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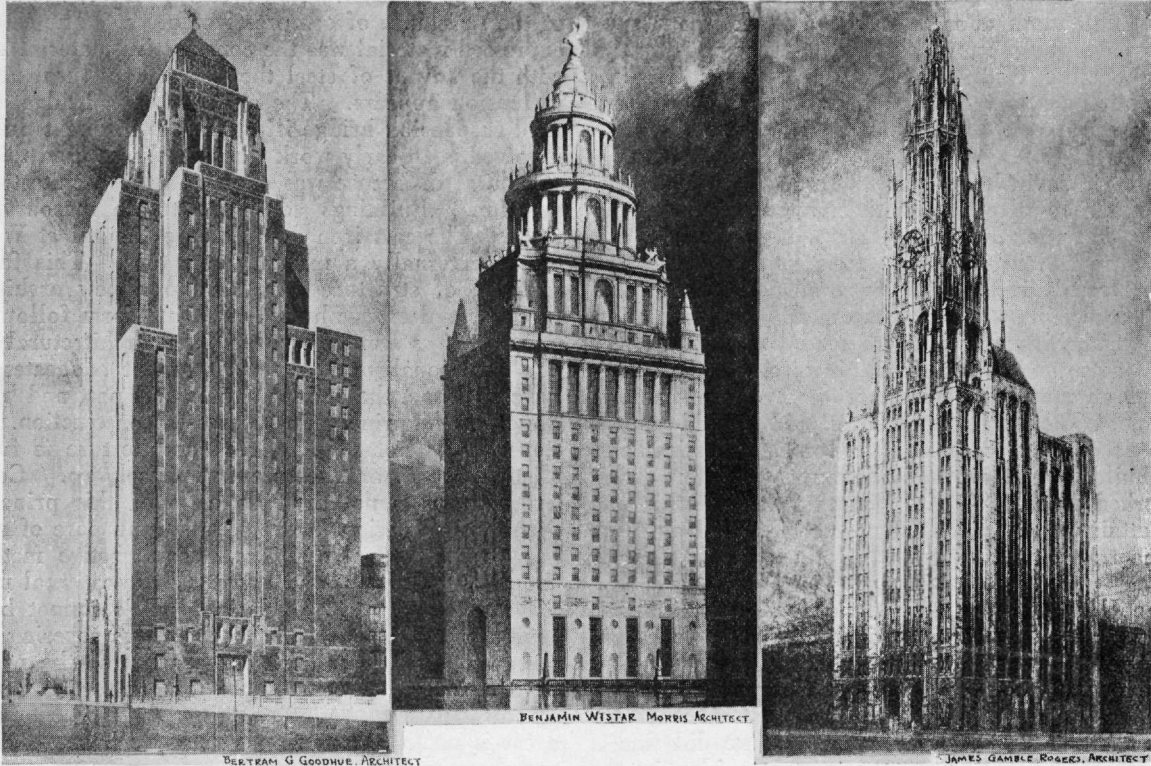
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# MODERN ARCHITECTURE

BY PROF. CHAS. ST. JOHN CHUBB (Department of Architecture)



"FUNCTIONALISM"

"CLASSICISM"

"ROMANTICISM"

## COMPETITION FOR THE CHICAGO TRIBUNE BUILDING

**F**EW months back there appeared on the pages of THE OHIO STATE ENGINEER a most excellent article by Professor Ronan, entitled, "On the Use of Precedent." It is not the purpose here to attempt to add anything on that subject but rather to point out how precedent has voiced itself in modern architecture.

At the outset, let us confess that all critics of architecture do not agree that the historic styles can be used to express the complexities of our modern civilization. If architecture is to be a history of civilization written in building materials it cannot express the new in ancient terms. One well-known architect describes work based on precedent as "embalmed architecture" and the architect who uses precedent as a dead one for, says he, "to the dead all things are dead." Again we have a constant demand for an American Style. The popular writer is tired of Greek and Roman forms, of Gothic and Renaissance buildings. Soon some newspaper critic discovers the American style—it is syndicated, but in a month it is forgotten. Little wonder it is that the beginner in architecture is perplexed. Let him seek the answer to his perplexity in the constructed work of modern masters and not in the written word of iconoclastic critics.

