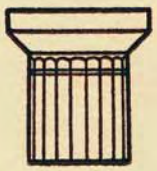
THE FIRST FIFTY YEARS OF

ARCHITECTURAL EDUCATION

AT THE AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS



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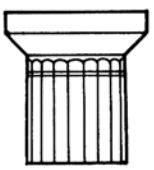

A BRIEF HISTORY OF THE DIVISION OF ARCHITECTURE FROM SEPTEMBER 1, 1905 TO AUGUST 31, 1956

ERNEST LANGFORD

PREVIOUS PUBLICATIONS

First Five Administrators of Texas A&M College
Early History of Texas A&M College Through Letters and Papers
Fragments of Early History of Texas A&M College
Second Five Administrators of Texas A&M College
Supplement to First Five Administrators of Texas A&M College

David Brooks Cofer
Archivist, 1950-57

A Publication of
COLLEGE ARCHIVES
Agricultural and Mechanical College of Texas
College Station, Texas
1957

Foreword

The curriculum in architecture at the Agricultural and Mechanical College of Texas was just entering its fifth year when I came along as a freshman in September 1909. Except for those first four years, plus eight spent elsewhere, it has been my good fortune to be associated with this program for more than forty years. I have seen the enrollment grow from a mere handful to well over four hundred and the faculty from the equivalent of two full-time instructors to a staff of thirteen. The writing of this history of the first fifty years has therefore been a comparatively easy undertaking. It has been simply a matter of reviewing old college catalogues, Longhorns, architectural yearbooks, various other publications, talking with many of the early graduates—and being blessed with the faculty of remembering people and events.

Ernest Langford

College Station, Texas
October 22, 1957

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Illustrations

A portfolio of illustrations is printed as a separate section on pages 13 to 28, inclusive. Those typical of the years 1906-16 are reproduced from old college bulletins and architectural yearbooks. Those typical of the years 1946-56 are reproduced from actual drawings and models still in the possession of the division library. All are properly identified in the portfolio.

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The Beginning

The first formal program in architectural education in the state of Texas was begun at the Agricultural and Mechanical College of Texas September 1, 1905 with the inauguration of the curriculum in architectural engineering by the late Dr. Frederick E. Giesecke.

Even before Dr. Giesecke began his long career as a teacher and administrator, architects of the state were thinking about the establishing of a program of architectural education in Texas. In 1889—while Dr. Giesecke was still less than twenty years of age—a scholarly address on "Architectural Professorships" was delivered at the fourth annual convention of the Texas State Association of Architects in Waco by Mr. W. C. Dodson, president of the TSAA. Because of its historical significance, Mr. Dodson's address is reproduced in Appendix A.

The First Curriculum

Announcement of this first curriculum in architectural education was printed as a supplement and inserted in the 29th annual catalogue for the session 1904-05. That was the first official announcement of an architectural program in Texas —a program effective September 1, 1905 and called architectural engineering. The subject of architectural design received little attention. What instruction was offered consisted essentially of laboratory exercises in the amount of 2½ hours per week for a total of 5 quarters. The programs of the first two years were identical with those in civil engineering. Close examination of the junior and senior years indicates that the engineering aspects of architecture were stressed practically to the total exclusion of architectural design.

As a matter of historical interest, the first courses which were called architectural design came in the winter and spring terms of the junior year, were scheduled for 2½ hours a week, and described as: "A study of the classic orders of architecture, which are d r a w n to scale and rendered in ink and color." There followed in the fall term of the senior year another 2½-hour design course described as: "A study of the best examples of classic buildings; scale drawings rendered in ink and color"; and in the winter and spring terms of the senior year two other 2½-hour design courses described as: "Periodical problems in design." This was the design program of the department for the first several years; but the surprising fact is that such a meager allotment of time for design produced work of the caliber shown on page 14.

The program announced for September 1, 1905 is reproduced below as it appeared in the supplement.

COURSE IN ARCHITECTURAL ENGINEERING

This course is designed to prepare young men for professional work as architectural engineers; the subjects in theory and practice have been selected and arranged so as to afford the training and the technical information necessary for the design of a building with due regard to proportion, economy of material and structural safety.

The course of instruction extends over a period of four years and comprises general courses in English, history, economics, modern languages, military science, mathematics, chemistry, physics and drawing, and technical courses in architectural history, architectural design, materials of construction, mechanics of materials, including laboratory practice in testing the strength of materials, stresses in roof and bridge trusses, design of truss members, masonry structures, sanitary engineering, electric lighting and wiring, heating and ventilation, building construction and structural design.

FRESHMAN AND SOPHOMORE YEARS

For these two years the course is the same as that in civil engineering.

JUNIOR YEAR

FALL	Hours per week	WINTER	Hours per week	SPRING	Hours per week
Architectural Eng'ing Materials of Construction	3	Architectural Eng'ing History of Architecture	2	Civil Engineering Mechanics of Materials	6
Architectural Eng'ing History of Architecture	3	Electrical Engineering Lighting and Wiring	1	Chemistry Inorganic	3
Physics Electricity	3	Chemistry Inorganic	3	Languages French or German	3
Languages French or German	3	Languages French or German	3	Mathematics Calculus	3
Mathematics Calculus	3	Mathematics Calculus	3		
		Military Science Drill Regulations	3		
Freehand Drawing	2	Freehand Drawing	2	Freehand Drawing	2
Working Draw'g & Spec.	5	Architectural Design	2½	Civil Engineering	2½
Machine Drawing	2½	Chemistry	2½	Chemistry	2½
Physics	2½	Electrical Engineering	2½	Architectural Design	2½
		Machine Drawing	2½	Machine Drawing	2½

SENIOR YEAR

FALL	Hours per week	WINTER	Hours per week	SPRING	Hours per week
Architectural Eng'ing History of Architecture	3	Architectural Eng'ing Heating and Ventilation	3	Architectural Eng'ing Heating and Ventilation	3
Civil Engineering Roofs and Bridges	3	Architectural Eng'ing Building Construction	3	Architectural Eng'ing Building Construction	3
Civil Engineering Masonry Construction	3	Civil Engineering Roofs and Bridges	3	Civil Engineering Sanitary Engineering	3
History Industrial History	3	Chemistry Geology	3	Chemistry Geology	3
Mathematics Calculus	3	History Industrial History	3	History Political Economy	3
Military Science	1				
Graphic Statics	5	Civil Engineering	5	Architectural Design	2½
Architectural Design	2½	Architectural Design	2½	Structural Design	5
Structural Design	2½	Structural Design	2½		
Freehand Drawing	2	Freehand Drawing	2		

With the printing of the 30th catalogue a year later, the course in architectural engineering was outlined in detail for four years. Descriptions of curricula are generally included in college catalogues to outline the philosophies upon which those curricula are based and to set forth the mechanics through which achievement of desirable goals may be reached. As a simple matter of comparison of two such statements made fifty years apart, the following is taken from the 78th catalogue:

ARCHITECTURE

The program in architecture is designed primarily to prepare young men for professional careers in the design and construction of buildings.

The method of teaching is that of individual criticism accompanied by careful direction in the

use of the library and in materials of construction. The work of the first two years is designed to give the student fundamental training in the techniques of drafting and an appreciation and understanding of the elementary principles of design and construction. The work of the upper years is built around the larger problems of architecture which, in many instances, become individual student projects.

Two options are offered: I, Design Option; II, Construction Option. The program is the same during the first two years. This makes it possible for the student to defer his decision until the beginning of this junior year, when he can more intelligently select his course of study for his upper years. Both options are five-year courses. Option I leads to the degree of Bachelor of Architecture; Option II, to the degree of Bachelor of Science in architectural construction.

While the programs are designed primarily to prepare young men for professional careers in architecture and building construction, the training forms a good foundation for those who may wish to enter other fields. Graduates find their way into the profession as draftsmen, designers, estimators, superintendents of construction, and develop careers as architects, contractors, and city and regional planners.

The department is a member of the Association of Collegiate Schools of Architecture, is on the approved list of schools accepted by the Texas Board of Architectural Examiners, and is accredited by the National Architectural Accrediting Board.

First Graduates

Three men were graduated with degrees in architectural engineering in June 1906. They were James S. Dean, Max F. Mayer and J. Rodney Tabor.

Mr. Dean stayed on a few years as an instructor and later established a successful practice in Sacramento, California. He later became city manager of Sacramento and finally served as director of finance for the State of California. He is now retired and living in Sacramento.

Following graduation Mr. Mayer went to New York and later to Paris where he studied at the Ecole des Beaux-Arts. Upon his return from Paris, he worked for several years in New York and finally settled in Little Rock, Arkansas, where he established a long and successful practice. Mr. Mayer died some eight or ten years ago.

Mr. Tabor was born and reared practically within sight of the college. After graduation he spent two years at the Massachusetts Institute of Technology and received his B.S. in architecture from that school in 1908. He then opened his own office in Houston where he was in continuous practice for over forty years. Because of his love for his alma mater, he and Mrs. Tabor established the J. Rodney Tabor Scholarship in Architecture in 1951. This scholarship is in the amount of $200.00 and is awarded annually to a fourth-year student in design to help defray expenses in his fifth year. Mr. Tabor died quite suddenly in 1955 in his sixty-ninth year.

Administration

At the time the department was organized there was no such thing as a "school" as we now understand that term. The catalogue for the year 1905-06 simply lists six regular courses extending through four years and leading to the degree of Bachelor of Science, the particular course pursued being specified in the diploma. These courses were identified as follows:

1. Course in Agriculture
2. Course in Architectural Engineering
3. Course in Civil Engineering
4. Course in Electrical Engineering
5. Course in Mechanical Engineering
6. Course in Textile Engineering

Course IX, Architecture—the design option, was authorized in 1909 and appeared for the first time in the catalogue for 1909-10. The work of the first year was still common with all other engineering curricula, and remained that way until 1912-13 when a separate program was approved for students entering architecture.

So far as can be ascertained from the records, up until about 1907 department heads must have reported directly to the president of the college. Catalogues for the previous years make no mention of schools, deans, or other administrative officials. The first indication of the appointment of a dean is in the catalogue for 1907-08 in which the late Charles Puryear is listed as "Dean, Professor of Mathematics." Thus Dean Puryear became the intermediary through whom all department heads reported until the schools of agriculture and engineering were organized in 1911. And

even after that date those departments not incorporated in either of the schools still reported through him as "Dean of the College"—as did, of course, the deans of agriculture and engineering.

With the organization of the School of Engineering, architecture was made a department of that school where it has remained. On the whole, this association has proved to be satisfactory as most of the deans of engineering have been sympathetic towards a program in architecture. Proposals have been made through the years—the first in 1922 or thereabout—for autonomy as a school. Enrollment, staff, and course offerings having reached their present proportions, the time has come for autonomy as a school and efforts are being made in that direction. Given proper recognition and facilities, the program in architecture will continue to grow in prestige and distinction.

Administrators

Six men served as administrators of the department through its first fifty years. Dr. Giesecke was the first, his tenure as head extending first to 1912, when he left to go to the University of Texas as professor of architecture. He later returned to the college and served as head of the department from September 1, 1927 to August 31, 1929.

A graduate of the college in 1886 in the "Mechanical Course," Dr. Giesecke later received the M.E. degree in mechanical engineering in 1890. Early after the turn of the century he received his B.S. in architecture from the Massachusetts Institute of Technology; and in the mid-twenties the Ph.D. from the University of Illinois.

Dr. Giesecke was blessed with an inquisitive mind—so much so, in fact, that his interests ran far afield of architecture. While he maintained an active interest in architecture, his life-long researches were done in the field of heating and ventilation. He was the author of scores of papers, of various texts, handbooks, and other material reaching all of the way from the fundamentals of drawing and descriptive geometry to the heating and ventilating of buildings.

In addition to serving as head of the department, Dr. Giesecke also served as college architect. In that capacity he designed many of the campus buildings erected during the first thirty-odd years of this century. Among these mention may be made of several dormitory and classroom buildings, including the academic building and the Cushing Library.

Dr. Giesecke was born in Washington County, Texas, January 28, 1869 and died in New Braunfels, Texas, June 27, 1953 at the age of eighty-four. A more detailed account of his life's work may be found in the college archives.

The second man to become head of the department was Sampson James Fountain, son of the late Dr. Charles Perkins Fountain who served for many years as chaplain and later as professor of English and head of the department.

Mr. Fountain received his B.S. in civil engineering from Texas A&M College in June 1901 and his B.S. in architecture from the University of Illinois in 1905. Following his graduation from Illinois, he spent some thirty months in France and Italy and studied at the Ecole des Beaux-Arts in Paris. Shortly after establishing himself in practice in Cleveland, Ohio, he was appointed professor of architecture and head of the department, Texas A&M College, September 1, 1912.

Mr. Fountain was born in Camden, Alabama, November 15, 1881 and died August 14, 1914 in the thirty-third year of what promised to be a full and complete life.

The third man to head the department was Rolland Adelsperger. Mr. Adelsperger received his B.A. from Notre Dame University in 1890. A full eighteen years later he received his B. S. in architecture from the same school. He was on the staff at Notre Dame from September 1906 to October 1913, and came to Texas A&M College as professor of architecture and head of the department and college architect September 1, 1915. He remained here about three years.

Mr. Adelsperger was born in La Porte, Indiana, October 9, 1871 and died in Chicago some twenty-odd years ago.

Edwin Bruce LaRoche served as the fourth administrator, coming to the department October 1, 1918 and remaining until April 1, 1925 when he resigned to become associated with the firm of Herbert M. Greene, LaRoche, and Dahl, Architects, Dallas, Texas.

Mr. LaRoche received the B.Arch. degree from Cornell University in 1912. He was born in Young's Island, South Carolina, February 2, 1885 and died in Dallas some ten years ago.

Henry Norton June succeeded Mr. LaRoche as the fifth administrator, serving in that capacity until well into the summer of 1927. He later established a brief practice in Corpus Christi and went from there to the University of Florida as professor of architecture in 1930.

Mr. June was born in Towanda, Pennsylvania, February 28, 1872 and received his B. S. in architecture from the University of Pennsylvania in 1896. He was engaged in general office practice in New York from 1897 to 1904, and was head of the department of architecture in Ohio Mechanics Institute, Cincinnati, Ohio, from 1909 to 1920. He died in Gainesville, Florida, about twenty years ago.

Dr. Giesecke returned to the college in September 1927 as head of the department and college architect. Upon his request, he was relieved of the administrative duties of the department September 1, 1929 but continued as college architect and director of the Engineering Experiment Station until his retirement.

Ernest Langford, a graduate of the department with the class of 1913, succeeded Dr. Giesecke and became the sixth administrator September 1, 1929. From his graduation in 1913 to September 1, 1915 Mr. Langford worked in the office of A. O. Watson, Architect, Austin, Texas. He returned to the college as instructor in drawing September 1, 1915 but left in August 1919 to go to the University of Illinois as an instructor in architecture. He remained there until September 1, 1925. During the time he was at the University of Illinois he completed work for his M.S. degree, which he received June 9, 1924. He returned to the college as professor of architecture September 1, 1925 and was promoted to head of the department September 1, 1929. Born in Ballinger, Texas, May 30, 1891, he reached the age for modified service September 1, 1956. On that date he relinquished the administrative duties of the department but remained on the faculty as professor of architecture. Of the some 950 men who have been graduated from the department, Mr. Langford has come to know all of them personally save for some ten or twelve who graduated prior to his entering the college as a freshman or during the years when he was at the University of Illinois.

In addition to serving as administrator of the department, Mr. Langford has found time for many other activities. He has been a member of the American Institute of Architects since 1926 and was advanced to the College of Fellows AIA at the 87th Annual Convention in Minneapolis in June 1955. He is a charter member of the Texas Society of Architects and registered to practice architecture in the state of Texas.

Along with Messrs. Arch C. Baker, Wm. W. Caudill, Henry D. Mayfield, Jr., and Wm. E. Nash, Mr. Langford was instrumental in the organization of the Brazos Chapter AIA, which was chartered by the Institute July 1, 1952, and served as its first president during the following year.

In one capacity or another he has been a member of the city council of College Station since incorporation in 1938, and has served continuously as mayor since April 1942.

Teachers

Many able teachers have been associated with the department through the years. Among those best remembered by former students and graduates may be mentioned: Samuel E. Gideon, Gilbert Allan Geist, Rexford Newcomb, Clarence J. Finney, Charles M. Brooks, J. Marshall Miller, William W. Caudill, to name only a few who have contributed materially to the progress of the department and who have achieved national reputations here or elsewhere.

Samuel E. Gideon was one of the early able teachers to be associated with the department. Mr. Gideon studied at the Massachusetts Institute of Technology and Harvard University and graduated from the School of Fine Arts at Fontainebleau, France. He left the department in 1912 to become professor of architectural design and history at the University of Texas. He was an authority on early Texas architecture and published numerous illustrated articles in Pencil Points, the American Architect, and other publications. His illustrated brochures include "Landmarks of Austin," "Historic and Picturesque

Austin," and "Austin and the Austin National Bank." He was president of the Texas chapter of the national committee on the preservation of historical buildings and for many years a member of the American Institute of Architects. Mr. Gideon died in Austin, August 13, 1945 and was buried in the state cemetery.

The one teacher who will probably be most affectionately remembered by the largest number of the earlier students is Gilbert Allan Geist. A graduate of St. John's College in 1899, Mr. Geist was first appointed an instructor in drawing in September 1909. When the art of freehand drawing came to be more a part of the program in architectural training, he was transferred to the department in September 1923 as professor of architecture. Mr. Geist was an able delineator, a fine teacher, and a man whose knowledge and reading extended over many fields. Hundreds of his drawings remain with us as illustrations in probably some thirty copies of the Longhorn, and there is no way of counting the number of his illustrations which appeared through the years in various popular magazines. Mr. Geist remained a member of the faculty of architecture until he left in 1934 because of ill health, when he returned to his native Philadelphia to live only a few years.

One of the men who remained with the department for about two years but who later achieved national fame through his writings and contributions in the field of architectural education was Rexford Newcomb. Mr. Newcomb graduated in architecture from the University of Illinois with the class of 1911 and came to the department as an assistant professor September 1, 1917. He later returned to Illinois where he remained until his retirement in 1955. He served as dean of the College of Fine and Applied Arts at the University of Illinois for 25 years or more.

Clarence J. Finney, a graduate of the department with the class of 1922, will be particularly remembered by students of design. He was first appointed to the faculty January 1, 1924, and except for time out for foreign study and to teach at the University of Florida for two years, he served continuously as a member of the staff until he left in 1947 to enter private practice. Mr. Finney was an able teacher. He early recognized the impact of contemporary thinking on design and led his students brilliantly in the transition from what may be called the "classic" period into the "contemporary" period. His earliest work followed closely the program of the Beaux-Arts Institute of Design; his last work with the department was thoroughly contemporary and set the pattern which the design program essentially follows today. Mr. Finney died in 1957 in his fifty-sixth year.

Until the appointment of Melvin M. Rotsch September 1, 1950, Charles M. Brooks and J. Marshall Miller probably did more than any of their predecessors in creating an interest in the history of architecture. Mr. Brooks received his B.F.A. and M.F.A. degrees from Yale University in 1931 and 1934 and came to the department as an assistant professor of architecture September 1, 1934. Mr. Miller received his B.Arch. degree from the University of Southern California in 1937, and was appointed to the staff September 1, 1937 to succeed Mr. Brooks who had resigned to accept a professorship in Scripps College. The program which they established brought new interest to a phase of architectural education, namely, the importance of a thorough grounding in the history of architecture before embarking on a professional career. Mr. Brooks is presently a professor of art and architecture, Lawrence College, Appleton, Wisconsin, while Mr. Miller is an associate professor of planning in Columbia University.

