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THE SOUTH AFRICAN ARCHITECTURAL RECORD

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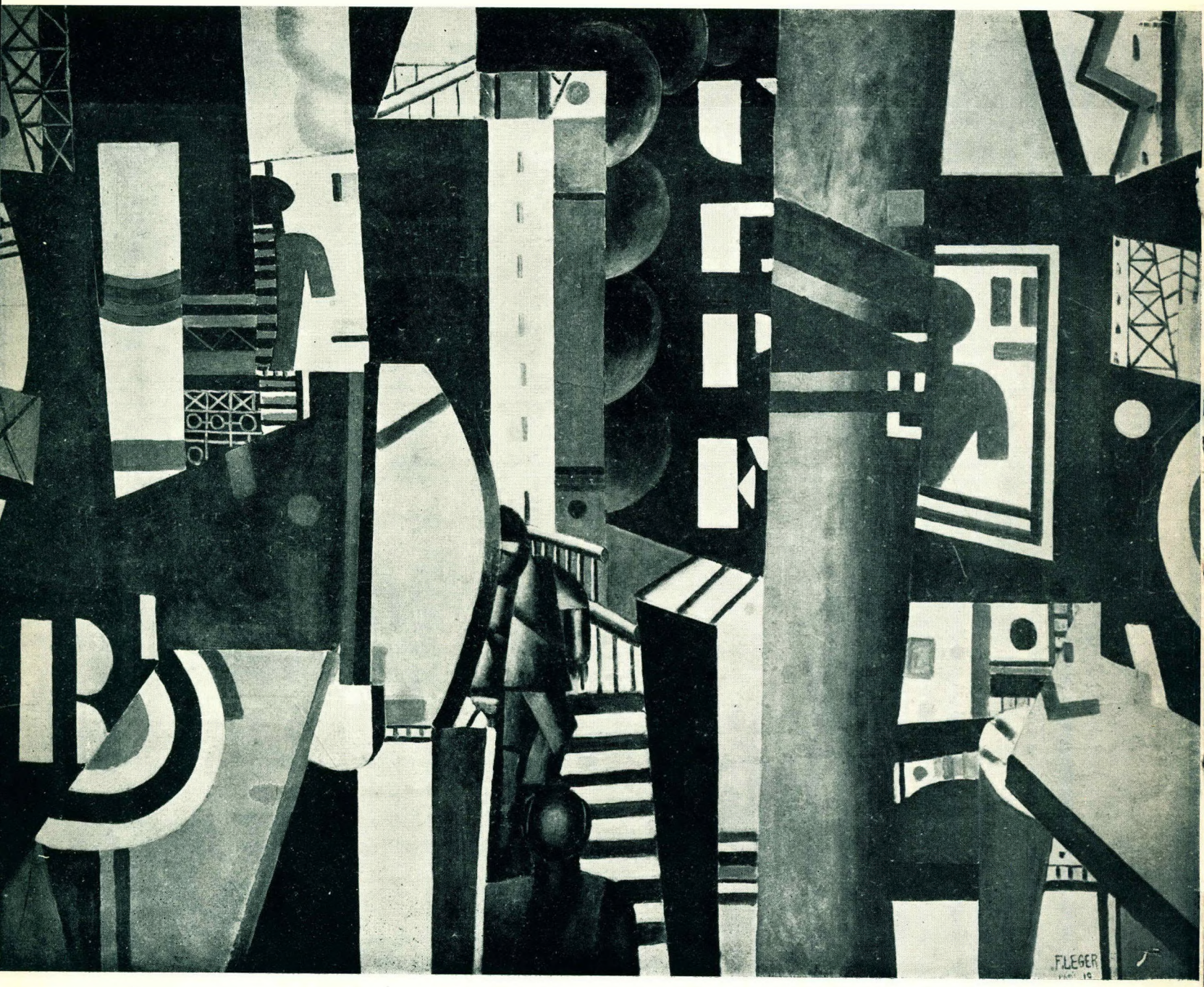

F.LEGER

LA VILLE

FERNAND LEGER

Modern architecture born of modern painting offers the people infinitely greater and more reasonable possibilities of existence than did the preceding architecture. Fernand Léger

