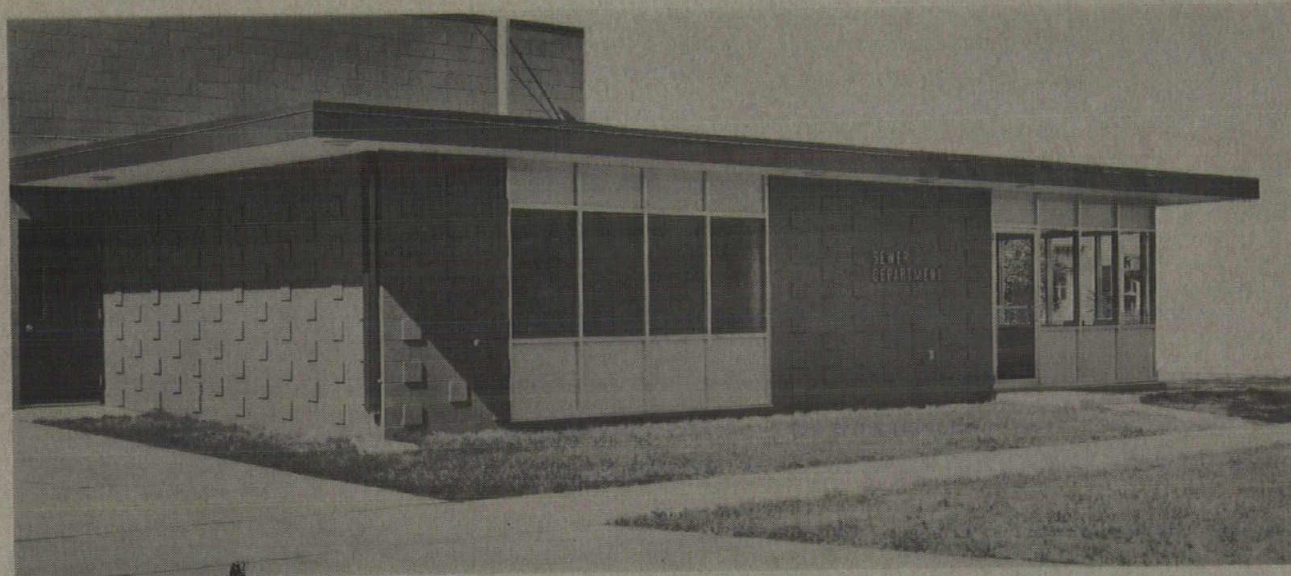


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EDUCATION ISSUE

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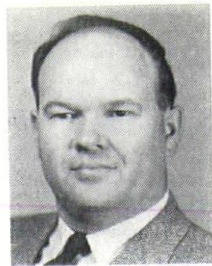
Cover: "Directions" by Tadeus Janowski, visiting lecturer and faculty member, Department of Architecture, Iowa State University, symbolizes the profession (or man, in a larger sense) facing and choosing the courses of action that will make this the best decade in the century — or the worst. See page 18.

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1965 Regional to Explore 'Architecture: Mid-America'



Healey



Kendall



McCallum

The Central States Regional Conference of the American Institute of Architects, to be held at the Hotel Fort Des Moines, Des Moines, Iowa, on November 3, 4, 5, and 6, 1965, will orient itself to the topic "Architecture: Mid-America", according to plans that have been more than a year in the making.

Edward H. Healey, AIA, President of the Iowa Chapter of the American Institute of Architects, expressed the reasoning behind the choosing of the theme:

"'Architecture: Mid-America' is a particularly appropriate subject for this particular time."

"The central section of this country has for a long time been thought of as being a rather provincial, conservative area that is more often a follower than a leader."

"In actuality, however, there has been a real awakening in 'the hinterland' over the past decade. Although projects here are not always of the magnitude of those in the more populous areas, the quality of our design has risen markedly."

"In fact, if an indigenous American Architecture is to be found, it is in the Midsection of this country."

"With this thought in mind, I want to extend a welcome from the Iowa Chapter to the Region. It is my hope that the conference will bring us renewed faith, vision, and inspiration to continue developing a practical and creative architecture that is truly representative of our country, and especially of 'Mid-America'."

Conference Chairman R. Kenneth Kendall, AIA, and his committee have arranged a program of speakers and events that cannot help but move an unusual number of architects from behind their desks and drafting boards to the activity.

Angus McCallum, AIA, Director of the Central States Region, will keynote the conference the morning of Thursday, November 4. McCallum, well known for his service to the profession and to his community, will finish his third year as Regional Director and be succeeded by the new director elected by the conference on Saturday.

Later Thursday morning, Miles Beatty, Regional Vice President of the F. W. Dodge Corporation, will speak on the topic "Architecture: Mid-America—Big Business." Mr. Beatty, a midwesterner born in St. Louis, Missouri, and educated in Cincinnati, Ohio, has been with the F. W. Dodge Corporation forty years. He is responsible for every Dodge activity in the region, including Dodge Reports, Sweet's Catalog Services, and Dodge Statistical Services, all of which are well known and appreciated.

Tom Chenoweth, Des Moines City Manager, will extend a Thursday luncheon welcome. After lunch,

Karel Henry Yasko, FAIA, will ask the question "Architecture: Mid-America—Where Are We Going?". As Assistant Commissioner for Design under Public Building Service, General Services Administration, Karel Yasko is eminently qualified to examine this subject. Educated at the Yale School of Painting and the Yale School of Architecture, (B.F.A.; Arch.), he practiced from 1947 to 1959 as a principal in the firm of Foster & Yasko, Architects, subsequently becoming Wisconsin State Architect and then graduating to his present post in government.

Raymond D. Reed, AIA, Head of the Department of Architecture at Iowa State University, Ames, Iowa, will moderate a panel discussion beginning early Thursday afternoon, and ending later in the day with a period of questioning from the floor.

When Ray Reed assumed command of the Department of Architecture, ISU, (He is a Lieutenant Commander in the United States Navy Reserve) a long search was ended for a successor to Leonard Wolf, FAIA, whose untimely death snuffed out a driving force in architectural education. Since July, 1964, Reed's intellect has burst over the School of Architecture and the Chapter in a brilliant shower of ideas that are based on a genuine philosophy and a large quantity of know-how. Educated at Tulane (B. Arch.) and Harvard (M. Arch.), Reed was a practicing architect in Louisiana and Chairman of Architecture, University of Southwestern Louisiana, before coming to Iowa. He will serve as moderator for all sessions of the conference.



Beatty



Yasko



Reed

Participants in the panel discussion moderated by Reed will be Gyo Obata, AIA, St. Louis, Missouri; Raymond D. Crites, AIA, Cedar Rapids, Iowa; David Murray, AIA, Tulsa, Oklahoma; Robert Schaefer, AIA, Wichita, Kansas; and Alex Weinstein, AIA, Omaha, Nebraska.

Gyo Obata, AIA, is widely known throughout the United States. He is the partner responsible for design in the St. Louis firm of Hellmuth, Obata, and Kassabaum. 'HOK', as it is known, has received many architectural design awards, including national honor awards from the American Institute of Architects. Obata graduated from Washington University, St. Louis, receiving the degree Bachelor of Science in Architecture. He then studied at Cranbrook under the late Eliel Saarinen, graduating in 1946 with the degree Master of Architecture in Civic Design. After working in the Chicago office of Skidmore, Owings, and Merrill, he joined Hellmuth, Yamasaki, and Leinweber in 1951, the firm being subsequently reorganized as Hellmuth, Obata, and Kassabaum.



Obata



Crites



Murray

Raymond D. Crites, AIA, has designed a number of Iowa Chapter Honor Award-winning buildings, and recently received a National Chapter Honor Award for the design of his own home. He is a partner in the Cedar Rapids firm of Crites and McConnell, and graduated (B. Arch.) from Iowa State University in 1953. He instructed at that school in 1955 and 1956, and is presently a member of the State Capitol Planning Commission.

David G. Murray, AIA, is senior partner in the Tulsa firm of Murray-Jones-Murray, an organization which has received increasing recognition for its work. More than twenty awards for excellence in architecture have been given to the firm. Possibly the best-known building designed by Murray-Jones-Murray is the elegant Tulsa Airport. Murray holds a Bachelor of Architecture degree from Oklahoma State University, and included among several other important service activities for the profession is his position as a member of the Oklahoma Board of Governors of Licensed Architects.

Robert Schaefer, AIA, is a partner in the firm of Schaefer, Schirmer, and Eflin, Wichita. He received the degree Bachelor of Science in Architectural Engineering from the University of Illinois in 1949 and continued in graduate design there until 1950. Nine of the firm's projects have received State A.I.A. design awards. Mr. Schaefer is active in civic work, and among other things is a member of the Board of Directors, Wichita Art Museum.

Alex Weinstein, AIA, is a partner in the Omaha firm of Steele, Sandham, and Weinstein, known throughout Nebraska for their excellent design and wide range of ability. He received a Bachelor of Science in Architectural Engineering degree from Iowa State University in 1943, and a Master of Architecture degree from the Massachusetts Institute of Technology in 1948.

The morning of Friday, November 5 has been programmed to feature talks by Mr. James Alcott and Mr. Joe D. Batten.

Mr. Alcott, Director of economic development for the Midwest Research Institute, will talk about "Mid-America Potential". He is presently secretary of Kansas City Resources, Inc., an organization that considers and promotes research projects for the Kansas City metropolitan area. He is also chairman of the Engineering Foundation Research Conferences.



Schaefer



Weinstein



Alcott

Joe D. Batten is President of Batten, Batten, Hudson & Swab, Inc., Management Consultants, and chairman of Successful Living Institute, with headquarters in Des Moines and with offices in key metropolitan centers. He has written numerous articles and is the author of the book "Tough-Minded Management", published by the American Management Association. Mr. Batten will parallel the subject of his book with a talk on "The Tough-Minded Architect—Leader of the Mid-American Environment."

The Friday noon luncheon will be a joint session with the Greater Des Moines Chamber of Commerce at which a welcome will be given by Charles Iles, Mayor of Des Moines. At this session, an AIA Regional award will be presented to Oklahoma City; the Mayor and President of the Chamber of Commerce of that city will be present to receive it. A challenge by Morris Ketchum, Jr., FAIA, National President of the American Institute of Architects, will conclude the luncheon. Ketchum, a very articulate and highly qualified spokesman for the profession, heads the New York architectural firm of Morris Ketchum, Jr., and Associates, and holds degrees from the graduate School of Architecture, Columbia University, and the School of Fine Arts, Fontainebleau, France. He has served in a number of local, state, and national AIA offices. He will deliver a major address later in the program.

Early Friday afternoon, November 5, Dr. Louis Valbracht, A.B., B.D., D.D., will examine "Architecture: Mid-America—for the Love of Man." The Reverend Valbracht is senior pastor of St. John's Lutheran Church, Des Moines, which has a congregation of over 5,000 baptized members. Extremely active in civic affairs, Dr. Valbracht has made a great many speeches to audiences of many and diverse natures.



Batten



Valbracht



Ketchum

At Friday afternoon's end, all the speakers and panel members will participate in a symposium. The discussion will have three thematic bends: The Force, The Direction, and The Vision.

The Friday evening banquet will be preceded by a cocktail party, the Carthage Marble Company hosting.

The banquet itself will feature a major speech by Morris Ketchum, Jr., FAIA: "What Challenge Faces the U.S.? How Does Our Region Differ From the U.S.?" Ketchum, as mentioned previously, is National AIA president, and is a speaker held in international regard.

Saturday morning will begin with a Regional Executive Council meeting, Angus McCallum, AIA, presiding, and be followed by a continental breakfast provided by the Producers' Council. A subsequent business meeting will elect a new regional director, and a presentation will then be made by the Octagon Staff. A showing of the AIA-sponsored film, "War on Ugliness" following Saturday noon luncheon will conclude the Conference.

PROGRAM
CENTRAL STATES REGIONAL CONFERENCE

WEDNESDAY, NOVEMBER 3

3:00 P.M.

Registration

6:30 P.M.

President's Reception

Cocktail Party — Host Chapter

8:00 P.M.

Dinner

9:00 P.M.

Welcoming Address — Orientation

THURSDAY, NOVEMBER 4

8:00 A.M.

Registration

Continental Breakfast

Mezzanine Floor — Producer's Council

9:30 A.M.

Opening Session

Welcome: Edward H. Healey, A. I. A.
President, Iowa Chapter

Introduction: R. Kenneth Kendall, A. I. A.
Convention Chairman

Conference Moderator: Raymond D. Reed, A. I. A.

Keynote Address: Angus McCallum, A. I. A.
Director Central States Region

10:45 A.M.

Coffee Break

11:00 A.M.

Speaker: Miles Beatty
Vice-President F. W. Dodge Corp.
"Architecture: Mid-America —
Big Business."
(An Economic Analysis and Forecast)

12:00 Noon

Luncheon

Welcome: Tom Chenoweth, City Manager
Des Moines, Iowa

Speaker: Karel Yasko, F. A. I. A.
Assistant Commissioner Public
Building Service, G. S. A.
"Architecture: Mid-America—
Where Are We Going?"

1:45 P.M.

Break

2:00 P.M.

Panel Discussion By Regional Architects

Panel: Ray Crites, A. I. A., Iowa
Gyo Obata, A. I. A., Missouri
David Murray, A. I. A., Oklahoma
Robert Schaefer, A. I. A., Kansas
Alex Weinstein, A. I. A., Nebraska

3:30 P.M.

Coffee Break

3:45 P.M.

Panel Discussion — Continuation with
Participation From the Floor.

5:00 P.M.

Adjourn

6:30 P.M.

Cocktail Party — Producer's Council Hosts

8:15 P.M.

Party — "Luau"
Dinner and Floor Show

FRIDAY, NOVEMBER 5

8:00 A.M.

Registration

9:30 A.M.

Speaker: Mr. James Alcott
Director of Economic Development
Midwest Research Institute
"Mid-America Potential"

10:30 A.M.

Coffee

10:45 A.M.

Speaker: Mr. Joe D. Batten
President of Batten, Batten, Hudson
and Swab, Management Consultants
"The Tough-Minded Architect — Leader
of The Mid-America Environment."

11:45 A.M.

Break

12:00 Noon

Luncheon

Joint Session with the Greater Des Moines Chamber of Commerce —

Welcome: Mayor of Des Moines

Award: A. I. A. Regional Award to Oklahoma City Participating:

Angus McCallum, A. I. A.

Morris Ketchum, Jr., F. A. I. A.

Mayor — Oklahoma City

President — Oklahoma City Chamber of Commerce.

Challenge: Morris Ketchum, Jr., F. A. I. A.

President, American Institute of Architects

1:45 P.M.

Break

2:00 P.M.

Speaker: Dr. Louis Valbracht, Senior Pastor,
St. John's Lutheran Church, Des Moines
"Architecture: Mid-America — For
the Love of Man."

3:00 P.M.

Coffee

3:15 P.M.

Symposium: Participants: All speakers and panel.

Discussion: The Force
The Direction
The Vision

5:00 P.M.

Adjourn

6:30 P.M.

Cocktail Party — Carthage Marble Co. Hosts

8:00 P.M.

Banquet

Entertainment: Y-Boys Chorus, Des Moines, Iowa

Speaker: Morris Ketchum, Jr., F. A. I. A.

President, A. I. A.

"What Challenge Faces the U. S.?"

How Does Our Region Differ From
the U. S.?"

10:00 P.M.

Dance and Bar — Music by Don Hoy

SATURDAY, NOVEMBER 6

8:00 A.M.

Regional Executive Council

Breakfast Meeting — Angus McCallum, A. I. A.
Presiding

8:30 A.M.

Continental Breakfast — Producers Council

9:30 A.M.

Business Meeting — Angus McCallum
Presiding

Election of a New Regional Director

10:30 A.M.

Coffee

10:45 A.M.

P. R. Presentation — Octagon Staff

11:45 A.M.

Adjournment

12:00 Noon

Luncheon

Film: "War on Ugliness"

LADIES PROGRAM

A hospitality room will be open at all hours during registration.

Women are invited to any or all of the men's program events.

The following are special events planned for ladies only:

THURSDAY, NOVEMBER 4 (Limit 200)

2:00 P.M.

Bus excursion to Simpson College Library,
Indianola, Iowa — (Designed by Richard Neutra)

Exhibit: "Yarn Mosaics" By Valeria Griffith
Tea

FRIDAY, NOVEMBER 5 (Limit 200)

11:00 A.M.

Bus tour enroute to Des Moines Golf and
Country Club via Drake University Campus and
Des Moines Art Center.

11:30 A.M.

Bus straight to Des Moines Golf and Country Club

12:00 Noon

Punch

12:30 P.M.

Luncheon

Speaker: Isabella Ketchum — Interior Designer
wife of A. I. A. President Ketchum —
"Mixing and Matching in Modern Interiors"

Special Guests: Wives of Architectural Students
attending conference



Governor Harold E. Hughes signs new practice bill in the presence of Iowa architects James Lynch, left, Chapter first vice president, and W. David Frevert, 1964 Chapter president.

Legislature Enacts Architectural Practice Law

Significant changes in Chapter 118 of the Code of Iowa were made during the recent legislative session. Chapter 118, that part of Iowa law which establishes the Board of Architectural Examiners, determines the method by which a registration certificate can be obtained, and sets up standards and violation penalties, was amended in the interest of both the public and profession, the Iowa Chapter believes. By the addition of and the rewording of certain provisions, the previous law has become a "practice" law. Previously, it was known to the profession as a "title" law.

Essentially, the law before amendment did not prevent any person from performing all the services furnished by an architect as long as the person did not use "any form of the word title 'architect.'" The amended law defines the practice of architecture and limits it to those who have passed a registration examination.

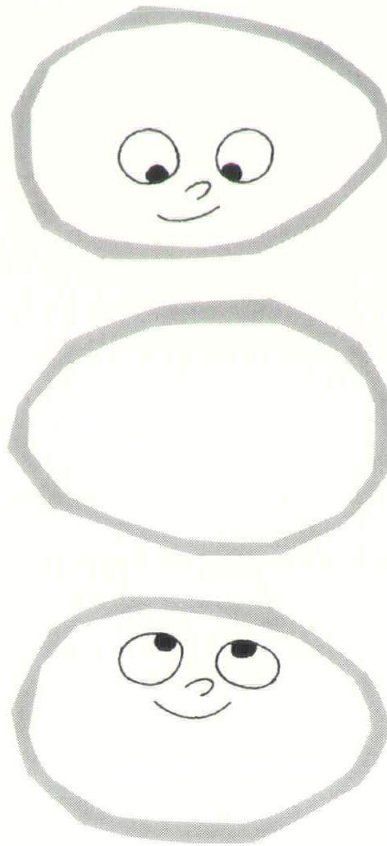
The law as now in force states, in part:

"The practice of architecture includes any professional service, such as consultation, investigation, evaluation, planning, and design, or responsible supervision of construction, in connection with the construction of buildings, or related structures and projects, or the addition to or alteration thereof, wherein the safeguarding of life, health, or property is concerned or involved."

"It shall be unlawful for any person to practice or offer to practice architecture in this state or use in connection with his name, or to otherwise assume, use or advertise any title or description tending to convey the impression that he is an architect unless such person is qualified by registration as herein provided."

Certain exemptions have been included in the new law concerning the furnishing of services for churches, buildings used primarily for agricultural purposes, and warehouses, among others.

Wade Clarke, Jr., Assistant Attorney General of the State of Iowa, in discussing the interpretation and enforcement of the law with the Chapter, has stated that the enforcement of the law with care and good judgement will prove to it to be an effective asset to all architects and to the entire state, saying also that the fraudulent or inexperienced practice of architecture by persons holding themselves out to be experienced architects is a hazard to both the occupiers and users of poorly designed buildings. Clarke also made clear the importance of the layman's participation in the governmental process, [of enforcement] pointing out that the statutory provisions of the law can be carefully and wisely enforced only if the Attorney General's office receives the help and cooperation of the architects practicing in Iowa through the adequate and timely reporting of violations of the law.



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In The Tuileries Garden

BY R. BUCKMINSTER FULLER

Buckminster Fuller, world-recognized engineer; educator; inventor; thinks in terms of 'world'. To use his phrase, a "world around" way of thinking must soon develop if the world is to continue in its present status: that of being inhabited by living people. This way of thinking, this foment of action, cannot be accomplished politically, he believes; it can only occur as the result of a special type of change: an inventive "more-with-lessing": a change exemplified by the thinking of the world student organization he describes.

Mies van der Rohe has talked about less being more. Fuller points out that less is going to have to be more—and more.

23, Canynge Square
Bristol 8, Somerset, England

Astronauts, aviators, mariners, sub-mariners and people of all countries use and appreciate tiny transistors, because transistors do so much more, so much more reliably with so much less. So also do a myriad of invisible alloys, chemical and electro-magnetic devices accomplish much more with less. These globally interacting, invisibly operating inventions were not organized as a benevolent world revolution by anyone. But their comprehensively integrating and inter-accelerating, more-with-lessing altogether constitute—the one revolution which is politically welcome the world around. Computers, TV's and plastics are wanted everywhere.

The centuries-long only subconscious more-with-lessing is now entering human consciousness as constituting a unified world revolution—as inexorable and transcendental to man's will as is an earthquake. Some speak of the revolution as "the impact of technology on society", others as "automation". Everywhere people are aware of its portentousness. Few think of it correctly as "invisible-more-with-lessing"—99.9% of humanity look upon it only as visibly more—and more—and more again.

To turn the heretofore only subconsciously regenerative more-of-every advantage with less-of-every-resource revolution to highest human benefit in the shortest time with the most pleasure and satisfaction and with the least effort, pain or rupture for all has now become the conscious focus of a world around university students' coordinated research.