William W. Caudill was one of the first members of the staff to recognize the importance of research in architecture. He came to the department in 1939 after having graduated from Oklahoma A&M College with a B.Arch. degree in 1937. Ten years later he received his M. Arch. from MIT. In the meantime he had begun work on an approach to the design of elementary schools in Texas with the result that "Space For Teaching" was published as a bulletin of the Texas Engineering Experiment Station in 1941. This bulletin has been distributed throughout the world. "Space For Teaching" was followed by several years of intensive research, all of which is summed up in Mr. Caudill's book, "Towards Better School Design," published by the F. W. Dodge Corporation in 1954. He is presently the senior member of the firm of Caudill, Rowlett & Scott & Associates, Architects and Engineers, Bryan, Texas, and Oklahoma City, Oklahoma.

Others who have been associated with the department in one capacity or another and for varying lengths of service include:

C. L. Wignall, a graduate with the class of 1909, taught for two or three years immediately following graduation. He later established an office in Port Arthur, and remained actively in the profession until his death in December 1953.

W. C. Heck, appointed instructor in architectural engineering September 1, 1910.

Allan Burton, a graduate with the class of 1913, who later established a long and successful practice in Baltimore, Maryland. Mr. Burton died in Baltimore in 1955.

Henry T. Dysland, appointed assistant professor of architecture October 1, 1916.

W. Scott Dunne, who came to the department as instructor with joint duties as draftsman in the office of the college architect, November 15, 1917. Mr. Dunne was a draftsman of the "old school." He had worked for a number of years in some of the larger offices in St. Louis, and when he left here established an office in Dallas where he practiced until his death some twenty years ago.

J. M. Kellogg, appointed associate professor of architecture September 1, 1919.

David C. Lange, appointed instructor in architecture September 1, 1919.

Grayson W. Gill, appointed associate professor of architecture September 1, 1933.

Ralph E. Lindsey, appointed associate professor of architecture September 1, 1924.

W. L. Bradshaw, who served as an instructor in architecture during his senior year 1923-24.

Charles J. McLaughlin, appointed acting professor of architecture October 1, 1926.

Clarence A. Johnson, appointed instructor in architecture September 1, 1927.

J. Cozby Byrd, appointed instructor in architecture September 1, 1929.

S. C. P. Vosper, appointed professor of architecture September 1, 1929.

William A. Orth, appointed associate professor of architecture September 1, 1933.

J. B. Atkinson, appointed acting assistant professor of architecture September 1, 1934.

S. B. Zisman, appointed instructor in architecture September 1, 1935.

William V. Cash, appointed associate professor of architecture September 1, 1937.

T. B. Thompson, appointed assistant professor of architecture September 1, 1939.

John M. Rowlett, appointed instructor in architecture September 1, 1940.

F. F. Beadle, Jr., appointed instructor in architecture September 1, 1942.

Joe T. Meador, appointed assistant professor of architecture February 12, 1946.

Theo R. Holleman, appointed instructor in architecture September 1, 1946; associate professor of architecture in charge of the program in junior design.

Gordon C. McCutchan, appointed instructor in architecture September 1, 1946.

Jason P. Moore, appointed assistant professor of architecture June 1, 1946.

Hal M. Moseley, appointed assistant professor of architecture September 9, 1946.

Doil S. Hammons, appointed instructor in architecture September 1, 1948.

William R. Allen, appointed assistant professor of architecture October 1, 1947.

Charles H. Neuhardt, appointed instructor in architecture November 1, 1947.

David L. Ardito, appointed instructor in architecture October 1, 1948.

John N. DeHaas, appointed instructor in architecture September 15, 1948.

Harry S. Ransom, Jr., appointed instructor in architecture October 1, 1948.

Thomas A. Bullock, appointed instructor in architecture September 1, 1949.

Richard Vrooman, appointed instructor in architecture September 1, 1949; associate professor of architecture in charge of the program in sophomore design. Mr. Vrooman has won significant honors in two recent architectural competitions: Second prize in the Fort Brown Memorial Center Competition, Brownsville, Texas, 1951; and first prize in the All-Faith Chapel Competition, College Station, Texas, 1955.

Melvin M. Rotsch, appointed assistant professor of architecture September 1, 1950; professor of architecture in charge of the program in the history of architecture.

James A. Davis, appointed instructor in architecture September 1, 1950.

Brawley M. King, appointed instructor in architecture February 1, 1951.

Harold L. Hornbeak, appointed instructor in industrial engineering in 1948; transferred to department in 1952 as assistant professor of architecture.

James Henry Lemmon, Jr., appointed instructor in architecture September 1, 1951.

Willard Strode, appointed instructor in architecture September 1, 1951.

Gale K. Vetter, appointed instructor in architecture September 1, 1951; associate professor of architecture in charge of the program in fifth-year design.

K. Frank Robinson, appointed instructor in architecture September 1, 1952; assistant professor of architecture in charge of the courses in technology of materials, working drawings and specifications, and professional practice.

Franklin D. Lawyer, appointed instructor in architecture September 1, 1952; assistant professor of architecture in charge of the program in fourth-year design.

Harry W. Gooding, appointed instructor in architecture February 1, 1953.

William G. Wagner, appointed instructor in architecture October 15, 1954; assistant professor of architecture in charge of the program in freshman design.

Many of these men remained on the staff for only a year or so, others four or five years, and a few for as long as ten years.

Names, Degrees, and Options

The first name was Department of Architectural Engineering and Drawing and the degree was Bachelor of Science. The name was later changed to Department of Architecture, a title which was used until January 1, 1956, when the name was changed to Division of Architecture.

The curriculum has changed many times since 1906. For a long time all students in the School of Engineering took the same work in the first two years. Gradually more emphasis was placed on design, with the result that beginning with the year 1914-15 the program was revised to make the first two years common for all students in architecture. In the senior year the student could, as his interests dictated, elect an option in Course IX, Architecture, or an option in Course VII, Architectural Engineering.

With a full four-year program in architecture established, for the first time students were admitted directly to the department upon their entrance to the college—a practice which was followed until the Basic Division was authorized in September 1950.

(The Basic Division was established to provide for specific needs of entering students and to administer their work during the first year in college or until they are admitted to one of the degree-granting schools. Students in the Basic Division who wish later to enter architecture actually start their work in the architectural program in their first year so that the practice established in 1914 of admitting freshmen directly to the department remains in effect to this day.)

A description of the freshman courses in architecture which became effective in 1914 is particularly appropriate in comparing the work of that day with what the first-year student does today. In the meantime, the college had adopted the semester system so that we find freshman students in 1914 registering in Architecture 101 (0-9), Elements, in the first semester and in Architecture 102 (0-9), Elements, in the second semester. Both courses were described as: "The correlation of plans, elevations and sections; lettering; mouldings, the orders, architectural elements; conventional rendering; 16 plates in line; 6 in wash." As an interesting comparison, students who entered the freshman year in 1956 and who indicated architecture as a major, registered for 101, Architecture I (0-9), credit 3, "Basic principles of design and composition; sketching, techniques of presentation"; and in the second semester for 102, Architecture I (0-9), credit 3, "Architectural projections, perspective, beginning design."

Through all the years from the day the department was organized to the year 1931-32 the degree which was awarded for the completion of any of the programs or options was Bachelor of Science. In 1931-32 the design option was extended to five years and the degree granted upon completion of that option was Bachelor of Architecture. Group II, the architectural engineering option of the old program, was kept as a four-year curriculum with the degree Bachelor of Science in architectural engineering. In 1940-41 the architectural engineering option was dropped and students desiring to major in architectural engineering were advised to register for civil engineering—whatever that may mean!

The last class to receive degrees in architectural engineering was that of 1944.

The program in architecture underwent another revision effective with the school year 1942-

43. Three options were offered: I, Design; II, Construction; III, Structural. Options I and II led to the degree of Bachelor of Architecture; III to the degree of Bachelor of Science in architecture. The first three years were common in all options. Option III seemed at the time to offer great possibilities as behind it lay the thought of a joint program in architecture and civil engineering. Few students seemed interested in the option and it was dropped after about five years.

What is essentially the present program in architecture became effective in 1947-48. Option III having been dropped, emphasis was placed upon design and construction. Several technical courses were replaced with more general ones. With the cooperation of the late Dr. Thomas F. Mayo, professor of English, the course in Great Books was offered for students in architecture.

The present curriculum includes two options. Option I, Design, leads to the degree of Bachelor of Architecture; Option II, Construction, to the degree of Bachelor of Science in architectural construction. Option I is designed primarily for the man who wants to establish himself professionally as an architect; Option II, for the man who wants to establish himself in the field of building construction. Both options are five years in length and are identical in the first two years.

Records of all students are screened at the end of the second year. Students whose scholastic attainment is unsatisfactory are advised to change to another curriculum or to repeat certain courses to prepare themselves for more advanced work. Admission to the junior year in design or construction is granted only upon a grade-point ratio of 1.5 in those courses which are considered to be prerequisite to these options.

Pre-Beaux-Arts Years

For the first ten years, that is to about the year 1914, little real instruction was offered in architectural design. There was some instruction in architectural drawing but that consisted almost wholly of copying from plates in various text books. Some attention was given to "creative" design but without too much success. As a matter of fact, there was very little time for design. A review of the curriculum of those early years shows that the total number of hours devoted to architectural design during the last two years actually added up to be about the equivalent of a semester of design in the present program. In terms of total hours, the student in architecture of the Pre-Beaux-Arts years registered for 12.5 clock-hours of architectural design. As opposed to that, the man who graduates today from the design option registers for a total of 156 clock-hours.

Records show that sixteen men were graduated during what we are calling the Pre-Beaux-Arts years. Of these sixteen exactly eight established themselves as professional architects, and two of the eight still maintain their offices with lucrative practices.

The Beaux-Arts Years

The Beaux-Arts period began with the appointment of S. J. Fountain as head of the department. Mr. Fountain had graduated from the college with a degree in civil engineering. He later received his bachelor's degree in architecture from the University of Illinois. He then traveled extensively in Europe where he studied at the Ecole des Beaux-Arts in Paris. With that background it was only natural that he should immediately pattern instruction in design after that of the Ecole. Several of the architectural yearbooks which were published during Mr. Fountain's time or shortly thereafter are still extant. Many of the "Mentions," "First Mentions," and "First Mentions Placed" can still be seen in reproduction in those books. They all show unmistakably that hours and hours went into the grinding of ink and the running of multitudinous washes.

Following Mr. Fountain's untimely death at the early age of 33, the enthusiasm which he had generated for the Beaux-Arts system waned for a while. The flower began to bud again in the middle and late twenties and reached full bloom once more under the direction of S. C. P. Vosper, one of the ablest delineators of modern times. He was at his best in the "Archaeologies." Few men could equal him in the composition of a "projet"; none surpassed him in his brilliant use of colors in presentation.

Enthusiasm for the Beaux-Arts system began to wane again in the thirties and came to a complete and abrupt stop by the end of that decade.

Passing of the Smock and the Esquisse

Students of a generation ago will recall with mixed emotions many "ear marks" of their Beaux-Arts years. To mention two, there were the smock and the esquisse. They probably came in together; at least they went out together! Students of today are unfamiliar with both of them and not one in a hundred can spell "esquisse."

The smock was nothing more than a cotton or linen duster, but every student and faculty member owned and wore one. Work in the drafting room could not begin until all were properly robed. And for that matter, instructors wore their smocks in the lecture rooms—especially if there were chalkwork to be done at the blackboards. While the smock was worn ostensibly to protect one's clothes, its real meaning went deeper than that—it was the trade-mark of the artist! A photograph showing a group of students and their instructors properly attired for an afternoon of freehand drawing—say, for the year 1915—is reproduced on page 20.

The esquisse (pronounced es-keese) was something else. Literally a sketch, just how closely one adhered to it determined once and for all how he fared with the Society of Beaux-Arts Architects—or, more particularly, the Beaux-Arts Institute of Design, an old and honorable organization which in recent years has found it expedient to change its name to the National Institute for Architectural Education.

During the years when the department participated in the Beaux-Arts program the making of an esquisse was a serious matter. At the appointed hour students and instructor met in what approached the atmosphere of a wake, an envelope was opened, and the subject of the program announced. Each student was given a copy and a limited time in which to prepare his esquisse "en loge." That meant within the privacy of a stall or small cubicle where the student would be alone—in secret. Many of the more affluent schools had stalls or booths designed for that sole purpose, but locally it meant that each student went to his drawing board after the class had taken a solemn vow that each would work alone, that he would peek into no books nor over the shoulders of his fellows. Once alone the student got out his tracing paper, pencils, pen and ink, laid them before him, and began the serious business of making an esquisse. If the design were for, say, "A Municipal Bath House"—not an uncommon subject in those days—that meant that by 9:00 p. m. or some other specified hour the student would have committed himself in india ink on tracing paper to a "parti" from which not the slightest deviation was permitted without running the risk of being placed "H.C." (For modern students that was a short way of advising one that he was "hors concours"—unsaddled, out of running, unfit to compete. And odd as it may seem to the student of this generation, no greater disappointment could come to the student of forty years ago than to have his design placed H.C.).

The esquisse, then, consisted of a simple sketch in black ink on a piece of white tracing paper 11" x 14", or some such size, showing just how the student proposed to design a municipal bath house. And regardless of what ideas might come to him later in developing his design, he was forestalled from incorporating them in his solution lest it be placed H.C. The smart fellow always sought to leave himself uncommitted so far as possible in his sketch so that he might have just that freedom later on—but then he ran the risk of having his esquisse H.C.-ed!

Nostalgic notes must surely be found in the chronicles of fifty years. The smock is one. Others are terms with which the student of today is utterly unfamiliar, but to the generations of their sires and grandsires they were serious business. A few may be mentioned: analytique, archaeology, charrette, entourage, projet.

The Analytique was a study of elements of architecture—in short, an order problem. Typical subjects were: A Colonnade, A Problem of Superimposed Orders, An Entrance to a Court House, A Doorway, A Temple of Love. Examples dating about 1915 are reproduced on pages 15 and 16.

The Class B Plan Problem was the next stage in design to which the student advanced once he had accumulated enough points or proved himself otherwise. Typical subjects were: A Small Memorial Art Gallery and Museum, A Private Chapel, A Small Railroad Station, A Small Theatre (note the spelling). An example of a small theater is reproduced on page 18.

The Class A Plan Problem was for the "ancien" only—the old student, a senior. Typical

subjects were: A Municipal Market, A Shopping Center, A Museum of Applied Science, A Presidential Pantheon, A School of Music and Oratory, A Country Estate. An excellent example is reproduced on page 19.

The Archaeology Projet. This was where the student who was skilled in composition and rendering really came into his own. Essentially a projet in research, plus more than an average standing in the history of architecture, the student might find An Entrance to an Assyrian Palace, A Cast Iron Balcony, or A Spanish Renaissance Loggia, as a subject to bring out the best in his imagination. Unfortunately no examples of archaeologies are extant for reproduction.

Definitions of a few other terms will serve to ring down the curtain on the Beaux-Arts years.

Charrette: The final drive to complete the work at hand. Usually a continuous stretch that might extend to forty-eight hours, the student emerged unkempt, unshaven, bleary-eyed, and left the drafting room in a shambles. But the projet was finished, the stretch cut from the board, rolled, wrapped, and on its way to New York! If a charrette occurred in the middle of the week classes were cut in order the next day or two. Students of today go through exactly the same ritual except for name. Nowadays they call it "working in the salt mines."

Entourage: The development of the grounds immediately surrounding a building or group of buildings. An excellent way for getting an effect —bands of lines and circles representing plots of grass, small plants, trees, balustrades, walks, drives —all intended to tie the plan together in a harmonious whole.

Projet: Pronounced "pro-zhay," this was the finished product, the thing on which the student had labored for four to six weeks and on which he hoped to win a coveted Mention, First Mention, First Mention Placed, or possibly a Medal.

And so we come to the end of one of the glorious periods in architectural education. The contemporary scene is upon us.

The Contemporary Years

The break from the Beaux-Arts to the contemporary years was not an overnight affair, but when it did come, it came to stay. The work of European modernists had begun to impinge on the old order. The result was that the philosophy of teaching underwent a complete revolution. Work in design in the early years of the contemporary period was as deplorable as some of the architecture of the same years. Having found himself completely freed from the rigorous disciplines of classic architecture, the student was at a total loss as to what to do with himself. Design sank to an uncomfortably low level before teachers and students could find their way out of the confusion.

The teacher who did most to put design back on a sure footing was Clarence Jack Finney. Mr. Finney was a good teacher, a brilliant designer, and after much cutting and filling succeeded in bringing order out of a chaotic condition.

The classic orders had imposed meticulous details in terms of column heights in relation to diameters, heights of entablatures in relation to column heights, entasis, and all of that. Metopes, triglyphs, dentils, eggs and darts, and a thousand and one other types of ornament had been drilled into the student in the classic approach. Almost overnight he woke up to the fact that all of this had been stripped off with total abandon. What had previously been classic buildings completely symmetrical about major and minor axes were reduced to mere boxes devoid of all ornament, classic or otherwise. This resulted in an architecture (if it may be called that) which was sterile, lacking in interest, and showing no understanding of the new directions in which we were going. Professional architects, likewise, found themselves bewildered in much the same manner.

About all that the student had access to was the national publications and much of the work reproduced in them was that of foreign architects, particularly of western continental Europe. All of this was utterly devoid of what the student knew as "rules." The result was that in working out a solution for whatever problem was at hand he came up with something neither fish nor fowl. It is a pertinent observation that the best progress was made by the students who started from scratch in the new order of things. This meant that about five years elapsed before anything approaching the newer concepts was fully understood.

The class which graduated in 1935 was the first to break completely from the old order. A number of them have established highly successful

practices. Their work is thoroughly contemporary, many have won national awards, and all are recognized as leaders in the profession.

Objectives

Throughout the years members of the staff have repeatedly asked themselves just what it is we want to do. A statement which was prepared in 1938 for the ninth annual convention of the Texas Society of Architects on the aims and objectives of architectural education has come to be accepted as a satisfactory point of departure.

THE AIMS AND OBJECTIVES OF ARCHITECTURAL EDUCATION

The ultimate aims and objectives of architectural education are few and simply stated: The training of students for professional careers in architecture or in fields closely allied thereto; the training of men for proficiency in design and construction; the training of men to attack their problems in a simple, direct and craftsman-like manner without striving for imitation or forced originality; the training of men to be sensitive to those cultural values which give meaning to building. The architect is going to have to give up the idea that his sole duty is to one client; he has a responsibility to the community. He must realize that his buildings affect the community and are in turn affected by it; and it is largely up to the schools to train a generation of architects to think in terms of their communities, to bring them to a realization of the fact that the design of the community differs no whit from the design of the individual building, except possibly in degree; to instill into their graduates a desire to become community-conscious and to accept their responsibilities accordingly. The idea of the architect's being a public servant is not entirely new, but if the products of our schools are to assume positions of leadership, which we hope they will assume, our duty is pretty clearly defined: We must present a program which is so comprehensive and interesting as to create in the hearts and minds of students the will to become leaders; and having created that will, we must furnish the equipment necessary for the accomplishing of that determination. This can be accomplished only in the establishing of a firm foundation for the continued development of each individual. He must be taught fundamental principles of design and construction; he must develop the capacity to analyze, plan and organize space to serve the needs of man; he must develop a clear understanding of the aims, ideals and functions of the architectural profession; he must develop the ability to express himself clearly, forcibly and concisely; and, finally, he must possess those intangibles such as good manners and good taste, which in the end determine professional competence and success.

All through the years an effort has been made to include in the curriculum a liberal amount of non-technical or cultural courses. These include history, a general course in art and civilization, history of architecture, English, and such electives as modern languages, sociology, psychology, philosophy and education. A recent study of the curricula of several schools of architecture indicates that the percentage of liberal or cultural courses in our program is on par with or above the national average.