ARCHITECTURE IN MODERN PAINTING

a study in absorption and reinterpretation

BY REX MARTIENSSEN

It is a commonplace to-day that the modern movement in painting had its birth in Aix-en-Provence when Paul Cézanne embarked upon that amazing series of experiments which, through his medium, was destined to open a new chapter in the history of perception. For Cézanne, who "wanted to do Poussin over again from nature," created a new material world for people whose vision had become too dulled to perceive the essential structure and quality of their physical surroundings. Where Gauguin created a world of exotic colourful personages—a world of sensuous escape and dark richness; where van Gogh strove to bring passion and movement within the confines of a coloured pattern, Cézanne worked on the calm dispassionate plane of the researcher who would establish a universal set of values, and as an interpreter of the visually significant world in which we live. It is in this respect that the limited vision of Gauguin and van Gogh fell short of the generalised and broadly valid philosophy of Cézanne.

For Cézanne "the primitive of the style he initiated" is still, a hundred years after his birth, an influence and force in the schools of painting and architecture whose principles are closely derived from his teachings. The wilful misunderstanding of his work during his lifetime, though tragic in its personal context, did not submerge its significance but reflected the depressing level to which the movement towards "romantic revivalism" had sunk.

"Nous sortons de Cézanne," Léger once exclaimed. And if it is not true of Braque, Picasso and Juan Gris, it is most certain that the cubism implicit in Cézanne's work has achieved through Léger a deep significance. Ozenfant has described Cubism as super-Cézannism, and had Cézanne lived even longer it is likely that he would have extended the framework of his researches until the natural elements in recognisable contexts had been replaced by abstract arrangements having an interior and organised relationship independent of the accidental. The "motif" which attracted him so often was fundamentally architectural. The simple farmhouse or group of village buildings was the core around which he brilliantly constructed his planes

of enclosure. "The contour eludes me" is a phrase that echoes his painstaking efforts to "realise," but in this search for significant form was born the very alphabet of Cubism. Cézanne showed that the Provençal buildings had volume as well as surface, and although he worked in a medium of two-dimensional analysis, he found a new and vital meaning in the nature and structure of these three-dimensional entities. Thus by transcription and inspired arrangement he formulated a series of organised demonstrations which drew their substance from architecture, and later through the work of others gave back to architecture the principles which had been absorbed. Using the simple dwelling as a medium, Cézanne taught the architect the laws which had been forgotten. He showed that surface was significant in its definition of volume, and that the mutilated and perforated "walls" which had come to be accepted by architects could enclose in only an incidental and imperfect manner. This lesson was not directly understood, and it was for the later masters of painting and architecture to interpret and apply its essential doctrines.

One can visit the scenes of Cézanne's labours in the surroundings of Aix. The beloved Mont St. Victoire to which he returned again and again; the rubble cottages with their simple pitched roofs and small windows; the crisp landscape marked by pines; the rocky outcrops; the stretches of classic grey-green scrub which must have delighted the Romans when they first set foot in the new country. These form the background to his work; a common factor in all his essays to achieve the final perfection. One can speculate on the element of chance which provided for him the perfect laboratory. For here in the south of France Cézanne discovered the essential geometry of its vernacular building. He discovered what we all realise now —that the faculty of arranging forms to produce at one and the same time a simple dwelling and compelling plastic effect is the particular genius of the Mediterranean peoples.

In the north the vernacular structure in wood merely achieves the picturesque. Even in the stone regions austerity and simplicity degenerate into dullness, but the small buildings of the Mediterranean display a harmony with their setting and an integral formality which requires evaluation in higher terms. Light is thin in the north and the wooden dwelling lacks primary surface.





