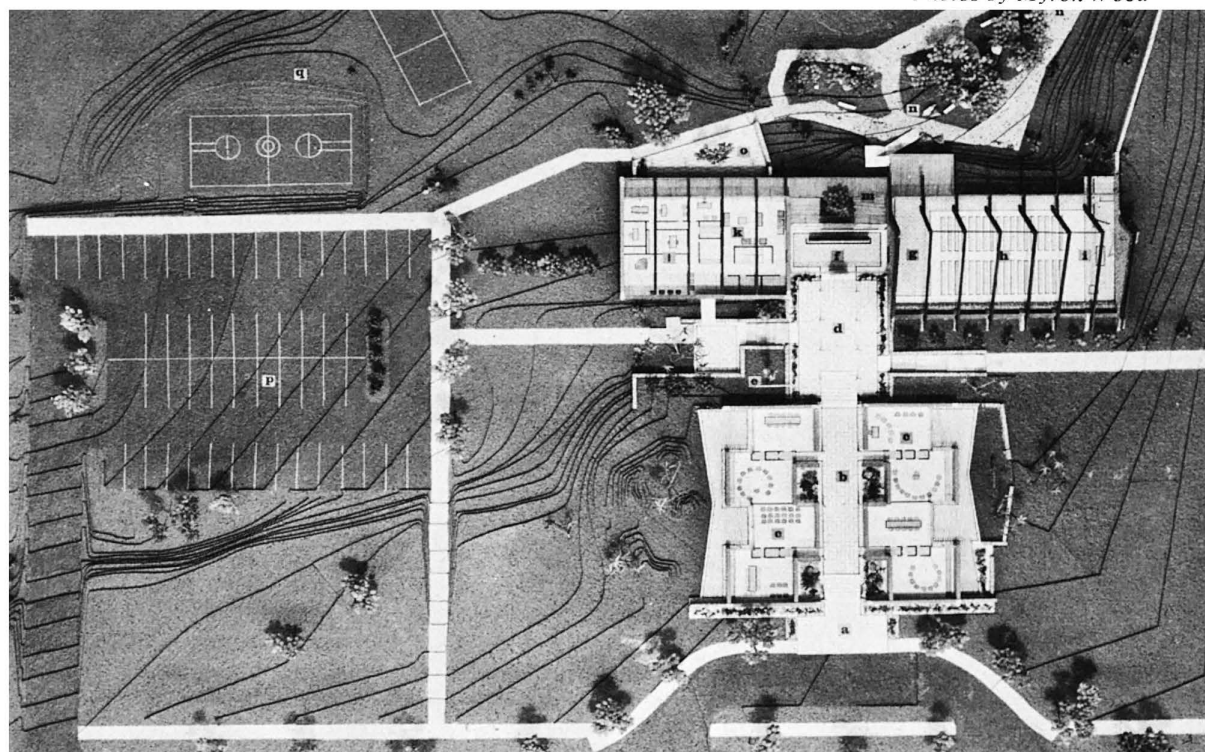
LUSK & WALLACE, ARCHITECTS

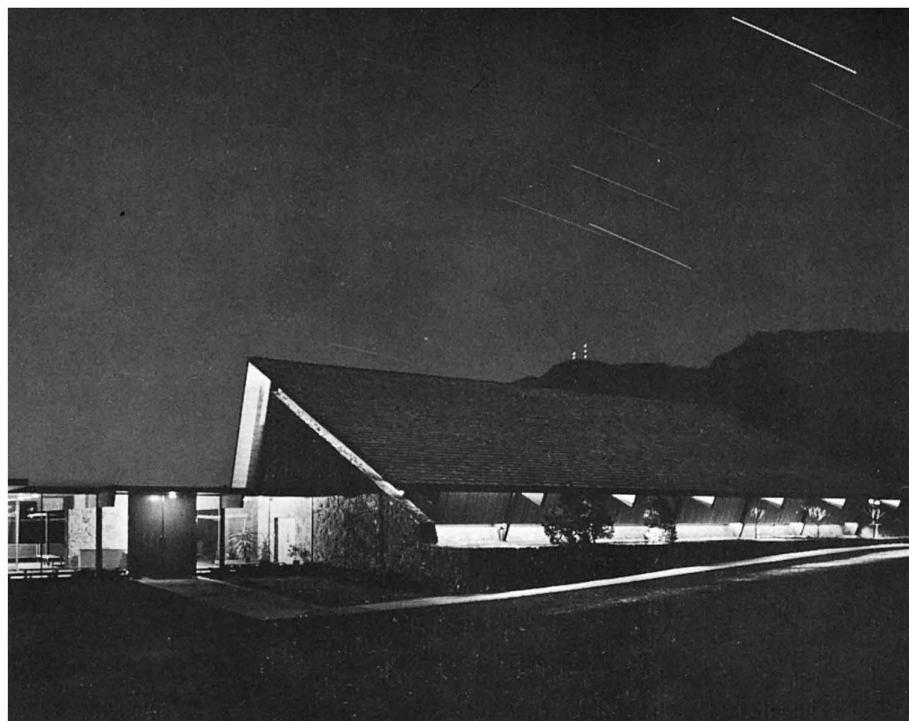
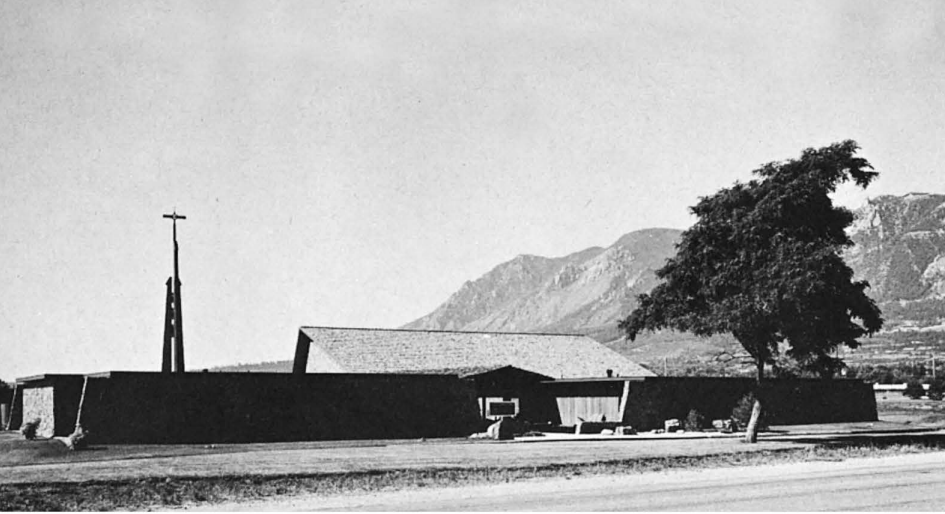
This non-denominational community church is located on a sloping, five-and-a-half-acre site in Colorado Springs, Colo. The program required that the complex of church, social hall and school be constructed in three stages. The sanctuary seating 325 and fellowship wing containing meeting areas, offices and temporary church school classrooms have been completed.