From the very earliest days when the first two years were common with civil engineering, administrators and faculties alike have realized that construction has an important place in architecture. All students receive basic training in mathematics through an elementary course in differential and integral calculus; thorough courses in mechanics, statics, and strength of materials; design in wood, steel, concrete, and roof framing systems; advanced courses which include statically indeterminate structures and the more technical aspects of modern construction.

Other technical aspects of the curriculum common to both options include the technology of materials, working drawings, specifications, and professional practice, interspersed with courses in business administration and laboratory testing of materials.

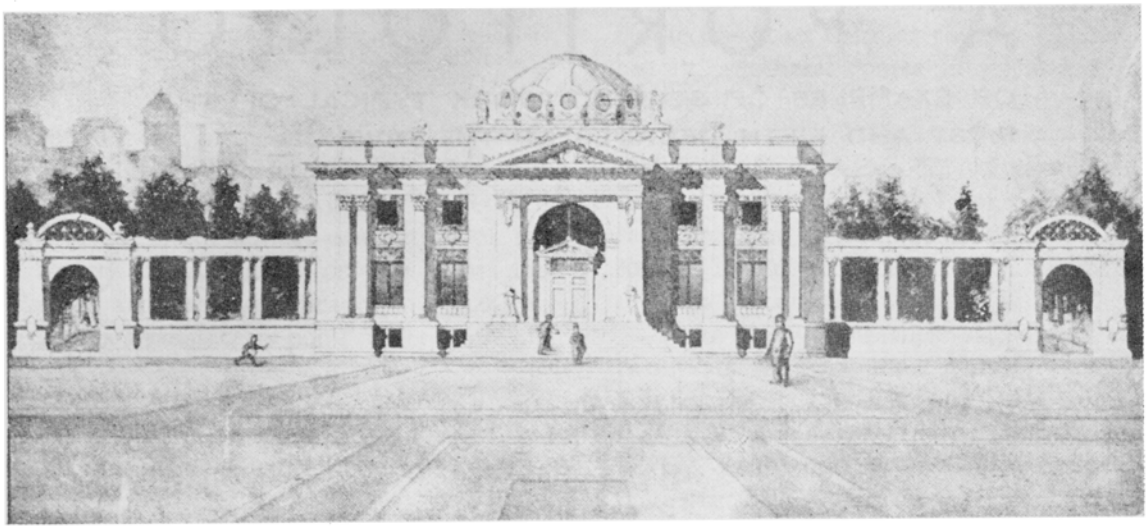
But to state a philosophy is one thing; to put it into operation is another. Following, then, is an attempt to outline the training which a student receives during his five years in architecture.

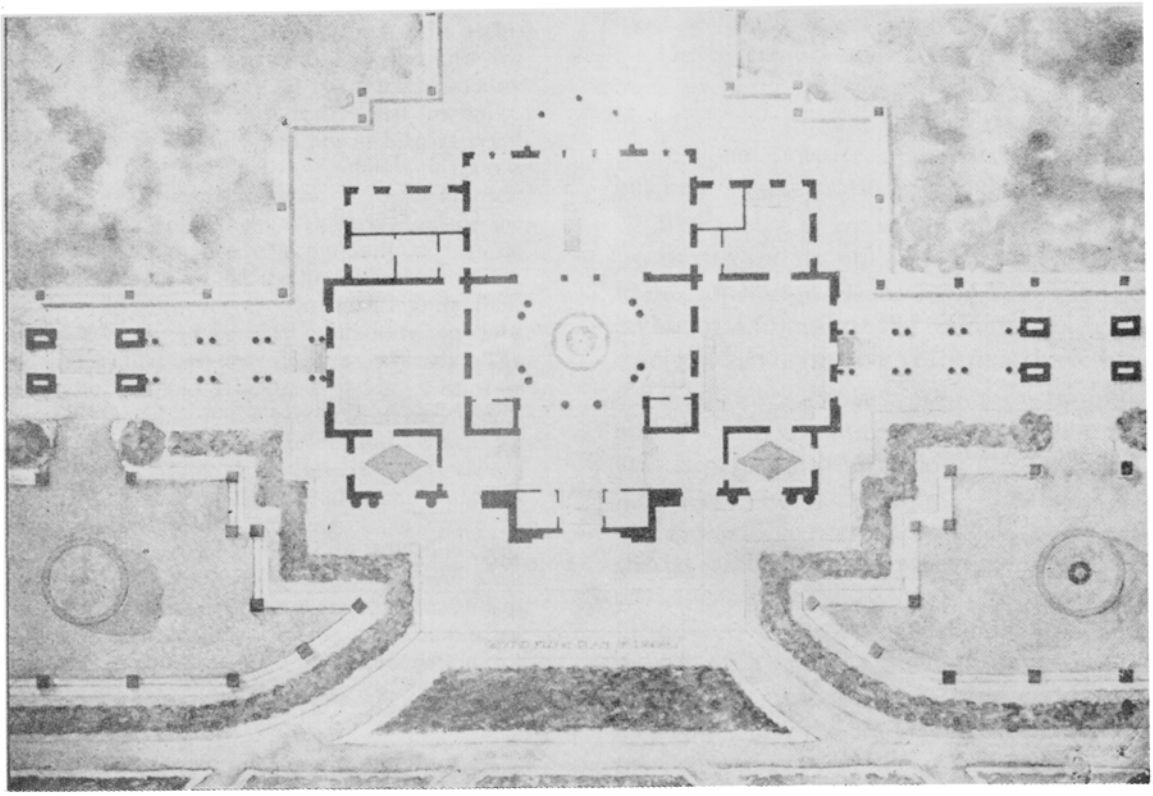
Fundamental to any program is training in the ability to draw. With this in mind the freshman year is planned to give the student training in the techniques of architectural drawing. This includes the basic principles of descriptive geometry, shades and shadows, perspective, and freehand drawing. Elementary design principles are also introduced and may be extended to include the design of a small house or other simple structure of like proportions. Along with his training in architecture, the student is also being grounded in such general courses as English, mathematics, and history.

In the second year somewhat larger problems in design are given. Techniques of presentation are continued, elementary structural systems and

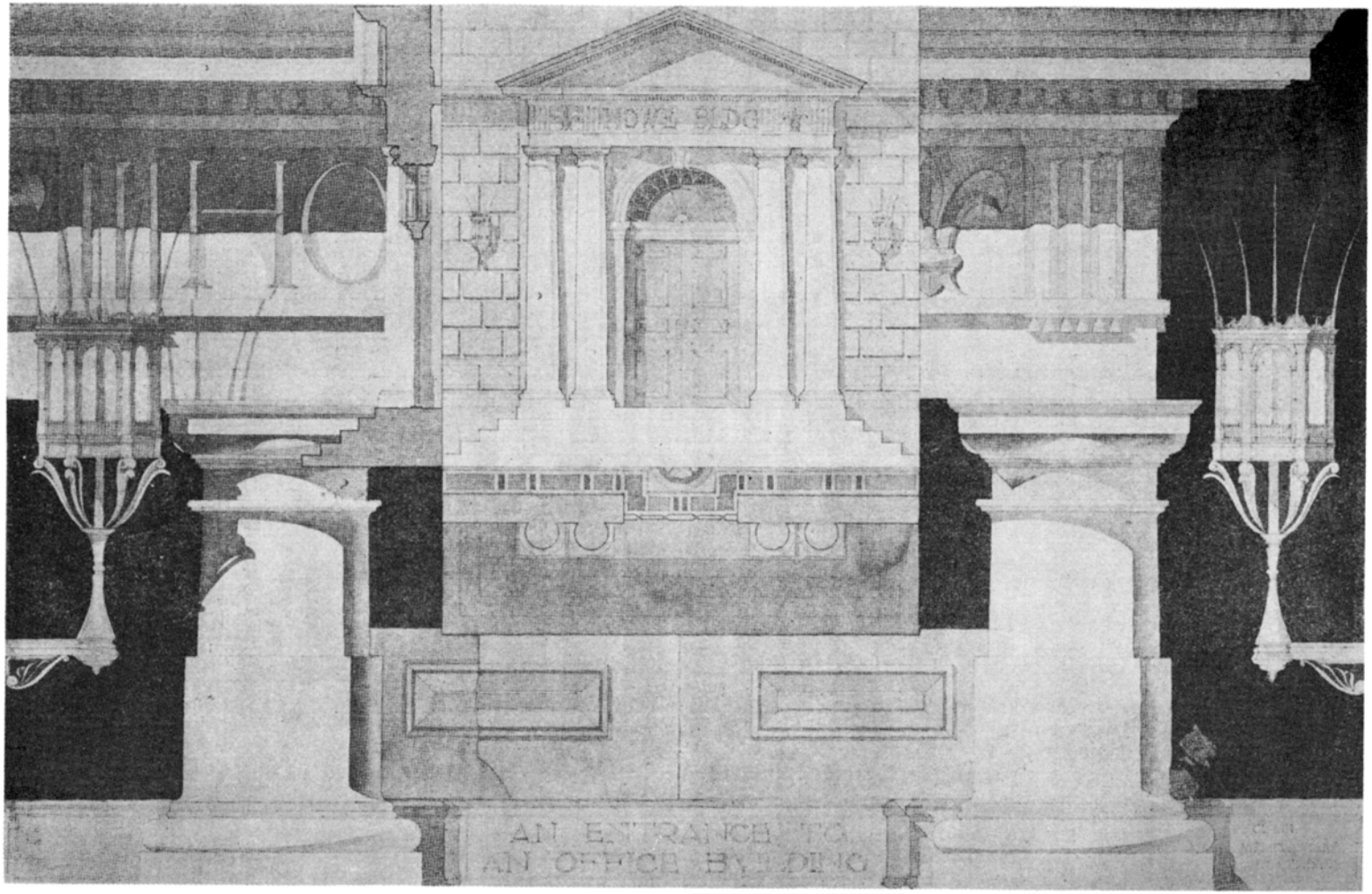
A PORTFOLIO

OF EXAMPLES OF STUDENT WORK TYPICAL OF THE FIRST AND FIFTH DECADES OF THE DIVISION . . .

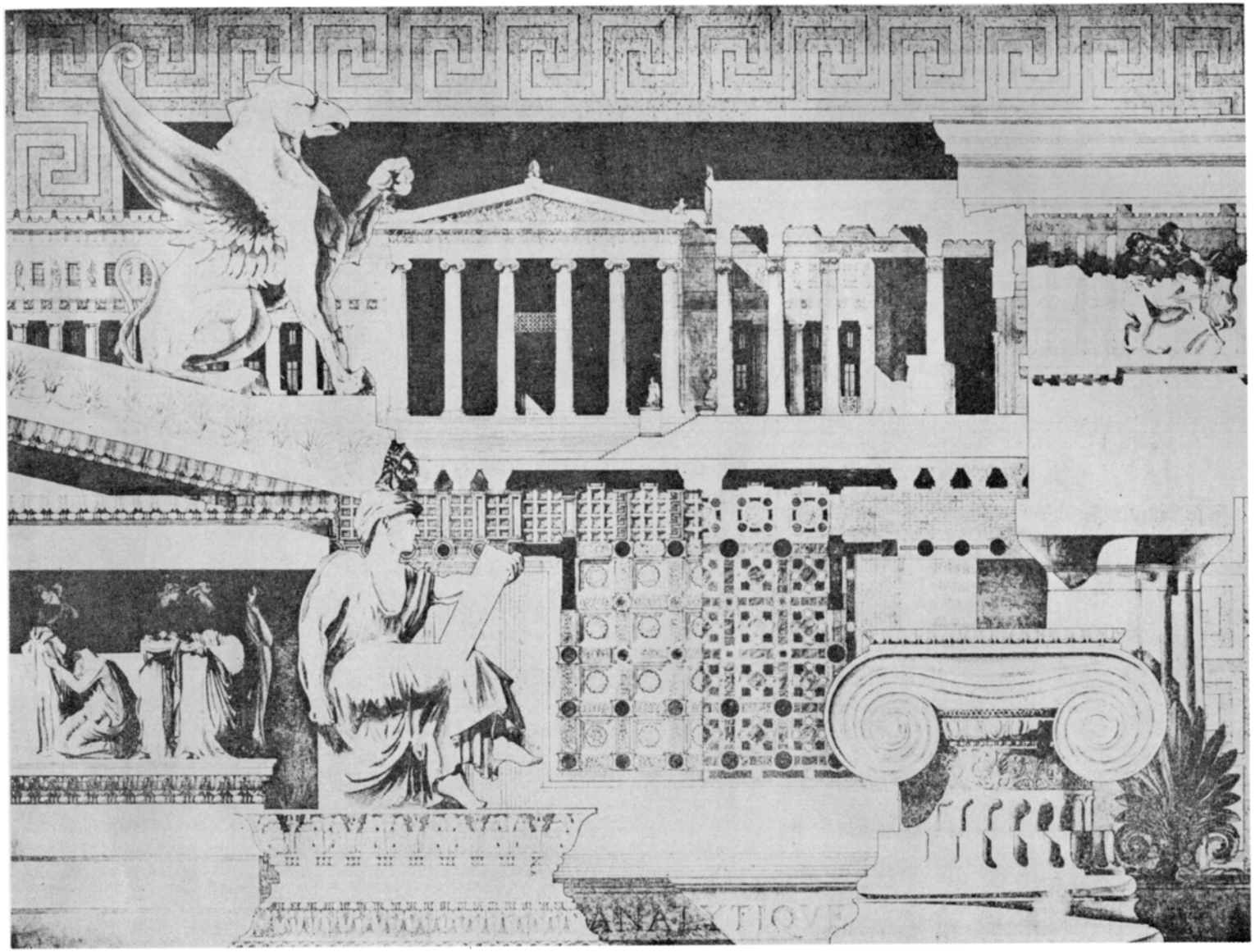




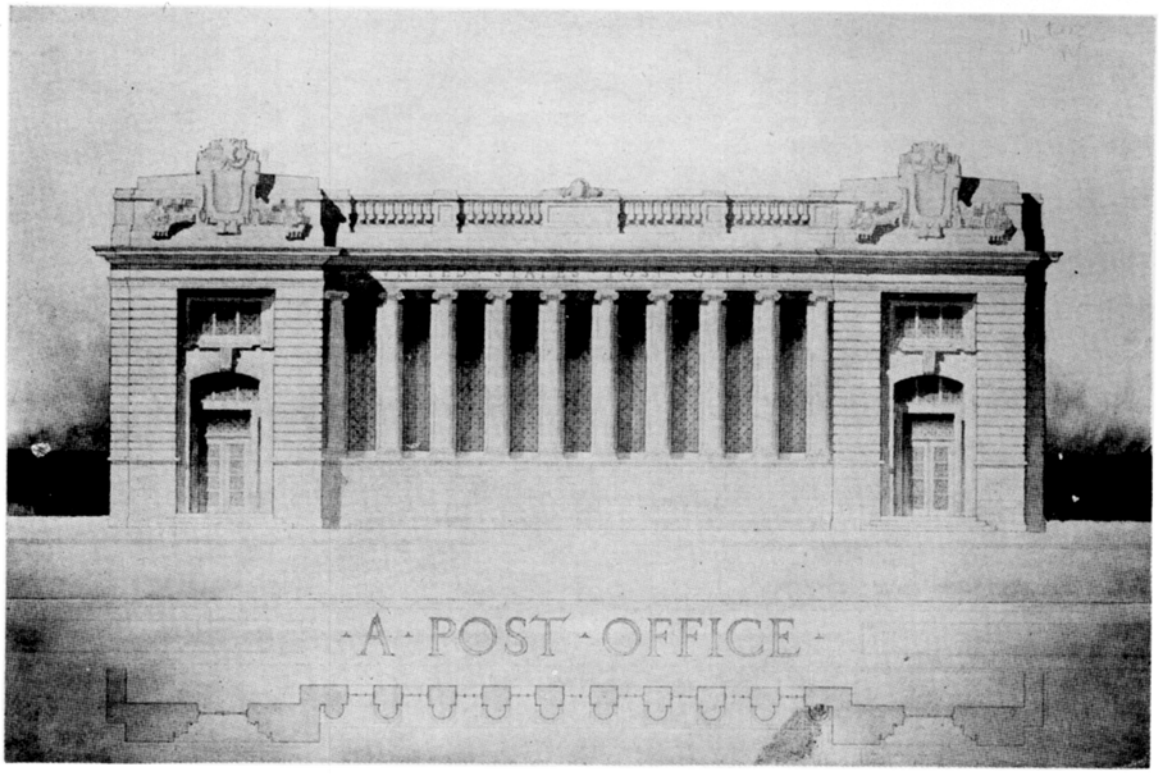
ELEVATION AND PLAN OF THESIS DRAWINGS. SPRING OF 1906