Above: FRANCE Provencal Landscape by Paul Cézanne

Opposite: SPAIN Cottage in the Province of Alicante

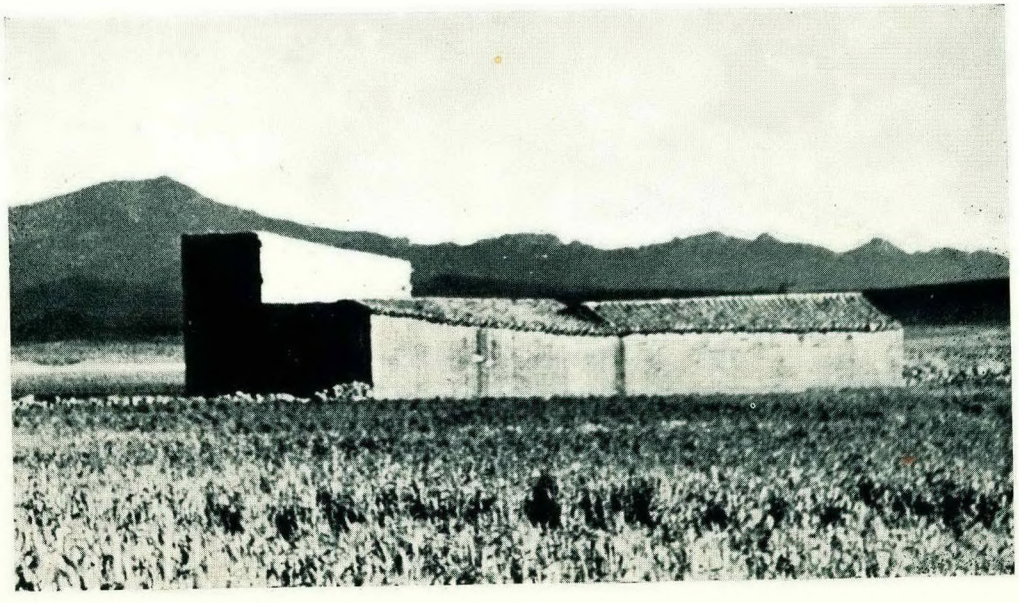
The emphasis is on detailed structure. The attributes of security, the battle for warmth and protection are reflected in the traditional (and extremely interesting) forms which satisfy exacting climatic demands. But it is in vain that one searches for that classic simplification, that imposed arrangement which reveals delight and not necessity. One must not expect a formality which can have no existence in a setting without light and colour. The traditional protection-arrangement of wood still echoes the emergence of man in his struggle against the elements. To it there clings a nostalgic association which is deeply rooted in the consciousness. It has the dignity of long usage; in its applications to the problems of shelter it shows the constructor working almost without mechanical resources, in the face of great difficulties. But it shows too that the user has not yet freed himself from the local and restricted functionalism of primary materials.

Northern stone buildings achieve durability and security, but little else. Even the many fine secondary elements of architectural form which have been devised as practical protective expedients are blurred by indifferent light and help but little the broad effect of architecture. The fretted surfaces of northern building attest to a striving for accent and modulation where there is no sunlight to create relationships on a bolder scale. The failure of such attempts is apparent in the dark multiplicity of Gothic detail which is the typical " wall surface " of the northern cathedral. What is understandable in the chalet with its repetition of wood forms (a practical outcome) is merely perverse and wilful in a stone building. In the substitution of projections for plane surfaces the inspiration of the craftsman is given free play, but the result is uncontrolled and without formal significance. The climate is to blame.

The southerner whose temperament mirrors the sea and sky has plastically an enormous advantage over the more active but slightly frozen nordic. He lives close to nature and not in conflict with her. Under the sun his surroundings take on a vividness that demands a counterbalancing repose—a withdrawing from play of form which stimulates and exhausts. His dwelling stands deliberate and separate from the tumultous pattern of nature. Against olive, vine and hillside, against the ever-changing model of the clouds, he needs a screen which will offset the restless fecund insistence of his