Identified as the Design Science Decade, the students' ten year plan is divided into five evolutionary stages of two years each. Stage one—on exhibit in the Tuileries Garden in Paris, France, for the first

ten days of July, 1965 (under the auspices of the International Union of Architects' Eighth World Congress)—confronts the world with the facts which have led its students to the research conclusion that human survival apparently depends upon an immediate, consciously coordinated, world around, computerized, research marshalling of the theoretically required additional inventions and industrial network integrations—for the swiftest attainment and maintenance of physical success of all humanity.

Fortunately, say the students, such invention initiative does not derive from political debate or bureaucratic licensing. The license comes only from the blue sky of the inventor's intellect. No one licensed the inventors of the airplane, telephone, electric light and radio to go to work. It took only five men to invent these world-transforming developments. Herein lies the potential effectiveness of the world student research revolution.

The students have no political motives. They are not supported by any political organization. As amateur design scientists, the students deal only in resource statistics, computation, inventions, schematics, drawings and models which treat with the world's industrial network growth. They deal theoretically and experimentally with man's external, inanimate, industrial network organism in the same way that medical science deals with mankind's internal organism. Their design science findings may be employed alike by all political states, whenever, in emergencies, the students' inventions and network integrations become as logically employable as are medical science's research "breakthroughs". Anticipating critical need, the students' design science "breakthroughs" are placed upon the published, standby awareness

"shelves" in the same way that medical breakthrough techniques and antibiotics become standby.

Because humanity has a long memory for fiascos, nonsense and catchwords, the question has been asked several times, "Has the world students' coordinate support of the invention revolution something to do with Technocracy?". The answer is No! Technocracy was a political organization. It was formed in the 1929-32 economic depression. It consisted mostly of unemployed engineers. This blue-shirt uniformed, technical-elite asserted that the 1932 depression would soon worsen. They announced that they would, at the right moment, set up an engineer's dictatorship. Economic recovery in the U.S.A. by Franklin Roosevelt's administration deflated technocracy's plans. They were inherently deflatable. Engineers are too forthright. They are politically naive.

The world students' design science initiative has no precedent. The conditions precipitating it never before existed. It is the constructive outgrowth of the world around students' ever more logical dissatisfaction with the inadequacy of yesterday's theories and practices to cope with today's problems and potentials. Their highly intuitive and not always clearly defined dissatisfaction is frequently articulated only in protests over local regulations, or the right to be heard. Sometimes, in civil rights movements, the students' spirit discloses superb courage and dedication to human justice. Sometimes—in wanton outbursts of indiscriminate disdain of the "old"—it may break windows and noses. Typical of the milder, organized protests, was the recent University of California students' Berkeley rebellion.

The issues are often confused because of political tampering. It is easy for skilled operators of oppos-

ing world ideologies to surreptitiously exploit the universally persistent, intuitive discontent amongst their adversaries' youth by daring-do teasing in their respective directions.

Born utterly helpless, and gaining independent competence only slowly, youth clings to the idea of an older authority responsible for its welfare. Youth assumes that the political authority is a public parent. When dissatisfied, youth protests to the authorities, assuming the authorities can, if they wish, make everything satisfactory. Often, the "authority" lacks such capability. The problems are usually beyond the scope of local authority.

The present university youth are World War Two's babies, many born with their fathers away at war. Many were tended by group babysitters as their mothers worked in munitions factories. The present university students are also the first humans to be reared by the *third parent*—television—which has given them hourly news of world events. Unlike any previous generations, the students think "world". They will settle for nothing less than justice and physical advantage for all, everywhere around Earth.

The third parent also taught them that no invention barriers are insurmountable to science and technology. They were born into an air travelling world. The atom bomb is their birth mark. In their fourth year of life the giant, transistorised computers began commercial operation. When the students were nine, men climbed to the peak of Mount Everest. When ten, they were immunized against polio. When twelve, the Russians' unmanned rocket sputnik orbited the Earth every hour and a half, and also the first civilian nuclear reactor went into operation as an electric

power generating station. When thirteen, the U.S. atomic powered submarine, "Nautilus", went from the Pacific to the Atlantic submerged below the north Polar ice. When fourteen, the Russians' unmanned rocket photographed the far side of the moon and returned to Earth. When fifteen, the U.S. Bathyscaphe took man safely to photograph the bottom of the Pacific Ocean's deepest hole. When sixteen, a Russian orbited Earth in a rocket. When seventeen, the D.N.A. genetic code for the control of the design of all life was discovered.

The students know that man can do anything he wants. Yet they see world officialdom investing the world's highest capabilities only in race suicide springboards. Finding their own political demonstrations for peace or their outright revolutions leading only towards further war, pioneers amongst the students have joined up objectively with the heretofore only subjectively experienced do-more-with-less invention revolution. The students are applying general systems theory to comprehend and utilize the accelerating invention revolution as the swiftest and only fundamental means of attaining world peace with both physical success and moral justice for all.

The students' reason:—

At the present moment the cumulative total of metals—mined and refined by man throughout all history—is wholly employed in machines or structures which, operating at limit capacity, can accommodate and serve only 44% of living humanity. The metals in 80% of all the scrap of yesterday's obsolete mechanics and structures have been recovered, refined as "pure metals" and put to work again. But the rate of discovery of additional metal ores is slower than human population increase. Throughout the twentieth century, therefore, the metals mined or unmined have been continually decreasing per each world man. No exclusively political act of any political system can make the world's resources take care of more than 44% of humanity.

Despite the constant increase in human population and constant decrease of metals per person, between 1900 and 1965 the number of people attaining physical regeneration success by full participation in the highest standard of living progressively developed by world industrialization—a personal standard of living and health superior to that ever enjoyed by any pre-twentieth century monarch—rose steadily from less than 1% to 40% of all living humanity. The 40% of humanity surprisingly grown successful, despite constantly diminishing physical resources, per capita, can only be explained by the doing-more-with-less invention revolution.

The success cannot be attributed to any political doctrine. It has flourished equally under opposing ideologies. Take away the energy distributing networks and the industrial machinery from America, Russia and all the world's industrialized countries, and within six months over 2 billion swiftly and painfully deteriorating people will starve to death. Take away the politicians, all the ideologies and their professional protagonists from those same countries and leave them their present energy networks, industrial machinery, routine production and distribution personnel and no more humans will starve nor be afflicted in health than at present.

Why has mankind failed to perceive, understand and respond logically to the significance of this situation? The answer is complex. It consists of such powerfully conditioned human reflexes as the *laissez-faire* induced by nature's built-in, instinctive, pre-occupational "game playing" drives operative in all living creatures, by which, in lieu of intellect, they only inadvertently and unintentionally provide vital support of one another—as for instance do all the mammals respire all the vegetation's vitally required dioxide, while all vegetation respire all the mammals' vitally required oxygen; or as do the honey-hunting bees inadvertently fertilize the growth of flowers with their pollen dusting tails. By the integrated coordination of these myriad inadvertencies of "game playing", nature accomplishes the comprehensive ecological and metabolic regeneration of life on Earth.

Typical of the "games" played by man which preclude his recognition of the fundamentals of his evolution are:—vision-blinding national and local egocentricities; obsessions with legendary "perfections" of yesterday; preoccupation with murder and scandal news; mole-like shortsightedness developed by constant attention to before-the-nose successive personal and local crises and ambitions; narrowness of focus due to specialization; and spring fever.

Another important reason for world society's failure to apprehend and comprehend the significance of industrialization's subordination of the role of yesterday's political ideologies is the insurmountable communications barrier between the 1% of the world population who are scientists, and the 99% who are not. The one-scientist-to-ninety-nine-non-scientists ratio reflects the historical fact that since the last ice age left 75% of the world surface under water, 99% of mankind has occupied only 4% of the world's surface. This 4% has consisted of the many widely dispersed, fertile or mineable dry lands and their fishable inland or coastal waterways. Through 98% of that time, the 99% of humanity sprinkled myopically about the divided lands were mutually unaware of one another. During that same period approximately 1% of humanity went out to sea and occupied the world's omni-interconnected oceans, which together cover 75% of the spherical surface of Earth.

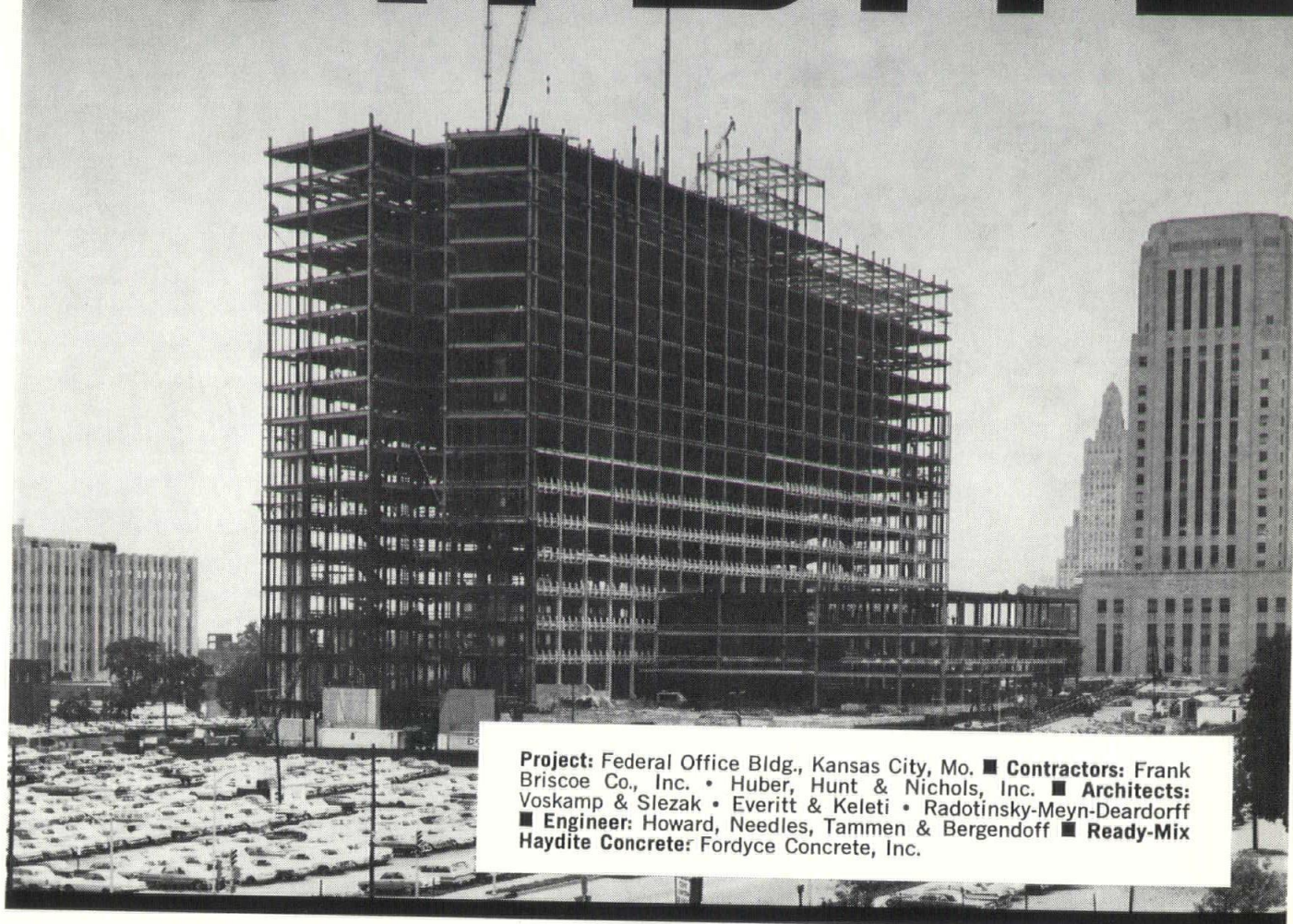
Those few who prospered on land fought defensively against invaders from less productive areas. The heavier and bigger their fortifications, the more secure the defenders felt. They shut down their work, locked their doors and everyone went to sleep at night.

But the sea never shut down. Those who went voluntarily to sea went voluntarily to fight the sea, and other men, for its supremacy. Men on the high seas, forced by the limits of floatability, strove offensively for light weight scientific and technical superiority—stone fortresses sank.

Both the sailors' rewards and their security lay in doing ever more within the limit of floatable weight. The more-with-less capabilities of the pirates, with their properly equipped little ships, often overcame the big, well-manned, richly-laden and less maneuverable ships.

Continued on page 37

HAYDITE



Project: Federal Office Bldg., Kansas City, Mo. ■ **Contractors:** Frank Briscoe Co., Inc. • Huber, Hunt & Nichols, Inc. ■ **Architects:** Voskamp & Slezak • Everitt & Keleti • Radotinsky-Meyn-Deardorff ■ **Engineer:** Howard, Needles, Tammen & Bergendoff ■ **Ready-Mix Haydite Concrete:** Fordyce Concrete, Inc.

FOR LIGHTWEIGHT STRUCTURAL CONCRETE

Weights approximately $1/3$ less than ordinary concrete!

Haydite is the original, time proven aggregate for producing lightweight structural concrete without sacrificing strength or durability. Other uses of Haydite include refractory concrete, insulating concrete, Guniting, insulating fills, roofing granules, filtering medium, hydroponics.

*For information on specific uses of Haydite
contact your local Ready Mix Plant or:*

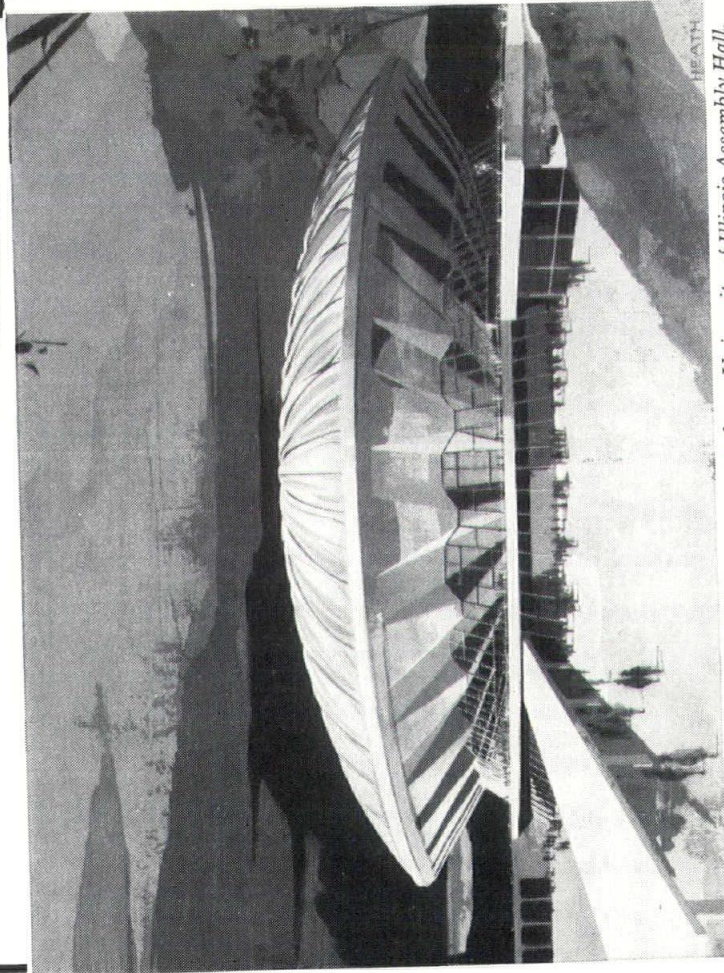


Producers of Haydite aggregate at Centerville, Iowa & New Market, Mo.

modern concrete forming

c.i.a. file: 4-a

Prepared as a service to architects by Portland Cement Association
Clip along dotted line



Movable forms were used for world's largest concrete dome. University of Illinois Assembly Hall. Architect: Harrison & Abramovitz. Structural Engineers: Ammann & Whitney, New York



Fig. 1

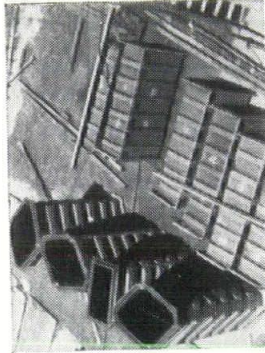


Fig. 2

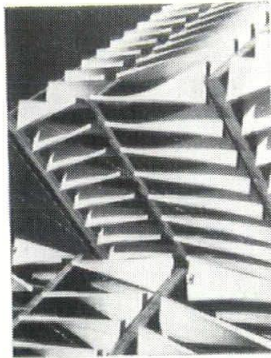


Fig. 3

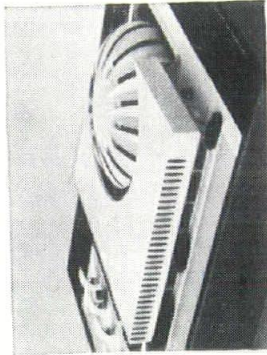


Fig. 4

STRENGTH OF CONCRETE FOR SAFE FORM REMOVAL	AVERAGE TIME TO OBTAIN STRENGTH*
Concrete not subject to bending (tops of sloping surfaces)	24 hours
Concrete subject to bending caused by: 1. dead load only 2. dead and live load	36 hours 3 days
Concrete subject to high stresses (roof or floor slabs and beams)	4½ days

*Concrete with Type I portland cement: 6½ gallons / bag at about 70° F.

New forming and casting methods, as well as advanced building techniques, encourage dramatic increase in use of sculptured concrete. The advantage of rapid form removal (in some cases forms can be stripped after one day and reused immediately) has given concrete an economical and esthetic design versatility. In addition, new forming methods and materials permit the higher reuse of forms, sometimes as high as sixty times. An example of one method of new form construction is shown in Fig. 1. The master mold is draped with fiber glass reinforcement, which will be firmly embedded in a thick coating of polyester resin. (Photo: Engineered Concrete Form Corp., Chicago.) Fig. 2 shows completed forms for Marina City, Chicago. Fig. 3: True hyperbolic paraboloids were used in the Henry Ford Hospital parking structure, Detroit. The 7-ft. 4½-in. concrete panels have a 90° twist, are 24 in. wide top and bottom and 18 in. at waist. (Architect: Albert Kahn.) Fig. 4: The Wyoming National Bank at Casper, Wyoming, illustrates the complete freedom possible in concrete. (Architect: C. Deaton.)

Write for free information. (U.S. and Canada only.)

408 Hubbell Bldg., Des Moines, Iowa 50309
A national organization to improve and extend the uses of concrete

PORTLAND CEMENT ASSOCIATION

Iowa State University

Department of Architecture

A review of goals, new Faculty, and student work

A Strategy For War

BY RAYMOND D. REED, A.I.A.

*Head of the Department of Architecture
Iowa State University*

We are now engaged in a war, the outcome of which will determine if the people of this nation will live with meaningful human dignity.

Wars do not happen suddenly, nor without reason. We have long witnessed daily acts of provocation, of wanton destruction of our lands. Each of us has, through countless compromise and Christian understanding, turned the other cheek. Each of us has, through countless compromise, hoped for a Chamberlain's peace in our time. The war has been long in coming, yet with certainty, it is now upon us.

Guns and bombs punctuate political concepts between nations of men; yet the lasting scars of war are minute in comparison with the desecration of our living world by man in conflict with the nature of our world.

Shimmering silver streams of fish bloating in doubtful soups; ugly creeping encrustations of cancerous subdivisions into which the humanity of our people is classified without meaning, understanding, or founded hope; smoking atmospheres of choking smog or worse offer mute testimony of real conflict. Circumstances now exist which, if unabated, will fulfill the prophecy that many may leave this earth not with a bang, but a whimper.

It is commonly assumed that civilization by divine destiny must always advance. Yet the concept of free will and the dead bones of countless civilizations before us testify that the well being, meaning, and dignity of man hangs on the thread of each generation. Now is our time.

Within recent times it has become fashionable in the professional circles of the architect to talk of 'comprehensive services' and of 'the war on ugliness'. Yet, the architect is now ill-equipped, ill-trained, and ill-organized for effective combat in the total war of environmental design.

For several years we have searched for new leaders to plan our strategy, to marshal our forces, and to direct our tactics. Yet wars are not won by generals flinging slogans at conventions. Wars are won by countless individual acts of courage and conviction. This 'war on ugliness' is not to be a war of blaring bands and bright uniforms. It will be an insurrection of people demanding the right to live in meaningful human dignity.

As individuals in a war we have three choices. We can become neutrals, we can become collaborators, or we can become combatants.

The architect cannot morally remain neutral. Those too sensitive to get involved waste their lives by not living. Each professional commission or omission supports or denies the general welfare of our people.

The architect cannot become a collaborator. The architect who collaborates as a draftsman for ill-conceived projects for well-meaning but ill-informed or irresponsible clients, in threatening the values of our society, sacrifices the rewards and respect of a creative and responsible profession. To create an environment expressive of the best that exists within

us, the architect must become involved in 'the war on ugliness'. Involvement on a 'business as usual' basis will have no value. Our past willingness to conduct business as usual in times of strife has contributed to the current chaos.

We cannot create a living society with yesterday's tools. The war is too comprehensive to be fought within narrow professional limits. Our profession must change to meet the needs of our people. Professional by-laws and covenants restricting the full use of the ethical architect's talents at the expense of our people must be abolished.

Professionally, and as individuals, we must join forces with others fighting to conserve natural resources, to design effective transportation systems, to use land for the common welfare. Trash, refuse of any kind, air and water pollution, blatant signs, and ugly structures exploiting visual shock to sell commodities must openly be individually condemned.

Each must perform such small but positive acts as are individually possible.

The schools of architecture must support and reinforce the profession. Within the last year our department has taken the following actions.