ANALYTIQUE: AN ENTRANCE TO AN OFFICE BUILDING

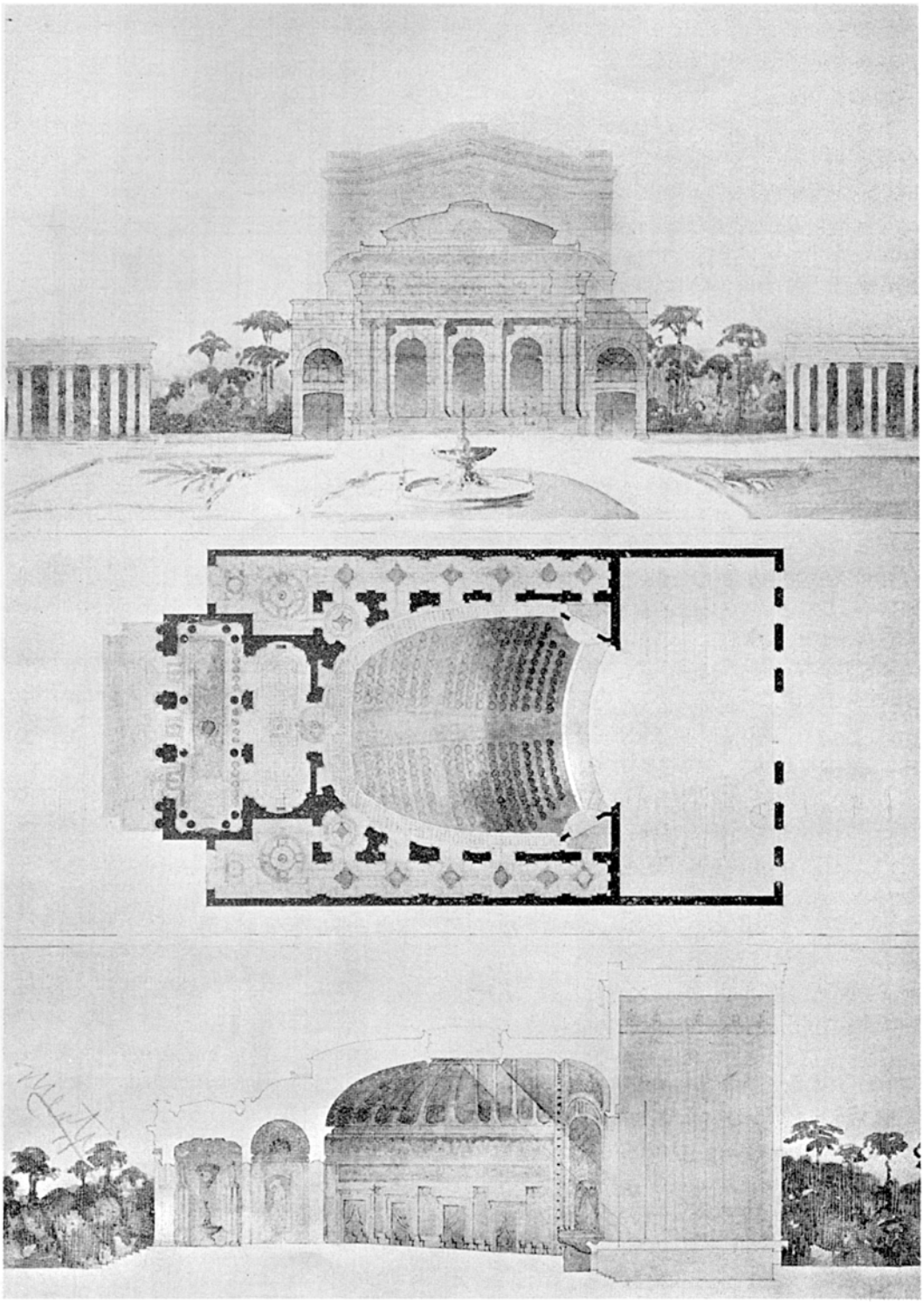


ANALYTIQUE: AN ENTRANCE TO A COURT HOUSE

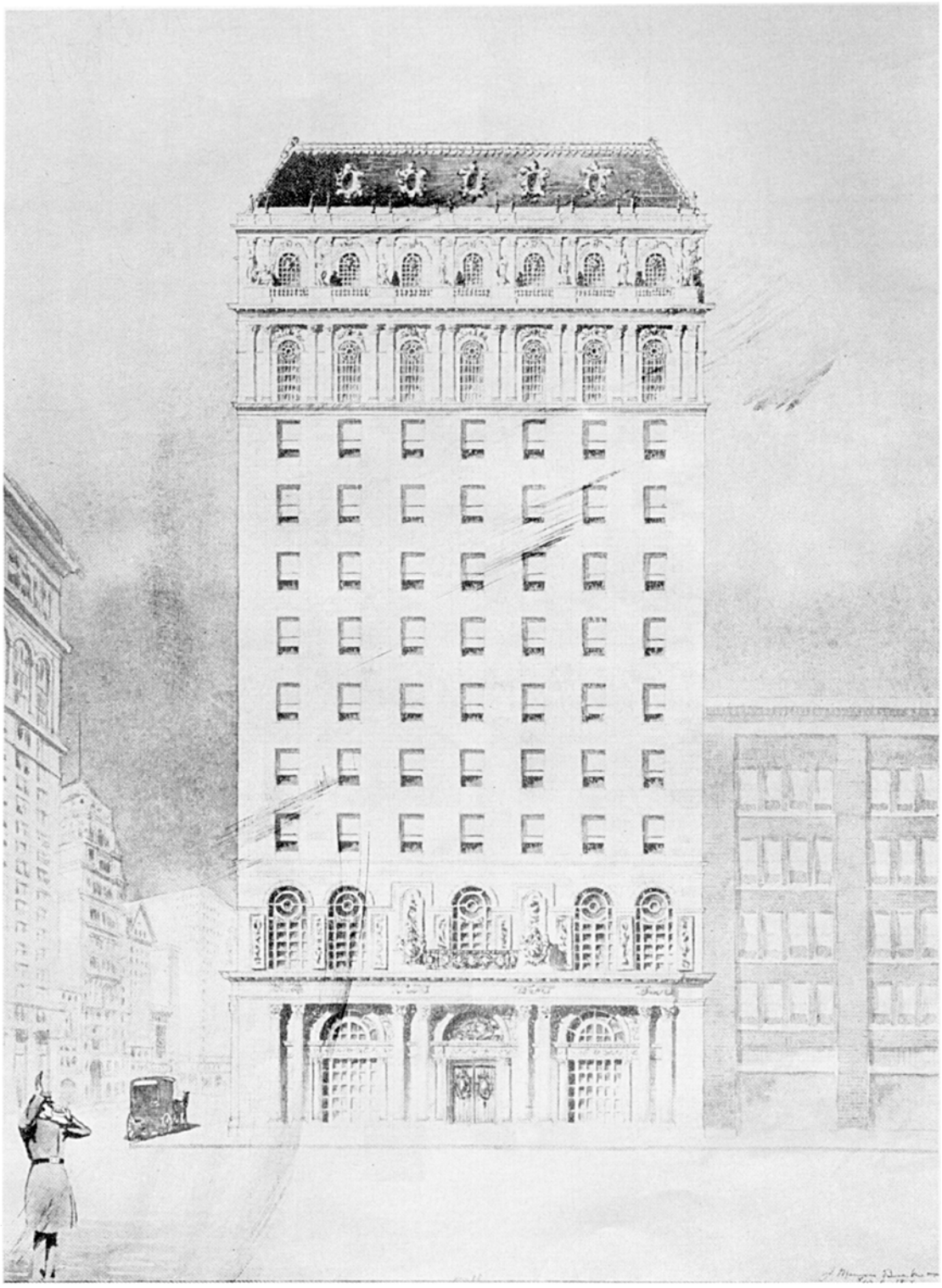


A POST OFFICE

CHARCOAL DRAWINGS FROM PLASTER CASTS



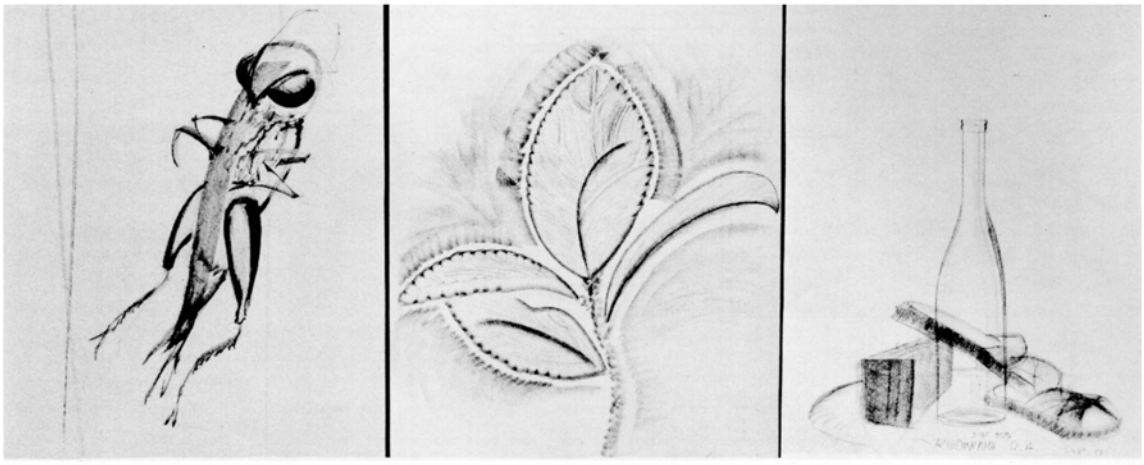
CLASS B PROJET: A SMALL THEATRE

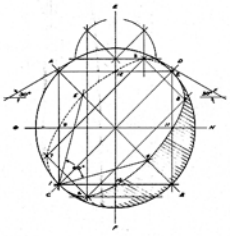


CLASS A PROJET: A HOTEL

PROPERLY ATTIRED FOR AN AFTERNOON OF FREEHAND DRAWING
REMINISCENT OF THE DAYS WHEN EVERY STUDENT OWNED AND WORE A SMOCK.

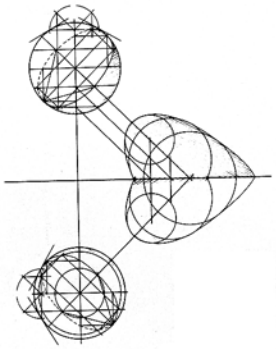
THE DRAWINGS ON THE PRECEDING PAGES ARE TYPICAL OF STUDENT WORK DURING THE FIRST TEN YEARS 1906-1916. THOSE ON THE SUCCEEDING PAGES ARE TYPICAL OF THE DECADE 1946-1956.

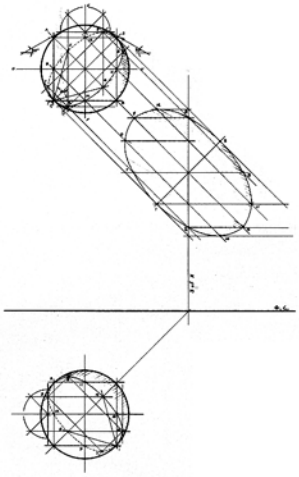


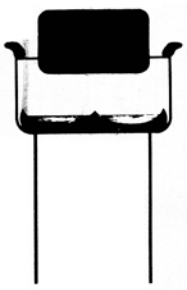


THE SHADE LINE ON THE SPHERE

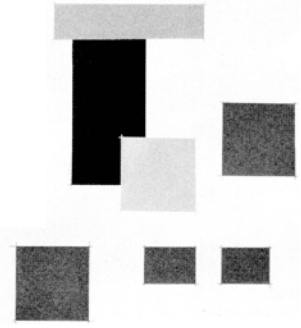
DRAW 45° LINES THRU THE CENTER TO THE OUTER EDGES OF THE CIRCLE. USING THESE FOUR POINTS (A,B,C,D) ON THE CIRCLE CONSTRUCT A SQUARE WITHIN, THEN DRAW HORIZONTAL AND VERTICAL CENTER LINES (EF AND GH) TO INTERSECT THE LINES OF THE BOX. THESE FOUR POINTS (9,10,11,12) ARE ON THE SHADE LINE. NEXT, PROJECT TWO LINES TANGENT TO THE CIRCLE AT THIS TIME AT AN ANGLE OF 30° WITH THE HORIZONTAL. DRAW A HORIZONTAL LINE THRU THE POINTS OF TANGENCY. THEN, USING AS A CENTER THE POINT OF INTERSECTION OF THAT LINE AND THE CENTER LINE (EF), SWING AN ARC FROM THE TANGENT POINTS. NEXT, PROJECT 45° LINES FROM THE CENTER OF THE ARCS TO THE ARCS THEMSELVES. DROP VERTICAL LINES FROM THESE POINTS OF INTERSECTION. THIS LOCATES POINTS 5 AND 6. NEXT, PROJECT DOWN AND TO THE RIGHT AT 45° FROM POINT 5 AND PROJECT UP AND TO THE RIGHT FROM POINT 6. THE POINT OF INTERSECTION OF THESE TWO LINES IS POINT 8. POINT 7 IS LOCATED IN THE SAME MANNER. PROJECT A LINE FROM POINT 1 TO THE LINE AB AT AN ANGLE OF 75° WITH THE HORIZONTAL TO LOCATE POINT 5. PROJECT A LINE FROM POINT 1 TO THE LINE AB AT AN ANGLE OF 15° WITH THE HORIZONTAL TO LOCATE POINT 9. A SMOOTH CURVE DRAWN THRU THESE TWELVE POINTS WILL PRODUCE THE SHADE LINE.





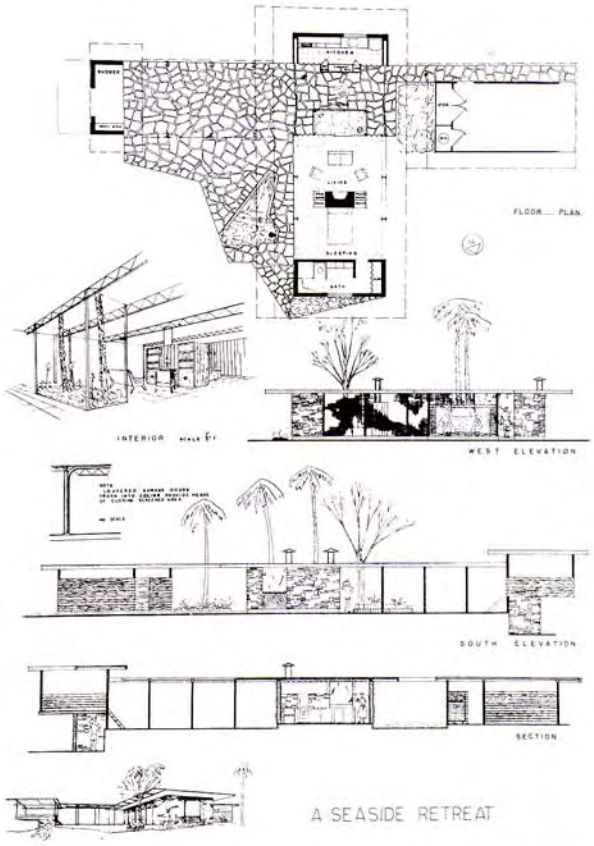


E. SOTTSASS

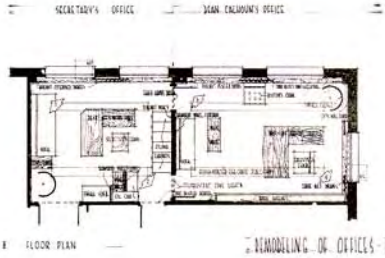


RYE

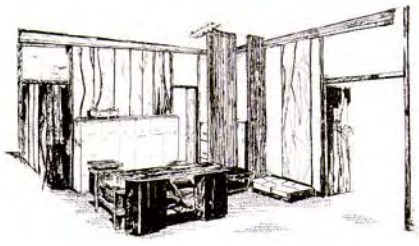
ARCHITECTURAL GRAPHICS

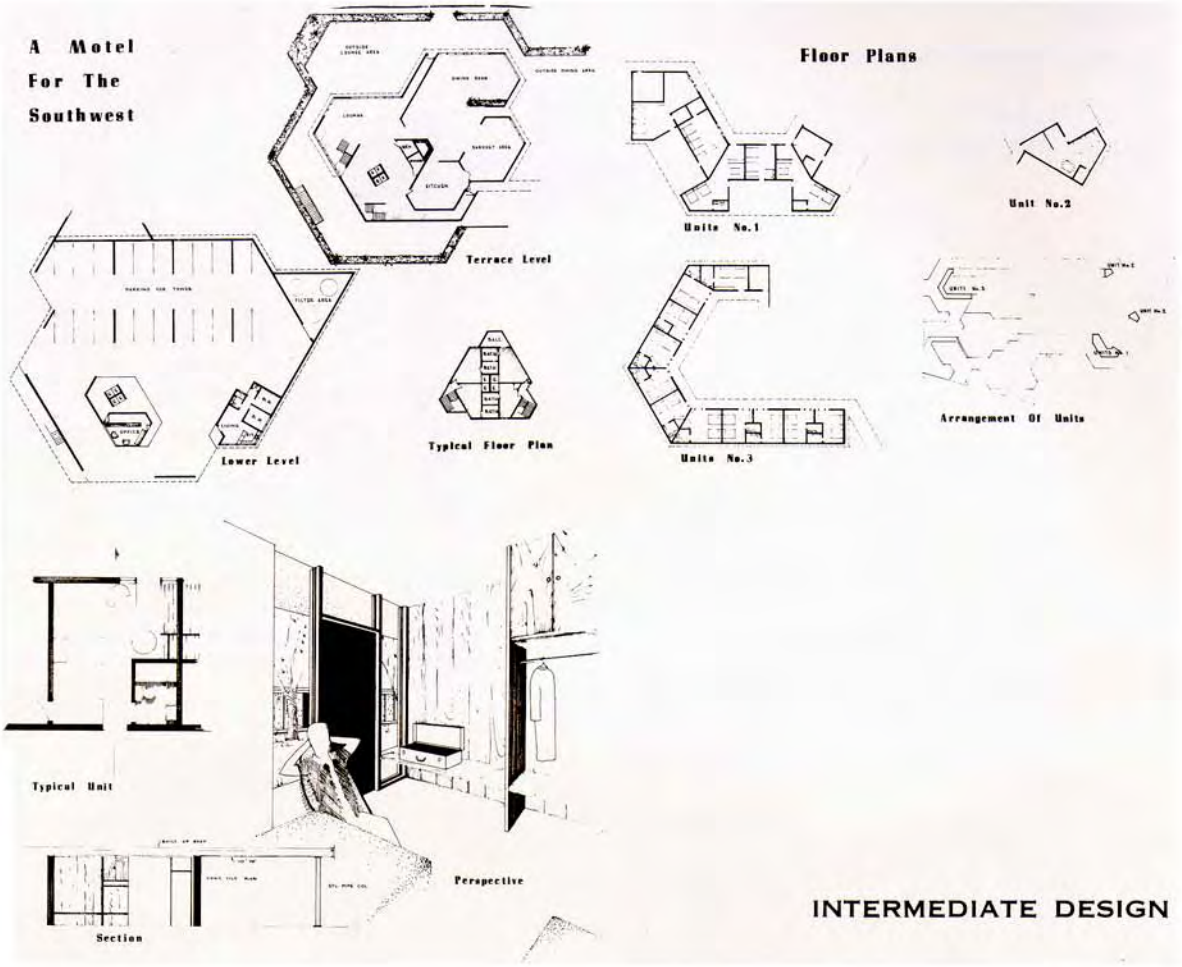


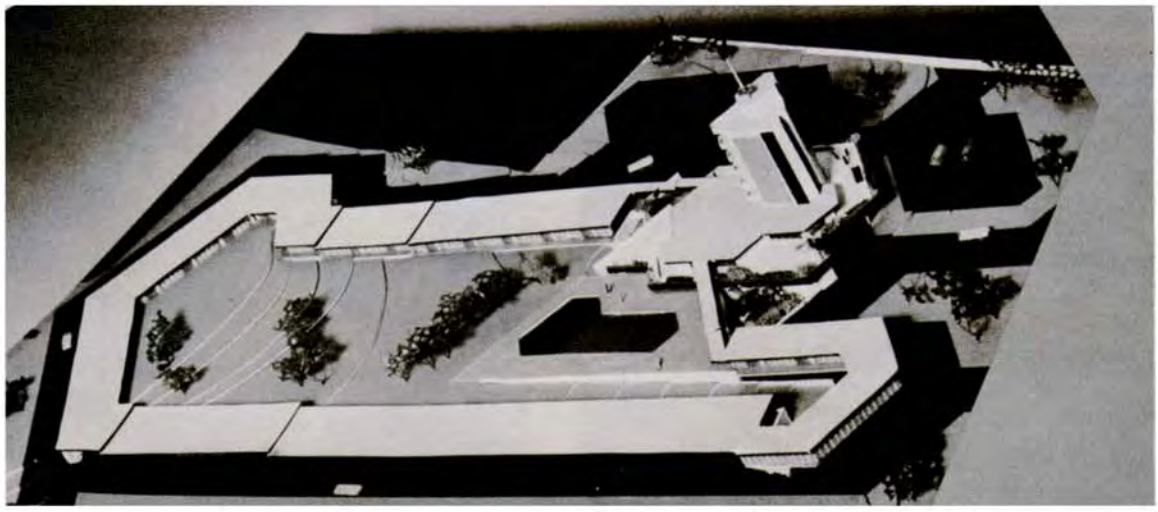
A SEASIDE RETREAT



REMODELING OF OFFICES - DEAN CALHOUN - SECRETARY OFFICES




A Motel
For The
Southwest
Floor Plans
Terrace Level
Lower Level
Typical Floor Plan
Units No.1
Unit No.2
Units No.3
Arrangement Of Units
Typical Unit
Perspective
Section
INTERMEDIATE DESIGN