S I C I L I A N F A R M B U I L D I N G S



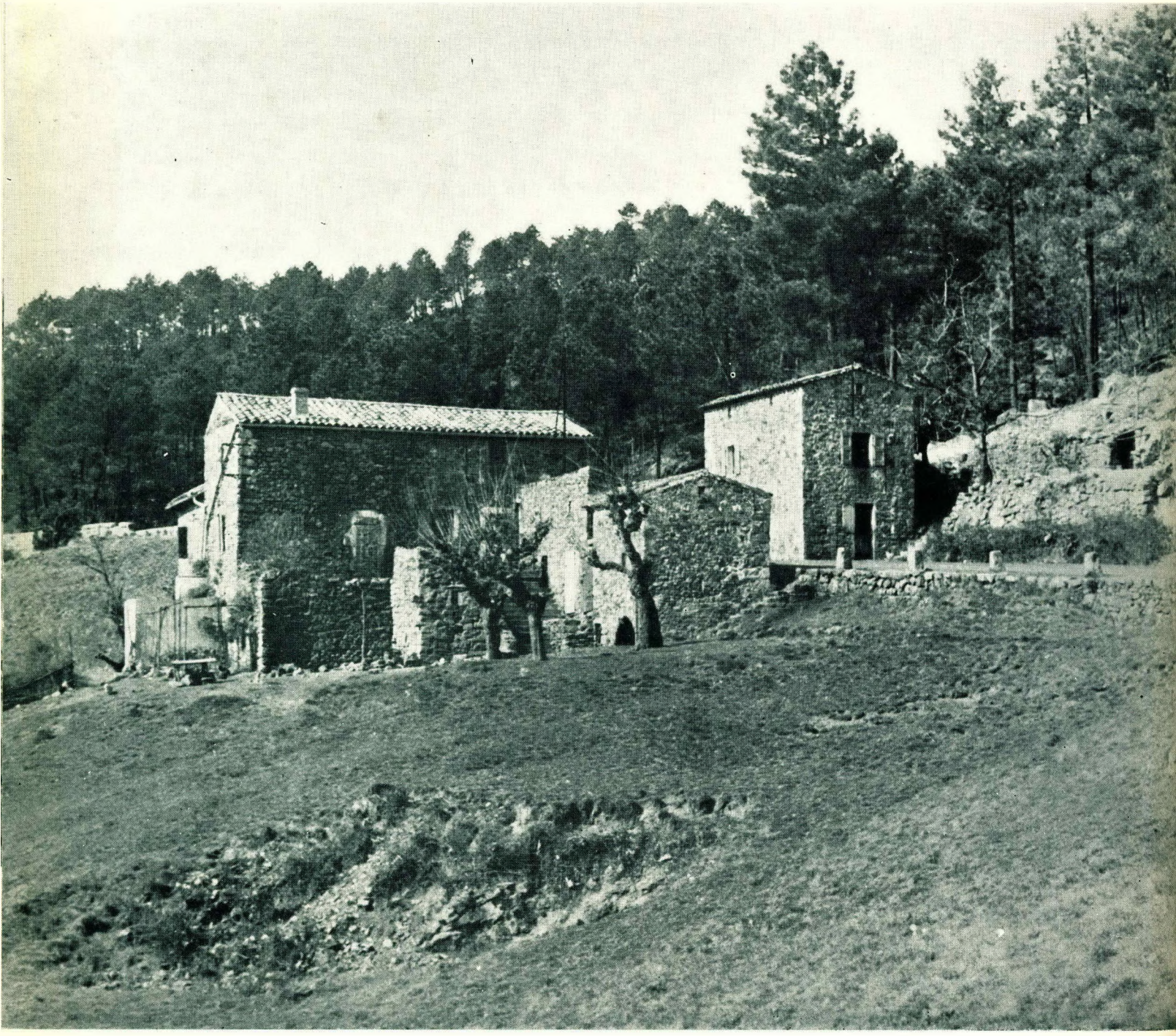


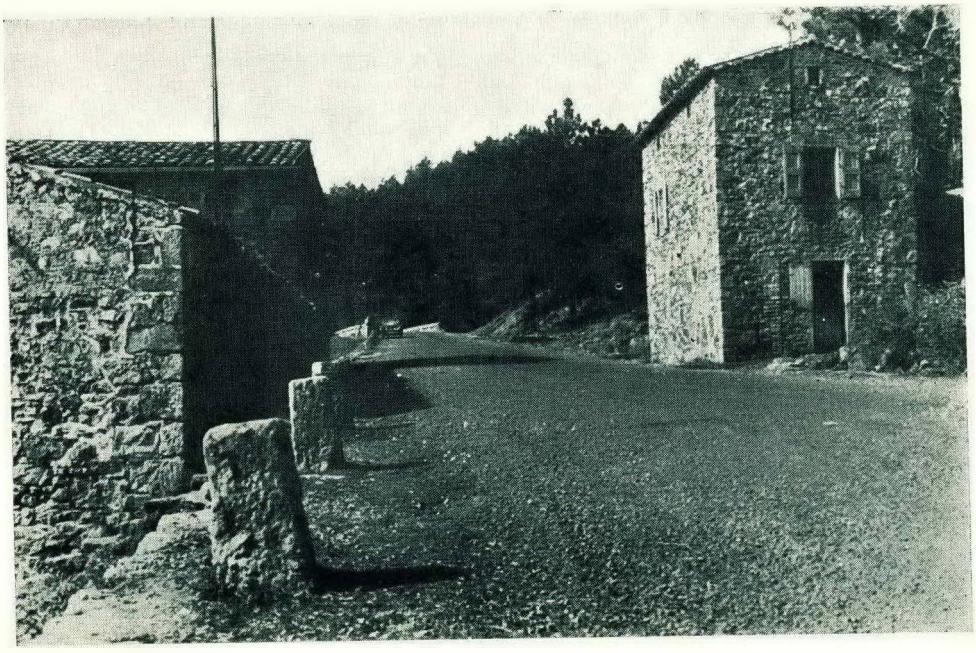
HILL TOWN IN WEST SICILY

surroundings. . . . The white farmhouses which space out the Sicilian landscape, the cottages steeply deployed on the volcanic slopes of Aegean islands achieve a monumental simplicity. Prismatically sharp and detached, they are works of art, "pure creations of the mind." Singly they are fragments of a thesis; collected into groups as in the villages they are mass demonstrations, complex but formal in their rigid adherence to the rectilinear. Whether in Provence or Spain, Italy, Sicily or Greece, there is the same disinclination for the meretricious, the same instinctive "Cubism."

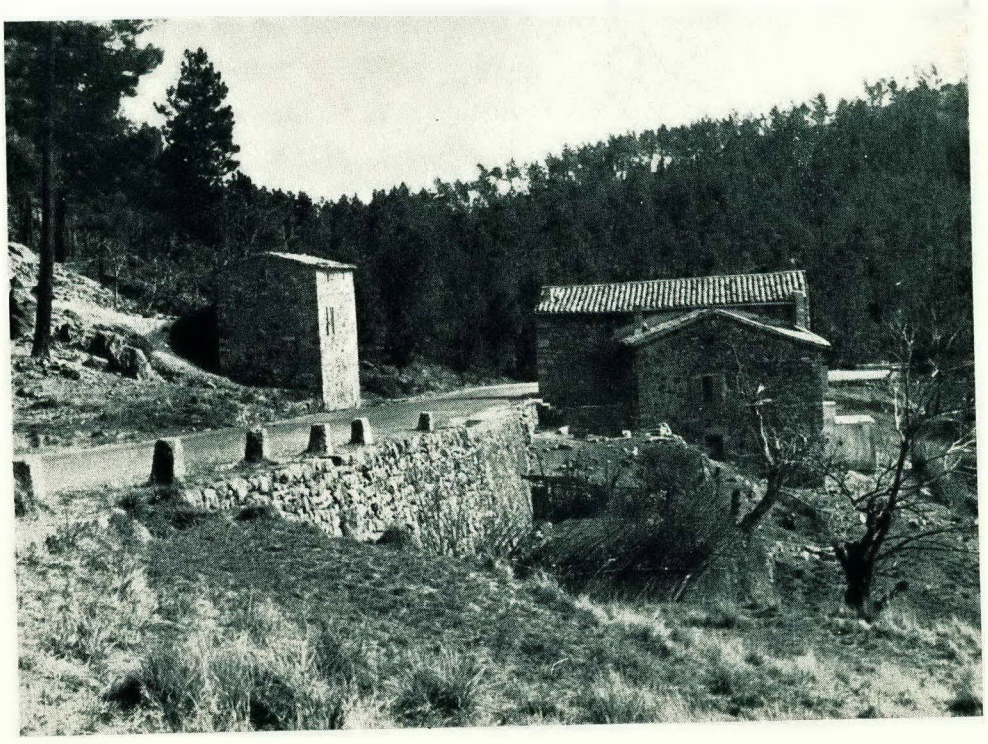
To Cézanne, then, goes the credit of "discovering" the geometric quality common to the vernacular building of the Mediterranean countries, and we may now consider the outcome of his painstaking and undramatic researches. I shall not attempt a discussion of the work of the intermediate painters who developed his theses and produced arrangements of varying interest. Let us turn directly to a consideration of the part which Fernand Léger has played in this great progression of "architectural" painting. There can be no doubt that the teachings of Cézanne impinged on Léger and, in spite of their inevitable sublimation in the course of his own development, through him played a determining rôle in the history of the modern movement in architecture.