By modern architecture we do not mean the work of the present generation, for no single generation ever created a living style. We must go back a century and a half to trace the movements which have produced the work of today. During this time architecture has passed through two strongly marked phases based on precedent quite antithetical in character. The first of

these, the "Classic Revival," was the result of the publication of many works on archaeological research in Rome and Greece. Travel in these centers of ancient civilization became the vogue and was considered a part of any gentleman's education, as was a knowledge of architecture. This fact voiced itself even in the infant United States in the production of many amateur architects and enabled Thomas Jefferson to plan and design his famous home at Monticello, the University of Virginia, and to exert a strong influence on the early buildings of the national capital. The discovery of, and the excavation of Herculaneum and Pompeii gave fresh impetus to the Roman movement influencing in particular the work of Robert Adam, whose style, based on Pompeian precedent, is still, after more than a century, producing interiors of great charm and refinement. But the Roman revival was not to occupy the whole field of architecture unchallenged. The superiority of Greek architecture was announced, further study sustained the challenge and even today the Greek work of the Periclean age is considered the greatest architectural achievement of man when considered from the viewpoint of sheer beauty of form and proportion, purity and simplicity of line, and perfection of detail and finish. The majesty and pomp of Roman work had fallen, and by 1820 the Greek revival was an accomplished fact.

In both of these movements the early work shows a studied yet free expression of the prototypes adapted to the needs of the period. Designers soon knew their forms too well, the orders were standardized, or, what is worse, copied literally, and finally whole Greek designs were slavishly copied and of course were not suited

to their use. An Ionic column cannot be a church spire, nor can a Monument of Lysicrates. An Erechtheion caryatid porch cannot terminate a transept nor will a Thesion make a Custom House. No lover of architecture today will advocate such literal imitation. Nor has it been able to survive in any age. Having reached this state in England in about 1850, the Greek was gradually set aside by new forces which gave rise to the Gothic revival. These forces being somewhat lacking in the United States the Greek revival was followed by an architectural reign of terror which did not terminate until about 1890.

The Gothic revivals in Europe were the architectural echoes of the so-called Romantic movement, and of the principle of nationalism in history, literature and art. Romanticism and nationalism were given great impetus in England early in the 18th century by historic novels, such as those of Scott, which awakened an appreciation of the legend, history and art of feudal England. Why turn to Greece and Rome for its inspiration when England had an ancient architecture of its own—namely, the Gothic. The idea gathered force and by mid-century the "battle of styles" was in full force. Classical and Gothic buildings grew side by side and some few architects worked in both styles. Victory for the Gothic was finally attained in the building of the Gothic Houses of Parliament in 1840-60 from the designs of Sir Charles Barry.

In the United States we had no feudal tradition so turned to England for Gothic inspiration. The nation was too young for an intensive nationalistic feeling but that is expressing itself today in such phrases as "America for Americans," and "Why have we not an American style?" Indeed some thirty years ago we did find a basis for an expression of the romantic idea in the Colonial Architecture. We must not forget, however, that American Colonial Architecture has its precedent in English Georgian work, which in turn had its precedent in the Palladian work of Italy and this in turn takes us back to Ancient Rome.

Classic and Gothic architecture then in succession became the vogue of the day. The former is a style of marked horizontal treatment while the vertical line predominates in the latter. Both had their limitations in expressing logically modern building purposes. A Greek office building and a Gothic art museum cannot Renaissance were never entirely forgotten and a measure of eclecticism carried through both periods. When the limitations of the revivals were realized, and when be reasonably justified and yet both have been attempted. periods were Classic or Gothic. The triumphs of the It must not be supposed that all buildings of these

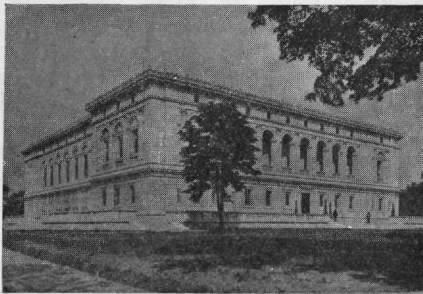
each had reduced itself to the banalities of copy book correctness a new influence governing the development of style appeared in the use of iron and steel as structural material.