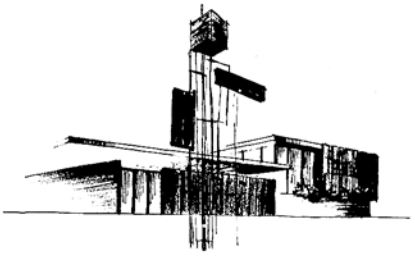


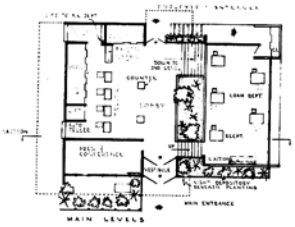
RIGHT

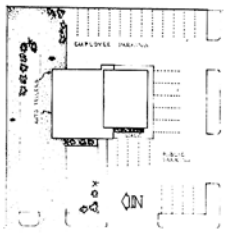
12-HR. SKETCH PROBLEM

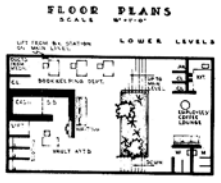
LOWER LEFT

MODEL FOR CITY HALL

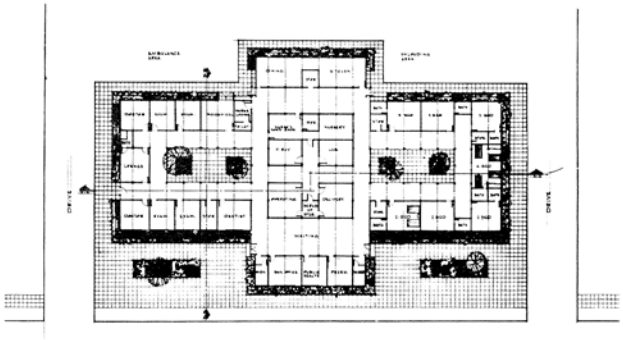


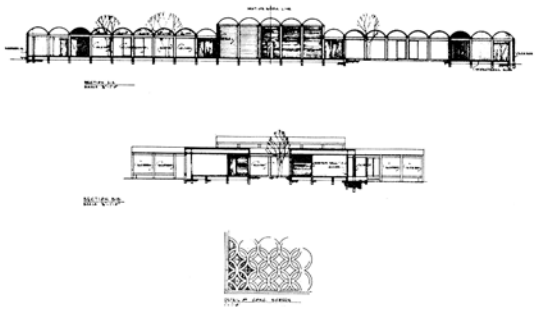




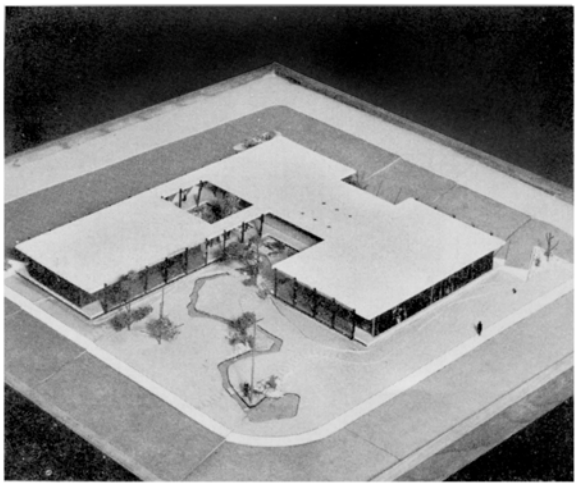


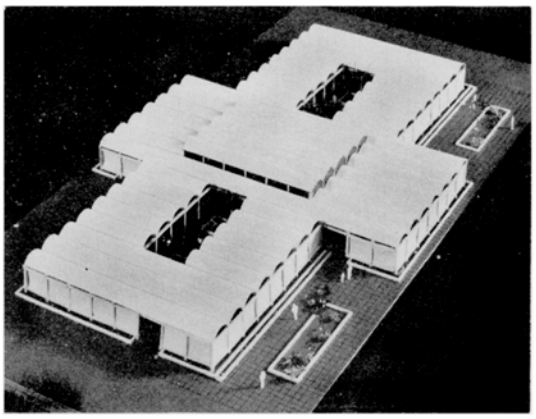
A BANK



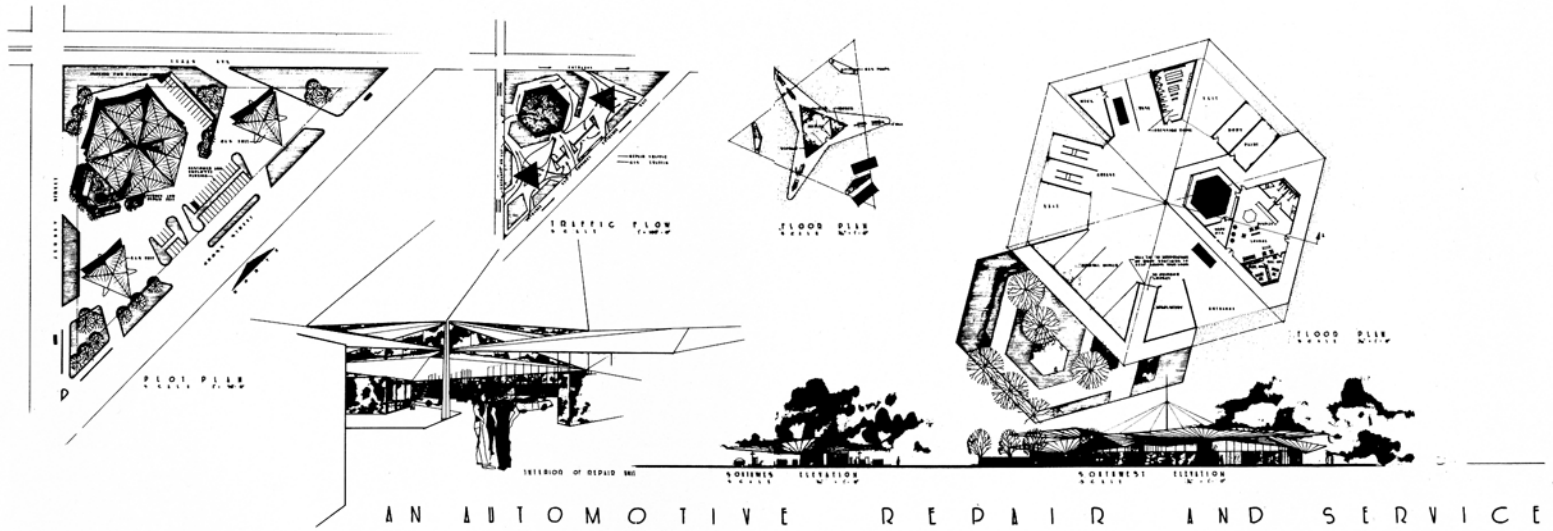


A COMMUNITY HOSPITAL

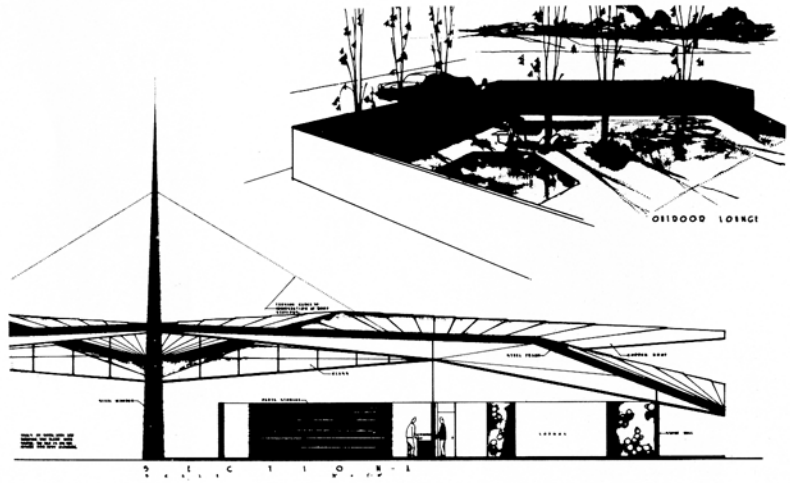




INTERMEDIATE DESIGN



AN AUTOMOTIVE REPAIR AND SERVICE



CENTER

INTERMEDIATE DESIGN

THESIS
TEXAS A. and M.
1957

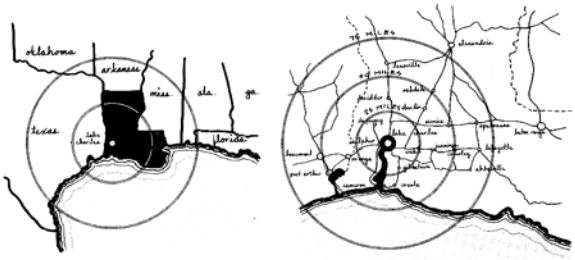
W. CECIL STEWARD
KIRBY M. KRAMER

METROPOLITAN DEVELOPMENT

lake charles la.

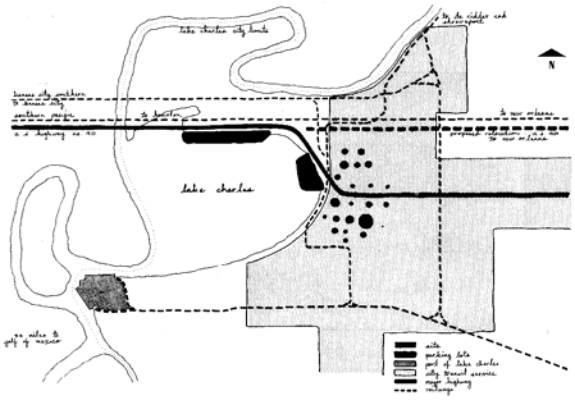
a GEOGRAPHICAL LOCATION

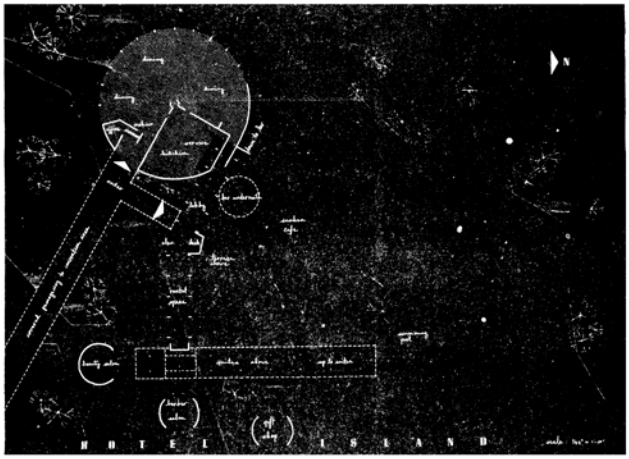
lake charles la.

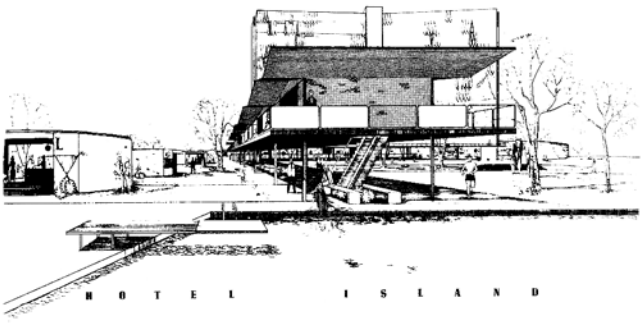


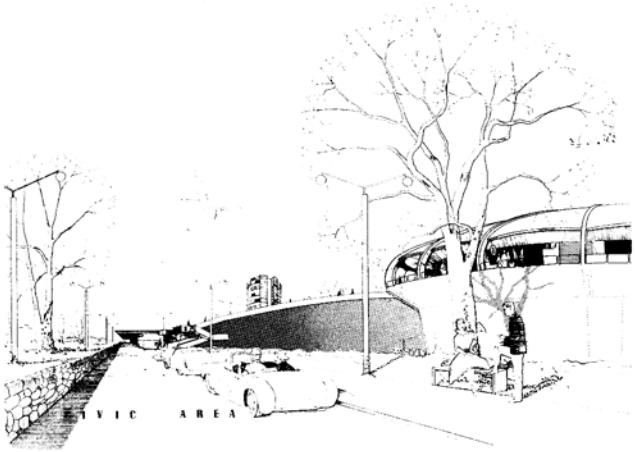
d TRANSPORTATION

lake charles la.



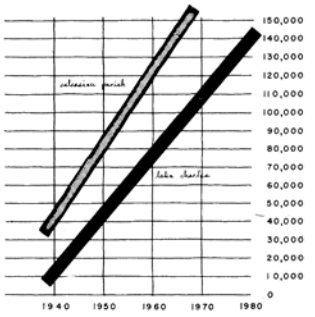






b | POPULATION GROWTH
lake charles la.

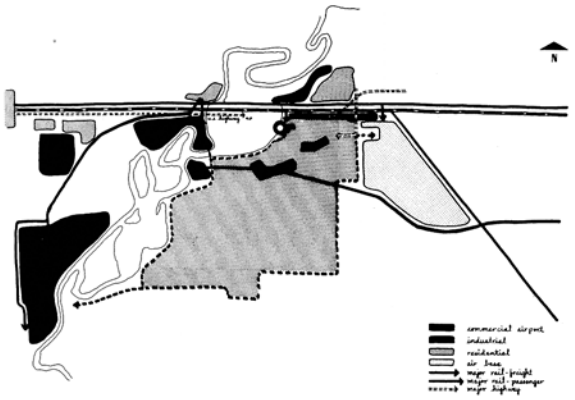
ESTIMATED GROWTH

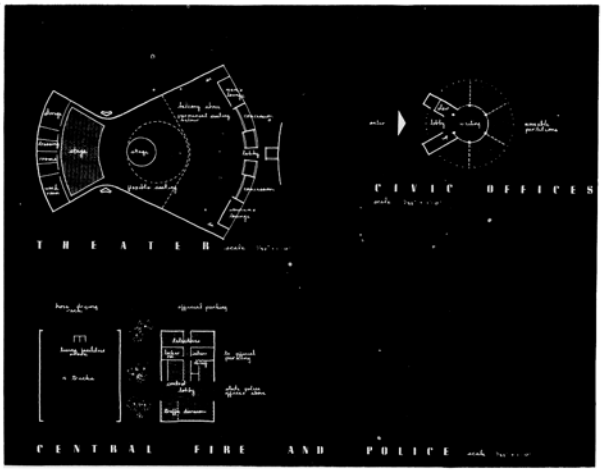


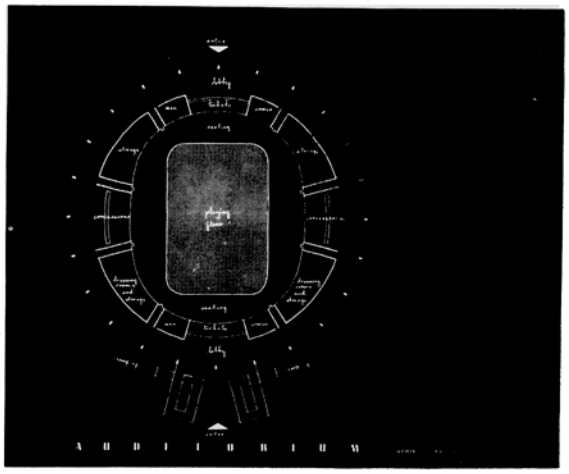
POPULATION 1950

AGE GROUP	NUMBER	PERCENT TOTAL
0 - 10	9,084	22.0
10 - 20	6,098	14.8
20 - 30	7,827	19.0
30 - 45	9,699	23.5
45 - 65	6,543	15.8
65 - 75	1,444	3.5
OVER 75	577	1.4
TOTAL	41,272	100.0

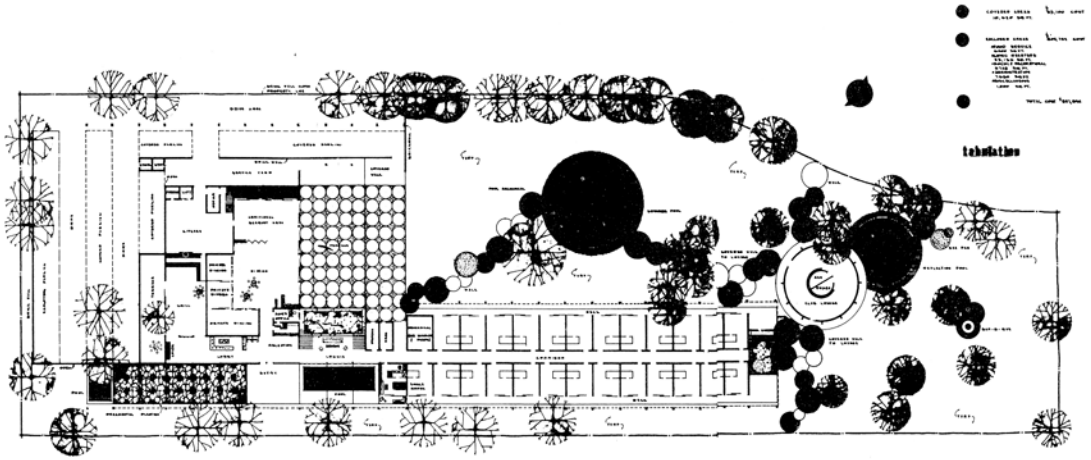
C REGIONAL LAND USE
lake charles la.





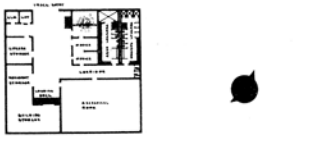


THESIS 1956-57
FIFTH-YEAR DESIGN



site development .... first level plan

tabulations

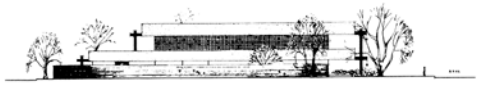


basement plan

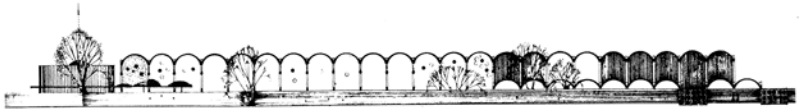
second level plan

FACULTY CENTER

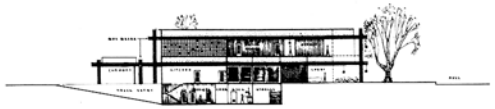
TEXAS CONCRETE MASONRY ASSOCIATION COMPETITION



mall elevation



houston street elevation



section

ADVANCED DESIGN

working details are introduced, functions of plan are considered to include due regard for space requirements, circulation, orientation, etc. Elaborate presentation is minimized although the use of simple models is encouraged. Basic structural principles and the elements of mechanics and physics are introduced, as well as study in the technology and use of materials.

At the beginning of his junior year the student elects the option in design or the option in construction as his interests may dictate. The student electing the construction option leaves off further study of architectural design and progressively adds advanced courses in structures, as well as courses in business administration, economics, civil engineering.

The student who elects the design option goes into intermediate design wherein emphasis is placed on planning, arrangement, and construction. From here on every effort is made to reproduce and expand the experiences which might be found in the office of the professional architect. Conferences with clients are encouraged, sites are visited, the writing of programs is begun. Training in mechanics and strength of materials has progressed to the point where the aspects of structural design can be given more attention. Beams are designed not as theoretical isolated elements to carry assumed loads over assumed spans, but rather as specific parts of a selected system of construction for a current problem in design. In like manner columns, footings, roof framing systems, details, selection and use of materials, etc., become real parts of real problems.

At the beginning of his fourth year the student finds that his preliminary training has prepared him for the more complex aspects of planning. Construction ceases to be a problem in mechanics and structural design—it becomes a source of inspiration. Materials cease to be mere concrete and steel—they become products to be molded at the will of the designer. Along with his training in design are courses in art and civilization, the history of architecture, English, and technical courses in the mechanical and electrical equipment of buildings.

To this point problems in design have been limited largely to isolated structures of various building types. In the fifth year the student finds himself concerned with major problems in community and regional planning and in the design of groups of buildings; and in his last semester the presentation of a thesis in which the attempt is made to add up all that has gone before.

(This and the paragraph following are more or less parenthetical. They are inserted here to show how a practice—namely, that of requiring a thesis in partial fulfillment of the requirements for graduation—has persisted throughout the entire history of the department. For the first three men to receive degrees—Messrs. Dean, Mayer, and Tabor, who actually spent only one year in architecture—presented theses in partial fulfillment of the requirements for their diplomas.