For one can distinguish two main contributory factors in the contemporary movement. The significant arrangement of surface and volume into architectural entities of varying complexity and purpose; and the technique of structure in the material interpretation of these space concepts. The greatest single contribution to the establishment of surface and colour as attributes of architectural space has been made by Fernand Léger. In his experiments made before and during the Great War, Léger's work reflects a preliminary and violent research into the nature and arrangement of formalised "objects." The dictum of Cézanne—the proposition that nature can be resolved into the sphere, the cylinder and the cube—underlies his work, but that superb clarity of volume and quality of organisation which mark Léger as the master of twentieth century painting had not yet been achieved. Léger appears to have worked by an almost ineluctable compulsion, and with complete independence (of contemporaries) towards his goal,





GROUP NEAR
CHAMBORIGAUD
SOUTH FRANCE

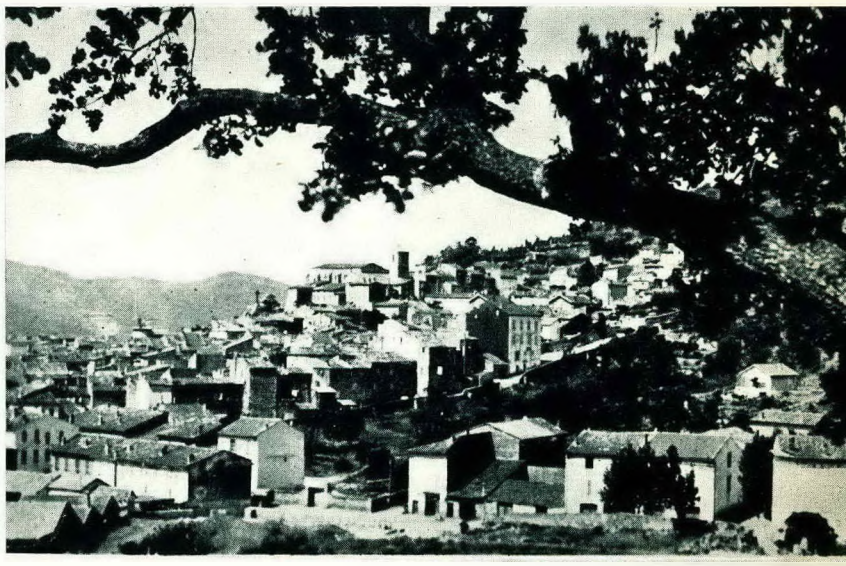


In 1919, having worked for twelve years beside (but independently of) the Cubists, he emerged from the diagrammatic laboratory medium by painting the vast and significant "La Ville." Léger moves boldly into the restless arena of "la vie actuelle," and in the comparative chaos of post-war Europe reaffirms the tenets of Cézanne and startlingly extends the existing vocabularies of colour and volume into a new and universal fabric. Léger had worked as an architect before he started to paint, and it is indisputable that the "architectural" bias in his work first gave direction to his researches, and eventually enabled him to play a directional and decisive part in the modern movement. We find in the monumental and architectural period of his activity (about 1919-1929) that his work never became solely the expression of a personal and internal vision as did that of Picasso and Braque. His work showed a preoccupation with, and formal interpretation of, the essential external realities of the contemporary scene. "La vie actuelle"! To-day one can see in every field of industrial art the influence of Léger.

And through his enormously increased vocabulary of related colour and form he has influenced the post-war movement in architecture. Monsieur Tériade has justly said: "L'art de Léger est un art de l'espace. Il est par consequent très près de l'architecture." Fernand Léger himself says: "Je me rencontre toujours et en tout avec Le Corbusier." His work is essentially non-literary and objective—it has, in Paul Nelson's words, "cette qualité sublime de l'art antique: l'objectivité." The quality which is apparent in the sombre but impeccably arranged "Grand Déjeuner" of 1921, in the "Odalisques" (1920) and in the "Mère et l'Enfant" (1922).