To increase the competency of our students, design studies have been extended from four to five years. Studies in materials and methods of construction, delineation, construction law, and office practices, have been added. Practical experience is now required before graduation. In recognition of our urban chaos, the scope of design studies will be extended from individual buildings to comprehensive urban architecture.

Believing it important that creative architects should develop individual talents in depth, we have initiated opportunities for individual concentrated study in fields relevant to architecture. Problems in aesthetics, economics, structure, and urban ecology relevant to architecture will be researched to depths seldom before possible.

Four talented architects have been added to reinforce the strengths of our capable faculty.

The formation of a School of Design is being studied. If formed, this school will encourage coordinated and comprehensive solutions for the creation of a meaningful living environment.

Through suitable displays, we have expressed the values and challenges of architecture to every high school in Iowa. The number of students wishing to study architecture is without precedent.

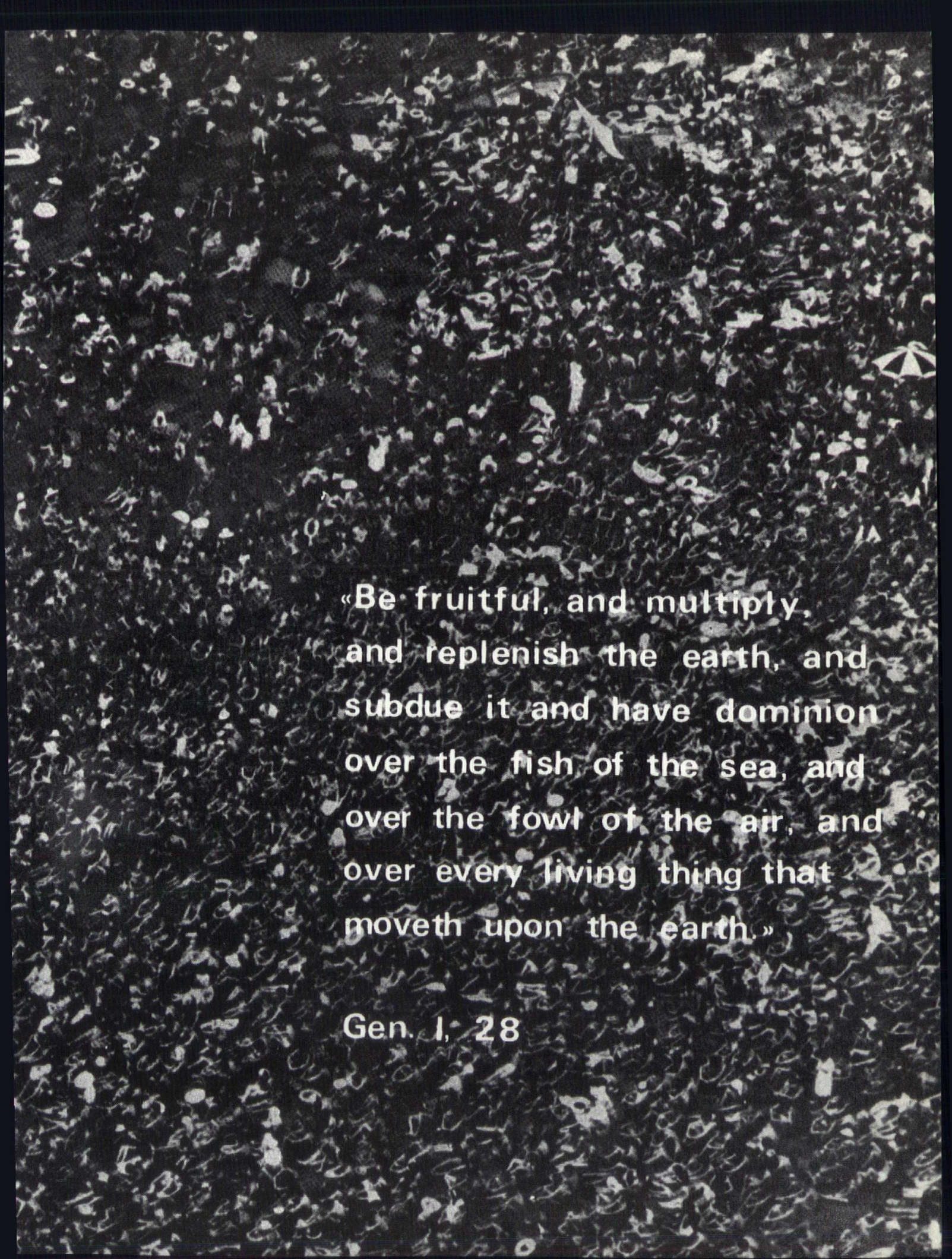
We have initiated a lecture series in which nationally known architects and critics will monthly discuss topics of interest to the profession and the people of Iowa.

We have held meetings with architects, builders, and insurance executives to determine the research needs of our area. We have initiated research proposals, the acceptance of which will permit active participation in architectural research.

It is by these and other small but significant acts that our department commits its resources to the war on ugliness. Our faculty is dedicated to encouraging the intellectual growth, human sensitivity, and technical competency of our graduates.

It is believed that our mutually intensified efforts to meet our common challenge will help forge our profession into an effective force capable of creating an environment that will encourage the growth of meaningful human values.

Overleaf: Student Work

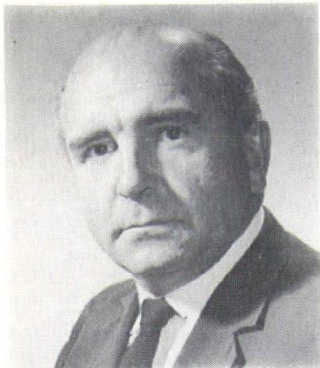


«Be fruitful, and multiply,
and replenish the earth, and
subdue it and have dominion
over the fish of the sea, and
over the fowl of the air, and
over every living thing that
moveth upon the earth.»

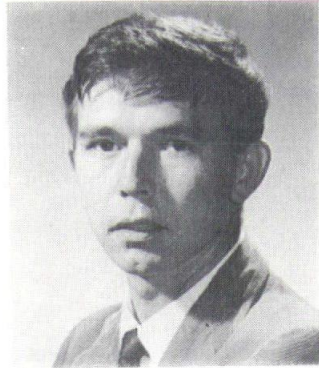
Gen. I, 28

The New Faculty Members

The University has engaged four new faculty members, wealthy in education, talent, and architectural experience.



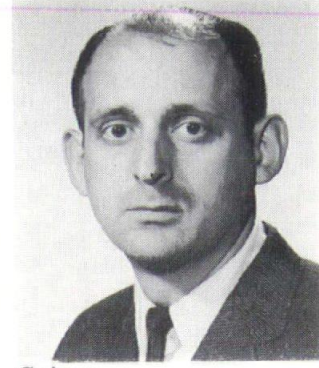
Janowski



Faust



Bjornstad



Geiger

Tadeus M. Janowski was born in Cracow, Poland. He received a Master of Architecture and City Planning degree from the University of Cracow and a Master of Architecture degree from the University of Illinois.

He is on leave from the University of Manitoba, where he holds the rank of Associate Professor. He has also taught at the University of Illinois. Janowski has received many important commissions and was for ten years Chief Architect in the State Office of Poland. He was also a consultant to the Committee of City Planning and Architecture for Southern Poland.

He has individually and in collaboration received 36 prizes in competitions. First prizes: Polish Pavilion in Brussels; Planetarium and Observatory in Warsaw; Dublin Campus Redevelopment Experimental Rotative Building; New Quarter, Moscow; Olympic Stadium in Banff; and first stage winner, Red Rock Hills Housing Development competition, San Francisco.

Mr. Janowski is a visiting lecturer at Iowa State, teaching architectural design in the junior year and also teaching courses in delineation.

Robert L. Faust, a native of New Orleans, attended Tulane University and the University of Oklahoma where he received a Bachelor of Architecture degree.

Prior to his recent appointment at Iowa State University, he was an Associate and Job Captain in the firm of A. C. Ledner and Associates of New Orleans. Earlier, he was an Associate in the firms of Leonard Spangenburg and Associates in New Orleans and Bruce Goff, Architect, Kansas City.

Mr. Faust holds the rank of Instructor at Iowa State and is teaching basic design in Freshman classes.

Tore Bjornstad was born in Norway. He studied architecture at the University of Oslo, Iowa State University, and at Frank Lloyd Wright's Taliesin Fellowship.

He has practiced architecture in Norway and Canada and is presently on leave of absence as senior architect for the Canadian Broadcasting Corporation. He is a planning and research consultant to N. J. Pappas and Associates, a world-wide engineering and development group. Among his latest work is the 60 million dollar Canadian Broadcasting Corporation Consolidation Complex in Montreal and radio stations in Hong Kong and Kuala Lumpur.

Mr. Bjornstad holds the rank of Instructor at Iowa State and is teaching Fourth Year Architectural Design. He will also pursue a research program on the use of computers in architecture.

Raymond W. Geiger, a native of South Dakota, received a Bachelor of Architecture degree from the University of Minnesota in 1961 and a Master of Architecture degree from the Massachusetts Institute of Technology in 1965. His master's thesis was entitled "The Analysis of a Prototype Research Building Systems (Utilizing Pre-Cast, Reinforced Concrete Construction)."

His professional experience includes design and construction drawing in the offices of Leonard Parker, Minneapolis, Minnesota; Harold Spitznagel and Associates, Sioux Falls, South Dakota; Gerald Baxter, Bel Air, Maryland and Davies and Wolf, Cambridge, Massachusetts.

Mr. Geiger holds the rank of Instructor at Iowa State and is teaching basic design to Freshmen.

Examples of Student Work, Fifth Year Design

Students in Fifth Year Design, 1964-65, worked within the following general outline:

Fall Quarter:

A COMMUNITY COLLEGE FOR FORT DODGE, IA.

This was a program tailored to fit actual local requirements, including site, educational requirements, and budgetary limitation. The site, which was visited by the class, exercised a strong influence over the development of the various designs. The scheduling of future additions proved to be a very strong determinant in selecting the premiated parti.

Winter Quarter:

Each student had his choice of the following:

A WORLD STUDY CENTER FOR PHILOSOPHIES AND IDEAS

(Paris Prize Competition)

A rather typical Paris Prize Program which included some inspiring objectives but which had a rather weak site description.

A HIGH-RISE OFFICE BUILDING FOR DES MOINES

Two typical office buildings were programmed with emphasis on auto storage, vertical circulation, and structural considerations for tall buildings. Each student selected one of the programs.

Spring Quarter:

TERMINAL PROBLEM:

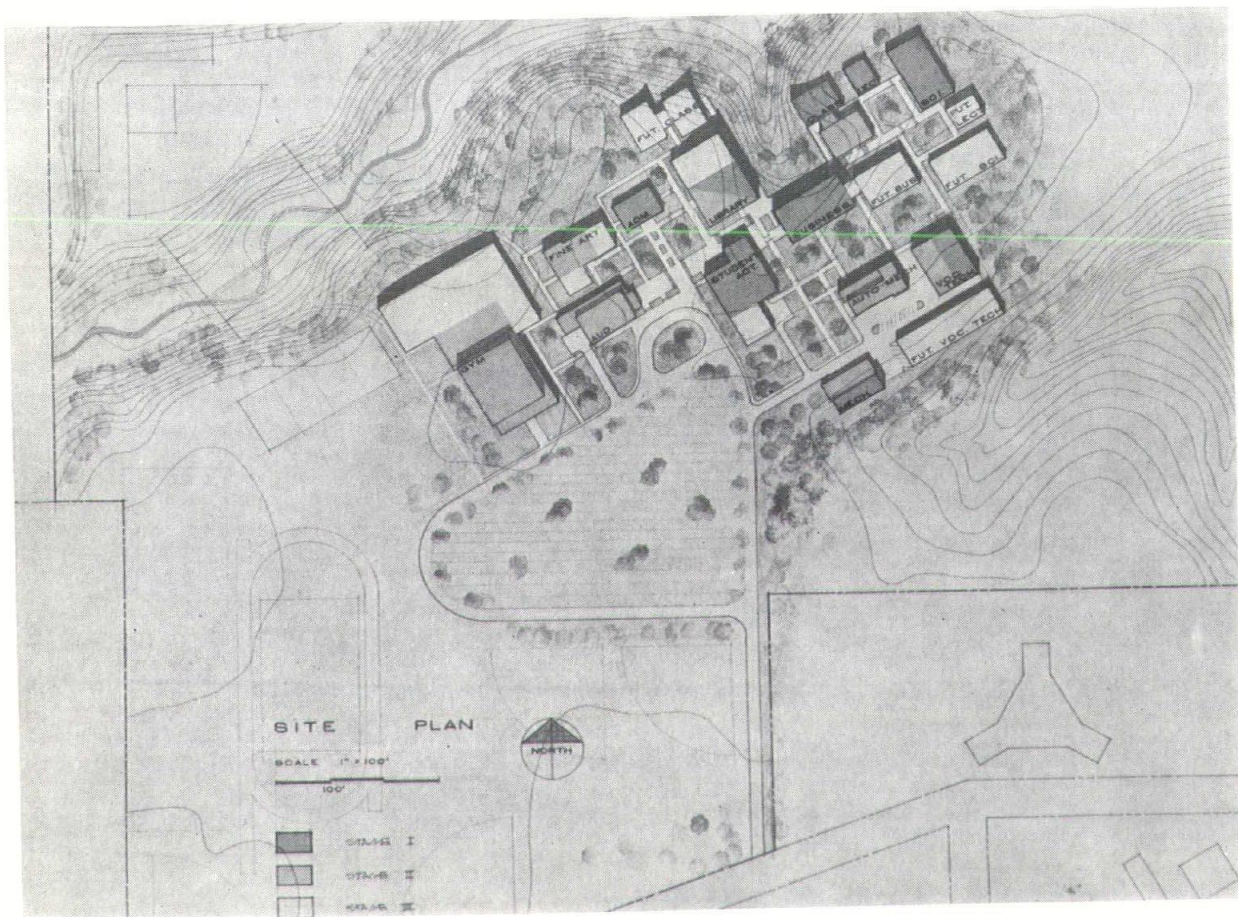
Each student selected his own subject which was researched and programmed during the Fall and Winter quarters and designed during Spring quarter. Subjects related to professional practice were integrated into the study of the problem as much as possible.

Editor's Note: Selected portions of each problem are shown to indicate the general scope of the work. The selections were made from a greater number of plates and drawings, the scope of which encompassed the entire graphic solution to the problem. Comments are by Professors Vernon Stone and Karol Kocimski as indicated.

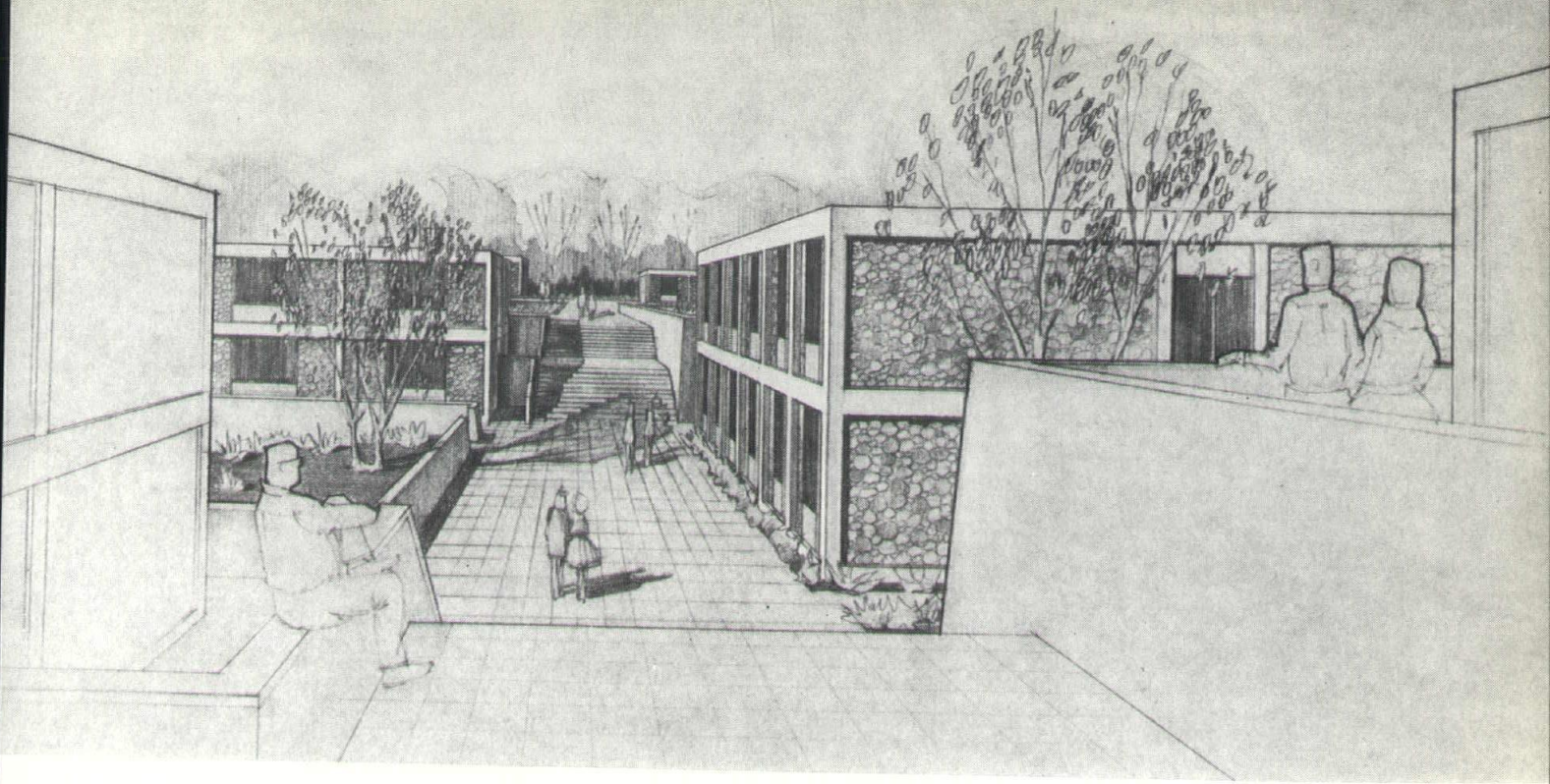
PROBLEM: A COMMUNITY COLLEGE
FOR FORT DODGE, IOWA

James Lammers' Community College design has a parti which is characterized by separate buildings, carefully related to satisfy all of the interrelationships specified by the program. The plan was developed to permit future additions to be built with a minimum of disturbance to existing activities as indicated by the chronological shadings on the plot plan. Contrast this parti with that of Student Anderson overleaf.