(In the Longhorn for 1906—the senior annual published by the class of '06—the thesis of Mr. Dean is listed as "A Design for an Engineering Building," Mr. Mayer's as "Design of Library," and Mr. Tabor's as "Design for A College YMCA Building." Mr. Mayer's thesis was actually the design of a library for the college, and through a stroke of good fortune reproductions of his drawings have been preserved to this day. The plan and elevation of his design are reproduced on page 14. Mr. Dean states—Appendix B—that Mr. Mayer "had visited the Ecole in Paris and had a little of the touch." His design for a college library certainly shows the influence of the "Ecole"—to quote a phrase which every architect understands: It is right out of the book!)

The student who presents an acceptable thesis today goes far beyond anything ever dreamed of fifty years ago. Early in the first semester of his last year he selects the subject of his thesis, prepares an outline, and submits both to the design faculty. When finally approved, the proposal may look something like this—an actual proposal which has been slightly edited and condensed for inclusion here.

PROPOSAL FOR THESIS
Architecture 502

TITLE	A Civic Center for Denton, Texas
BACKGROUND	Situated within fifty miles of both Fort Worth and Dallas in northeast Texas, Denton is a college town of approximately 28,000 local residents plus 8,000 college students. The presence of two colleges, one a women's college and the other a co-educational school,

lends a youthful atmosphere to the growing community, and the geographical location of the town makes it a desirable place for all age groups to live.

NEED FOR A CIVIC CENTER

At the present time there is no civic center or anything of comparable function in the city of Denton. There is not even a municipal swimming pool, which is unusual for a town of this size.
The reason for the lack of these facilities lies in the presence of the colleges. Each school has its own pool, auditorium, and other facilities for recreation, entertainment and creative classes. Their facilities are modern and are open to the townspeople on many occasions, but they are facilities which were originally designed for the use of the colleges and are not adequate for the needs of both the schools and the city. The city has a definite need for a center built for the townspeople with functions serving all age groups from the small child to the older person. A center such as this would adequately suit the needs of the community and at the same time relieve the increasing demands upon the college facilities which should primarily serve the students.

INFORMATION SOURCES

Officials of the city of Denton, especially the members of the park board, will be contacted with regard to locating the center. College officials will be consulted in connection with class instruction at the center and also to keep from duplicating facilities that will serve both the city and the schools. Architects will be contacted, and research into written matter regarding civic centers will be done.

PROPOSED LOCATION OF CENTER

The proposed location of the center will be in the city park, which is situated a few blocks from the city square and approximately midway between the two colleges. It is an ideal site which presently has within its boundaries a bandshell, a library, and some play equipment for children.

TENTATIVE COMPONENTS

Tentative plans call for a redevelopment of the park as a whole. There will be included in the planning a little theatre, an auditorium, areas for class instruction in painting, sculpture, etc., and recreational and entertainment facilities for small children, teen-agers, young adults, and older people.

BASIS FOR SELECTION

The planning and design of the center is of sufficient magnitude to tax the talents of any designer. I hope to profit from the experience of planning building groups; will emphasize the use of color and integrated sculpture and decor; and will gain personal satisfaction from creating a center—if only on paper—for which there is a definite need.

For the development of the thesis the program is conducted so far as possible in the manner of the professional office. Specialists are called in as needed—they may be doctors, ministers, farmers, engineers, economists, sociologists, as the requirements of the particular subject may dictate. From the first thesis of a simple plan and elevation, the thesis of today has become a veritable problem in "programming"—a prerequisite to successful practice.

For the final judgment the student is given two hours—more if needed—to present his semester's work. A competent jury is assembled and the student goes about his presentation just as the professional architect would present his program, say, to a school board, a commissioners court, or a group of doctors.

Great value is derived from the thesis in the lesson learned from collaboration. Even in its initial stages the student surrounds himself with consultants from the various fields with which he may be concerned. A student in the construction option may be the consultant in structural analysis; one from mechanical engineering in planning for mechanical equipment; one from landscape architecture in developing the plot; and so on. If the subject is, say, a fifty-bed hospital, a host of consultants becomes an immediate necessity and all of them are either brought to the college or the student goes to them.

The greatest value of the thesis as a teaching tool comes from the fact that it puts the student on his own. He selects his own subject, chooses his own consultants, writes his own program, and goes about the business just as he would if he were in practice. He learns to assume responsibility, to make decisions, to meet people. His

critic is always at hand to guide him, and of necessity wields a tremendous influence on the outcome; but in the last analysis it is the student to whom the benefits accrue—and they are incalculable in preparing him for a career in architecture.

A typical thesis dating just fifty years later than Mr. Mayer's is shown on pages 26 and 27.

Use of Models

The use of models in both design and construction is taken for granted today. Like other newer techniques, the modern student simply assumes that they have been with us always. Actually, however, their use dates from the mid-thirties when a few of the more daring students sought more realistic ways of presenting their designs.

The first model of any consequence was made by Lawrence M. Cook who received his B.S. in architecture in 1932. Enrolled as a graduate student in 1932-33, Mr. Cook did a "Mediterranean" type residence for a lot with complicated contours. Finding himself in trouble with the usual line drawings and perspective, he made a model in order that his design might be shown to best advantage. Photographs and descriptive text of his model appear in Pencil Points for October 1932.

Like so much that he was responsible for, model-making was first introduced as a technique in design by C. J. Finney. Starting with the use of simple forms molded in clay for mass effects, he led his students through the use of balsa wood, cardboard, to "zippatone," to finished models showing the professional's touch.

There is no arguing the point that a model is a good teaching tool. A good model does for a design what a perspective drawing cannot do; and a model of a structural frame is about the only way in which some of the more complicated forms can be presented. The only element of danger in model-making is that the student will rely upon that technique to the exclusion of learning how to draw. For after all, buildings are still erected from working drawings!

Research in Architecture

Research in architecture began with the breaking away from what we have called the Beaux-Arts years. The first serious effort was that of Wm. W. Caudill in the late thirties and early forties and resulted in the publication in 1941 of "Space for Teaching: An Approach to the Design of Elementary Schools of Texas," as Bulletin 59 of the Texas Engineering Experiment Station. This publication was followed by various papers, research reports, bulletins, and finally by Mr. Caudill's "Toward Better School Design" published by F. W. Dodge Corporation in 1954. Practically all of the research facilities are centered in the Texas Engineering Experiment Station. Mr. L. J. Horn, supervisor of publications of the station, has prepared the following statement on research and testing for the architect.

> Science is serving architecture at the Texas Engineering Experiment Station through a program of research and testing on performance of architectural shapes with regard to the major environment factors—breeze and daylight—separately and coordinately. An additional factor—sound—will be subjected to study in future work.
>
> The program was initiated in the interest of school building architecture at a time when the huge numbers of wartime births reached school age to require facilities. The research phase has proved the worth of strip windows in daylighting, and of louvers, glass blocks, and overhangs in sun control. It has also revealed the merits of multilateral daylighting and the importance of the ceiling as a reflecting surface. In the field of natural ventilation it has shown that greatest comfort can be attained with breeze-deflecting arrangements on the inlet side of a room and large openings on the outlet side. Among other innovations it has introduced the technique of channeling breeze down a corridor and then dividing it with an obstruction like a column to cool the rooms on each side in a long building. It also brought the surrounding landscape into play in experiments which resulted in information on how to use trees, shrubs, and hedges to direct and concentrate the breeze for effective interior patterns. In newest work the weathering ability of structural materials used in landscaping, and the refinement of architectural testing methods are research quests.
>
> The testing phase of the program is an accommodation to architects seeking proof of performance of their designs before construction. It is conducted as requested on a fee basis alongside regular research. The model-scale methods used have been proven by full-scale correlation.
>
> Facilities used in both the research and the testing are a 30 x 30 foot revolvable experimental

building which can undergo changes in orientation, fenestration, or roof shape on a moment's notice; a 20-foot-diameter lighted dome which serves as an artificial sky; and a modern wind tunnel with accommodations for observation and photography.

Both the research and testing are of continuing nature and aimed at aiding the architect to attain the best in performance from his designs.

Student Societies and Publications

The first student society of which any record can be found was the architectural engineering society for the school year 1908-09. A photograph of that organization, complete with officers and an active membership of eighteen, appears in the Longhorn for 1909. However, it was in the fall of 1912 that a really serious effort was made to interest the students of architecture in perfecting an active organization. In September of that year Mr. Fountain became head of the department, and one of his first aims was to encourage some fifty students—the enrollment in architecture at that time—in organizing themselves into a closely knit group with common objectives.

A second aim was to organize an "Atelier of The Society of Beaux-Arts Architects of New York City" with Mr. Fountain as Patron so that qualified students might have "an opportunity of taking problems given out by this society" and thus have the further opportunity "to compete directly with the students of architecture of the largest colleges and universities." A third aim was the publishing of an architectural yearbook of student work.

Mr. Fountain's enthusiasm bore splendid fruits. The architectural society was organized and in one form or another and under various names has existed to this day—with the organization of the Brazos Chapter AIA, it is now known as the Student Chapter AIA. With the forming of an "atelier" the Beaux-Arts years were begun. Students began immediately to compete successfully with students of older and larger schools, and for a number of years garnered their share of awards. And in the spring of 1913 the first architectural yearbook was published.

The practice of publishing annual yearbooks was fairly universal during the first two decades of this century. Schools exchanged copies and in this way opportunity was afforded to compare the work of students of the various geographical areas. It is to be regretted that the publishing of yearbooks ceased practically altogether in the twenties. The practice is being revived again but more on a regional basis than the effort of a single school.

Coeval with architectural society or club—or whatever the organization was called—was the Beaux-Arts Ball. Every school wound up its social year with a dance. In the early days these were gala affairs. The theme was usually historical in nature, costumes were imaginative, and in general the architectural dance was the most colorful event of the school year. What with such modern themes as "Suppressed Desires"—or others equally inane—the architectural "wind-up" of today is a far cry from that of a generation ago.

Library, Slides, and Plaster Casts

The core of every program in architectural education is the library. The division is fortunate in that it possesses a good working library. While it does not compare in quantity to many libraries of larger and older schools, it lacks nothing in quality. Books have been selected with care and number approximately 3,000; the number of bound periodicals is about 1,000.

As one would expect in a library which has been fifty years in the making, the earlier purchases included such standard works as D'Espouy's "Fragments d'Architecture Antique"; Seure's "Monuments Antiques"; Stuart and Revetts "Antiquities of Athens"; Letarouilly's "Edifices de Rome Moderne"; "Die Architektur der Renaissance in Toscana"; Pfnor's "Monographie du Palais de Fontainebleau"; Fougeres' "L'Acropole d'Athenes"; Robert and James Adam's "Works in Architecture"—all of which in these latter years have become more or less museum pieces. But in their time they were in constant use and today they bear the tell-tale marks of having served as prototypes for many an analytique and archaeology.

The men who went through the Beaux-Arts years will have little difficulty in recalling all of these titles, whereas students of today are hardly aware of their existence. Bearing mute but con-

clusive evidence of the great architecture of the past, their use is now limited largely to the reference shelf in the study of its history.

For the last twenty years or so purchases have been limited pretty largely to publications of those two decades. The result is a comprehensive collection covering both foreign and American contemporary architecture. Where D'Espouy used to be the work which was in greatest demand, nowadays it is likely to be "Brazil Builds," the works of LeCorbusier, Neutra, Gropius, Wright—or Sweet's! And the constant use of Sweet's is a good sign. It shows that the student is aware of the fact that the proper use of materials plays an important part in good design.

Regardless of the care with which a library has been chosen, its ultimate use to the student depends largely upon the person in charge of it. The division is fortunate in this respect as for some twenty-odd years its library has been under the able and efficient direction of Miss W. B. Johnson.

Of importance next to the library is the collection of carefully selected lantern slides. The number runs into the thousands and covers every phase of architecture—history, design, materials, methods and techniques of construction, types of buildings, and so on. Close akin is the film—a medium that is practically in daily use and which is an excellent teaching device.

The plaster cast must have a paragraph somewhere and this seems to be as good a place as any. The time was when every library door was flanked by heroic figures of Venus of Milo and Apollo, while within on a pedestal placed at some focal point could be found the Laocoon group or the lovely figure of the cupbearer Hebe. Schools of architecture owned literally hundreds of plaster casts—and thousands of drawings have been made from them, as witness those reproduced on page 17. But today not over six casts remain out of an inventory which at one time numbered a hundred or more.

Awards and Honors

As of August 31, 1956 the following awards and honors were available to students in architecture:

The Davidson Fellowship. A fellowship in the amount of $500 established in 1949 by the heirs of the late M. N. Davidson. Awarded annually by competition to a graduating fifth-year student in design or construction for graduate study, travel, or other worthy program approved by the faculty.

The J. Rodney Tabor Scholarship. A scholarship in the amount of $200 established in 1951 by Mr. and Mrs. J. Rodney Tabor of Houston. Awarded annually by competition to a fourth-year student in design to assist in defraying expenses in his fifth year.

The W. S. Mosher Memorial Scholarship. Two scholarships in the amount of $600 each established in 1948 by the Mosher Steel Company. Awarded on the basis of scholarship and need after personal interviews. Open to students in architectural construction and civil engineering.

The AIA School Medal. Awarded annually by the American Institute of Architects to a graduating student in design in recognition of scholastic achievement, character, and promise of professional ability.

The Alpha Rho Chi Medal. Awarded annually by the Alpha Rho Chi Society to a graduating student in design who has shown ability for leadership, performed willing service for his school and department, and given promise of real professional merit through his attitude and personality.

The AGC Silver Medal. A silver medal awarded annually by the Houston Chapter AGC to that graduating student in the construction option who has shown greatest proficiency and attainment in architectural conctruction. The medal may also be awarded to a student in civil engineering.

In addition to those listed above, there are several other awards which are made annually by the Texas Architectural Foundation. In general these awards are made by competition and students registered in the schools of architecture in the state of Texas are eligible to compete. Among these awards may be mentioned the TSA-Featherlite Student Competition, the Texas Concrete Masonary Association Competition, the Royal Tile Award, the Clay Products Association of the Southwest Competition, and the Tile Council of America Competition.

Association of Collegiate Schools of Architecture

The Association of Collegiate Schools of Architecture is an organization made up of universities and colleges offering professional train-

ing in architecture. The association was organized about 1912 and for many years membership was limited to a relatively few schools. The division was made a full member June 21, 1942 and has been in good standing since that date. Various members of the staff have presented papers at the annual meetings and Mr. Langford was a director of the association during the years 1951-53.

National Architectural Accrediting Board

The National Architectural Accrediting Board is the accrediting agency for curricula in architecture. Membership of the board is made up of six men, two, respectively, representing the American Institute of Architects, the National Council of Architectural Registration Boards, and the Association of Collegiate Schools of Architecture. The division was accredited first May 1, 1948 and for a second time on June 28, 1954. Accreditation is for a period of five years, hence the program will be reviewed a third time by the NAAB in 1959.

Texas Board of Architectural Examiners

The Texas Board of Architectural Examiners is the agency for architectural registration in Texas. The division is accredited by the board and its graduates are regularly admitted to examination for license upon proper qualification.

Number of Graduates

The following table gives the enrollment by years and the number of undergraduate and graduate degrees conferred through August 31, 1956.

SUMMARY OF ENROLLMENT AND DEGREES

BSAE = Bachelor of Science in architectural engineering
BSA = Bachelor of Science in architecture
BAr = Bachelor of Architecture
BSAC = Bachelor of Science in architectural construction
MSA = Master of Science in architecture
MAr = Master of Architecture

Year	Enrollment	BSAE	BSA	BAr	BSAC	MSA	MAr	Total
05-06	10	3						3
07	10							
08	23							
09	24	3						3
10	53	4						4
11	41	6						6
12	42	6						6
13	48	5						5
14	51	1	2					3
15	32		2					2
16	30	4	4					8
17	31		9					9
18	27	1						1
19	22		3					3
20	34		1					1
21	55					1		1
22	80		6					6
23	107		8					8
24	140		13					13
25	136		18					18
26	143		12					12
27	179		20					20
28	184		16					16
29	175		23					23
30	151		18					18
31	128		19			1		20
32	116		16			1		17
33	94		14					14
34	76		12					12
35	91	2	7					9
36	98	1	1	8		1		11
37	103	3		6				9
38	125	4		4				8
39	144	4		5				9
40	147	1	1	12				14
41	159	9		10		1		20
42	147	5	6	6				17
43	123	4	11	8				23
44	46	1		1				2
45	87	1		1				2
46	186	2		1				3
47	360	10		20				30
48	392	4	2	36	4			46
49	400			35	26			61
50	413			52	32		1	85
51	354			27	32		1	60
52	384			29	30		1	60
53	356			26	37			63
54	339			24	28			52
55	317			30	21		1	52
56	303			36	28		1	65
Totals		84	244	377	238	5	5	953

It is obviously impossible to locate any considerable number of these men, let alone tell what they are doing. However, some general comment seems appropriate.

Of the design graduates, some 200 are registered architects in Texas or elsewhere. Of

these about 50 have established themselves as principals in successful practice; the others are employed as draftsmen, superintendents, specification writers, or engaged in closely related work.

Of the construction and architectural engineering graduates, possibly 100 or more are engaged directly in building construction, structural design, the mechanical and electrical equipment for buildings, or as principals in contracting firms. Others are representatives for various manufacturers of materials and supplies; some jobbers, owners of lumber yards or planing mills, or engaged directly in manufacturing processes.

Then there is a veritable host of graduates who are engaged in other activities. These men are employed by the oil companies, the aircraft companies, the railroads, state and federal agencies, and other similar organizations. A number are members of architectural or engineering faculties, two or three are in the ministry, and a score or more have chosen to make their careers in the armed services. Of these latter several have attained the general rank; other ranks vary from colonel to the most recently commissioned second lieutenant.

A fact worth recording—and one which augers well for the profession and for our social well-being—is that scores of graduates have accepted responsibilities beyond the ordinary business of earning a living. Some are members of city councils; others are on planning and zoning commissions, school boards. And so far as their professional interests are concerned, any number have accepted responsibilities as officers and directors of their chapters, both AIA and AGC. Many have served on state and national committees; others as officers in organizations of related or allied interests.

And finally, some two score have been called to greater work by the Master Architect.

The Fiftieth Anniversary

Plans for celebrating the fiftieth anniversary of the division were begun in the school year 1954-55 and worked out in detail in the first semester of 1955-56. The Brazos Chapter AIA was designated as host for the three-day celebration by Dr. David H. Morgan, president of the college. Some twenty graduates of the division were selected to constitute a steering committee, and following a two-day meeting of the group committees as follows were appointed:

General Chairman, Theo R. Holleman
Finance, Herbert W. Beutel, (*chairman*)
Publicity and Evening Events, Richard Vrooman, (*chairman*)
Registration and Reservations, K. Frank Robinson, (*chairman*)
Exibits, G. K. Vetter, (*chairman*)
Transportation, Ben H. Evans, (*chairman*)
Decorations, Franklin D. Lawyer, (*chairman*)
Program, William G. Wagner, (*chairman*)
Wives Events, Staff wives
Ernest Langford Gift, Milton Foy Martin, (*chairman*)

The committee chose "Survival Thru Architecture" as the general theme of the celebration, and around that subject the program of the fiftieth anniversary was developed. The program and the keynote address of Mr. George Bain Cummings are reproduced in Appendix C.