From 1924 to 1929 Léger occupied himself almost entirely with an idiom which was basically architectural. This involved a considerable "abstraction," and the human figure which so powerfully contributes towards the paintings mentioned above, is replaced by the "object" employed in compact and finite arrangements. These superb works, in which the lyrical is interwoven with the formal, in a manner which is entirely Léger's, mark a development from the massively arranged volumes of the early twenties whose "plénitude silencieuse" can be paralleled only in the archaic sculpture of Greece. The spatial aspect of Léger's work (even in the very early examples) is of profound significance. On analysis one perceives that it is the emphasis which changes

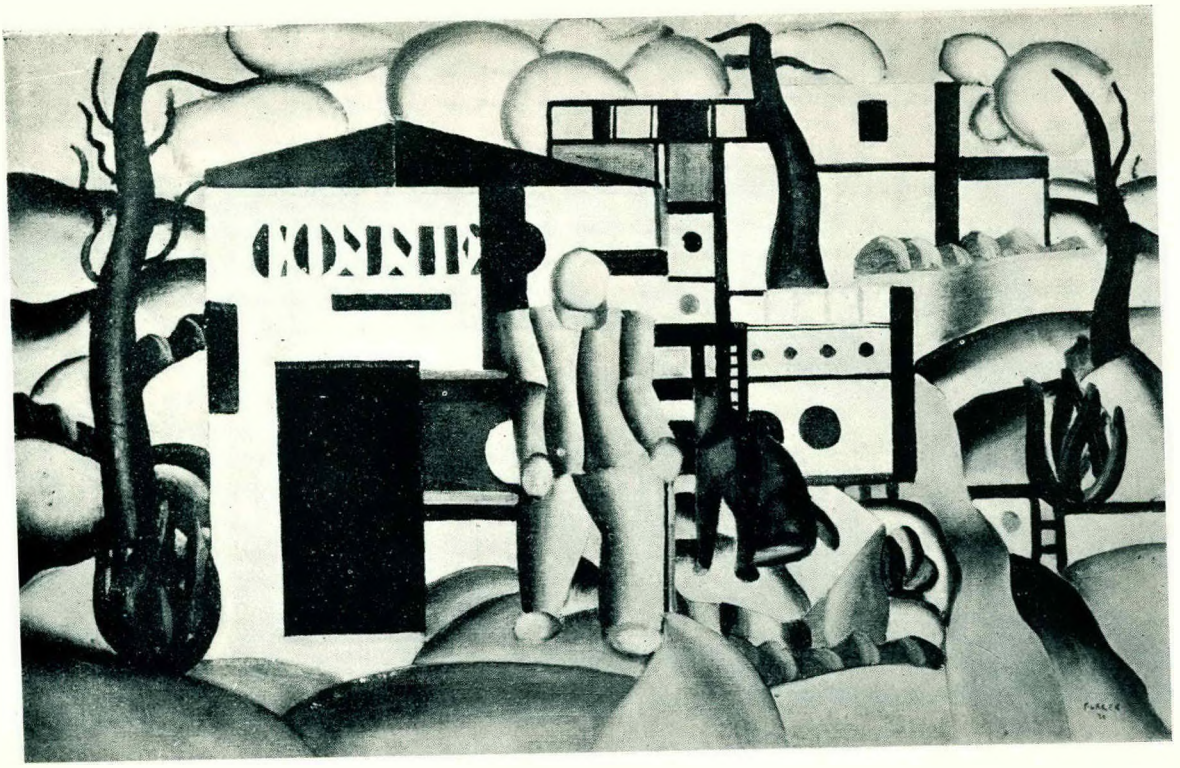




CAGNES BY ANDRE DERAIN

HYERES FROM A POSTCARD

SOUTH FRANCE



ABOVE: PAYSAGE ANIMÉ F. LÉGER (1921)

OPPOSITE: PAYSAGE A LA COQUILLE F. LÉGER (1929)