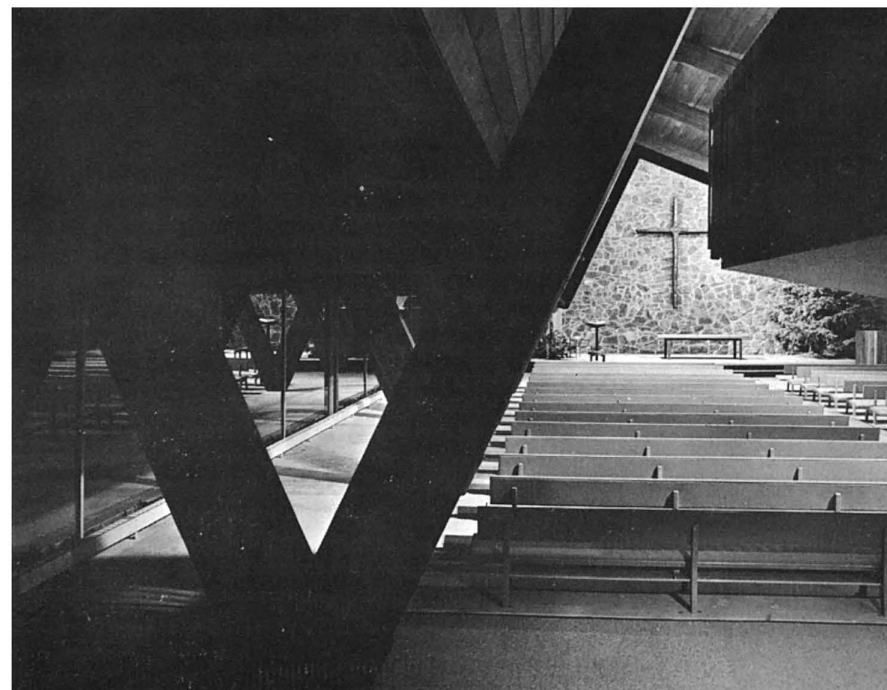
The sanctuary, with its free-standing organ and choir loft to the rear, has been set into the hillside to minimize exposure to a high-speed thoroughfare on the north and also to bring it into close relationship with a landscaped glen on the south containing a pool and fountain and meandering walks. Beyond are a lake and, in the distance, the front range of the Rockies.

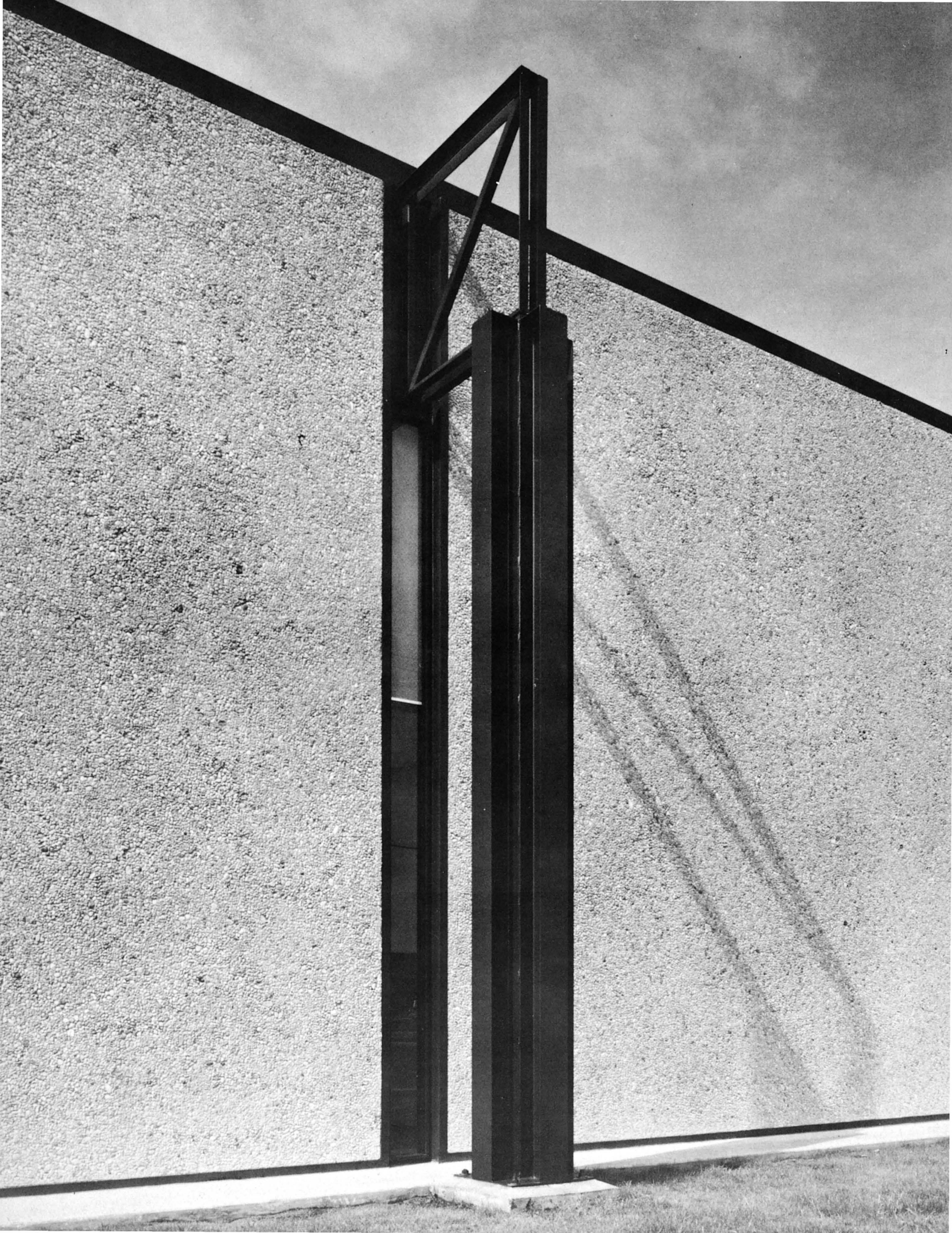
The buildings are framed in wood with laminated beams and exterior walls of moss rock and redwood. Interior walls are moss rock, redwood and gypsum board. Cost of the sanctuary and fellowship hall, including fixed furnishings, was a shade under \$11.50 a square foot.