Professor: Vernon F. Stone

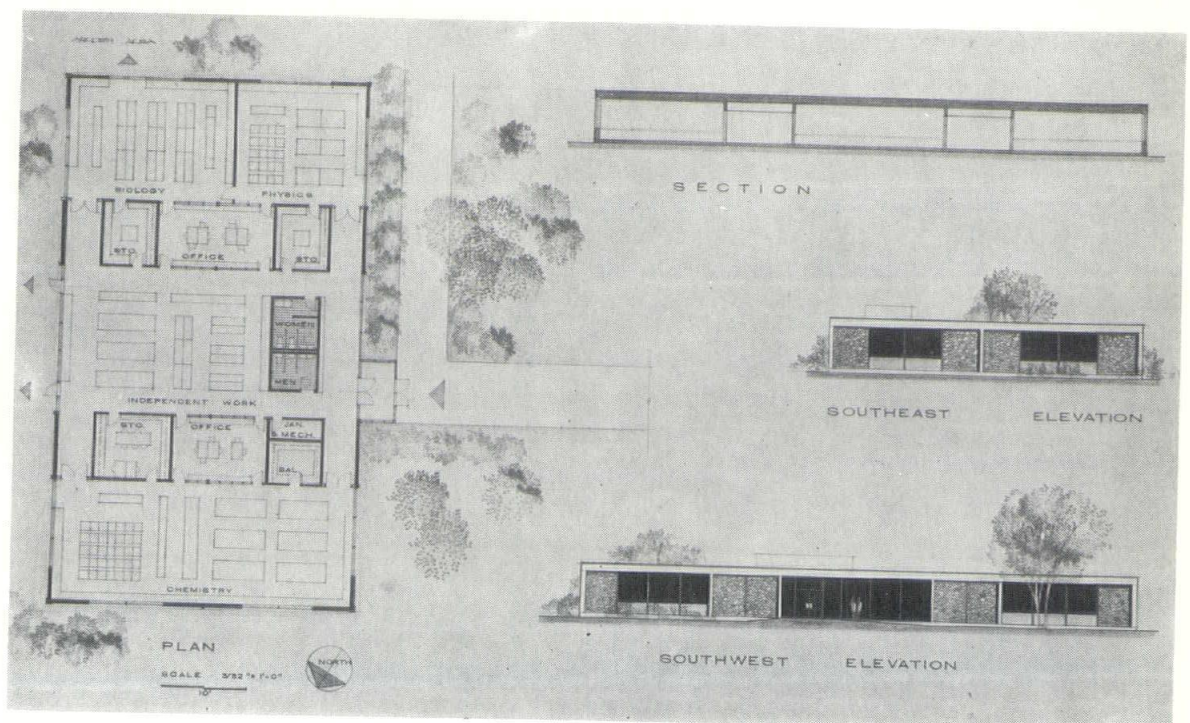


Site Plan



Perspective of Interstice

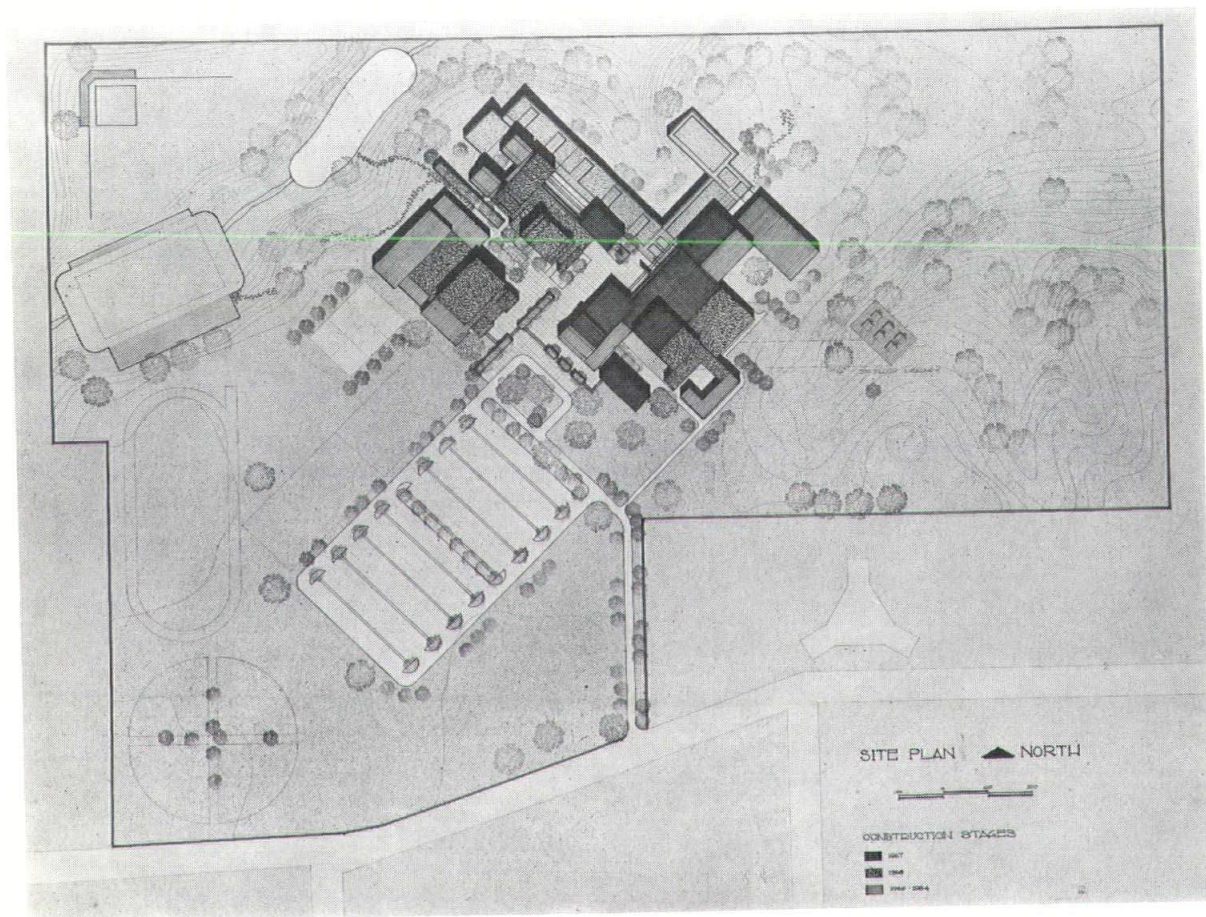
Science Building



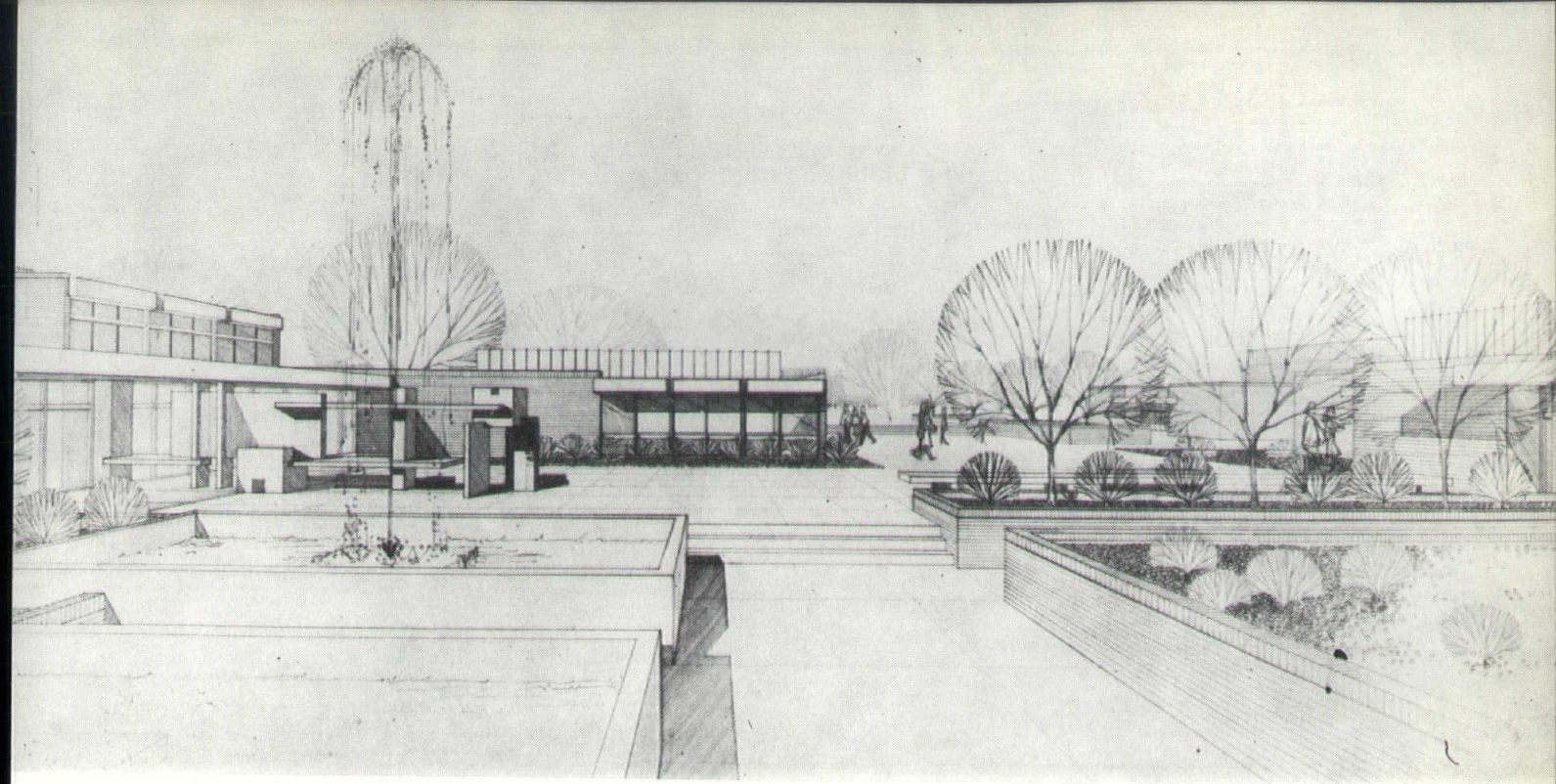
PROBLEM: A COMMUNITY COLLEGE
FOR FORT DODGE, IOWA

Daryl Anderson's solution for the Community College is a complex of contiguous forms with planned additions, as indicated by the hatching of the buildings on the site plan. Each growth area is indicated by different hatching textures. The solution allows, like Lammers' solution, additional growth (building) without disturbance to the academic functioning of the original core, but the elements eventually join. The disposition of elements was handled rather freely, thus reflecting the additive nature of the design; they generate from a core of centralized exterior spaces in a way designed to achieve unity for the whole project.

Professor: Vernon F. Stone

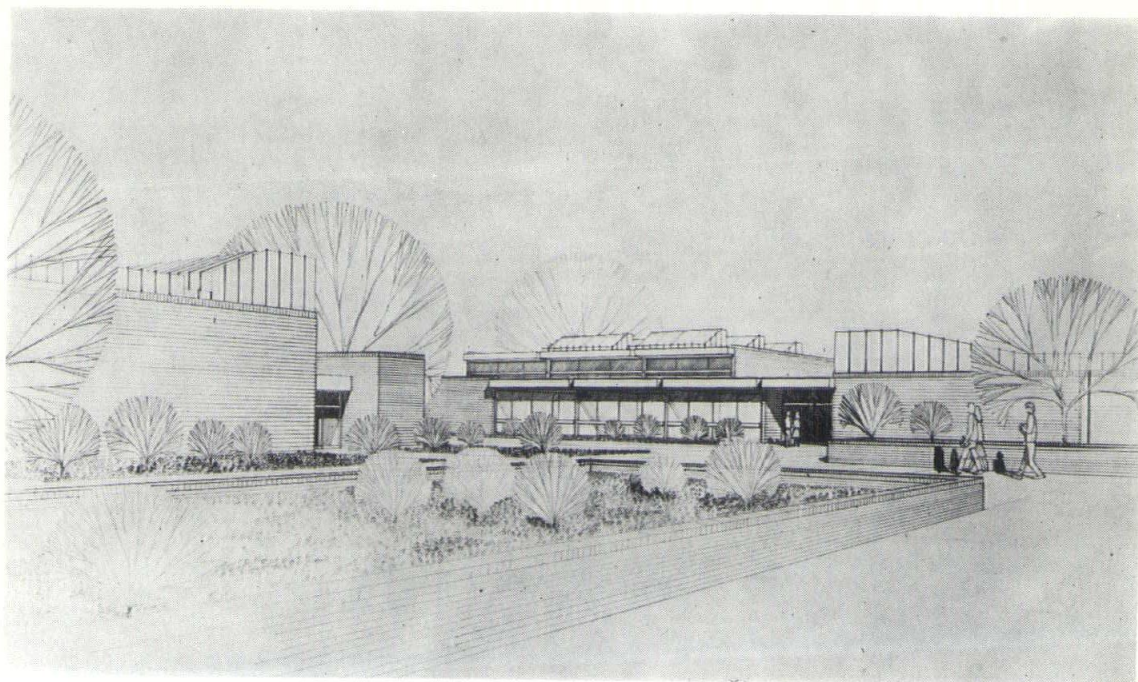


Site Plan



Court Perspective

Court Perspective



PROBLEM: A SCHOOL OF DESIGN FOR
IOWA STATE UNIVERSITY

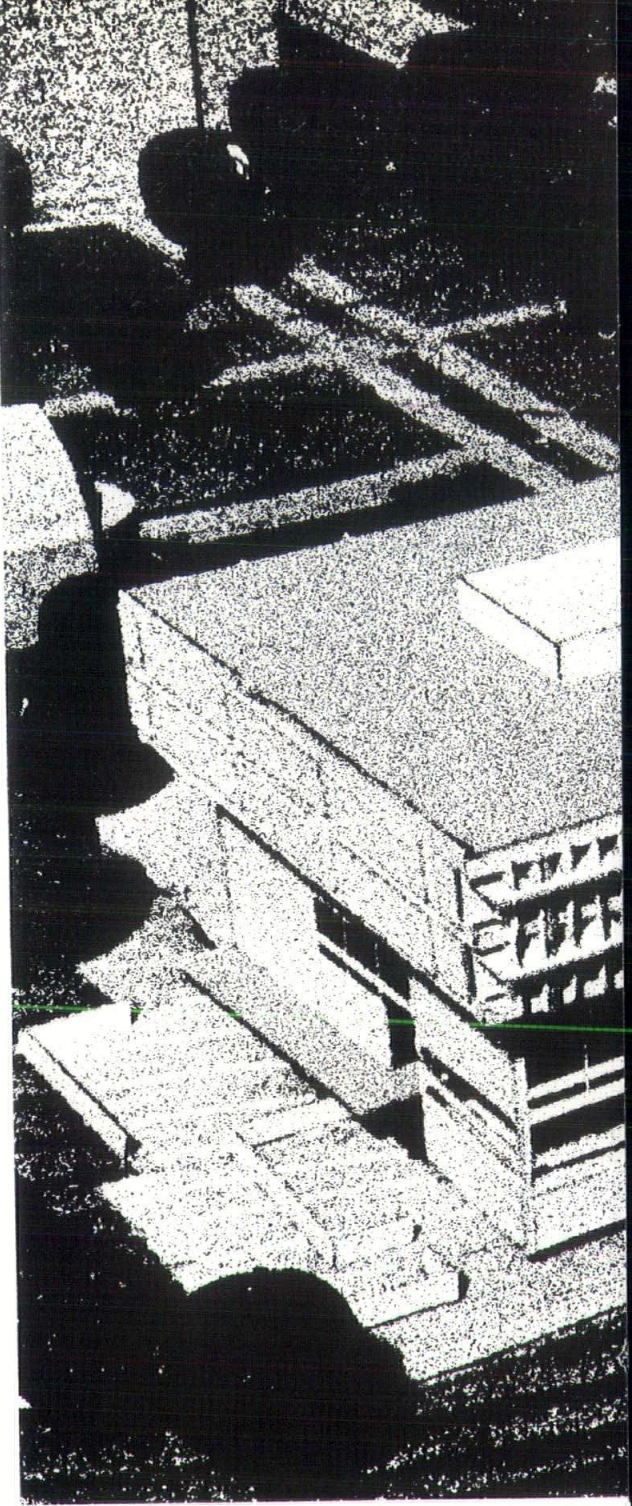
This problem, selected by Daryl Anderson as a fitting challenge for his fifth year terminal problem, is a building complex which would house the departments of Architecture, Landscape Architecture and Applied Art. A site on Music Hall Hill overlooking Lake LaVerne was selected by the committee working toward the creation of a School of Design.

The plan permits four separate buildings to be interconnected, allowing the departments to have individual freedom and yet be a connected School of Design. The buildings are of pre-cast concrete. The structure is modular, disciplined, and economical. It is believed that the solution has strength and sensitivity.

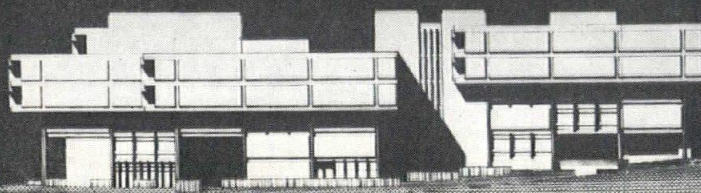
Professor: Karol Kocimski

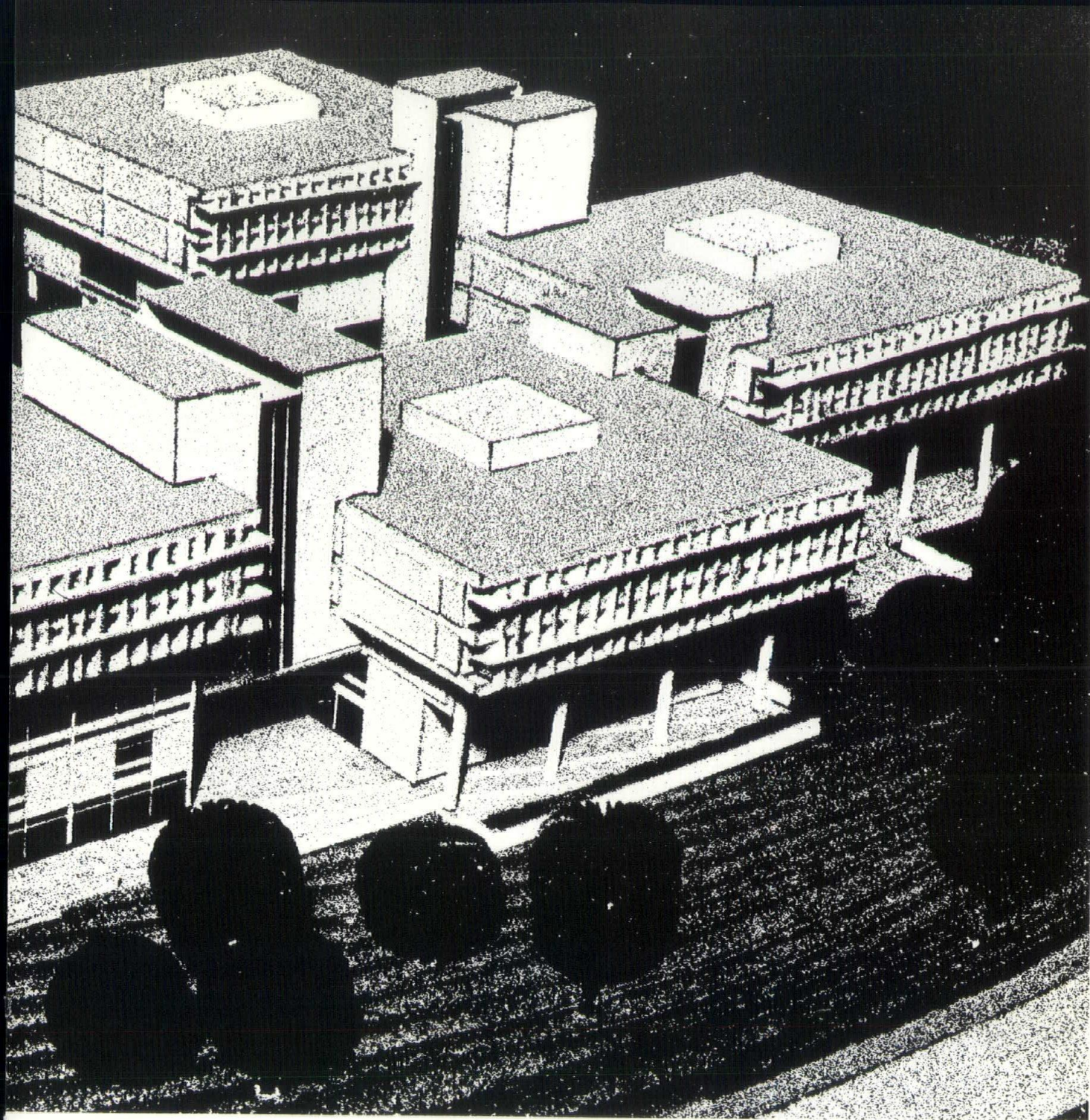
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Model Study



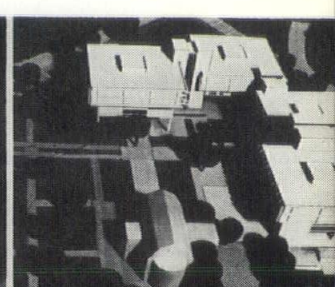
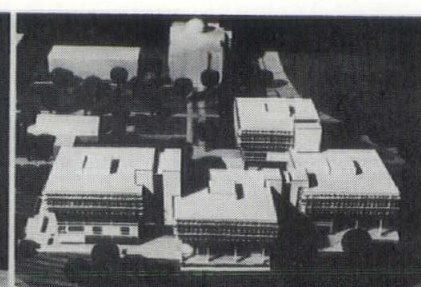
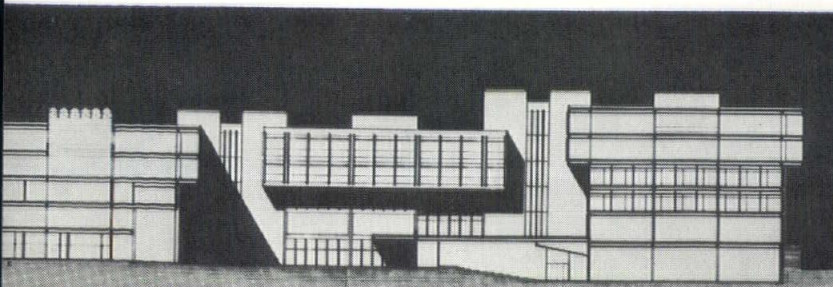
East Elevation