Headquarters

Following the agelong practice of relegating instruction in architecture to attics, top floors, and other out-of-the-way places, the department was first housed under the mansard roof of "Old Main"—a rather pleasing old building erected in 1876 but which unfortunately was destroyed by fire in 1912. Headquarters were removed to the third floor of the civil engineering building in 1909, and in 1914 to the fourth floor of the academic building which had been erected on the site of Old Main. There in a space of some 20,000 square feet the program in architecture has been housed for forty-odd years. Additional space has been used from time to time as the enrollment grew, the last being temporary shacks to house the freshman program. A separate building for architecture is included in studies for the future development of the campus, and it is to be hoped that such a building will become a reality in the sixth decade of the division.

Fifty Years Later: The Curriculum for 1955-1956

A good point upon which to close this history of architectural education at the Agricultural and Mechanical College of Texas is to compare the program of today with that of fifty years ago. The first is outlined in detail on page 2. The program which follows is taken from the 79th catalogue and is the one which was in effect for the school year 1955-56.

Curricula in
ARCHITECTURE AND ARCHITECTURAL CONSTRUCTION

Freshman Year

First Semester		Credit
Architecture 101 Architecture I	(0-9)	3
English 103 Composition and Rhetoric	(3-0)	3
History 105 History of the United States	(3-0)	3
Mathematics 102 College Algebra	(3-0)	3
Mechanical Engineering 105 Carpentry and Mill Work	(1-6)	3
Military or Air Science	(0-3)	1
Physical Education 101	(0-2)	R
		16

Second Semester		Credit
Architecture 102 Architecture I	(0-9)	3
Basic 106 Survey of Man's Knowledge	(0-2)	1
English 104 Composition and Rhetoric	(3-0)	3
History 106 History of the United States	(3-0)	3
Mathematics 116 Plane Trigonometry and Analytics	(4-0)	4
Mechanical Engineering 101 Engineering Problems	(0-3)	1
Military or Air Science	(0-3)	1
Physical Education 102	(0-2)	R
		16

Sophomore Year

First Semester		Credit
Architecture 201 Architecture II	(0-15)	5
Architecture 205 Freehand Drawing	(0-3)	1
English 210 Writing and Discussion	(2-0)	2
Mathematics 223 Differential and Integral Calculus	(4-0)	4
Military or Air Science	(0-3)	1
Physics 201 College Physics	(3-3)	4
Physical Education 201	(0-2)	R
		17

Second Semester		Credit
Architecture 202 Architecture II	(0-15)	5
Architecture 206 Freehand Drawing	(0-3)	1
Architecture 228 Elements of Mechanics	(3-0)	3
Civil Engineering 206 Plane Surveying	(0-3)	1
Government 306 American National Government	(3-0)	3
Military or Air Science	(0-3)	1
Physics 202 College Physics	(3-3)	4
Physical Education 202	(0-2)	R
		18

At the beginning of his junior year, a student who has a grade point ratio of 1.5 or more in his major courses may, with the consent of the Head of the Division of Architecture, choose one of the following options:

Option I: Design Option

Option II: Construction Option

Option I leads to the degree of Bachelor of Architecture; Option II leads to the degree of Bachelor of Science in Architectural Construction.

Students who are interested in architecture as a career are encouraged to choose Option I; students interested in building construction are encouraged to choose Option II.

DESIGN OPTION

Junior Year

First Semester		Credit
Architecture 301 Architecture III	(0-18)	6
Architecture 305 Freehand Drawing	(0-3)	1
Architecture 327 Construction I	(3-0)	3
Architecture 329 Art and Civilization	(2-0)	2
Architecture 353 Technology of Materials	(2-0)	2
Elective		3
		17

Second Semester		Credit
Architecture 302 Architecture III	(0-18)	6
Architecture 306 Freehand Drawing	(0-3)	1
Architecture 328 Construction I	(3-0)	3
Architecture 330 Art and Civilization	(2-0)	2
Architecture 354 Technology of Materials	(2-0)	2
Elective		3
		17

Senior Year

First Semester		Credit
Architecture 401 Architecture IV	(0-18)	6
Architecture 427 Construction II	(2-2)	3
Architecture 429 History of Architecture	(3-0)	3
Landscape Architecture 411 Landscape Design for the Architect and Engineer	(2-2)	3
Elective		3
		18

Second Semester		Credit
Architecture 402 Architecture IV	(0-18)	6
Architecture 428 Construction II	(2-2)	3
Architecture 430 History of Architecture	(3-0)	3
English 371 Great Books	(3-0)	3
Elective		3
		18

Summer Work

Architecture 500; Summer practice, twelve weeks, required.

Fifth Year

First Semester		Credit
Architecture 501 Architecture V	(0-18)	6
Architecture 527 Construction III	(2-3)	3
Electrical Engineering 436 Electrical Equipment for Buildings	(3-0)	3
English 403 Speaking for Professional Men	(1-2)	2
Mechanical Engineering 335 Mechanical Equipment of Buildings	(3-0)	3
		17

Second Semester		Credit
Architecture 528 Construction III	(2-3)	3
Architecture 454 Specifications and Working Drawings	(1-6)	3
Architecture 502 Architecture V	(0-18)	6
Architecture 550 Seminar	(1-0)	1
Architecture 554 Professional Practice	(2-0)	2
Architecture 556 City Planning	(2-3)	3
		18

CONSTRUCTION OPTION

Junior Year

First Semester		Credit
Architecture 327 Construction I	(3-0)	3
Architecture 329 Art and Civilization	(2-0)	2
Architecture 353 Technology of Materials	(2-0)	2
Business Administration 305 Business Law	(3-0)	3
Economics 205 Principles of Economics	(3-0)	3
Elective		5
		18

Second Semester		Credit
Architecture 328 Construction I	(3-0)	3
Architecture 330 Art and Civilization	(2-0)	2
Architecture 354 Technology of Materials	(2-0)	2
Business Administration 409 Survey of Accounting Principles	(3-0)	3
Civil Engineering 315 Strength of Materials Laboratory	(0-2)	1
Geology 422 Natural Structural Materials	(2-3)	3
Elective		3
		17

Senior Year

First Semester		Credit
Architecture 427 Construction II	(2-2)	3
Architecture 429 History of Architecture	(3-0)	3
Architecture 454 Specifications and Working Drawings	(1-6)	3
Business Administration 428 Real Estate Titles and Conveyances	(3-0)	3

Civil Engineering 473 Cost Estimating	(3-0)	3
Elective		3
		18

Second Semester		Credit
Architecture 428 Construction II	(2-2)	3
Architecture 430 History of Architecture	(3-0)	3
Business Administration 433 Business Management	(3-0)	3
Civil Engineering 478 Construction Plant and Methods	(3-0)	3
English 371 Great Books	(3-0)	3
Elective		3
		18

Summer Work

Architecture 500; Summer practice, twelve weeks, required.

Fifth Year

First Semester		Credit
Architecture 527 Construction III	(2-3)	3
Architecture 554 Professional Practice	(2-0)	2
Civil Engineering 408 Municipal Administration	(3-0)	3
Industrial Engineering 412 Labor and Industry	(3-0)	3
Mechanical Engineering 335 Mechanical Equipment of Buildings	(3-0)	3
Elective		3
		17

Second Semester		Credit
Architecture 528 Construction III	(2-3)	3
Architecture 550 Seminar	(1-0)	1
Civil Engineering 465 Soil Mechanics and Foundations	(2-2)	3
Electrical Engineering 436 Electrical Equipment for Buildings	(3-0)	3
English 403 Speaking for Professional Men	(1-2)	2
Elective		5
		17

Courses of Instruction and Staff for 1955-1956.

Descriptions of the various courses offered by the division and the staff for the year 1955-56 are reproduced below as they appeared in the 79th catalogue.

COURSES OF INSTRUCTION

Division of Architecture
Professor Ernest Langford

Professor M. M. Rotsch; Associate Professors T. R. Holleman, G. K. Vetter, Richard Vrooman; Assistant Professors B. H. Evans, C. J. Godwin, T. R. Jones, Jr., F. D. Lawyer, K. F. Robinson, W. G. Wagner; Instructor H. W. Gooding

101. Architecture I. (0-9). Credit 3. I
Basic principles of design and composition; sketching, techniques of presentation.

102. Architecture I. (0-9). Credit 3. II
Architectural projections, perspective, beginning design. Prerequisite: Architecture 101 or equivalent.

201. Architecture II. (0-15). Credit 5. I
Elementary design; techniques of presentation, simple problems in planning. Prerequisite: Architecture 102.

202. Architecture II. (0-15). Credit 5. II
Elementary design; detailed planning, with attention to construction; materials and techniques of presentation. Prerequisite: Architecture 201.

205. Freehand Drawing. (0-3). Credit 1. I
Basic techniques of freehand drawing; sketching and drawing in various media.

206. Freehand Drawing. (0-3). Credit 1. II
Freehand drawing with emphasis placed on more advanced techniques of sketching and drawing in various media. Prerequisite: Architecture 205 or equivalent.

228. Elements of Mechanics. (3-0). Credit 3. II
Force systems, composition and resolution of forces, resultant equilibrium; centers of gravity, analysis of simple frames. Prerequisite: Mathematics 223.

301. Architecture III. (0-18). Credit 6. I
Intermediate design, with emphasis on plan, arrangement, and construction; materials and techniques of presentation; methods of construction. Prerequisite: Architecture 202.

302. Architecture III. (0-18). Credit 6. II
Further studies in intermediate design with emphasis on plan, arrangement, and construction; materials and techniques of presentation; methods of construction. Prerequisite: Architecture 301.

305. Freehand Drawing. (0-3). Credit 1. I
Fundamentals of color and still life, sketching. Prerequisite: Architecture 206.

306. Freehand Drawing. (0-3). Credit 1. II
Advanced work in water colors and other media. Prerequisite: Architecture 305.

327. Construction I. (3-0). Credit 3. I
Fundamentals of strength of materials and their application in architectural construction. Prerequisite: Architecture 228.

328. Construction I. (3-0). Credit 3. II
A study of the systems of framing in architectural construction; analysis and design in wood and steel. Prerequisite: Architecture 327.

329. Art and Civilization. (2-0). Credit 2. I
Historical survey of the cultures of man with respect to art and architecture. Prerequisite: Junior classification.

330. Art and Civilization. (2-0). Credit 2. II
The development of great periods of civilization; their influence on architecture as an art and as a profession. Prerequisite: Junior classification.

331. Mechanics and Materials. (2-3). Credit 3. I
The basic concepts of mechanics and strength of materials and their applications to simple framing systems. For students in industrial education. Prerequisite: Mathematics 223.

353. Technology of Materials. (2-0). Credit 2. I
Materials of construction, their properties, characteristics, and uses. Prerequisite: Junior classification.

354. Technology of Materials. (2-0). Credit 2. II
Selection of materials, methods of construction, quantity surveys, estimating, outline of specifications. Prerequisite: Junior classification.

401. Architecture IV. (0-18). Credit 6. I
Advanced design; major projects in building design and construction. Prerequisite: Architecture 302.

402. Architecture IV. (0-18). Credit 6. II
Advanced design; major projects dealing with more complex building types. Prerequisite: Architecture 401.

427. Construction II. (2-2). Credit 3. I
A study of the systems of framing in architectural construction; analysis and design in reinforced concrete. Prerequisite: Architecture 328.

428. Construction II. (2-2). Credit 3. II
Graphical analysis of roof framing systems; evaluation of loads on trusses; truss design. Prerequisite. Architecture 328.

429. History of Architecture. (3-0). Credit 3. I
Study of the development of pre-classic and classic architecture and of the historical development of buildings through the Gothic period. Prerequisite: Architecture 330 for students in architecture; senior classification for others.

430. History of Architecture. (3-0). Credit 3. II
Study of the development of architecture from the Gothic period forward; influences and trends; structural and esthetic factors in the development of contemporary buildings. Prerequisite: Architecture 429.

454. Specifications and Working Drawings. (1-6). Credit 3. I, II
Detailed specifications; supervision and superintendence; building laws and codes; working drawings. Prerequisite: Senior classification.

500. Summer Practice. Twelve weeks; required; no credit. S
Summer practice in architectural offices or with building contractors as the student may be registered in Option I or Option II. Required previous to registration for fifth year.

501. Architecture V. (0-18). Credit 6. I
Advanced design; major projects in community and regional planning. Prerequisite: Architecture 402.

502. Architecture V. (0-18). Credit 6. II
Advanced design; major projects in the design of buildings and groups of buildings. Prerequisite: Architecture 501.

527. Construction III. (2-3). Credit 3. I
Advanced studies in the systems of architectural construction. Prerequisite: Architecture 428.

528. Construction III. (2-3). Credit 3. II
Individual problems in the systems of architectural construction; materials and methods of construction; preliminary surveys of costs. Prerequisite: Architecture 527.

550. Seminar. (1-0). Credit 1. II
Oral presentation of selected topics from current literature in the fields of architecture and building construction. Prerequisite: Fifth year classification.

554. Professional Practice. (2-0). Credit 2. I, II
Office practice; professional relations and ethics; building law, contracts. Prerequisite: Senior classification.

556. City Planning. (2-3). Credit 3. II
Survey of planning principles and procedures; legal aspects; physical and social development of the city; housing. Prerequisite: Senior classification.

For Graduates

629, 630. History and Archaeology. (2-0). Credit 2 each semester. I, II
Individual problems of study and research in the field of American architecture and archaeology.

681. Seminar. (1-0). Credit 1 each semester. I, II, S
Review of current work in architecture; original presentations on selected topics.

685. Problems. Credit 1 to 4. I, II, S
Individual problems involving the application of theory and practice in the design and construction of buildings and groups of buildings.

691. Research. Credit 2 to 4 each semester. I, II, S
Research for thesis.

APPENDIX A

Texas State Association of Architects—Fourth Annual Convention

This appendix is of a historical nature and should be of general interest to students and architects alike.

In the magazine BUILDING for January 26, 1889—a magazine which has long since ceased to be published—there is a news item about the fourth annual convention of the Texas State Association of Architects which had recently been held in the McClellan Hotel in Waco. Among architects listed in attendance were: Nathaniel Tobey, Dallas; J. J. Kane, Fort Worth; F. W. Kane, Fort Worth; James Wahrenberger, San Antonio, Texas; George E. Dickey, Houston; A. O. Watson*, Austin; Guy M. Tozer, Dallas; Curt McDonald, Austin; George W. Stewart, Dallas; Eugene T. Heiner, Houston; W. C. Dodson, W. W. Larmour, addresses not given.

Among other items of business were: (a) election of George E. King, El Paso; Burt McDonald, Austin; and M. McQuick, Dallas, to membership in the association; (b) the proposal of "An act to regulate the practice of architecture in the state of Texas" was adopted after various amendments and recommended to the state legislature; (c) a resolution "That the uniform contract adopted by the American Institute of Architects, the Western Association of Architects and the National Association of Builders be adopted by the State Association of Architects, and recommended to the members whenever practicable," was adopted.

The high point of the meeting was an address entitled "Architectural Professorships" by President W. C. Dodson on January 16. In spite of the fact that the architects were worrying about contracts and registration laws they were wise enough to foresee the time when schools of architecture would have to be established. Mr. Dodson's address reads as if it might have been delivered yesterday. It is quoted in full just as printed in the March 16, 1889 issue of BUILDING.

*Both Mr. Fountain and Mr. Langford worked in Mr. Watson's office immediately following their graduation from Texas A&M.

ARCHITECTURAL PROFESSORSHIPS

Address of President W. C. Dodson before the Texas State Association of Architects, January 16, 1889.

Architecture, or the practice of building, is venerable with age and honorable with the accumulation of years, and none can be ashamed of it. It is co-existent with the human race, and in the history of the earliest times we read of human habitations and of the people building cities; but it is not to be inferred from this that all understood building any more than all understand building at this day, or that its practitioners had the knowledge or scientific exactness of those of succeeding ages, or knew the convenience of the dwelling or public building. Like all other wants coeval with man, it has gradually developed with the wants and tastes and habits of our race as man has increased in knowledge and advanced in science and civilization. In an aboriginal state the wants of the people are few and simple in every department of life, and as it is to-day, nothing progressed beyond the demand of any felt want in any given case, but as it is to-day, the architect, by his genius and knowledge, made the want felt by leading the people in paths that brought them to right ideas, and conducted them to a higher plane. From the first, human necessity required protection from the summer heat and winter's cold; and diseases, wounds and sickness begot the use of medicine, however simple, to allay pain, to heal sickness and restore to health; and the wickedness of men produced crime, which gave birth to the necessity for law to protect the innocent and punish the guilty—hence these three avocations—architecture, medicine and law, are the children born of the same parents, the frailties of our nature and the needs of our race, each simple and rude in their beginnings, but keeping pace with man in the increase of his knowledge and the enlargement of his faculties.

But in their advancement they did not keep abreast each with the other. Law nor medicine advanced to lead or to meet the wants of society, as did the other, and neither of them have left monuments to their skill and efficiency, either in material good or in song or story, that marks the achievements of the architect when the nations were in their infancy. They have nothing in Egypt to compare with her pyramids, or her broken entablatures and fallen column, broken and fallen, but wonderful even in their ruin, and eloquent with the history of the architects who, in science and knowledge, had outstript all others. There is no remembrance of either, which has come down the aisles of time, in history or in their technical

works, from cultured Greece or classic Rome, which can stand with the genius of those who designed their amphitheatres and their temples; while later yet, St. Peter's was built, before medicine knew the functions of the heart, or had discovered the circulation of the blood; and St. Paul's had amazed the world with the symmetry of its proportions and the grandeur of its magnitude before Blackstone wrote his commentaries, and law was in a formative state. Since that time law and medicine have been pushed by means of technical education which has been provided in universities and other institutions of learning, while architecture has made such progress without these adventitious aids that the high plane to which it would have attained with them would have been the envy of the others. Thus, by means of both a liberal and a technical education, the former two are more sought after by men of education than is the other; and this mistake would not be so often made by men of merit if equal facilities were provided for the technical education of each. I do not see any sound reason why the State should make discriminations in providing facilities for the education of two of these branches and none for the other. It is true, there is not the glamour and show in ours there are in the others, nor is there the room for incapacity, but if the necessity for this chair in our university is rightly apprehended by our law makers, they will not be long in making suitable provision for it. I have not time at the present, nor is it necessary, to investigate the cause of this discrimination which has been made against our profession; it is enough to know that it has been done, partly because it has not been represented in the halls of legislation, as the other two have been, and partly from the mistaken idea that is was not of sufficient importance to provide for it. This feeling may give way as the light of truth breaks in upon the minds of the people and they better understand the functions, duties and responsibilities of an architect. This matter is of importance to the profession and is of equal importance to the public, and should be insisted on continually, for the public will have to understand that is for their interests before we can succeed in its attainment.

This subject is intimately blended with the bill for the regulation of the practice of architecture which we are preparing to present to the Legislature; it is blended with it because a profession of sufficient importance to require a license for the protection of the people before it can be practiced should require suitable proficiency to be made in the science and knowledge attaching to that profession, and ample means should be made for the attainment of this proficiency. Do you not believe that if there had been an architectural department in our university, as there is for law and medicine, that the Legislature would not have enacted some law, on its own motion, at least similar to the one we are asking for? Because it is an unnatural father who will disown his own child. Graduation and license are linked together. I do not wish to be understood as advancing the idea that no man should be allowed to practice architecture unless he has gone through the curriculum which would be adopted in an institution of learning before he could be examined and licensed to practice, any more than the student of law or medicine is required to do so, but only that the same opportunities should be given one as is given the other, thus putting each upon an equal footing; but I do insist that men should be examined and licensed by competent authority before they are allowed to practice. Many persons have fallen into the error that architects desire the enactment of a law requiring examination and licensure before practice can be followed, from a desire of respectability and self-interest. This is a mistake, for as a class, they have too much self-respect for any desire for factitious respect, and sense enough to wish only to pass in the light of their own merit and individuality rather than in a borrowed light which might be given by a recognition from the State; neither is it from a selfish motive that the enactment of this law is desired, for I know of no facts showing them to be more selfish than other classes; but we know enough to justify us in the attempt to get such a law for the protection of the people. Law and medicine have such laws, and the man would make himself contemptible who brought such a charge against lawyers or doctors. They advocated such protection, not for themselves only, but for the people, because each in their own profession were better qualified to detect charlatans and impostors than were others, and what the facts are in their case are exactly the facts in our case.