Photos by Myron Wood









CRAIG ELLWOOD ASSOCIATES, ARCHITECT

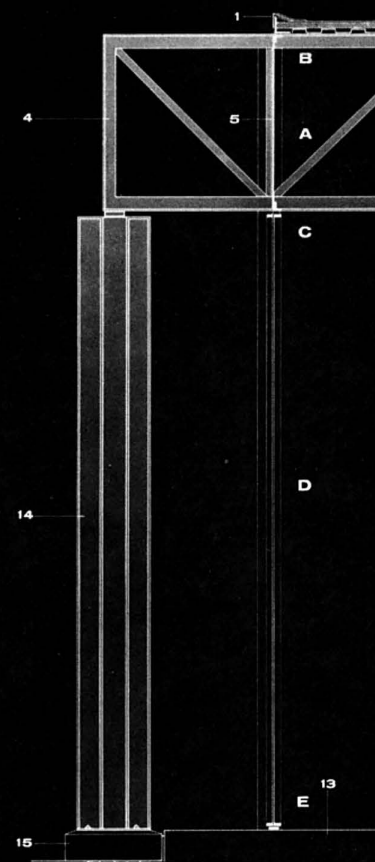
Photos by Marvin Rand

This one-story plant for Scientific Data Systems in El Segundo, Calif., covers 260,000 square feet at a completed cost of \$9.50 a square foot. The structure consists of steel columns supporting a system of lightweight trusses with exterior walls of natural concrete aggregate, poured into steel channel forms and tilted into place. The channels were left on as a frames with which to join the non-loadbearing panels to the slab, roof deck and each other.

A considerable saving in cost was effected by placing the peripheral columns and trusses to the outside of the enclosing wall, allowing for free expansion and contraction movement which eliminated the need for two or more additional rows of columns on the interior.

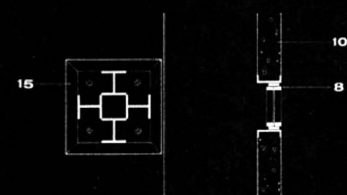
The \$2.47 million cost—\$.50 a square foot under the budget—includes 725 tons of air conditioning, complete landscaping (including 50 mature olive trees), 300 gypsum board and steel stud partitioned offices, kitchen and cafeteria, lobby furniture and fixtures, carpeting, paved and lighted parking for 750 cars and two truck docks with nine roll-up metal doors.

The client, who has a total of 37 acres in the site, is contracting with Ellwood for three more structures budgeted at \$6 million: an administration building, engineering lab and a maintenance-warehouse building.



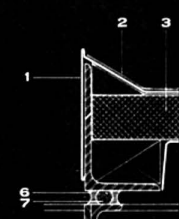
WALL SECTION

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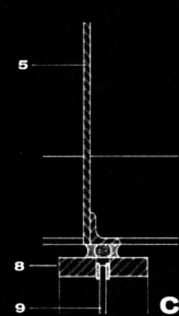


PLAN SECTION

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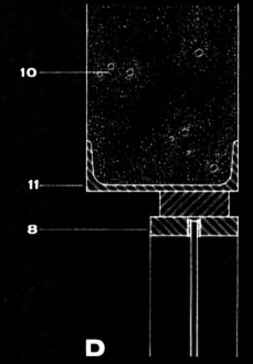


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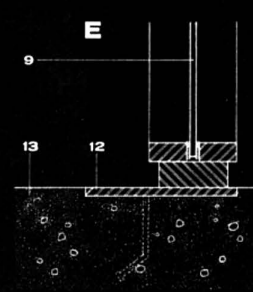


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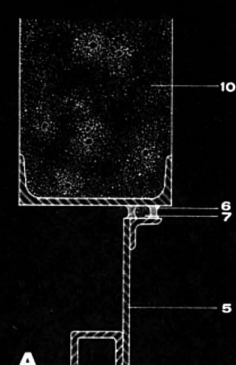
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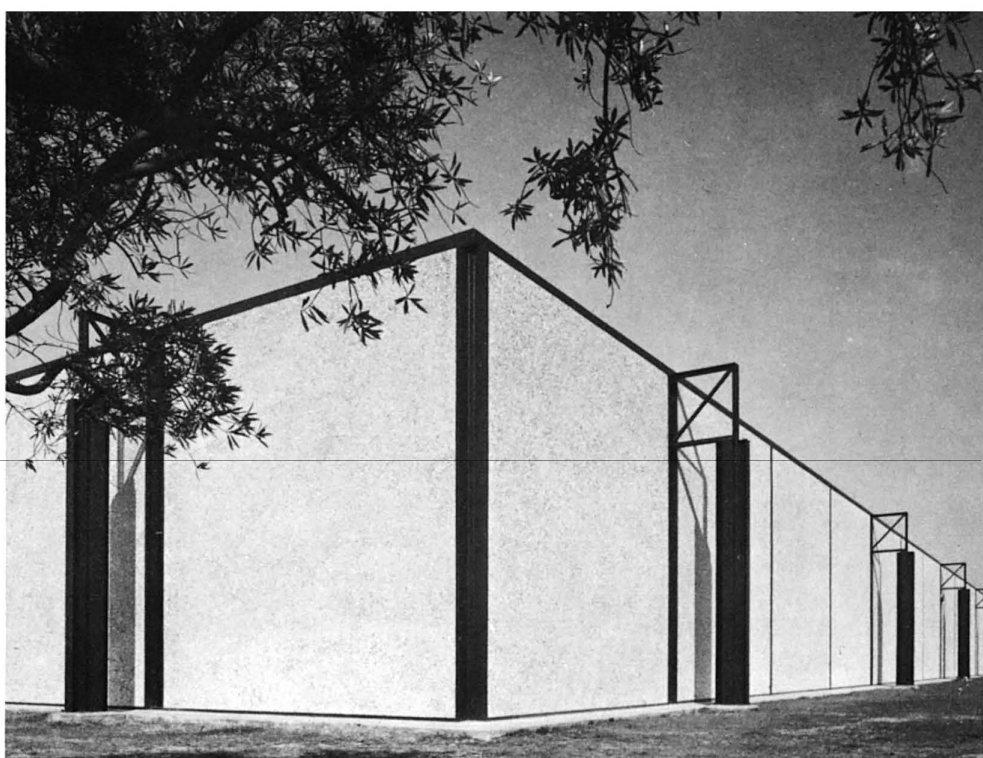
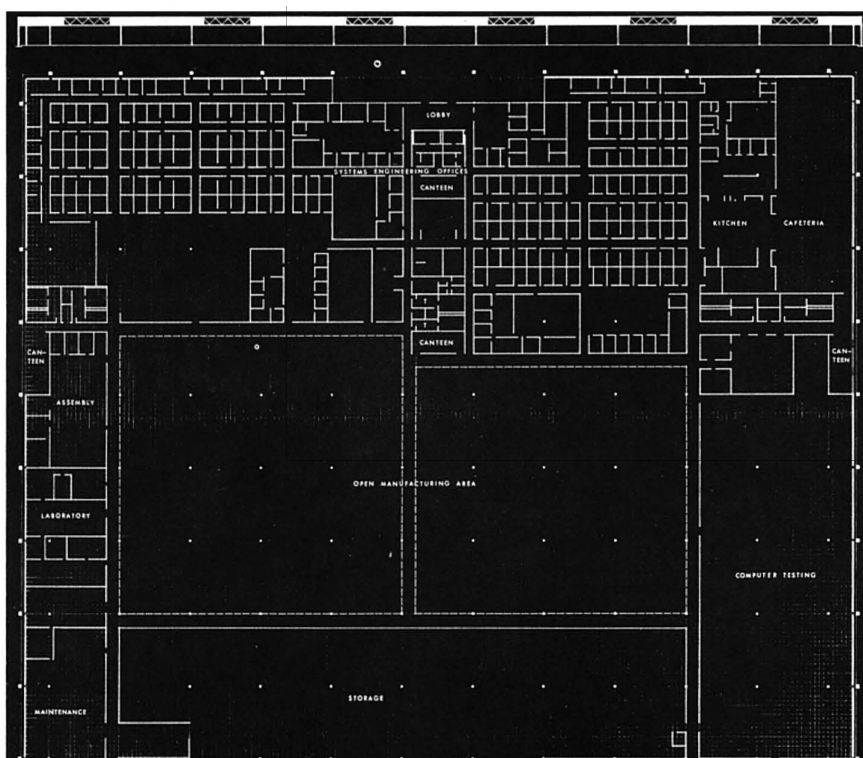
E