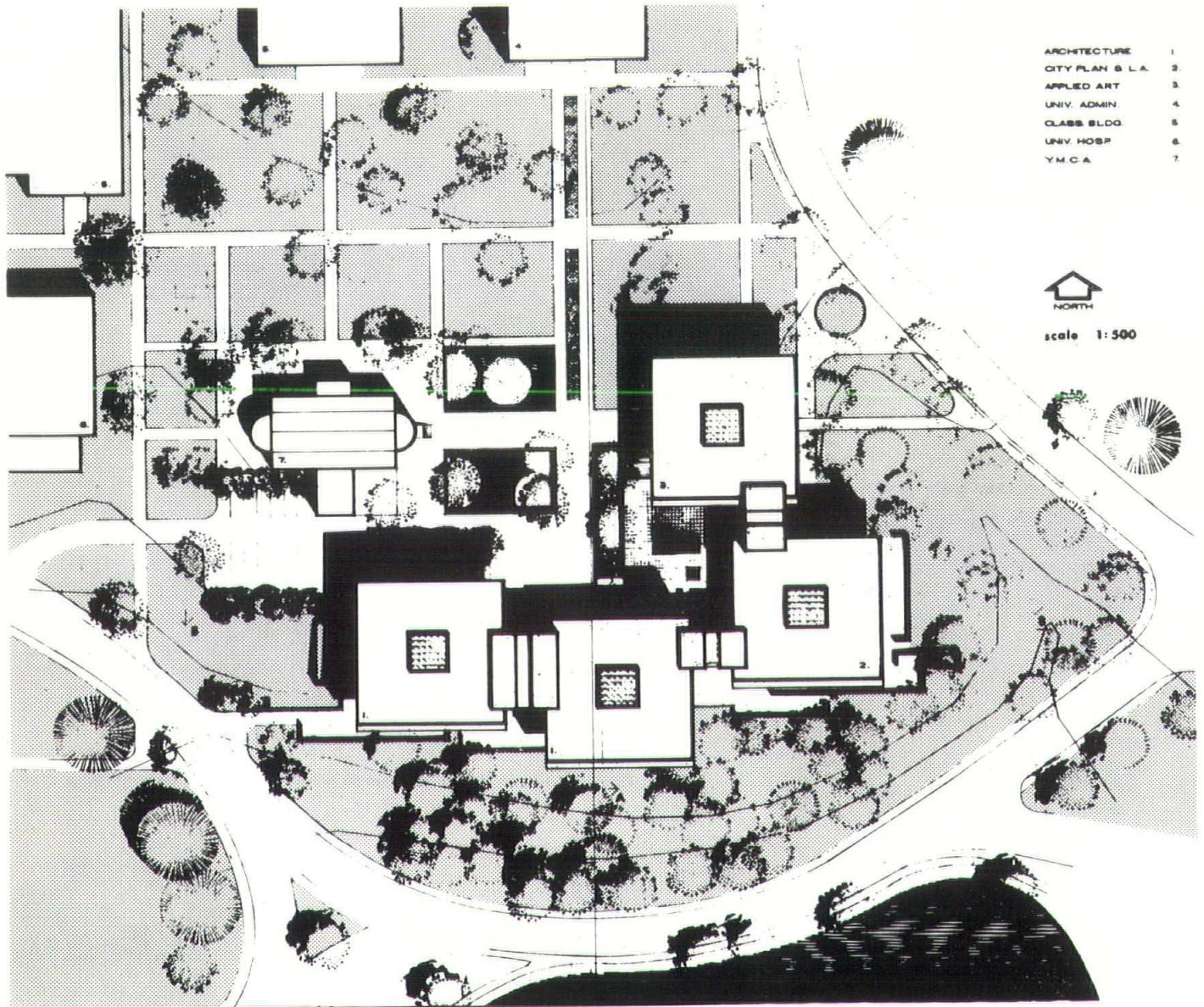


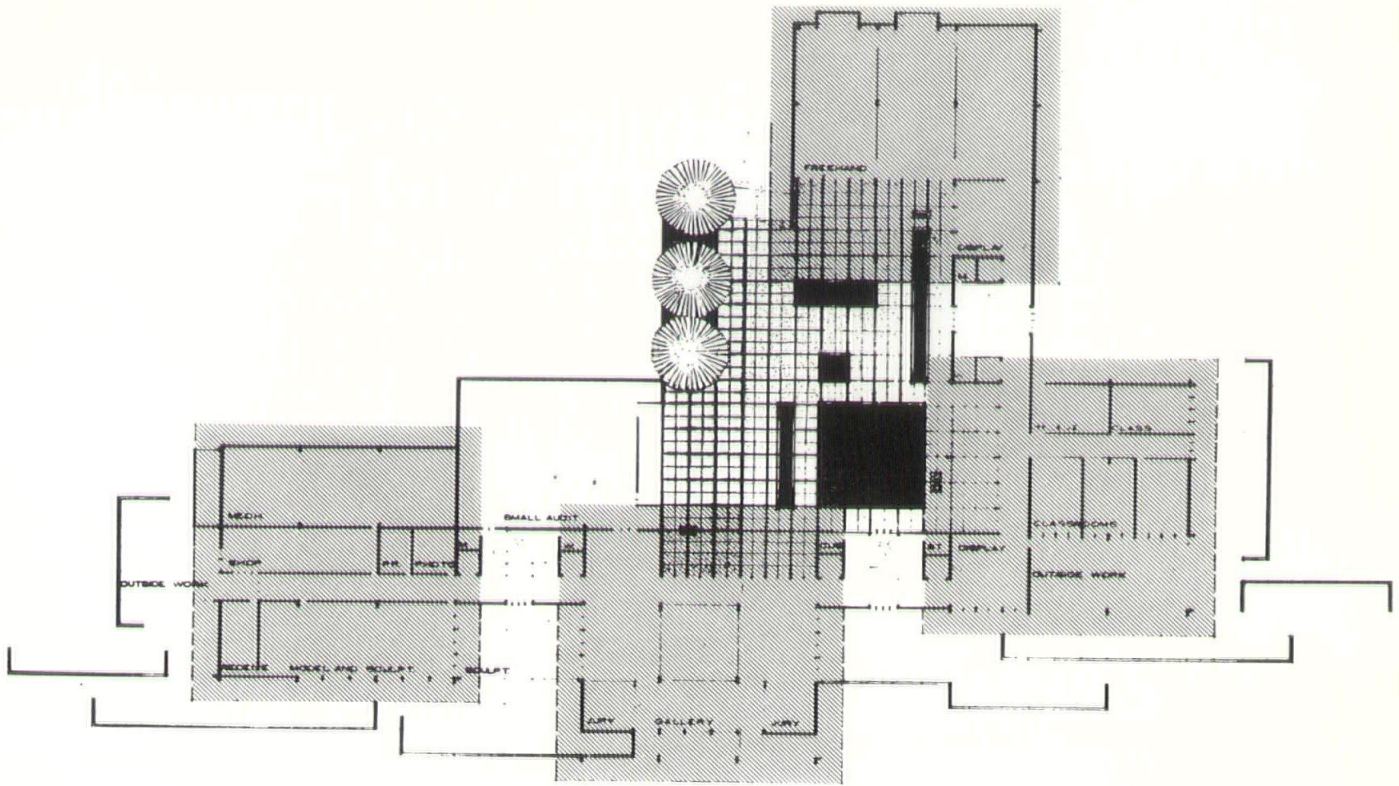
Section

Model Studies

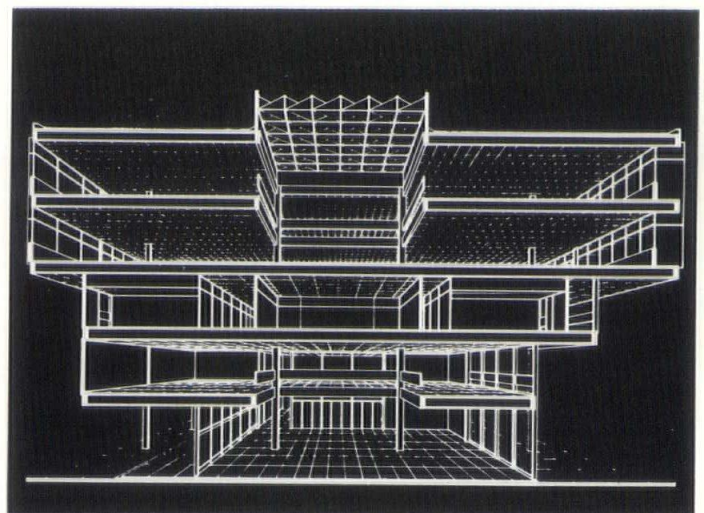


Site Plan





Lower Level Plan

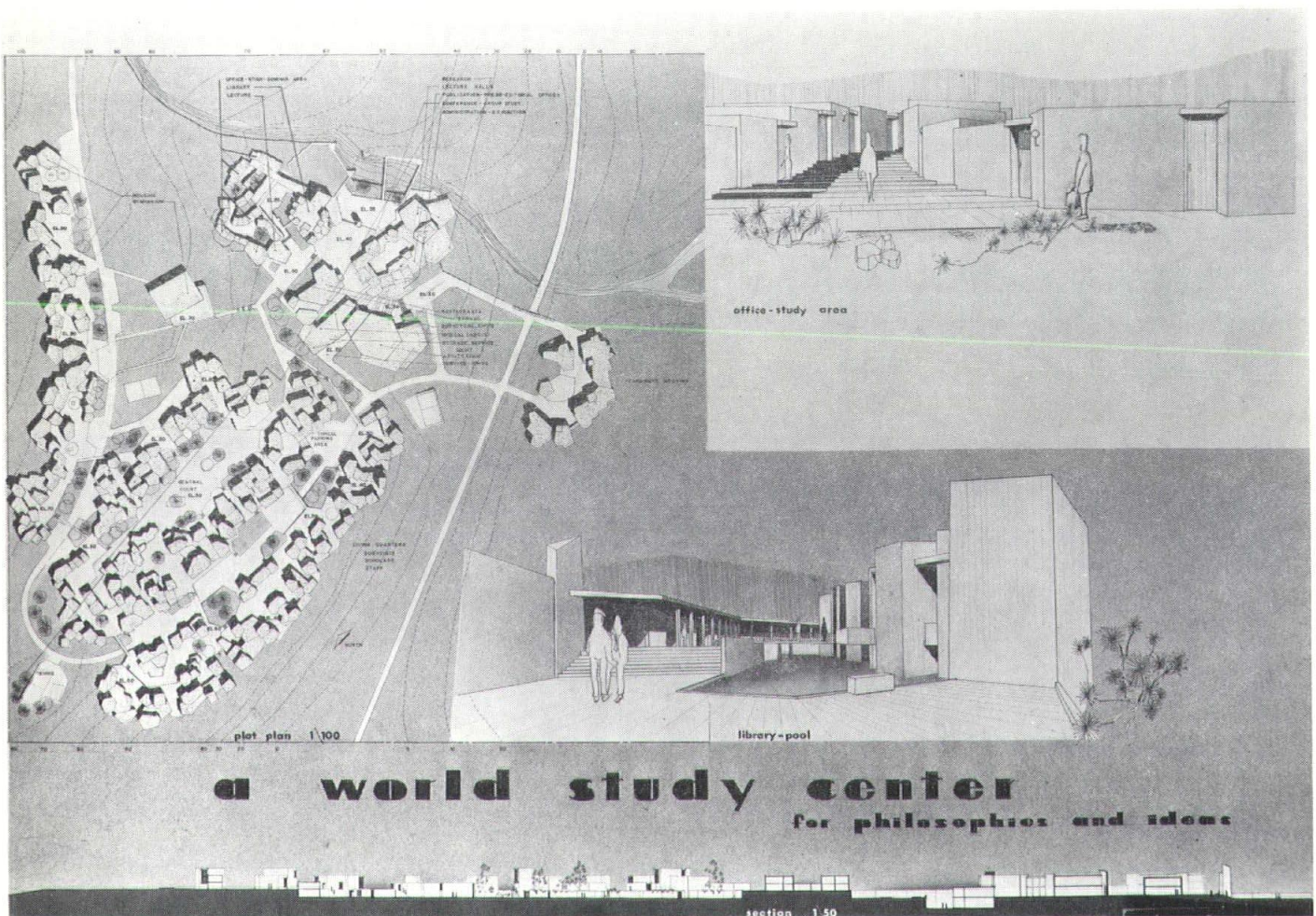


Section Perspective

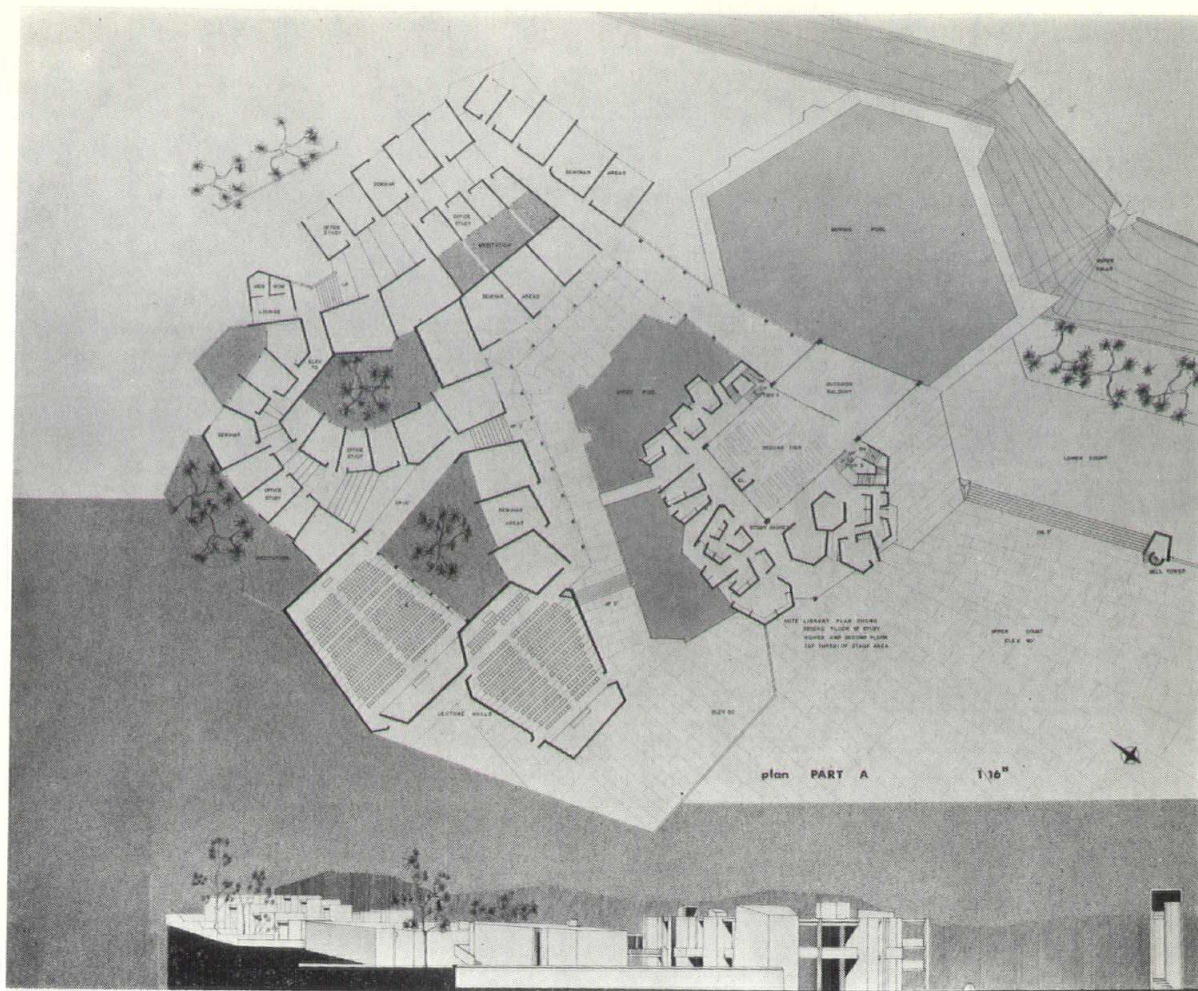
PROBLEM: A WORLD STUDY CENTER

Robert Kinneberg chose to design the World Study Center, the Paris Prize Problem for 1965. Several very thoughtful and competent designs were submitted after a fierce struggle with the time schedule. The lack of accurate and realistic site information was a serious hurdle in arriving at a satisfactory parti. The program did, however, indicate the development of individualized spaces—spaces in which to simply sit down and think, alone or in groups. The designer's conclusions show the creation of very individualized spaces that tie together in such a way as to produce an overall unity of space and scale.

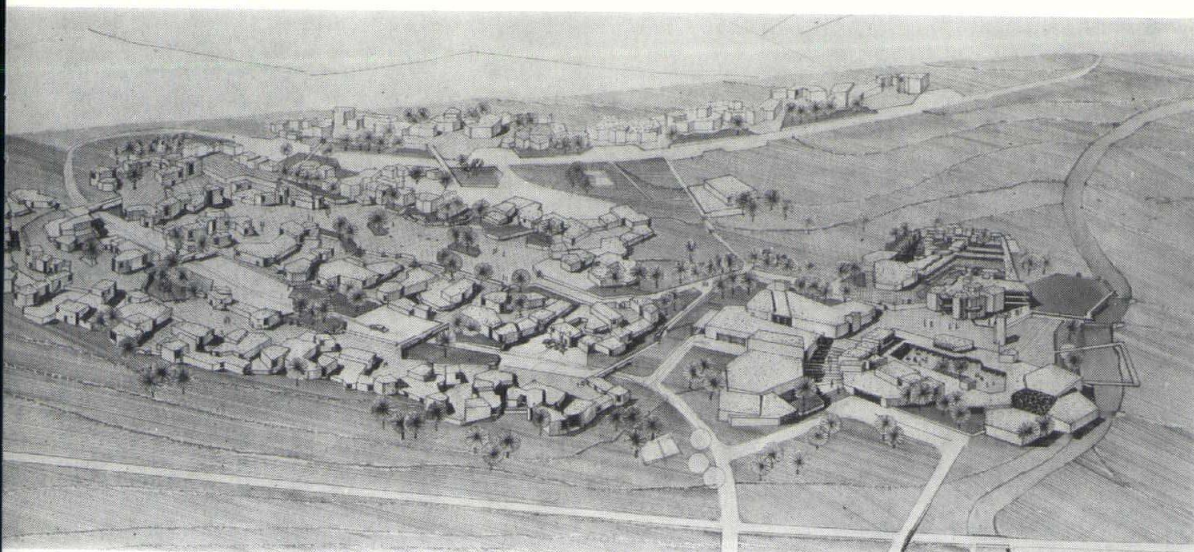
Professor: Vernon F. Stone



Site Plan and Court Views



Representative Plan



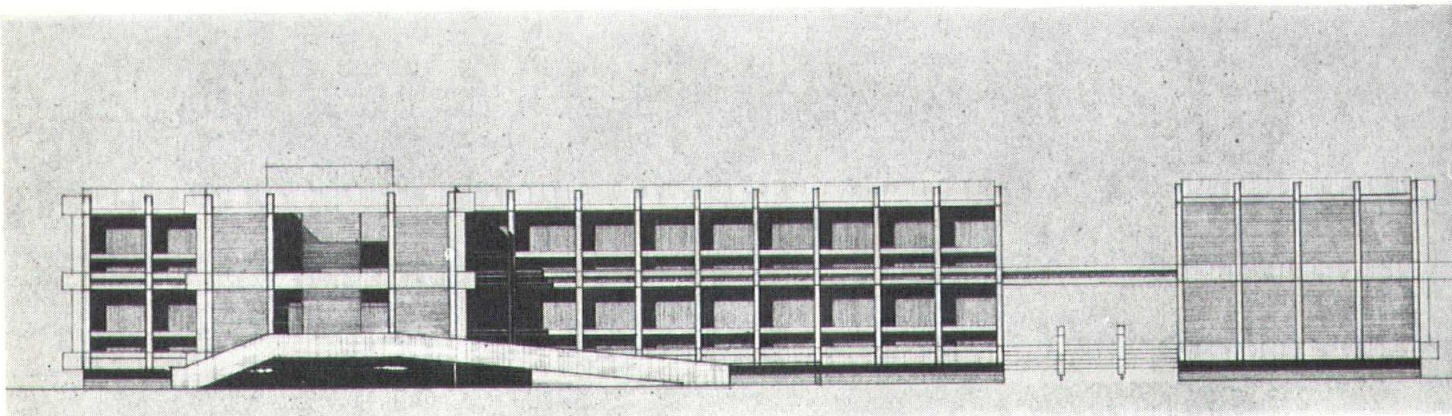
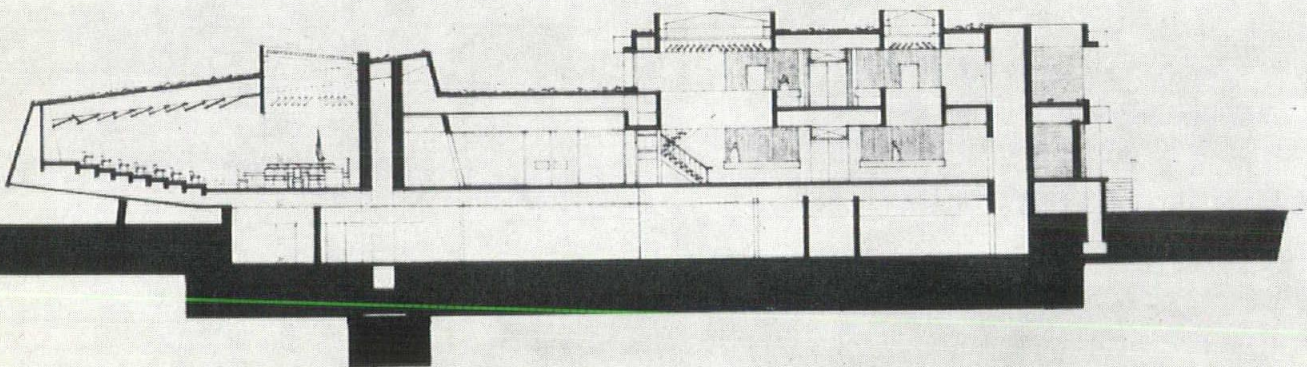
Site Perspective

PROBLEM: A CITY HALL FOR
FORT DODGE, IOWA

This terminal problem was researched, programmed, and designed by John Gustin. The solution gives the judiciary and town meeting space individual significance by using contrasts in form, structure, and transparency.