The architects want to be protected! Not at all, any farther than the law throws its aegis around every citizen and around other professions for the protection of the citizen. If any special protection had been necessary for our existence we would have become extinct long ago, for we have received less protection than any other class of citizens in any department of business. No, we want no protection, other than the security of our rights; but the people want protection, and it is the duty of the State to give it to them. In this as in all other instances where progress has been made in a right line, the architect has the task before him of teaching others what is for their own good and what is necessary for their safety and comfort, and must live in advance of those around him and occupy a higher plane in technical, scientific and practical information, for he must not keep up with the advancement of the people, but must be in advance of their advancement—in his department, a leader able to instruct.

APPENDIX B

A Short History of the First Class in Architecture

BY

J. RODNEY TABOR

JUNE 25, 1953

In the spring of 1905 Dr. F. E. Giesecke notified Max Mayer, J. S. (Dick) Dean and the writer, J. Rodney Tabor, that there would be a course in architecture that coming fall, culminating in a B. S. degree in architecture. We three signed up immediately. I was especially happy because I possessed some small talent in freehand drawing, and again because there were two stiff examinations coming up in civil engineering involving mathematics that the students of this new course were not compelled to take.*

So in the fall of 1905 these three students set out in this new course, guided by the kindly hand of Dr. Giesecke. His faculty consisted of Alva Mitchell, '94, teacher of descriptive geometry; A. C. Love, '99, freehand drawing; S. E. Gideon, who left in the fall of 1905 for MIT; and a fellow by the name of Nelson, brought down from Boston that year to teach water color. Of these five of 47 years ago, A. C. Love is a retired engineer living in Beaumont; Alva Mitchell, retired, at College Station; Nelson departed for parts unknown after a sojourn of one year; Sam Gideon died in Austin three years ago, a respected member of the architectural faculty at the University of Texas; and lastly, Dr. F. E. Giesecke, retired to his old home in New Braunfels, after a most honorable career as experimenter, author and college faculty member.

Our last and only year in architecture was pleasant and fruitful. Dr. Giesecke was lenient but kept a firm hand over the department. Nelson, our water colorist from Boston, couldn't adjust himself to Texas ways. Alva Mitchell found it rather difficult to drive "Script" through our thick skulls; and once when A. C. Love told this class of three to draw a straight line freehand, Dick Dean, who was a shark at drawing, drew it so perfectly that A. C. accused him of using a ruler; thereby Dick was filled with righteous indignation, and I thought that our number was going to be reduced to two. But in June we three graduated, Mayer and Dean being brilliant students, ones who would have stood out in any college. But when the names of the honor students were being called out during commencement exercises this was stamped on my memory: "Honor students of the Department of Architecture, Dean, Mayer, Tabor." Truly the heart of "Pal" Giesecke was so big that he must include all his boys.

After graduation I went to Boston where I spent two years at MIT, graduating in 1908. Then I opened an office in Houston and prospered with a growing city.

Dean stayed at the college in the department. He spent two summers at MIT, then eventually went to Sacramento, California, where with his brother the firm of Dean & Dean became a successful firm of architects. Through his ability and personality he later was appointed city manager of Sacramento. There he attracted statewide attention and Governor Warren made him director of finance for the State of California, which office he now holds.

Mayer, who had great talent, went to New York, thence to Paris where he studied at the

*After reading Mr. Tabor's "Short History," Mr. Dean appended the following comment about engineering and mathematics:
"I think his memory wrong about this. Our engineering and mathematics were as tough as that for all engineering students."
And this comment about the "straight line freehand" incident: "I am astonished that John remembers this incident. It occurred in our freshman year and Tabor wasn't even in my section. Love gave me a 70 on that test and I was heartbroken because I was honest about having drawn it freehand without a ruler."
Author's note: With the gracious consent of Mr. Tabor, given shortly before his death, this copy varies somewhat from the original dated June 25, 1953. The substance is the same; changes consist essentially in correction of dates and simplification of text.

Beaux-Arts. Returning with a wealth of knowledge and ability, he worked for some of the leading architects of New York and finally settled in Little Rock where he died about three years ago.

Thus we have the saga of the first class of architecture of Texas A&M. Both faculty and students have acquitted themselves honorably; and when the chapter is finally ended I think we can all say with pardonable pride—"Well done, class in architecture of 1906."

Comments from Mr. James S. Dean

(*As extracted from letters addressed to Mr. Langford*)

From a letter dated June 25, 1953:

Your letter of June 16 has been received and I have been giving thought to your request for information concerning the early days of the department of architecture. It is a little difficult after all of these years to bring back clearly the happenings of those days.

You, of course, can tell from the records that Professor F. E. Giesecke, now in retirement at New Braunfels, was the head of the department. He can give you more of the facts concerning the actual beginning than I can.

Your statement includes just about all I know, and it is quite accurate. As for my personal relationship, I spent the five* years after graduation working with Professor Giesecke in the department. This should show in the records of those days. Both Tabor and Mayer went immediately into the field of architecture.

I suppose I should begin to think about returning for the 50th anniversary of my graduation and my department. I shall bear this in mind.

From a letter dated August 23, 1957:

Many thanks for the copy of the 1907 bulletin of the college. Now that I see it again I remember it quite well. It came out the first year I was teaching drawing.

The drawings which you mention on page 27 are the thesis of Max Mayer—"A Library," I think for the college . . . My memory could be wrong of course after all these years, but I am quite positive this is the answer. Mayer was the best of the class on design as he had traveled abroad and I think had visited the "Ecole" in Paris and had a little of the touch.

You know the course was called architectural engineering in those early days and that was what it amounted to. The design side was almost absent. Both Tabor and I went to MIT in Boston to take additional special work in design. I took the equivalent of three years—3rd-, 4th-, and 5th-year work. We found that our engineering training at our college was fully as good as that at "Tech" and it was not necessary to apply our energies in that field.

My memories are rather dim. The staff was very small: Professor Giesecke, Professor A. Mitchell, Instructor Dean, and instructor in freehand drawing who seemed to change frequently. Just the beginning of a fine school of architecture.

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*The college catalogues for those years show that Mr. Dean was an instructor in drawing for three years beginning September 1, 1906 and an assistant professor of drawing for the school year 1909-10. The catalogue for the session 1905-06 lists the faculty of the Department of Architectural Engineering and Drawing as Professor F. E. Giesecke, Mr. A. Mitchell, and Mr. W. C. Nelson, all of whom are mentioned in Mr. Tabor's notes. See also footnote following Mr. Tabor's "Short History."
After reading these extracts for additions or corrections, Mr. Dean appended the following note:
"The reason my name doesn't appear in the catalogue for 1910-11 was that I left the staff in June of 1910 to take 5th-year design at MIT during the regular school year. I completed the design part of the course in midyear and returned to college the last 5 months. After that I resigned to enter architecture."

APPENDIX C

The Fiftieth Anniversary Celebration

Program

Sunday, March 25, 1956

2:00-5:00 p. m. Registration
2:00-9:00 p. m. Exhibition of student work and completed works of former students
8:00 p. m. Reunion, with after-supper refreshments and color movies of 1955 Texas A&M-TCU football game

Monday, March 26, 1956

8:00-10:30 a. m. Registration
1:00-2:30 p. m. Registration
8:00-9:30 a. m. Breakfast
Welcoming remarks and introduction of honored guests . . . . Ernest Langford, FAIA
9:00 a. m.-9:00 p. m. Exhibition of student work and completed works of former students
11:00 a. m. Official convocation and welcome . . . . Dr. David H. Morgan, President
Keynote address: "Survival is not Enough"
George Bain Cummings, FAIA, President, The American Institute of Architects
1:15-2:15 p. m. Architectural tour of Bryan and College Station
2:00-4:00 p. m. Coffee for wives and their guests
2:30-4:30 p. m. Seminar No. 1
The Contemporary Scene and the Architect—the Battleground
Moderator: Walter McQuade, Associate Editor, Architectural Forum
Speaker: John Lyon Reid, FAIA, Architect, San Francisco, California
Panel: Regional architects: Donald Barthelme, FAIA; Howard Meyer, AIA; William Pena, AIA; Charles Lawrence
3:15 p. m. Coffee break
3:30 p. m. Seminar resumed
4:15 p. m. Question and answer period
6:30 p. m. Cocktail party and buffet supper

Tuesday, March 27, 1956

8:00-9:30 a. m. Registration
1:00-2:30 p. m. Registration
9:00 a. m.-9:00 p. m. Exhibition of student work and completed works of former students
9:30-11:30 a. m. Seminar No. 2
Perspective in Architecture
Moderator: Walter McQuade
Speaker: John Knox Shear, Editor-in-Chief, Architectural Record
Panel: Regional architects: Harry Ransom, AIA; John York, AIA; Brooks Martin, AIA, Tom Bullock
10:15 a. m. Coffee break
10:30 a. m. Seminar resumed
11:15 a. m. Question and answer period
1:15-2:15 p. m. Architectural tour of Bryan and College Station
2:30-4:30 Seminar No. 3
Survival in Architecture
Moderator: Walter McQuade
Speaker: Charles R. Colbert, AIA, Architect, New Orleans
Panel: Regional architects: William W. Caudill, AIA; Baldwin N. Young, AIA; Preston M. Bolton, AIA
3:15 p. m. Coffee break
3:30 p. m. Seminar resumed
4:15 p. m. Question and answer period
6:30 p. m. Anniversary Banquet
Introduction of honored guests
Address: Review of 50 Years of Architectural Education at Texas A&M . . . Ernest Langford, FAIA

Space does not permit the reproduction of any considerable part of the proceedings of the fiftieth anniversary celebration. However, because of the timeliness of his remarks—and particularly so in that they were slanted towards the theme "Survival Thru Architecture"—it seems quite appropriate that Mr. Cummings' address, "Survival is not Enough," should be reproduced in full.

SURVIVAL IS NOT ENOUGH

George Bain Cummings
President of the American Institute of Architects

At this first convocation of the fiftieth anniversary celebration of the department of architecture of the Agricultural and Mechanical College of Texas, I salute the college and its president; the department and its head; its faculty and students; its alumni; the Brazos Chapter and the Student Chapter of the American Institute of Architects here represented; and the citizens of the great State of Texas, to whom this distinguished institution belongs. I bring you warm greetings from the American Institute of Architects, my own Central New York Chapter, my alma mater, Cornell University, and my home State of New York. I congratulate you on the completion of fifty years of fruitful education in architecture, on its impact upon the state and nation, and on its potential for the future.

The theme that has been chosen for this observence is "Survival Thru Architecture," and its provocative connotations will be explored and ably developed in succeeding seminars. My purpose in this opening address is to assert that survival is not enough! There must be Architecture and the other arts of civilization, orchestrated to produce the symphony that living can and should be.

I do not deny that there are times and occasions when survival—mere existence—is sweet, is even to be desired above all else. Fliers down in the ocean, in the Arctic, in mountain wilderness or desert waste, think first of all of survival. Eddie Rickenbacker, afloat and helpless on a raft in the Pacific, prays for survival and reaches out, as for manna from Heaven, to pluck a gull from the air. Charles Lindbergh, flying the Atlantic in man's first mastery of that adventure, fights sleep that he may survive. The people in the life boats of the Titanic, dazedly rowing away from the unsinkable ship, ask, at the moment, only for survival.

Survival is our most profound, most elemental instinct. Albert Schweitzer, the beloved philosopher, notes the persistence of nature, the prodigality of its production and reproduction, its drive to live and to procreate, the lashing of the semen towards the ovum, the urge of the salmon to ascend the stream to spawn, the splitting of the cocoon that the butterfly may emerge to fulfill its life cycle by reproducing its kind. And Schweitzer sets down as the foundation of his credo, reverence for life. In the first chapter of Genesis the relator of the ancient story writes: "Then said God, 'Let us make man in our own likeness, to resemble us, with mastery over the fish in the sea, the birds of the air, the animals, every wild beast of the earth and every reptile that crawls on earth.' So God formed man in his own likeness, in the likeness of God he formed him, male and female he formed both. And God blessed them: God said to them, 'Be fruitful, multiply, fill the earth and subdue it, mastering the fish in the sea, the birds of the air, and every living creature that crawls on earth.' " Thus survival is built into the structure of our faith as well as into our nature. Survival is sweet, survival is necessary, survival is our primal instinct.

But for us, in this day of our celebration, mere survival is not enough. We need, as purpose, something beyond bare existence. There are those who suffer in body, or in anguish of mind or spirit, or who stand long in the presence of overwhelming danger, that cry out for escape or release in death—that even deliberately choose and inflict death upon themselves. To such, survival is not enough; there must also be safety and health and well-being. And all of us struggle instinctively to enjoy these. Instinctively the eyelids close to protect the eye from danger—the arm is thrown up to ward a blow—, the blood corpuscles and living cells of the body rush to the place of injury or illness and work to repair and heal and restore. Instinctively, in sleep the body will seek a comfortable position, and, asleep or awake, will adjust to external conditions, such as heat or cold, to achieve well-being. Survival is not enough; there must be safety, health and well-being.

And, again, survival is not enough—there must be work and rest, in alternation. We cannot accept a state of perpetual idleness. Our bodies, minds and spirits would atrophy in disuse. There must be exercise, alternating with recovery and replenishment. There must be outgo as well as input—expenditure of energy to balance nourishment. There must be the zest, the exultation, of driving ourselves to capacity, followed by a period of recharging. We desire, and strive for, a balanced, well-rounded existence, in which we exact from ourselves maximum usefulness and efficiency. Our happiness demands this, in addition to survival.

Survival is not enough—there must be love and worship. There must be—for most of us—physical love, for completeness, for fulfilling the primary urge to survive through reproduction. There must be spiritual love, the sublimest, the most nearly God-like, of our attributes—love of our mate and family—of our friends, of people, of visions and purposes and ideals. Love of the great, good world around us, and of its Creator—love and gratefulness and submission, which is worship. Remember David, the shepherd King who sang: "When I consider thy heavens, the work of thy fingers, the moon and the stars, which thou hast ordained; What is man, that thou art mindful of him? And the son man, that thou visitest him? For thou hast made him a little lower than the angels, and hast crowned him with glory and honor. Thou madest him to have dominion over the works of thy hands; thou has put all things under his feet." And in the next breath, David, in perfect submission, sings, "The Lord is my shepherd; I shall not want." As ancient as the human family is this need for love and worship, for faith in something outside

ourselves. It is the lodestar of our souls. As Santayana expresses it:

Columbus found a world, and had no chart,
Save one that faith deciphered in the skies;
To trust the soul's invincible surmise
Was all his science and his only art.

And Tennyson has his Knight of the Round Table exclaim:

Live pure, speak true, right wrong. Follow the King—
Else wherefore born?

Survival is not enough—there must be beauty and fragrance. There are those of us old enough to remember Claude Bragdon's essay entitled "The Beautiful Necessity." He was an eminent architect, artist and stage designer, who pursued the inexhaustible possibilities of plane and solid geometry in the production of designs and patterns of breathtaking beauty. Then there was Louis Sullivan, of whom it was said: "He demanded of himself an emotional and spiritual expenditure to endow each building with its own identity of beauty." In Santa Fe there is a remarkable exhibition in the Museum of International Folk Art. Here are collected the artifacts of diverse and wholly unrelated civilizations from all parts of the world. There are articles of common purpose—such as the spoon, for example—invented from necessity by each people, unknowing even the existence of other peoples or their works. The strange and striking common factor is the embellishment each people has attempted. It is a common trait of the human family instinctively to strive for beauty, for the amelioration and enhancement of environment. As I travel around rural New York I pass many a small house, or even shack, in which there is the evidence of poverty. But invariably there is still a tomato can in which grows a geranium, standing on the window sill; or some attempt at curtains at the windows—some evidence of the yearning for beauty amid even the meanest surroundings. Sara Teasdale has written discerning lines entitled "Barter":

Life has loveliness to sell,
All beautiful and splendid things,
Blue waves whitened on a cliff.
Soaring fire that sways and sings,
And children's faces looking up
Holding wonder like a cup.

And she goes on to say:

Spend all you have for loveliness,
Buy it and never count the cost.

And again Santayana:

To feel beauty is a better thing than to understand how we come to feel it. To have imagination and taste, to love the best, to be carried by the contemplation of nature to a vivid faith in the ideal, all this is more, and great deal more, than any science can hope to be.

Recall how the narrator of the story of creation reports that after each stage of his work God paused and "saw that it was good." With the great pageant of Nature ever before and around us, all our senses are ministered to, and our realization of and yearning for beauty and the fragrance of goodness becomes a demand upon life, beyond mere survival. We are imbued with the desire and purpose to fulfill our capacity for living and enjoying life, and with the urge to create beauty and to make our contribution to the culture of the human family.

Finally, survival is not enough—there must be compensation, recognition, acceptance, approval, reward—there must be incentive and satisfaction. Robert Browning has written:

All we have willed or hoped or dreamed of good shall exist;
Not its semblance, but itself; no beauty, nor good, nor power
Whose voice has gone forth, but each survives the melodist
When eternity affirms the conception of an hour.

That is a thought of great comfort and promise to an architect. For all our individual striving there is the hope that there may emerge a work of art; but whether or no, there will be compensation—there will be satisfaction—in having tried our hardest and done our best, in having shared in creation and experienced the joy of creative power. Without that, survival is not enough.

Thus I conclude my cataloging of what is demanded in addition to mere survival. There must be safety, health and well-being. There must be work and rest. There must be love and worship. There must be beauty and fragrance. There must be compensation. But our theme in this celebration is "Survival Thru Architecture." Well, that is what I have been talking about, in a curious, indirect way. Through our architecture we provide for the safety, health and well-being of our people. We shelter all the diverse activities—personal and of the group—that are involved in making those provisions. We design the shelter for the world's work, and for the people's rest and for their loving and for their worship. We contrive it with our hearts, that there may be beauty and a fragrance along the way. We contrive it for the satisfaction of our own souls and consciences, and find our compensation in the contribution we are permitted to make to our day and generation, of our creative ability. And all this is required of us, in insuring survival thru architecture. Where there is no vision the people perish. In the physical environment of our civilization it is we, the architects, who must have and give the vision, that the people shall not perish but survive.

This whole concept of survival that I have been representing to you—augmented, enhanced and enriched—finds shelter and stimulation and accom-

modation, and effective and ennobling setting, through architecture. Civilizations—not merely survivals—are known through their architecture. Their character, their people, their life are recorded and revealed in it. It is an incontrovertible source of historical information. Thus it is the most useful of the fine arts and the finest of the useful arts—mother of the arts, indeed—in whose celebration we meet today.

Fifty years ago, the people of Texas recognized these facts regarding architecture, and made training in its discipline a part of their system of higher education. Your graduates have gone forth, throughout this state and into other communities, and have declared and practiced their profession. And Texas has been builded and enriched and beautified by their knowledge and skill and creative ability. All honor to Ernest Langford and those who have labored with him and before him, for the eminence on which this school stands, and the radiation of its influence.

The theme of this fiftieth anniversary celebration will be discussed during the days you are together by thoughtful and inspiring speakers, in your various seminars. As I said at the outset, my purpose has been to assert that mere survival is not enough. There must be architecture and the other arts of civilization, orchestrated to produce the symphony that living can and should be. Again, in behalf of the American Institute of Architects, I congratulate you and wish you good fortune.