A

- 1 METAL FLASHING
- 2 ROOFING
- 3 INSULATION
- 4 STEEL TRUSS
- 5 STEEL FILLER PANEL
- 6 SILICONE SEALANT
- 7 ETHAFOAM ROD
- 8 GLAZING UNIT
- 9 WIRE PLATE GLASS
- 10 PRE-CAST CONCRETE TILT-UP PANEL
- 11 FORMING CHANNEL
- 12 SILL PLATE
- 13 REINFORCED CONCRETE SLAB
- 14 STEEL COLUMN
- 15 CONCRETE BASE





INDUSTRIAL DESIGN

"THE THINKING SEASON"

Just who is being blamed (or applauded) for the quality of the environment may depend on which conference you've just attended. From the Aspen Design Conference on the Sources of 20th-Century Design, the American Institute of Planner's 50th anniversary meeting on Man's Optimum Environment, Urban America's "Our People and Their Cities" to the keep America Beautiful Conference on Litter Prevention—war on ugliness has been declared.

In the scramble to join up and divide the areas of responsibility (and commissions), those professionals who earn their living by esthetics are bumping shoulders, elbows and in some cases egos. The recruits include ecologists, planners, architects, urban designers, landscape architects and many more. Industrial designers, the newest group to join the ranks formally, aren't quite sure if they've been considered allies in the past. As the other professions began working with "joints" of buildings, townscape and the larger urban spaces, they found them inhabited and in some cases engulfed, by the industrial designers' products.

Convening for the second year as IDSA, the Industrial Designers Society of America met last month at a conference, "The Thinking Season," in San Francisco to expand their horizons. They were bombarded with challenges, questioned about their role in society and within the design professions and bounced into a "happening" at a Sensorium that combined al fresco color, sound, music, food, do-it-yourself light shows and dayglo painted ladies. For four days they were berated, coaxed and exhorted by speakers ranging from advertising man Howard Gossage (the Beethoven sweatshirts) to Bucky Fuller—all saying approximately the same thing: that the industrial designer can't merely be product oriented, he must be problem oriented. And the problems are technology, our environment, resources and the human condition.

Industrial design, conferees were told, has been thinking small. Instead of styling a new toaster for a contract client, the designer was urged now to think about new ways of toasting bread. Even further, there was some suggestion that he get out of the "toaster bag" and into the "human bag."

Questions were raised by speaker and conferee alike. Is the designer a problem solver or a question asker? How does he keep from being treated like technology's bad boy? Is industrial design today offering honest choices and solutions to human problems or only marketable differences between similarities?

There were some differences of approach, and each session seemed to up the ante, but the designer's roles and responsibilities were seen something like this by:

The Conference Committee, set the tone. "Within a half century (the industrial designer) has rescued almost single-handed the mass-produced product from the nuts and bolts category to that of an esthetic delight . . . With automated production pouring millions upon millions of products into our living space and continuing to occupy space as waste when depleted, the concern must shift from the individual product to the masses of products.

"The beauty of the individual product wanes when great quantities crowd our living space and shape our cities, our homes and, indeed, our lives.

"The quality of life for many people is affected by the vitality of the designer's concern. He is committed to the notion that human values are paramount to other pressures; he must care for people. This is a season of caring. It is a time of inquiry into values, both personal and for all. It is the moment for commitment to what is worthwhile."

Howard Gossage, expert in the game of words and the process of communication, attacked that cornerstone of contemporary design, "form follows function." He questioned if what we call functional today really mirrors our time, citing the Baroque designers who defined functional as something that delights the eye and spirit not merely provides the maximum number of cubic feet of usable space at the lowest cost.

"Form follows function makes a splendid sales pitch. It absolutely reeks of integrity; it sounds pure, professional and uncompromising." But it's a tired truism and its cause and effect logic limits the designer's problem solving: if a hammer won't drive a nail, the designer may search for a larger hammer or a softer board and miss the real need—to stick two boards together. As a substitute, Gossage offered "process" (although he sees "situation designing" as an up and coming phrase of the month). "Process thinking" is the opposite of "thing thinking" and, he says, the key to broadening the concerns of the designer.

S. P. R. Charter, ecologist and publisher-editor of *Man On Earth* wants the designer to nurture the individual esthetic response in the midst of automated proliferation. Looking at technology and the computer as the Big Bad Wolf who will get the better of us if the designer doesn't watch out, he asked some uncomfortable questions: Is the industrial designer the call boy of industry? Is the purpose and end use of the design an actual part of the design?—could, for instance, an industrial designer have been employed to build a better oven for the Nazis? At what point does the issue of morality enter?

"Utility alone, without the redeeming humanizing quality of esthetics, can consume the individual until he is dominated by his devices, becomes mechanistic in responses and his inspiration and awareness are corrupted." He feels only the designer can make individualism possible in our man-machine world.

Now technology employs the designer instead of the designer employing technology (the reason we get a larger number of toasters more and more alike). But technology also possesses the capacity to redress the imbalance it causes in our environment. If the designer can channel and direct those forces, we may be saved from our own pollutants.