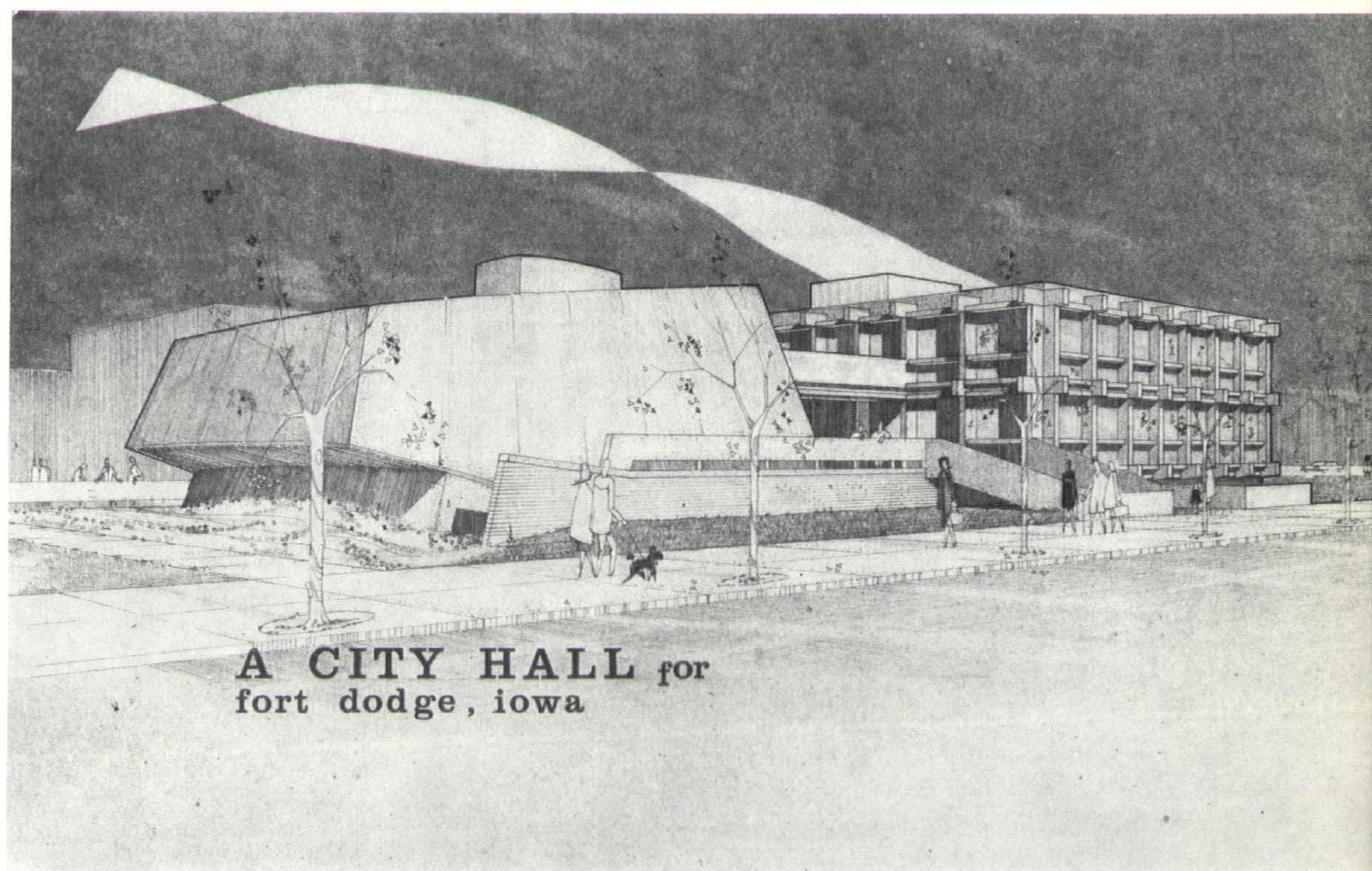
Professor: Vernon F. Stone

Section



North Elevation

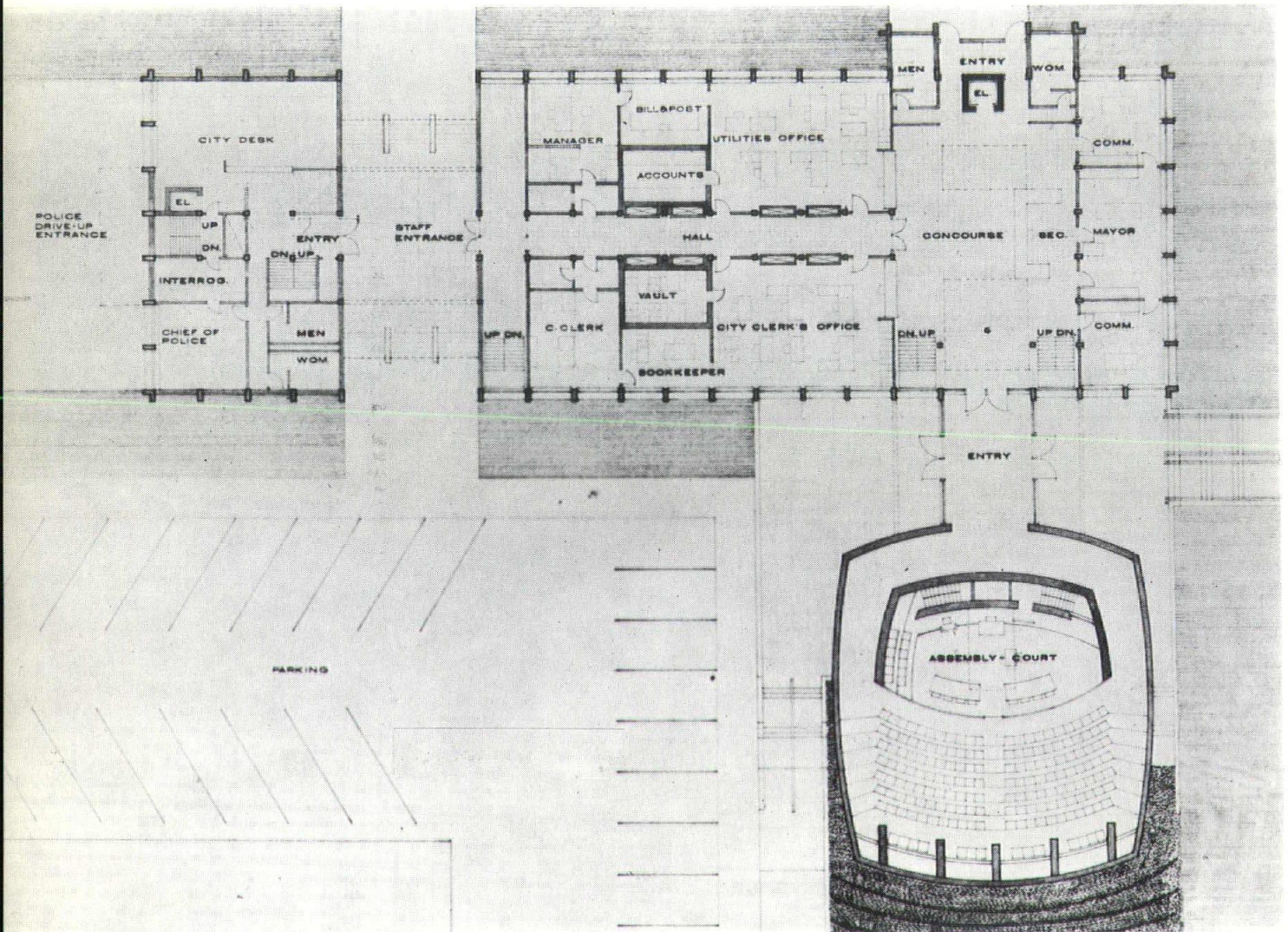
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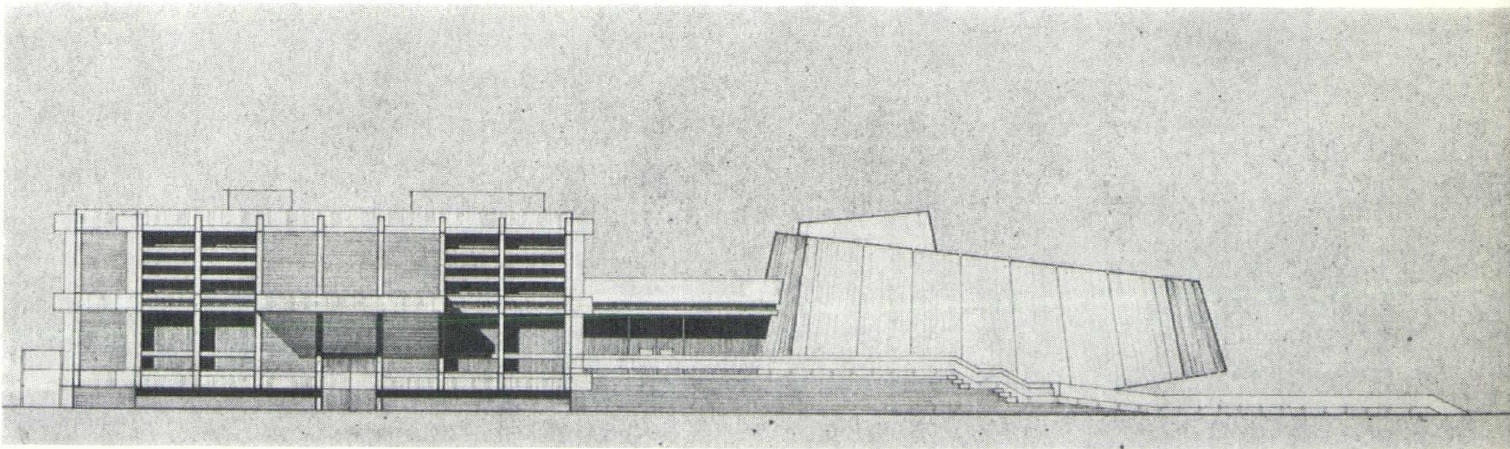
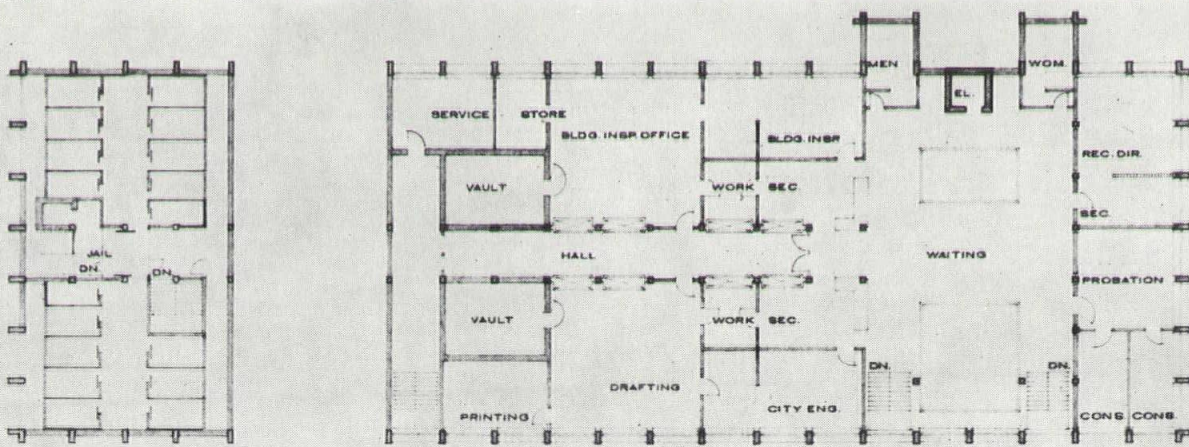
A CITY HALL for
fort dodge, iowa

Perspective

First Floor Plan



Second Floor Plan



East Elevation

IOWA STATE UNIVERSITY
1965-1966 GUEST CRITIC AND LECTURE SERIES

ALLAN TEMKO SEPTEMBER 23RD

1:10 P.M. "Structural Objectivity of the New Generation: The Work of Myron Goldsmith and Other Chicago Architects"

7:30 P.M. "Industrialization and the New Scale of Design"

Mr. Temko is an author, critic, publisher and a member of the Center for Planning and Development Research, University of California, Berkeley.

HENRY MILLION OCTOBER 21ST

1:10 P.M. "Geometry in 17th Century Italian Architecture"

7:30 P.M. "Creativity and Criticism"

Mr. Million is the author of Baroque and Rococo Architecture and Key Monuments of the History of Architecture and is a member of the faculty at the Massachusetts Institute of Technology.

KAREL YASKO NOVEMBER 3RD

1:10 P. M. "New Directions in Architecture"

Mr. Yasko is Assistant Commissioner for Design under Public Building Service, General Services Administration.

BURDETTE KEELAND DECEMBER 9TH

1:10 P.M. "Twentieth Century Scars and Goodies"

7:30 P.M. "Us Against Them"

Mr. Keeland is an Associate Professor of Design, University of Houston, Texas. Visiting critic in the Department December 6-10.

JOSEPH WATTERSON JANUARY 20TH

1:10 P.M. "The Architect Faces a World of Density"

7:30 P.M. "Population, People and the Person—The Individual in a World of Density"

Mr. Watterson is the author of Architecture—500 Years of Building and is consultant to the Director of the National Park Service, Department of the Interior, Washington, D. C.

RALPH RAPSON FEBRUARY 10TH

1:10 P.M. "Contemporary Architecture"

7:30 P.M. "Contemporary Architecture"

Mr. Rapson, a noted contemporary architect, is the Head of the Department of Architecture, University of Minnesota.

DAVID PERKINS MARCH 17TH

1:10 P.M. "Contemporary Southern Architecture"

7:30 P.M. "Contemporary Southern Architecture"

Mr. Perkins is President of the Louisiana Architects and is a principal of the firm, D. Perkins and Associates, Lafayette, Louisiana. Visiting critic in the Department March 13-18.

APRIL 27 Annual Student Chapter A.I.A. Banquet
Speaker to be announced.

The Public and Friends of the Department are invited to Attend the 7:30 P.M. Lectures. All Lectures Will be Held in the Electrical Engineering Auditorium, University Campus.

Ships had many technical and economic advantages. Within a given time they could carry cargoes many thousandfold the weight transportable on the backs of men or animals, or in overland vehicles. The seas were all interconnected and the lands were not.

The shipbuilding industry, as the prototype to all industry, required the use of all the world's best materials. The pirate with the strongest, tallest masts, strongest ropes and sails, could out-maneuver the other adventurers. He found those superior resources only by voyages of discovery around the entire globe. He found that the resources of the Earth were unevenly distributed, and only ships could integrate them to develop the industrial ever-more-with-less, competitive capabilities complex. Both the venturers' shipyards and the ships they built were major tool and power complexes. The more-with-less sea-tool competition eventually replaced wind and sail-driven wooden ships with steam-driven steel ships. To gain swift access to the mineral resources essential to their steam and steel shipbuilding, the pirates extended their marine launching, wooden railways back inland and mounted their ships' steam engines on metal rails and metal-wheeled carriages.

Thus began not only the great piracy of the land, but what is known as the industrial revolution. The 99% of humanity reoccupied with farming, fishing and crafts were unaware that they had been absorbed by the inherently comprehensive world system of industrialization. They thought exclusively of ensuing events as products of their local ingenuity.

The scientist-artist-inventor-architect-engineer of the Leonardo Da Vinci type, who had disappeared from world society when they were shanghaied to sea by the pirates at the beginning of the 16th Century, reappeared upon the land again, three centuries later in men such as Brunel and Telford—who built the railroads, bridges, tunnels and canals by which the seaborne world industry flowed inward upon the land. As the great British geopolitician, Sir Halford McKinder taught:—with the railroads the land became an extension of the ocean. Locally preoccupied land-bound world man did not know what was going on.

With steel shipmaking came a whole new world of alloy steels with unique capabilities. This brought about further scientific exploration of the Earth for rare alloys. The steel-making constituent, manganese, found plentifully in Ghana, is useless to Ghanaians who have neither coal nor iron with which to make steel. Ghanaian manganese must be transported overseas to make the steel; which will be exported back to Ghana and many other countries as tools, machinery and structural components. Industry is inherently of world magnitude, and only works as a world system. The newly emerging nations around Earth will soon have to learn that their political independence depends upon the degree to which they comprehend and voluntarily participate in the interdependence of world industrialization. Ghanaians make good airline pilots but the Ghanaian Airways equipment was not developed in Accra. Industry takes resources from halfway round the world to points of maximum efficiency for separation and more-with-less re-arrangement in alloys, parts and machine wholes. In order

to justify this vast expense of world pattern operation, it must mass-produce and mass-distribute to get enough customers to divide up the total cost. Only world distribution provides the most customers. So halfway round the world again, in all directions, go the products and services of industrialization.

Before the air transport era, this vast wealth-realizing integration of the world's resources was only accomplished via the seas. Whoever ruled the oceans ruled the world. Because a group of pirate ships could out-maneuver and surround one pirate ship, navies were invented. And the pirate navy with the best organized world around, ship building yards and world bases, ruled the sea. Thus 1% of the 1% of humanity that went to sea came to rule the world. Secrecy was their chief weapon. The sea kept its secrets. Thus, for many centuries 99.99% of humanity knew nought of how the world was being run. But being run it was—rigorously, for the first and last time.

With the invention of the airplane to the point where it was able to carry a torpedo which could sink an armour-clad battleship, which it did in 1929, came the assumption that whoever ruled the sky ocean, which dominated the water ocean, must succeed to the ruling of the world. Ability to dominate the world skies derived technologically from the same secret and government-guarded science which had produced the supreme ships of the sea; so the world, though amazedly impressed, knew little or nothing of either the 'whyfor' or the technical details.

The airplane could not float in the sky, it flew because of the negative pressure or lift, over the top of its wing foils, produced only by pushing or pulling the foils at multi-hurricane magnitudes of velocity through the air. This velocity required powerful, heavy fuel loads and super-to-multi-hurricane-strength structures. The first airplanes had excess lifting capacity for only one human pilot and could fly only for short distances, and for a few minutes. Whoever could make the airplanes do more lifting with less material to provide the greatest striking power, the greatest distances in the shortest time, would and did run the world, but only for a few hours and days because the technology was now geared to constant change and the opposition could regain the design science tool advantage overnight. Since neither side could "run the world", both sides continued the weapons race to guarantee that the other side should not run the world. This negatively dynamic stand-off of an increasing number of nations staffed by an international proliferation of nuclear and rocketry scientists finally developed into the "massive retaliation defense posture" of the most powerful nations at the mid-point of the twentieth century. And that is the condition today. The vast productive capabilities of man locked in dynamically balanced guarantee of "nothing to be gained and everything to be lost". In the meanwhile both "sides" burn up the fossil fuel and atomic fuel savings accounts of the ages disdaining to invest in harnessing the vast daily income energy wealth (for instance of the ocean tides) as "uneconomical" in comparison to the "costs" of burning the savings accounts.

In the 1920s transition, from sea to air mastery of the world, the doing-more-with-less went from visible technology to invisible science. Scientist-artist-inventors provided the new do-invisibly-more-with-invisibly-

less techniques. The cost of this new, air-ocean mastering, invisible, scientific world capability rocketed beyond the purchasing means of the old pirates and ended their world sovereignty in the economic panic of 1929. Only sovereign nations could now marshal the gargantuan credit to underwrite and to command the long-term, indirectly refunding advantages that went into the production of world air supremacy, which ran into capital tooling costs eightyfold the value of all the world's gold. The economics of development of the air/ocean technology introduced a new empirical concept of wealth, which made obsolete the exclusively intrinsic wealth standards theretofore mandated and obscurely maintained by the great pirates. The new wealth was a realistically marshalled use of an ever-advancing, tool organized, inanimate energy-capability wealth, which harvests the intellect's scientific shunting of universal energies onto the advantage end of man-invented levers, which levers also consisted of energy-as-chemical "materials".

Historically, the 99% of land based humanity knew approximately nothing of the 1% of humanity's sea and sky-hidden doings, and even less of its esoteric scientific stratagems. As a consequence of their respective preoccupations 99% of humanity have been historically conditioned to think of security only as more-with-more, and the bigger, heavier and more venerable the fortress or cathedral or mansion or inventory of possessions—the better. "Secure as the Rock of Gibraltar".

99% of the world population do not think of their buildings in terms of weight, let alone performance per unit of weight. How much does St. Peter's Cathedral in the Vatican weigh? Nobody knows. How much does the St. Peter's-dwarfing S. S. Queen Mary weigh? 86,000 tons. Everybody knows that. But for the last ten years the S. S. United States employing lightweight alloys and many other smaller more-with-less devices and weighing only 45,000 tons has carried as many passengers and tons of cargo per year at equal trans-atlantic speeds as has the S. S. Queen Mary, all at considerably less operating costs. That is why the Cunard Line is about to build a do-even-more-with-an-even-smaller ship to out-perform them both. We have entered into an era where visibly less than the biggest does visibly more. Now a 150-ton airliner can outperform either of these gigantic ships in total passengers carried per year. 99% of today's scientific advances are invisible. Ergo—man's incomprehension of his integrated magnitude, significance and overall conformation.

Even today's architects do not know the weights of their buildings. In order to make the structural components strong enough, engineers have to calculate the building weights, but only after the owners and architects have finished the visible shape scheme, superficial dimensions and materials design. 99% of humanity has never thought in terms of the do-more-with-less stratagems of the ship, airplane and rocket-designing scientists and their military operating personnel, who as yet constitute less than 1% of the human population. Not one man in a million knows what a transistor really is and why it does what it does. Even the scientists rarely think realistically regarding fundamental behaviors. All the world's scientists see the sun "going down" at "sunset"—

despite 500 years of knowledge that the Earth is rotating the scientist out of view of the sun. All scientists as yet say "up" and "down" when there are no such directions in the universe. The scientists tell you the "wind is blowing from the west", when a low pressure eastward of us is sucking. We can say reliably that despite man's "Education" he does not know what is going on.

Finally, the public's vast ignorance of either the comprehensive or particular nature of original undertakings in technical development has been almost certified by national defense secrecy. 99% of the original more-with-less invention revolution has been subsidized by the weapons programs of the major nations. During the first half century of the airplane the major sovereign powers poured 2½ trillion dollars directly and indirectly into its development as the new supreme weapon. Now in a third of that time the world nations have again appropriated almost as much capability wealth for the development of the atomic-headed rocketry and space race, for supreme control of the Earth and its surrounding portion of the Universe. Most central to all the remote controlled more-with-lessing of moon-landed rockets and ocean bottom exploring are the swiftly multiplying transistorized electronic computers, one of which can now, in one minute, print out the solution to a problem which a decade ago would have taken two years to calculate using the combined efforts of all those educated on Earth. Little wonder that 99% of humanity are innocently and innocuously pre-occupied with yesterday's irrelevant game—playing of serious "business", "politics" and "education".