Previous to this nearly all buildings were of masonry, which type of construction involves largely the principle of the resistance of compressive forces. The externally expressed material was the constructive material as well. With the advent of steel the use of structural members in tension appears. The masonry arch bridge and the steel suspension bridge illustrate the different principles involved. In early work when steel was used this great structural difference was denied in the architectural expression. Buildings continued to be masonry structures. The cast iron dome of the Capital at Washington is externally a masonry structure. This false expression of structure gave rise to a new architectural theory based on the hypothesis that "form follows function." Thus came into being the architectural school of "Functionalism." Its most ardent advocates would have us forget the entire architectural past and base our design on the principle of expressed construction. Functionalism is not new. Greek architecture is functionalistic—Gothic architecture is intensely so. Constructive method is not the sole basis of this principle of architectural design. The plan and purpose of a building have an equal claim with constructive method on external expression, and above all the external material must voice itself in the design. This cannot be steel, for this material must have a protective covering against rust and fire. Which shall we express—the protective covering which we see or the structural skeleton which we do not see. As one writer facetiously puts it—a cat is no less beautiful than the crab because it does not show its skeleton.

Here then lies the point at controversy. Our external materials are traditional—brick, stone and terra cotta—our internal construction is modern—steel. A steel structure can be dramatic and tremendously impressive but hardly beautiful. A steel railroad bridge or an Eiffel Tower illustrate the point. Neither will resist the ravages of time, and though they have strength of structure they have not durability—a quality for which we have instinctive admiration. They can have this quality only when the frail structural members are covered. If the covering materials are traditional they may be expressed traditionally. If they are not we must have a new expression.

The point brings us to the quite modern use of reinforced concrete, a construction in which the covering material resists the compressive stresses and the embed-

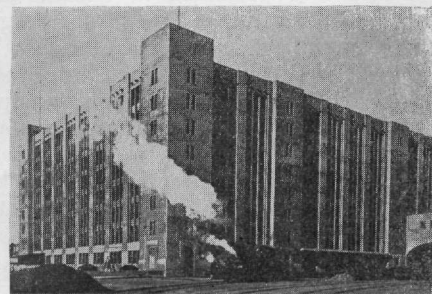
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DETROIT PUBLIC LIBRARY  
RENAISSANCE



WOOLWORTH BUILDING  
"ROMANTICISM"



ARMY SUPPLY BASE, BROOKLYN  
"FUNCTIONALISM"

ECLECTICISM IN THE WORK OF CASS GILBERT, ARCHITECT

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### MODERN ARCHITECTURE

(Continued from page 6)

ded steel takes those in tension. The covering material is here both structural and architectural and rightly demands new form of expression. Concrete placed in forms cannot imitate stone, nor need it be covered in shame. Honestly expressed it may, in spite of its surface crudities, be used with great beauty. Our Stadium is frankly a steel and concrete structure and none the less so because the north entrance is a two-thousand-year-old motif, borrowed from the Pantheon at Rome. But is reinforced concrete a suitable expression for a Lincoln Memorial or an art museum? Let us not think that with the advent of a new material or new form of construction that we must discard the old. Perhaps the invention of the saxophone helped develop jazz, but let us have at least an occasional expression from the old masters.

Finally we have the "Individualist" in architecture. He is found in art, letters, religion, politics—in every thread of our social fabric. He is the arch destroyer of tradition, he is the cubist in art, the bolshevist in government. Because a thing has been done he will have none of it. He proclaims his originality and he seeks to invent those things which are not a matter of invention. He is ever with us and yet never with us. His value lies in the fact that he makes us think, but his contribution to architecture is never lasting.

So then we stand between the Traditionalist on the one side and the Functionalist on the other, and the result is our present "Eclecticism." Few architects are always classicists, Romanticists or Renaissance in their traditional expression. Many of the traditional school frequently give intensely functionalistic expression to their work as may be seen in Bertram Goodhue's competitive design for the Chicago Tribune Building and in Cass Gilbert's Government Supply Base in Brooklyn. The problem of the office building can be beautifully expressed in all manners. The illustrations selected from the drawings of the Tribune Competition well present the diversity of manner of several individuals on a single building. The illustrations from the work of Mr. Cass Gilbert show the same diversity of manner in a single individual at work on buildings for widely different purposes.

All art is a matter of individual expression based on reason. It cannot be standardized. So long as our buildings are beautiful, fitted to their purpose and materials, and scientifically and durably constructed, we have little cause for worry. So soon as we produced a standardized American style fit alike for temple of mammon, man, or God, then need we worry. For the present let the controversy go on. It is stimulating.