Lawrence Halprin, landscape architect, author of *Cities and Freeways* and a general in the fight to preserve the amenities, recounted his current stalemate with the Bay Area Rapid Transit District (BART), where design consultation was subservient to engineering decisions. He reached beyond the questions already before the group to suggest that designers may need to help find solutions to pollution, overcrowding, etc., simply because the earth is the only true "home" of man, the only place in the universe for future generations to use for rest and relaxation from space travel and its portable "created" environment.

James Real, consultant on communication theory, mass media and planning, took on the designer's "hang-up," his participation in the accumulating clutter of things and the need for him to be concerned with human problems.

"Unless the industrial designer, with his formidable inventive powers, puts more of his thought and energy to the disposition of the products and materials he handles, he will eventually subvert himself quite completely and exist only as a packager and decorator—powerless to influence the often mindless clatter of the industrial machine, whose ends are the urgent concern of all of us.

"The glamour projects which fall his way, such as participation in the so-called problems of the supersonic airplane, are sophisticated child's play compared to the relentless, worldwide urgencies to mitigate the agonies of the short, brutal life of the vast majority of the earth's people . . . That elegantly designed machine-package, the human stomach, is our primary client. The fulfillment of the human heart and spirit follows after."

He suggested that the Society send one or two members each year to underdeveloped countries to see what design might do to alleviate problems with new ideas in transportation, communication, power and cheap, novel and effective tools.

R. Buckminster Fuller, presented by IDSA with its Award of Achievement, presented his fellow members with the challenge to take the initiative—to see the problems that confront man before they become problems. The same kind of anticipatory design which takes place in medical sciences where diseases are charted and cures discovered hopefully before not after an epidemic strikes.

Mrs. Edmund G. Brown, speaking not as the wife of California's

Governor, she protested, but as chairman of his Action Advisory Committee on California Beauty, asked the designers to consider the problems of disposing of the products they proliferate.

"California cannot indefinitely absorb the impact of waste products on its air, land and water." She echoed Charter's and Real's concerns.

Joseph Parriott, FIDSA, president of the national society, saw some of the answers in professional activity . . . clarifying the influence and impact of the industrial designer in the world, extending that influence and impact and strengthening the educational process of institutions teaching industrial design.

So where does that leave the industrial designer, caught between an emerging sense of professional identity and an accelerating number of world crises in which he plays some previously unnamed part. How are Fuller's recommendations to be implemented and the narrow view of designer-as-cosmetician broadened?

The conference indicated three overlapping solution areas:

1. *Education.* The industrial designer cannot join with other designers of the environment without knowing what they have accomplished to date. Unless there is understanding that all designers deal with the same problem, the manipulation of the external physical environment on different but interlocking levels and with differing skills, the work of the various design disciplines will continue to conflict. (Symbols may fight with signs which are fighting with buildings which are fighting with blocks, which are battling freeways, and on and on.)

Halprin suggested mid-career education, a more intense dose of the kind of exposure the conference offered—encompassing the problems and an understanding of the techniques of townscape, visual survey, urban design, city planning and ecology, our resources and major urban forms. A crash course in the nature of the battle as fought up to now will keep the talents of the designers focused on specific accomplishments but with wider understanding. Such seminars could take place on a national, regional or local level. Charter suggested that each individual designer needs to spend more time in the verbal world, in conversation with the allies, in reading about and concern with the larger issues.

2. *Group Action.* There has been much finger biting within the profession about the role the industrial designer has been asked to play, or more specifically, not asked to play, in government advisory capacities. Industrial design has not been represented on the National Council on the Arts (although a program director for Architecture, Planning and Design has been appointed: Paul Spreiregen, formerly the American Institute of Architects urban design specialist).

State arts councils now tend to draw largely from the performing arts and may perhaps add a few architects. Even Governor Brown, who began a brave new design program in 1964, has now moved his "design" committee into the Beauty program and a representative of that group all but had to apologize to the industrial designers because there were no categories for their work in the current California "Design Award" program.

The industrial designer finds himself not quite a part of either the beauty efforts or the arts councils, the two strongest governmental thrusts in his field today.

Group action also calls for some courageous stands. National organizations usually fall behind local groups in that respect, yet it may be in boldness that a clearer idea of the industrial designer emerges. The San Francisco chapter of IDSA has taken a stand backing Mr. Halprin in his resignation from BART because of its callous indifference to design considerations. The national board, obviously sympathetic with the problem, felt it was a "local issue" and could not act.

3. *Design Solutions.* The industrial designer's strength, his ability to create handsome, functional design solutions to his client's problems, can be applied to other programs.

Project Earning Power is an example of the designer's skill used for social advancement. Arthur Rissmann, national director of the program, and Gordon Petric, manager of the pilot project in Los

Angeles, talked about the progress of the experiment to design marketable products that can be manufactured by the handicapped and sold on their own merits and not by "tincupmanship."

The L. A. task force has designed a line of giftware that will be test-marketed there this winter. Real's suggestions for design solutions for emerging nations would be another example of designers playing their role by doing the thing that designers do best.

Arthur Pulos, Industrial Design Department, Syracuse University, made that point clearly in one of the afternoon seminars. The designer cannot separate what he is doing for the community from the work he does every day. He cannot add to the confusion or ugliness or mismanagement of resources 5 days a week and make up for it by fighting overhead wires on the 6th. Each project he works on must carry some element of social responsibility.

By his own work, within his profession, by concerted efforts with others who share the responsibility for the form of man's environment (the AIA, AIP, ASLA as a beginning), the industrial designer can find some answers to those confrontations during the "Thinking Season"—hopefully not limited to four days in October.

—Terry Roloff

BOOKS

(Continued from page 8)

THE CINEMA AS ART by Ralph Stephenson and Jean R. Debrix (Penguin Books; Baltimore, Maryland; \$1.45)

Stephenson, a novelist, has lectured and written about film; Debrix has been a journalist and novelist, director of a film school and a director and producer of films. Both were war prisoners, Stephenson of the Japanese, Debrix of the Germans. The book is offered as a contribution to "film criticism." It analyzes the techniques of film making (cinema), the differences between the screen image and reality and the usefulness of these differences when artistically employed. The films mentioned include some still being shown as new productions. The authors do not scamp their work or try to write down to a level of easy comprehension, nor do they indulge in fancy flights of verbal esthetics. They warn the readers that three chapters may be difficult, the preliminary chapter on film esthetics, "The Film and Art," that on "Space-Time in the Cinema," and the final chapter, "Reality and Artistic Creation," which discusses the audience reaction to motion pictures and critical decision of artistic quality. I am interested in their chapter heading, "The Fifth Dimension: Sound." In my lecture, *The Dimensions of Sound*, I speak of the "fourth dimension," in which an action takes the place of a note; at this point in the lecture I project a short double-screen motion picture by Baylis Glascock, in silence, the counterpoint of actions, space, and distances on the two screens giving the effect of music.