Twenty-five years after the original, secretly developed doing-only-more-killing-with-less-material-and-work-per-death as potentially realized in weapons and weapons production technology, only the inadvertent, generalized do-more-with-less capabilities of the tools-to-make-tools (that finally make the special tools called "weapons", 99% of which tooling could also make peaceful products) are second-handed into the domestic economics of world man to provide more life with less effort. But this ultimate life support upgrading occurs only after the prime weapon contractors' respective weapons contracts expire and only as a result of the obsolescence of their respective weaponry end-products.

While different political ideologies, as with the different languages and customs as yet operative in yesterday's pirate-decreed and natural barrier divided lands, are useful in organizing mankind's employment of the ever swiftly improving, multiplying and integrating industrial tool network of the invention revolution, (by-producted from the weaponry focused economies) it is becoming increasingly visible to ever more people that the industrial network will soon integrate society into a "one town world" obliterating the national divisions of Earth people, invented by the pirates' competitive strategies.

It is also increasingly clear to even more people that the fundamental and highest-priority responsibility for man's interim survival success on this little sun-orbiting spaceship, Earth, does not fall directly within the problem solving capabilities of political theory—not with the results obtainable by politics' ultimately greatest lever: war—hot, subversive, cool or cold. Either war is obsolete, or men are.

It is possible, at the present rate of performance-per-weight-of employed-resource-gaining that, given 35 more years, the opposing ideologies' weapons-into-space race may go on, as in the past, to inadvertently produce enough additional by-product more-with-lessing to ultimately bring 100% of humanity into successful physical survival. This is possible, however, only if men succeed in surviving on Earth throughout that period. During that only-by-crisis-after-crisis-stimulated 25 years development of ultra-ultra tools to make ultra-ultra weaponry, the probability is close to "certainty" that one "Oswald" amongst 4 billion living and perplexed people will succeed in pushing one of the humanity-extinguishing buttons of the increasing number of sovereign-possessed, omni-automated, inter-retaliation hook-ups to the comprehensive annihilation system. Assuming that humanity continues only to take the long way around by the protracted weapons race "detour" as the causative means of generating the new magnitude of more-with-lessing, competent scientists, integrating the probability curves, now calculate that there are only 10-20 more "probable" years for man on Earth.

But the same scientists concede that the safe new super highway leading directly to success for all, is now ready to use. As pioneers in operating along that new highway, the students' design science revolution may possibly result in a general re-orientation of world society's awareness, common sense and intelligence which, just in the "nick-of-time", will bring mankind into conscious promulgation of the do-more-with-less invention revolution to be applied directly to gaining man's living advantage, which can accomplish the 100% physical success of all humanity in less than one half the time it would take to occur only as the inadvertent by-product of further weapons detouring of human initiative.

But the students are aware that in considering the reorientation of mankind to comprehend and directly employ general systems theory and design science, they must first clarify the history of the problem. The students recognize that the scientific development of world holocaust weapons have thus far occurred only as the competitive, anticipatory, massive defense moves of what have been up to now powerful, but minor percentage groups, of the total world population, undertaken on the economic premise of all-the-yesterdays that there was not enough vital sustenance on Earth to support more than a small minority of all men. This point was esoterically established, exclusively for the establishment, by Malthus and fortified by Darwin a century and a half ago. "Survival only of the fittest". As a consequence those in power in the "have" nations used their highest capabilities to back their fears for the worst. None of them was enlightened by the startling knowledge that now looms on man's horizon, that there is potentially ample for all, which can be made a reality in 20 years.

Now, for the first time in history, those in highest office in the most powerful sovereign nations have been confronted for 10 years with scientific confirmation of the new economic potential, which may be realized, however, only through diversion of the high-priority science and industry from weaponry to "livingry" production. Each of the sovereign nations' "top men" cannot but wish with all their hearts to move in the direction of realization of peace, through abundance for all, by risking more than perfunctory

disarmament. They are deterred from so doing, however, not by the intransigence or treachery of "the enemy" as the propagandized public enemy image would suppose, but by their own political party without whose support they would have no chance of ratification of their acts. Their own party is deterred from such support by the constant threat of unseating not by the "enemy", but by their political party adversaries within their own respective national, political systems. The opposition, counting on long-conditioned self interest, popular scepticism, indignation and fear, insists that any softening of military "posture" is ethically exploitable as the means of a party coup. Posture softening, it is politically asserted by the opposition, could only be occasioned by madness or by secretly treasonable acts warranting immediate and vindictive takeover by the opposition.

It comes to those who discover it, all round the world, as a dismaying shock, to realize that continuation of the weapons race and of cold and hot warring are motivated only by intramural party fears of local political disasters. The world's political fate does not rest with leaders at the summit, expressing the will of world people, but with the local ambitions and fears of lower echelon political machines, within the major weapons-possessing nations, whose vacillation is accompanied by an increasing spread of the atomic weapons possessing nations whose respective internal politics will forever frustrate disarmament by political initiative. All political machine professionals of all political states will always oppose loss of sovereignty for their own state. Solution of the impasse, if it comes at all, must clearly come from other than political initiative.

It is true, the world university students point out, that throughout all history up to now man has been faced with not enough to go round; not even for the survival of more than a small minority. It has always been—you or me. Swift you-or-me by the sword or gun has often been preferable to slow death by slum rot or slavery. The direct and conscious design science revolution backed by the students can and may, by production of enough for all, accomplish elimination of the lethal you-or-me dictum, and its political bias support.

Now, for the first time in history, employing its literary voices, world society can give design science its popularly mandated priority over political initiative with realistic hope as the impelling motivaton. As 100% of humanty achieves or nears physical survival success, past history's seemingly inexorable reason for war (not enough for both of us) will have been eliminated.

The students argue that if they can make man conscious of his design revolution potential, and of the feasible and practical means of its accomplishment, the probability of pushing the annihilation button will be diminished from "critical" to "remote" status.

It seems apparent to students that—for whatever functional purposes man has been included in the design of the Universe—nature has been, and continues to be, intent upon mankind's survival in his most physically successful and intellectually useful condition, wherefore, in view of man's historically vast ignorance and fear, nature has employed those predominant "game-motivating" negatives to impel

him unconsciously, even as she impelled him through the womb, toward this moment of dawning awareness of realistic hope and birth of his own responsibility and intellectual initiative. The inadvertent doing-more-with-less as a by-product of the weaponry race seems, retrospectively, to have been nature's trick for developing his highest potential, while also saving man from his own short-sighted "game playing" ignorance.

It is inconceivable that one man, one party, one nation, or even a world congress of all mankind's representatives meeting a century ago, (1865) when a million dollars was an almost incredible sum, could have had the vision, logic and courage to elect to invest 5 trillion dollars in the invention and development of the then uninvented and economically unanticipated telephone; electric light; radio; airplane; jet and rocket flight; nuclear reactor; flight into space; world around television; elimination of both bacterial and virus diseases; discovery and isolation of 60 additional chemical elements and their electrons and nuclear components; and the genetic code; together with the 10 million additional, mutually inter-advantaging, technical inventions and discoveries which have occurred in the last century; plus development of industrial mass-production and its progressive industrial-production-capacity-geared-accrediting of the paper-financed, mass-consumption industry; tripling of human longevity and the support of three times as many people on Earth, half of them at standards of living better than any king has ever known. Those who suggest that it might all have developed peacefully and purposefully through a shift in political doctrine are as unrealistic as are those who now think that the old public *laissez-faire* and political-initiative-only patterns can continue without man's annihilating himself; or as are those who cannot see that the world students have found a hole through the black clouds of political impasse and human sacrifice to our first tiny view of a realistically hopeful blue sky future.

When they are available to him, a healthy man each day eats 3 pounds of food, drinks 8 pounds of water and breathes 80 pounds of air. Food has often been scarce, water sometimes scarce, but air almost always plentiful. Where there is abundance, competition is unnecessary and unthought of. When, however, fire in a theater suffocates them, men trample one another to death in the desperate panic of the unaccustomed competition for air. There is nothing unnatural about the elimination of healthy competition in the presence of universal bountifulness of a vital resource.

Science and engineering say that design science's peaceful accomplishment of 100% industrialization and comprehensively bounteous support of man is eminently feasible. It is feasible because that world's economy is now operating at the appalling low overall mechanical efficiency level at which only 4% of the energy consumed is realized as effective work. Reciprocating engines are 15%, turbines 30%, jet engines 65% efficient. Efficiencies of 72% in atomic reactors employing their by-product heat in de-salination and up to 80% in fuel cells are now everyday design realities. Increasing the overall mechanical efficiency of the world's prime movers and machinery to only 10% from the present 4% will result in 100% of mankind being benefitted by living standards higher than the present highest.

In addition to the world students' reorientation of the public from prime dependence on politics to prime dependence upon design science—for politics will always have its "accessory after the fact" housekeeping functions—there are now in evidence several other hopeful and highly realistic trends towards elimination of the political impasse to be accomplished by accelerating the more-with-lessing to the advantage of all men. Completion of the ultra-high voltage world network integration of electrical energy distribution, under the Bering Straits, which is now clearly possible well within the 20-year trend will automatically increase the world energy efficiency to an overall of 20%. This energy distribution network linking the day and night hemispheres of Earth will reduce the local standby power losses by 25%. The staggering economical advantage accruing to both public and private sectors has thus far caused both to join unreservedly in its development. The decisions of both public and private sectors to subscribe to their mutual interoperation was never taken as a consequence of interpersuasion by one another or of victory of one over the other. The persuasion came exclusively from the unbiased calculations of computers. The machine showed both sides that they would each profit beyond previous dreams by "integration". The computers will play a swiftly increasing, dominant role in the decisions of a man—leading him away from "policy" or political impasse and toward total physical success.

Because energy is wealth, the integrating world network means access of all humanity everywhere to the total operative commonwealth of Earth.

Wealth cannot alter yesterday. It can only alter today and tomorrow.

Multiplication of wealth began when man stepped on the long end of a log lying across another log with its short end under another big log, and he saw the big log which was too heavy for him to lift with his muscles, lifted easily by gravity pulling his miniscule weight against the high advantage arm of the lever. When man fastened a set of levers radially around the hub of a wheel and put the wheel under a waterfall and connected the wheel with a grinding mill, he learned to stand aside from the work and, gaining perspective, to use his brain to rearrange energy patterns to do more, and more fundamental, man-advantaging work.

Man found that the vast *associative* (gravity, matter) and *dissociative* (radiation) *energy patternings* of universe can be harnessed, shunted and valved by man to impinge on levers and trains of gears *ad infinitum*.

Man is now learning through the repeated lessons of experimental science that wealth is explicitly the organized and operative tool and energy capability to sustain his forward metabolic regeneration; to physically protect him; to increase his knowledge and degrees of freedom while decreasing his interfrustrations. Wealth, he finds, is inherently regenerative, but the rate of regeneration of man's solo wealth is to his commonwealth regeneration rate only as X is to X⁴. Experimentally demonstrated wealth is: energy compounded with intellect's know-how.

Science's law of conservation of energy states that 'Energy cannot be created or destroyed'. The *first constituent* of wealth—energy—is therefore irreducible. Science states that the entire physical universe is ENERGY. $E=MC^2$.

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Every time man uses the *second constituent* of wealth—his know-how—this intellectual resource automatically increases.

Energy cannot decrease. Know-how can only increase.

It is therefore scientifically clear that:—wealth which combines energy and intellect can only increase, and that wealth can increase only with use and that wealth increases as fast as it is used. The faster-the-more! Those are the facts of science. Those are the facts of life.

The students know that they can generate more wealth through their cooperative initiative than in competition with each other. Cooperation generates commonwealth. They need not be concerned about "making a living" for themselves. By dedicating themselves to research in "How to make the world work for all in the shortest possible time", they will be realizing the only living now possible which is for all or none.

Professor John R. Platt, Chicago University physicist and biophysicist in a thorough survey of the overall shapes of a family of trend curves which comprehensively embrace science technology and man in the universe, says: "The world has become too dangerous for anything less than Utopia".

Man's reflexes are conditioned to brush aside that statement on the grounds that "Utopia" has become synonymous with "unrealistic" or "impossible". This is because the many past attempts to establish Utopias all failed. The fact is that all past attempts were unrealistic before they started. All the historical Utopian attempts occurred when it was assumed that Malthus was right and that there never would be enough physical resources for more than 1% of humans to

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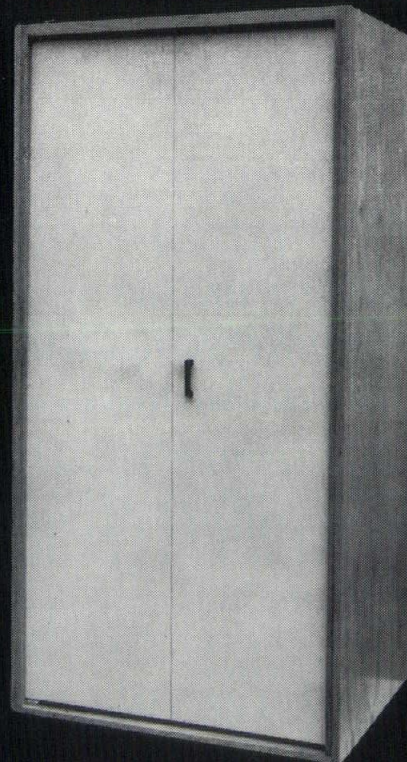
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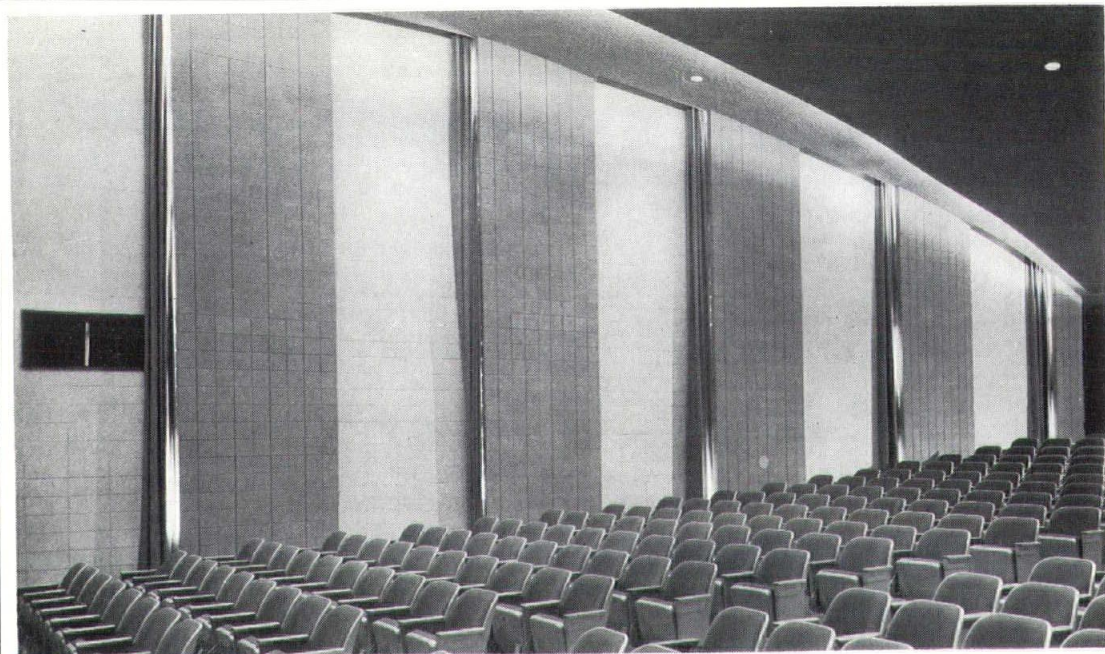
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live out their potential fourscore and ten years in comfort; nor for more than one ten-thousandth of 1% to live it out in precarious luxury as well as comfort; nor for any to live out their full span in health, safety, comfort, luxury, good conscience and happiness. The latter would, of course, be the minimum requirements for everybody in the establishment of Utopia. That is why their attempts were "unrealistic" in the light of their working knowledge that those conditions could not then be met or even dreamed of.

It was said at that time, "Man cannot lift himself up by his bootstraps". No one thought in the terms of doing-more-with-less. No Utopians thought of airplanes as a possible reality, nor in the terms of aircraft engines multiplying several thousandfold in power while simultaneously reducing their engine and air frame weights per horsepower by 99%. No one thought of communications going from wire to wireless with enormous gains in distance accomplished per units of invested materials, as well as a manyfold reduction of weight and energy per each frequency-tuned message circuit; none thought of a one tenth-ton "Telstar" satellite outperforming 75,000 tons of transatlantic cable.

The great transformation of man's physical capabilities by scientific industrialization, which alone could provide the physical environment and harnessed energy adequate and essential to a Utopian level of metabolic regeneration success for all humanity had neither occurred nor even been as yet scientifically conceived. As so far experienced, in their day, the would-be Utopians could reasonably think, for instance, of bigger, more fireproof, more bow-and-arrow proof stone or brick walls instead of wood. They could think of



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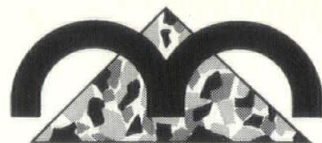
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common austerity. They could think of having more cows, or more acres, but experience, until then, gave them no thoughts of the doing-more-with-less science and technology revolution. Some cows gave more milk than others as some men were taller than others. There was good or bad luck. There was mystical blessedness or confoundment.

Not only did all the attempts to establish Utopias occur prematurely (in respect of technological capability to establish and maintain any bacteria and virus-immune, hungerless, travel-anywhere Utopias), but all of the would-be Utopians disdained and decried all the early manifestations of industrialization as "unnatural, stereotyped and obnoxiously sterile". The would-be Utopians, therefore, attempted only metaphysical and ideological transformations of man's nature—unwitting any possible alternative. It was then unthinkable that there might soon develop a full capability to satisfactorily transform the physical energy events and material structure of the environment—not by altering man, but by helping him to become literate and to use his innate cerebral capabilities, and thereby to at least achieve man's physical survival at a Utopianly successful level.

All the attempts to establish Utopias were not only premature and misconceived, but they were also exclusive. Small groups of humanity withdrew from and forsook the welfare of the balance of humanity. Utopia must be, inherently, for all or none. A minority's knowledge that the majority of humanity suffers and deteriorates while only the minority prospers, would never permit a Utopian degree of contentment of the all-powerful subconscious reflexing of the human brain. In the far-from-Utopianly idealistic lives



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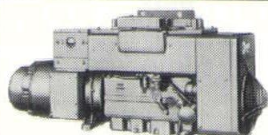
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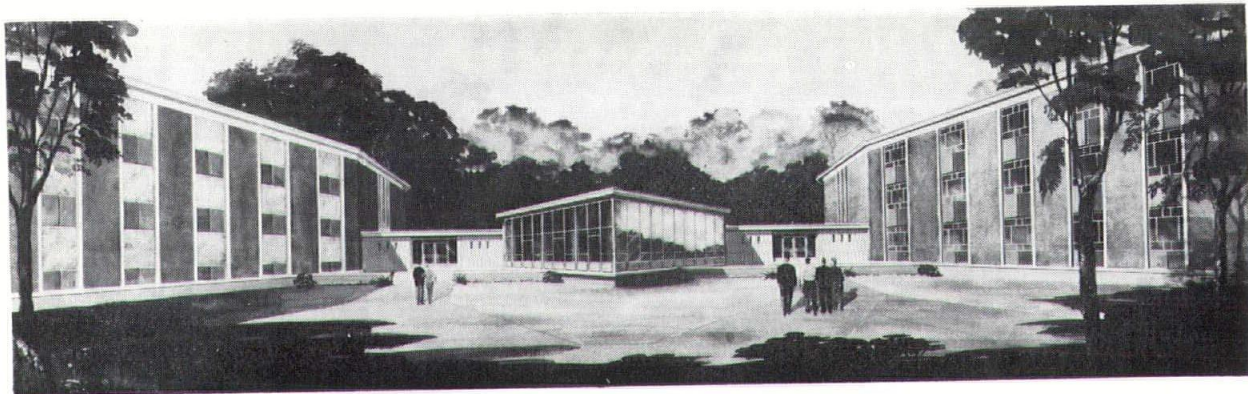
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of history's "aristocratic" minorities, which were alone supportable by the known means and resource effectiveness of the pre-industrial era, attempts were made by the successful minority to exclude thoughts of humanity's generally inexorable suffering by inventing "important" cultural preoccupations. However, dilettantism, sports, banquets, art patronage, flirtations, duelling, intrigue and war failed to appease the subconscious reflexing of kings' and courtiers' brains. Their lopsided and twilighted conscience, therefore, imposed a code of affected blindness. This irrationality was propped up by an assumption of divine wisdom having placed a few in preposterous survival advantage over the many because of their superior wisdom, culture and capability to fight for the less fortunate.

As a consequence, the poor, illiterate masses built their churches and prayed that they and theirs be given strength to endure life, and that they be blessed—"blessed" meant "wounded", and possible escape by death from unendurable life to a dreamed of good life thereafter. All this is now changed, not because man has changed, but because man has found that he is endowed with a powerful brain which has found out what a few of the invisible principles operative in physical universe can do. But universe having permitted him to discover his intellectual effectiveness as well as some of universe's riches, and thus to participate consciously as well as only subconsciously in universal evolution, will now require him to use his intellect directly and effectively. Success or failure is now all of humanity's responsibility.