The authors of *The Cinema as Art* are careful to back their demonstrations and arguments by descriptive references to actual films, from Dr. *Caligari* to 8½ and the work of Ray and Charles Eames; the choice sets a high line, though some popular American films are included; Japanese, Chinese, Indian, and South American films seem to me inadequately represented, especially the popular cinema, little known in Europe or this country. Art forms do not always grow most strongly on the highest branches. As a whole, a representative, well thought, informative, readable book.

WORLD OF LAUGHTER, The Motion Picture Comedy Short, 1910-1930, by Kalton C. Lahue (University of Oklahoma Press, \$4.95)

Kalton Lahue has already published *Continued Next Week: A History of the Moving Picture Serial* (1964). The author makes clear that this is not a definitive history of the American comedy short; some 3000 such comedies were released during the year 1913, more than 40,000 reels during the silent film period. He has discussed the feature-length films made by those actors who won fame as short-film comedians but not the comedies made by regular feature actors like Douglas Fairbanks. The book is one of those by-name-and-date surveys, with some critical commentary, which go back to the beginnings of baseball statistics and biographies and which have given a wrong slant to most books about jazz. The prose is pedestrian, as if worked up from a card file.

Peter Yates

music

PETER YATES

PROCESS: A HAPPENING, PERFORMED IN
LOS ANGELES, FRIDAY, AUGUST 26, 1966

"Process is a small slice of life, taken (abstracted, if you like) from the customs interrogation, the job interview, the induction physical, university registration, credit application, jail, immigration, city hall, ad inf." (From the "Scenario" by Joseph Byrd)

"... When I go to a Happening that seems to me to have intention in it I go away saying that I'm not interested. I also did not like to be told, in the *Eighteen Happenings in Six Parts*, to move from one room to another. Though I don't actively engage in politics I do as an artist have some awareness of art's political content, and it doesn't include policemen." (John Cage, from an interview in *Tulane Drama Review*)

"... One person described "Process" as 'psychological rape'; another regards it as 'the most entertaining boredom I have ever experienced'; still another, unwittingly grasping our intent, said, 'seeing all those people moving from test to test, from interview to interview—why you even forgot that it was supposed to be a Happening.'

"Since anyone who left had to see one of the supervisors and be 'deprocessed,' we know that only four of the 200 or so attendants left 'Process.'

"It is with much regret, but important that I mention that among the four was a fine arts critic and his wife. As a critic, this man has earned an international reputation as a supporter of the avant garde, a man who can extoll on the virtues of a piece like LaMonte Young's '1000 Beats on the Back of a Frying Pan,' and who, after undergoing one of the interviews (admittedly, the toughest, involving a series of probing questions by a Negro interviewer of the opposite sex, concerning the subject's sexual relations and attitude toward sex with Negroes) left the interview, stopped before a blackboard to draw psychedelic pictures and anagrams, then in a frenzy, burst out of one of the exit doors, refusing all attempts at being processed. For the sake of decorum, I will say nothing more about this man's response (even though I'm thinking) excepting that it was one *honest* response." (Michael Agnello, one of the promoters and "evaluators" of this event, from his article in the *Los Angeles Free Press*.)

This is my report of "Process," written the same evening, also printed in the *Free Press*. (Comments added later are in parenthesis.)

When I'm sober and amused, I drop my inhibitions; that is to say, what another might do when drunk I am more likely to feel free to do when sober. My wife and I went, as invited guests, to an occurrence called *PROCESS: A Happening*, sponsored by the *Los Angeles Free Press* and the Experimental Arts Workshop of the Pasadena Art Museum but held in a suite of second-floor school-rooms, the New Left School, in a building at the corner of Arlington and Washington. And while we were standing in line outside I could feel this thing coming on.

At length, when we were summoned to come in from the street and go single file up a flight of stairs, I began sensing in myself the feeling and I said to my wife the same thing I have already quoted from *An Interview with John Cage* but in a different order: when I go to a Happening I do not like to be told, so I go away saying that I'm not interested. In the hallway at the top of the stairs we were weighed; our weight written on a slip of paper was given to us as a number. We were then given the same number on another slip and stamped on the back of the hand with an invisible liquid; others were wristbanded, but for some reason I was not. We were also given a folder containing three printed but inscrutable forms. Then we were admitted through a door, our number pasted to us, and we were sent, as in a clinic, to a waiting section to be inter-

viewed. I deduced that what was intended was an "environment," in this case with *gestalt* implications: whatever we should do or say would "add up."

[Definition: "The term 'environment' refers to an art form that fills an entire room (or outdoor space) surrounding the visitor and consisting of any materials whatever, including lights, sounds and color." From a booklet describing Allen Kaprow's *Happening*, "Words," which he sent me. A recent Los Angeles "environment," exhibited in a gallery, consisted of an all-white room, the floor thick with white chicken feathers and talcum powder. After a few days the place stank.]

My wife was ahead of me, but after a look around she wanted out. I am glad she did, because she would not have enjoyed the interviews. Since she was the first to want out, the young ladies in white clinical coats who were shepherding us were not sure what they should do next: in regular bureaucratic procedure one went to ask another, and it developed that to get out without going through "Process" one must pay the price of a second admission. (This fact had not been announced in advance and seemed to me unwarranted. It isn't the money I minded about, because, as guests, we had been admitted free.) I went to be interviewed, and when I returned my wife was out of sight. I learned afterwards that the attendants would not let her go until they had bullied her into paying.

The interview, by a young Negro woman, started by asking if I were heterosexual or homosexual, with appropriate entry on the form. She proceeded to inquire, with slight but controlled embarrassment, since I am older than most of those who were present, my sexual attitude towards and experience in "going to bed" with Negro women. She concluded by asking if I would "go to bed" with her. I resented the questions not because they were sexual but because they were racist; I kept my answers noncommittal. (In a letter to the *Free Press* the week after publication of our respective statements, Mike Agnello wonders why my answers were "noncommittal." Even to have answered, "Young lady, it's none of your damn business," would in that context have allowed presumption of a racial bias. The best answer would have been, "Sorry, I'm not interested," but I was still trying to go along like everybody else.)

I was directed to another room, another desk. I was sober, I was not amused and had dropped my inhibitions. I suppose that at this point I should have walked out with the dignity befitting my years or have asked to be taken to their leader. (As a matter of fact the leaders were hiding out in a back room, making jokes about their victims.) I did not see where I was to go, and I did see a blackboard, so I bemused myself for some time by drawing silly pictures, like a child. I hastily erased one picture, for fear that someone might take it for a cartoon of a Negro. After the racist questioning I could not be innocent. Finally I produced a lettered diagram.

[This should not be considered an incorrect reaction. In the little book about Allen Kaprow's "Words" there is this quotation, headed "A Critic's Words," by Brian Doherty, from the *New York Times*: "Me? I wrote S-M-O-G, ve-e-ry slow, in red chalk. On the wall." "Why?" "I just felt like it. I didn't know what I was going to write. It just happened. It was a terrific experience. Just as if I was writing out the solution to an equation of probability." "Did you feel better?" "Not better. Different..."]

I was not with it, but I was in a mood. A tall photographer, who I suppose had been adding his visual record to the *gestalt*, solemnly photographed the diagram. I must have wasted a quarter-hour or more fooling around. During the last years I have given a good deal of time and thought to Happenings of various types, have observed them, talked and corresponded and written and lectured about them. I guess that subconsciously I was wondering about "Process," trying to bring my social and esthetic reasoning into line. Nobody interfered with me, either because what I was doing was not in their "Process" or in some way, though undocumented, it contributed to the *gestalt*. I wandered to the other end of the

room, where a sign read: "Please knock." I did, opened the door and saw at once that I was interfering with "Process." "Did I feel better?" "Not better. Different . . ."

After more wandering I found my desk, a line now waiting in front of it; I announced to the interviewer that this was the desk I had been looking for, again interrupting "Process," then wandered away, finally coming back to sit down where I could wait. (It was a corner waiting section with many empty folding chairs. I realize too late that I could have made my contribution by pushing rows of empty chairs through the crowd, offering them to the people who were standing in line. Or started piling chairs in the center of the room. Or sat in to assist the interviews. What was so passively going on needed interruption.) But now I was bothered because I hadn't seen my wife; I went to ask about her. One of the white-coated young ladies told me she was sitting on a chair outside in the hallway. Hell! I thought, that's a poor way to waste an evening, and I started out to look for her, then returned, laid my folder of forms on the desk and said I had decided not to wait. The young lady replied that if I did not wish to complete "Process" I would have to pay, etc. But now my sober dander was definitely up; I glowed with the virtue of a leftwing picket at a meeting of the John Birch Society. I turned my back on her, she following me to say I couldn't leave unless I paid and . . . She tried to close the door into the hallway; I put my elbow into it and went out.

The line by now was standing all the way down the stairs. Going down I was hailed by an acquaintance, who wanted to know what was up. I quoted my Cage formula. Twenty-four years with the California Department of Employment have left me with a syndrome about seeing people pushed around. Besides, in my cold sober mood, it now seemed to me that the only useful purpose one could serve in this "Process" would be to nonconform.

(There was, I'm told, a Bouncer to intimidate with "mild force" anyone who resisted paying to leave. Or restrain, I presume, anyone who wished to make his own contribution to "Process." I have seen a picture of him, large, doughfaced, in a white coat. I'm sorry that I didn't know this; I'd like to have watched him bounce. Mike asks, in his rebuttal, "Who were the conformists, the majority who went through the entire "Process" or the four who righteously left it?" Mike has been by habit sufficiently a nonconformist to answer that himself. But beware the erstwhile nonconformist, who, power suddenly in his grasp, becomes authoritarian! Mike's attitude reminds me of a former CIO activist, who had risen rapidly in the civil service hierarchy. He came in one day furiously angry, because, as he said, "Some damn fool County employee has refused to sign a loyalty oath!")

I thought: here are all these young or fairly young people waiting soberly in line, waiting to be told what to do, waiting to do whatever they are told. Whatever question they are asked, no matter how personal or racist, they will answer it. I had started that way myself. Now I had broken out. Shouldn't some others, if they are really nonconformists, break out also? I went out of there wondering what in Hades has happened to young radicals. I should have known, of course. The same thing has happened before to others. Whoever was in charge of this "Process" had gone a considerable distance beyond the play-game-ritual atmosphere of a Happening. This thing was indeed a Process, but political. The atmosphere of impersonal rule overriding individual difference had drawn from me an immediate rejection. The method was conversion by propaganda, by questioning in the style of "When did you stop beating your wife?" So much I had learned by my interview and by overhearing occasional questions which came to me while I was all too soberly wandering around. There was no alternative but to break out, as in the past other individuals have had to break out from political commitment. (Or, more drastically, as I have indicated, one could stay inside and become, in the spirit of the jest, an interferant.)

(Mike asks in his rebuttal: "Why not charge another \$1.25 as a "deprocessing fee" for those who wanted to leave? At least their dislike of "Process" can be more intense. They are able to enjoy

their hatred as is appropriate for such an event." Knowing three of the four who left, I would say that our feeling was not "hatred" but distaste. The situation needed something like the word, "decency," which brought down Joe McCarthy.)

Just a week or so before, I took part in an unprepared two-way conversation, before a public audience of the Architectural Panel, with Walter Hopps, Director of the Pasadena Art Museum. Walter had told me that he wished to talk about the environment and how we are defacing it, but the conversation took a turn to Happenings, and for nearly the entire two hours we didn't leave that subject. The conversation was itself a Happening, its direction unpremeditated. An encouraging number of the audience joined the conversation. A few other walked out, for boredom, another engagement, or whatever reason: it would not have occurred to us to prevent them or insist that they pay twice for that privilege.

One young originator of local Happenings who was in the audience (it was Mike) told about a current Happening, taking place simultaneously in three cities including Los Angeles, directed by Allen Kaprow in New York. Kaprow had sent me an announcement. My friend in the audience explained that his part in this Kaprow Happening was to follow, accompanied by two young women, a trail of jelly sandwiches up a mountainside. A woman in the audience asked if he wasn't ashamed to be wasting food like that, when so many people in the world go hungry. I replied that as much food is wasted at social entertainments. I wouldn't have followed the trail of jelly sandwiches myself, or have gone ahead to lay it, but if it's your game, why not!

A scientifically minded gentleman at the back, whom I couldn't see, pressed the question whether the Happening idea, and the sort of persons who take part in it, shouldn't properly be called "psychopathic." I said I thought not, that the attitude seems to me more ritualistic or religious, but while I was answering he didn't listen and conversed with a man beside him.

But the more I think about this whatever-it-was called "Process," the more I believe I wouldn't want to be in it. It was humorless. Happenings are not always humorless, though the more solemn practitioners tend to go in that direction. (To see a man tripped or pushed so that he falls downstairs can be funny in a motion picture; in real life it is no more funny than a broken pelvis.) "Process" was an elaborate practical joke, with a political propagandist slant, played on persons who believe it their duty to go along and not back out. You recall that the Marquis de Sade's idea of fun was to shut up other people in a castle they would never get out of. It was part of the game that they should not resist. A Happening was originally supposed to be freeing, not restrictive. I guess that I'm just an old-style American individual, a stick-in-the-mud nonconformist.