The present top priority world problem to be solved may be summarized as:—how to triple, swiftly, safely



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satisfyingly, the overall performances per kilo, kilowatt and man-hour of the world's comprehensively invested resources of elements, energy, time and intelligence. To do so will render those resources—which at the present uncoordinated, happenstance, design level can support only 44% of humanity—capable of supporting 100% of humanity's increasing population at higher standards of living than any human minority or single individual has ever known or dreamed of and will thus eliminate the cause of war and its weapons' frustrating diversion of productivity from the support of all mankind.

Because politicians will not dare to stop 'politicking', and because income-supported individuals will not risk loss of their incomes, and because the wage-earning world will not dare to drop its income-producing activity to promulgate the design science achievement, it can only be undertaken by the more or less free-wheeling student world. If the student handling of its initiative is well done, then in the progressively accelerating emergencies of human society, the significance of the students' initiative will loom into increasing prominence as their design inventions are put to work, soon in sufficient degree to persuade the wage-earning adults to transfer their efforts to support of the student initiative. If this occurs within the next decade, man may succeed in his continuance upon Earth. Because of the students' intuition and youth, the chances are good!

Professor Platt is right. This moment of realization that it is UTOPIA or OBLIVION coincides exactly with the discovery by man that for the first time in history, Utopia is at least physically possible of human attainment.

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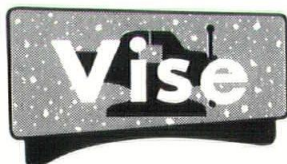


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The second Department of Defense, Office of Civil Defense, course in Protective Construction is scheduled to be in Des Moines on Tuesday evenings, 6:30 p.m. to 10:00 p.m., over the thirteen week period of October 19th through January 11, 1966.

The instructor will be John T. Hanley, Professor and Associate Head, Civil Engineering Department, University of Minnesota.

The course is primarily designed for structural engineers and consists of:

Applied engineering techniques pertaining to blast dynamics, vibrations, dynamic response, ultimate strength and plastic design of structures to resist the dynamic effects of nuclear weapons, practical problems and exercises in the application of the above principles in the design and construction of above-ground, mounded, and buried structures.

Graduates of the Fallout Shelter Analysts' Course will be issued Department of Defense credentials upon satisfactory completion of the Protective Construction Course.

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Iowa authors are invited to submit their unpublished book manuscripts as entries in an award program sponsored by the Iowa State University Press. The Press will present an award of excellence, together with a cash honorarium for \$500.00, to the author whose book manuscript is selected as being the most meritorious. Selection will be from among manuscripts submitted to the Press during the calendar year 1965.

Authors must be legal residents of Iowa at the time their manuscripts are submitted. The manuscript must be a complete and hitherto unpublished work in the English language uncommitted for any other publication. Fictional works and poetry are not eligible for consideration. Judging will be by the Manuscript Committee of the Press.

Authors preparing manuscripts for submission in this award program are invited to correspond with Mr. Merritt Bailey, Director of Book Publishing, concerning any questions they may have regarding techniques of manuscript preparation or publishing.

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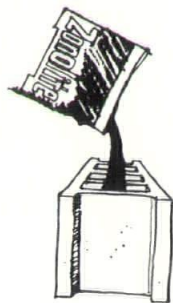
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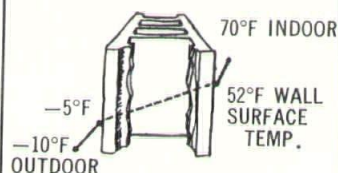


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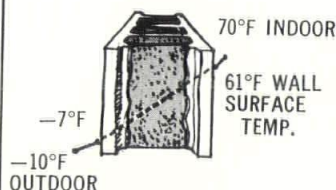
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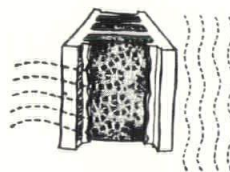


**U = .33 WITHOUT
MASONRY FILL**

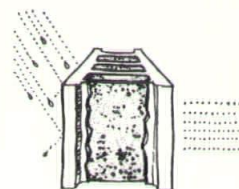


**U = .17 WITH
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For Insulation Value Zonolite Masonry Fill is an excellent insulation. The illustration above shows exterior and interior temperature contrasts on an 8" lightweight concrete block filled with the material. Note the U value of .17. Without the insulation, the U value of this same block is .33.



For Uniformity of Temperature The interior surface of the block stays at a comfortable temperature, all over. There are no hot or cold spots, because the method of thermal transmission, convection in the block cells, is baffled. Conduction through the web of block is negligible.



For Its Water Repellency Each granule of Zonolite Masonry Fill is coated with a special material so that it cannot absorb and hold moisture. Exhaustive tests at Penn State have proved the remarkable water repellency of the material. Interior walls stay dry.

For Sound Deadening A benefit of using Zonolite Masonry Fill Insulation. A common type of concrete block (3-cell, 8" x 8" x 16") reduces the loudness of sound 33 decibels all by itself. Add Zonolite Masonry Fill Insulation and the loudness is reduced another 20% to 31%.



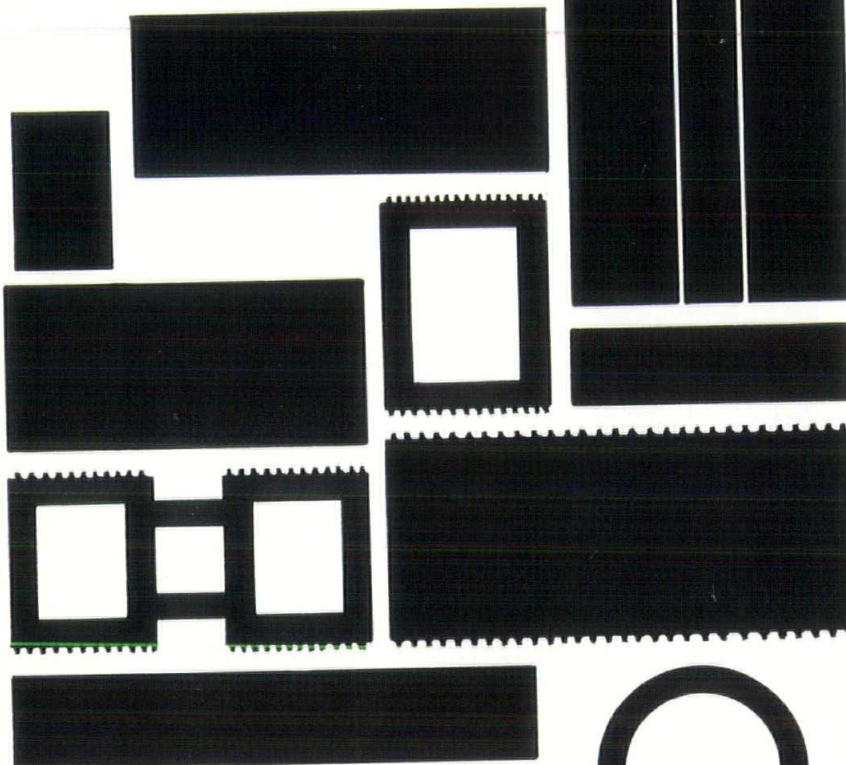
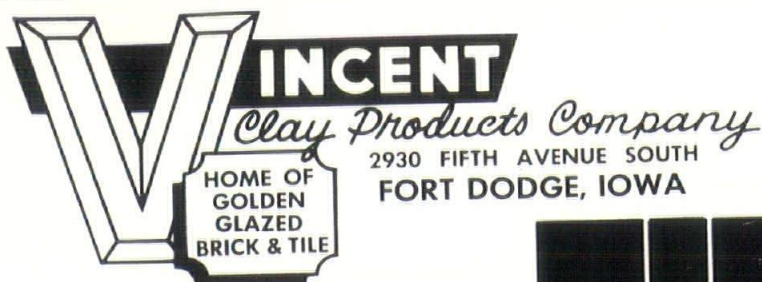
Zonolite Masonry Fill makes it practical to insulate nearly any block or cavity wall. It's low installed cost allows insulating many masonry buildings that didn't warrant the expenses of other insulating methods.

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SAFETY REPORT PUBLISHED

A special report on "Safety in the Construction Industry" has been published by the American Society of Safety Engineers in the September, 1965 issue of the Journal of the American Society of Safety Engineers.

The report includes a review of the current state of accident prevention efforts in the construction industry, for years one of the high hazard industries in this country. The report also considers "special problems" of the construction industry and reveals what is being done by various segments of the industry to help reduce accident rates.

A special section of the report lists more than 12 organizations in the construction field with descriptions of their activities and the materials and services available to construction companies. In addition, an article on "The 'SPATS' Path to Construction Safety," by B. T. Cherry, manager of safety and labor relations for the H. K. Ferguson Co., Cleveland, Ohio, is also included in this issue. In this article, Mr. Cherry discusses the use of critical path scheduling techniques as adapted to the pre-planning of safety requirements by his company.

Copies of the September, 1965 issue of the Journal of the American Society of Safety Engineers are available at 75 cents each from the American Society of Safety Engineers, 5 N. Wabash Ave., Chicago, Illinois 60602.

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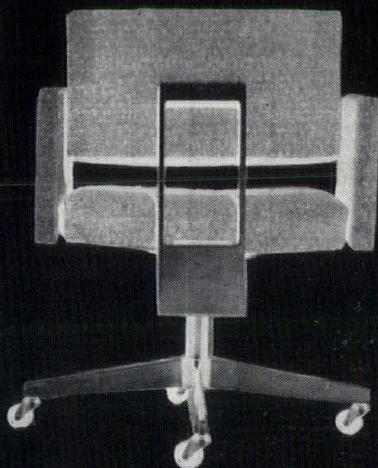
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A.I.A., PRODUCERS' COUNCIL SIGN NEW AGREEMENT

The American Institute of Architects and the Producers' Council, Inc., signed a new agreement of affiliation which clarifies their current common objectives and updates affiliation agreements originally signed in 1923. They have been previously revised in 1939, 1947, and 1957.

In a joint statement Morris Ketchum Jr. FAIA, and Charles S. Stock, presidents of the AIA and PC respectively, explained that because both groups work in the interest of the client, each is concerned with the goals and achievements of the other. Each seeks to protect the client, the AIA by fostering and preserving the highest degree of professionalism in architecture, the Producers' Council by guarding the quality and integrity of building products.

The presidents noted a need for increasing collaboration as matters of mutual concern have multiplied through a growing complexity in modern building and environmental design problems. The relationship established between the two organizations has been extremely valuable to the profession of architecture, to the producers of construction materials and products, and to those for whom buildings are constructed, they said.

Collaboration between the two organizations will be handled through a new Liaison Commission of six members, three from each group.

Officials emphasized that the new national Liaison Commission in no way affects individual chapter AIA-Producers' Council liaison committees. At the state and chapter level, the components of AIA and PC will continue to carry on effective liaison work through a variety of committee activities adapted to local requirements, they said.

Areas in which the two organizations will collaborate include advancement of knowledge about the most effective use and assembly of materials used in construction; dissemination of up-to-date knowledge of materials and methods gained through research and field experience; and improvement in standards of advertising and information on materials and methods useful to the architectural profession and the building industry.



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URBAN DESIGN CENTER IS PROPOSED

The formation of a national Urban Design Center working on a non-profit basis to provide the amenities in urban areas was protested today by Morris Ketchum Jr., FAIA, president of The American Institute of Architects.

Addressing manufacturers of building materials at the 44th annual meeting of the Producers' Council, Inc., here today, he enlisted their support in helping to fabricate items which would be

designed by architects, landscape architects, sculptors and other artisans for use in furnishing the outdoor spaces of American cities.

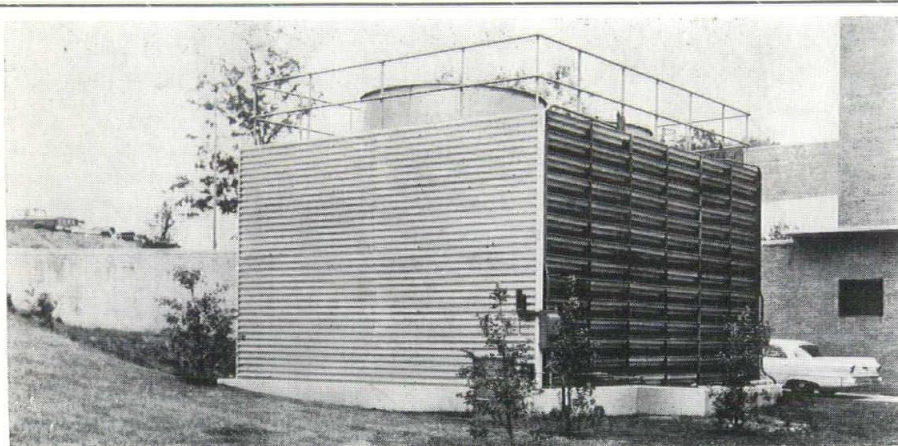
The Urban Design Center would work on street "furniture" including such things as benches, trash receptacles, light standards and fixtures. It would study ways to improve street and highway directional signs and bring order to the confusion of store signs that is prevalent in many cities.

He urged their cooperation in the Design Center project, and declared that manufacturer interest is im-

perative if it is to succeed.

The common interest architects and manufacturers share in seeing the best building products developed and used in construction was emphasized by the architects' national president.

"Given the right design tools, architects have the ways and means to build and rebuild the physical environment of our ever-growing country. Without them, we cannot produce today's architecture, let alone fulfill the unprecedented demands of the next 40 years," he said.



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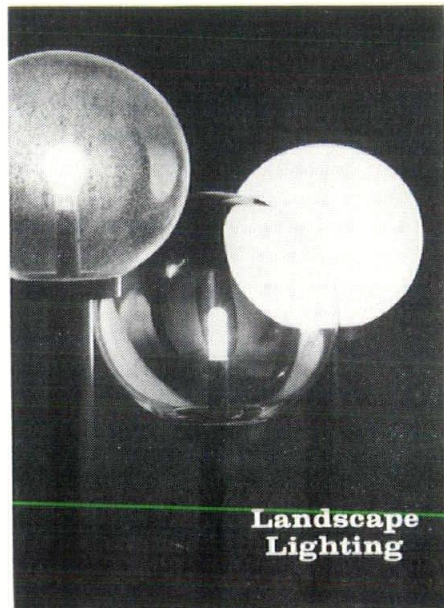
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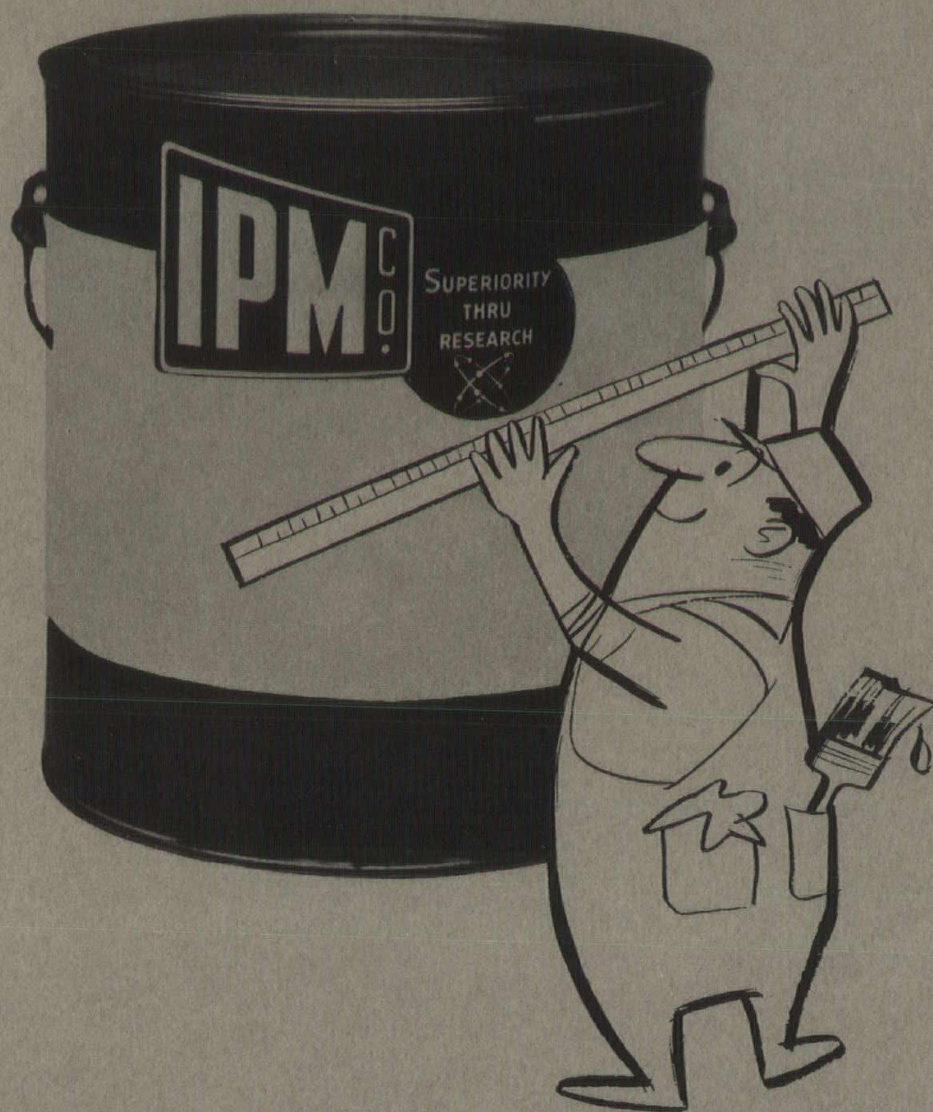


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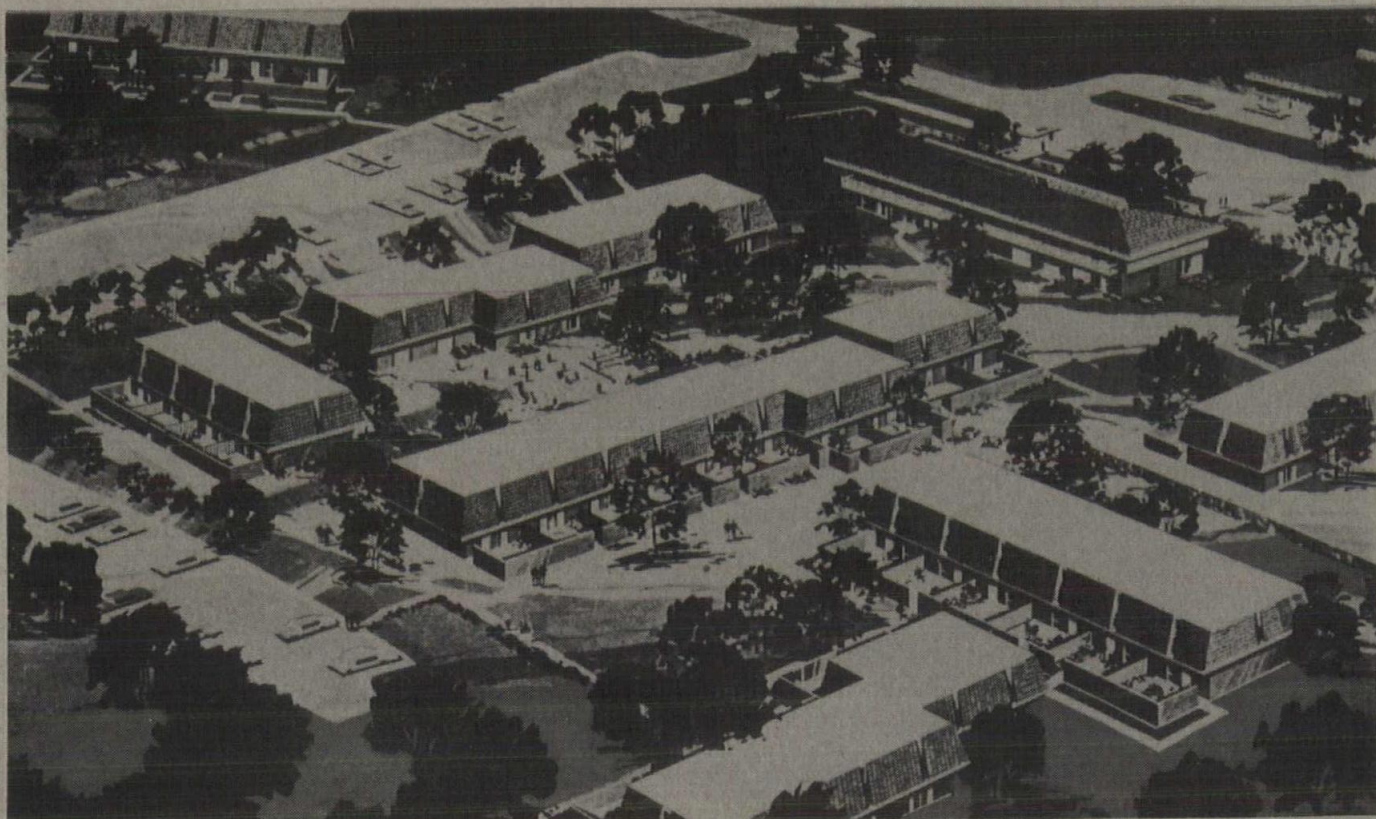


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Architects Savage & Ver Ploeg used 750,000 SCR (2¼ by 12 by 6 in. size) in their design. Exposed brick load bearing partition walls between the apartments are two faced units of the same size, color and texture as the exterior units. These walls divide the second story back to back bedroom and bath areas as well as the first floor kitchen and living areas.

All brick are being furnished by Oskaloosa Clay Products Company, a division of Goodwin Companies. If you would like a four part set of Contemporary Bearing Wall booklets published by the Structural Clay Products Institute, just let us know.



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