Free Press editor Jeanne Morgan was among the four who walked out. She returned accompanied by *Free Press* publisher and editor Art Kunkin. In a back room they confronted the giggling instigators of "Process." The argument continued through several days. Afterwards they published their own evaluation:

"Process was a game concerned not with material reality but with subjective reality—a region which is played with only by brainwashers and people who have little experience in the hard task of creating their own personal meanings, their own subjective reality. People who are, in other words, immature and unable to perceive the importance of the hard-won delicacy and the costly achievements of personal values. One does not play games lightly in that area of human identity."

The *Los Angeles Free Press* is one of several newspapers recently founded in several parts of the country which permit wide divergences of published opinion by local individuals, instead of leaving the issues to be discussed by reporters, commentators, and professors. The paper is making money as a result of cheap production, efficient management, political independence, and free representation of minority positions. I do not agree with much that goes into it. But I am heartened that in the issues represented by "Process" we are in agreement. For three decades American radi-

calism has been voiceless or forced to channel its erstwhile individualism through controlled outlets. It says much for the courage of the editors that they could first sponsor "Process" as it was presented to them by its organizers and then reject it on the evidence. A large number of those who attended and did not walk out were *Free Press* subscribers.

I am seriously disturbed by the esthetic trend represented by "Process." Suddenly those of us who have fought the battle of the living artist against the mortmain of the classic see springing up around us concert activities, art galleries, dance, and extra-theatrical ventures given over almost entirely to current enthusiasms. But with them we see rising an attitude of faceless indifference to responsibility, to good or bad, to simple decency and the rights of other persons, which disguises itself in a rationale of superiority to all of these. The attitude resembles fascism but would fiercely repudiate that term. Like the television screen it makes no distinction between the simulated and the real. In either, the bullet whine has been added from stock sound. Its ethics and esthetics are expedient. The young promoters of these events are the first generation progeny of—in Buckminster Fuller's description—the "third parent," television. Imaginatively impoverished by the uniform, bland indifference of electronic fun and violence, the first TV generation is trying, too late in youth, to discover or recover the lost experience of self-invented imaginative play. Frustrate or dissatisfied, many turn instead to marijuana and LSD, renewing the illusionary excitement. The Happening, designed to liberate the individual, to make him one with the ongoing activity, to heighten his responses to the living scene, has become instead too often authoritarian, irrational, and indifferent to reality. It claims freedom to deny any esthetic but its own. Instead of the enlargement of beauty, it prefers the estrangement and narrowness of "camp."

In two previous articles I have commented upon a collage of quotations from a book, *The New Art*, representing the New York esthetic scene. There is at present a danger that the peculiarities, the fashionable oddities of the New York scene may capture too great a share of national esthetic judgment. The Happening, which began as a liberating medium, has already divided in two strongly contrary directions: the authoritarian, in which participants and

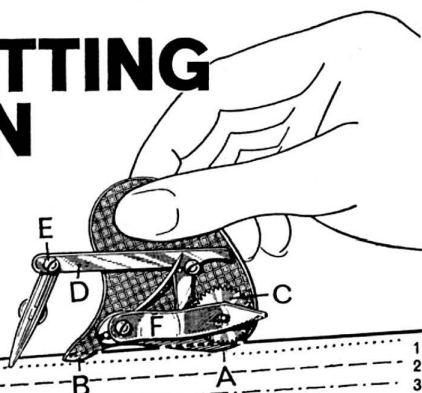
audience are supposed to do as they are told; and the communal, where a community leadership develops its facilities and places these, however handicapped by lack of money, at the service of community participation. The former is represented by what I have told of "Process." The latter is represented by such a group as ONCE in Ann Arbor: see my articles in *Arts and Architecture* for September and October 1965. The latter type deserves all the support that we can give it. The former needs our understanding and perhaps our sympathy, but it needs also our determination not to be sucked in against our individual judgment. And broadly across the field of arts today, those of us who have fought for living art by living artists must prepare to take our stand against substitution of ephemeral "standards" for the routine false "classic standards." Now more than ever those of us who work as critics must have the courage to be unfashionable and when necessary unpopular. We must work for the living artist but refuse to surrender to him when in our opinion what he does deserves our censure.

In the August 1965 *Arts and Architecture* I published a letter praising a group of high school students, who under the direction of Michael Agnello performed a Happening type program, for its "discipline." Brooding over Mike's change from discipline to authoritarianism, from decency to coarseness, I wonder whether, by aiming at the real goals which in "Process" turned out to be illusory and nasty, this Happening might not have stimulated its participants to a greater awareness of racial sensitiveness, of what it is to be unemployed, jailed, helpless in a power structure. Yet this, if seriously intended, would not have permitted the investigators to sit sniggering in a back room; they would need to have appeared, to have realized and accepted their responsibility; they would have required themselves to seek rightly directive questions and prepare meaningful answers. I don't say I know how such a form could have been worked, but the failure to deal seriously with such issues does not excuse trivializing them to a smearing parody. If authoritarianism alone was the real issue, not four of us but all present should have been prepared to defy it and break out. Mike calls me a "Don Quixote." Do he and his collaborators still think it funny to have had so many unresisting victims?

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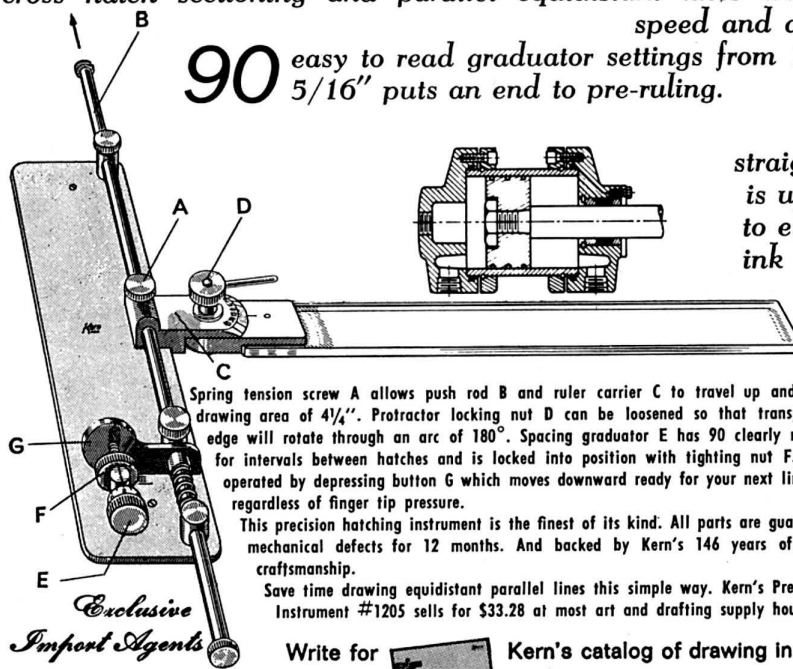


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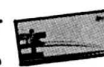
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