F.LEGER 29

over a number of years. In turn the sombre greys and generally opaque colours of his immediate post-war work are replaced by the daring juxtaposition of umbers, ochres, siennas, yellows and greys of the 1920-1924 group. Towards 1929 the colour vocabulary shows the use of primary colours arranged in comparatively large ungraded areas. A development which echoes and strengthens Léger's growing tendency towards analytical and planar expression in place of the predominating and directly suggested "volume." Thus the comparatively intricate pattern of the "Dejeuner," with its even colour scale, becomes ten years later a simpler architectonic arrangement, powerful and luminous in colour—and evoking in the onlooker a direct and extremely moving response. The "Paysage a la Coquille" (1929) is such an example. Here the volumic elements are reduced to a few forms—the architectural surfaces are formalised and no attempt is made to retain the same scale for the naturalistic objects. In 1921 the "Paysage Animé" related in a visual unity architecture and its surroundings. In spite of the simplification and "abstract" arrangement of the elements of this painting, it retained an essential reality. The "Paysage a la Coquille" dispenses with such an integral structure and Léger creates a new order of "objects in space."

The emphasis which had been on the solidity of the architectural forms depicted has now undergone a change, and we are keenly aware of the space which surrounds the architecture. Léger is moving towards a wider and more universal interpretation of the materials of architecture. As the minutiae of his earlier paintings were diminished and resolved into fewer and bolder elements, we sense the parallel movement which took place in contemporary building. We see in each fresh experiment the demonstration of new laws of space-colour which can be translated into terms of architectural scale—and which resolve with almost mathematical economy the complex problems of space enclosure. One must not infer from this that the process of Léger's painting plays an ancillary rôle, nor that it merely points to new structural possibilities. Its influence is of a higher order. From the profound resources which nourish Léger's genius there springs a joyous lyricism, clear, sane, far-reaching; the indicator to a new mode of life and a new conception of the physical framework which conditions our existence.

It has been said that Léger is an " easier " painter to understand than Picasso or Braque. This is not the place to discuss the degree of understanding which it is necessary to bring to the contemplation of painting; but if the statement implies that Léger is more directly accessible—more fundamentally in tune with our perceptive faculties than either of his contemporaries—it is undoubtedly true. Léger himself has said: " La vitesse est la loi du monde moderne; l'oeil doit savoir choisir dans la fraction de seconde. . . . " Only a fragment of the effect of his work can be conveyed in monochrome. To those who are familiar with his actual paintings, reproductions may recall something of their vitality, something of their pattern, but they show nothing of the new world of colour which he has created for us. During the past ten years Fernand Léger has progressed with sustained vigour and detachment even further in his interpretation of space. He moves beyond the restriction of arrangement in the recognisable world of our ordinary existence. As he creates the foundations of a new order we attempt an estimate of what he has done; it still remains for us to absorb and interpret his current teachings.

The writer was fortunate in seeing an exhibition of 70 of Léger's works at the Palais des Beaux-Arts at Brussels in 1938. The range extended from 1918 to 1937, and in authoritative opinion the selection is as representative as any previously shown.

ACKNOWLEDGMENT :

The reproductions of Fernand Léger's paintings are from Cahiers d'Art, Paris; the Spanish Cottage is from " Spanish Farm Houses and Minor Public Buildings," by Winsor Soule. All other photographs are by Heather Martienssen.



GROOTE SCHUUR, RONDEBOSCH

ARCHITECTURE AND TOWN PLANNING

A LECTURE BY HERBERT BAKER
delivered on July 11, 1911, in the hall of the Normal College, Pretoria.

We reprint on the following pages the text of a lecture by Sir Herbert Baker which appeared in the "African Architect" of August, 1911. To those architects of a younger generation who have not directly made contact with the man whose work in the early years of this century played a formative part in architectural taste in South Africa, his views, rarely expressed in the form of a lecture, should be of considerable historical interest.

Mr. Baker said: South Africa should, I think, approach the subject of architecture from an unique and interesting point of view. We all have our origin in countries situated within the latitudes of 45 deg. to 55 deg., and the whole of the South African Union does not extend beyond the latitudes of 25 deg. to 35 deg. We begin, therefore, as regards latitude, and that means climate, where even the south of Europe leaves off. Now, it must be admitted that both climatic and national tradition have, and always must have, great influence on architecture, and, therefore, we have to face a problem which is almost peculiar to the Anglo-Teuton race. It is a problem mainly confined to the British in South Africa and Australia, and the Americans in the Southern States. Algiers differs in climate little from the south of France, and I exclude India, Egypt, and Batavia, and other tropical dependencies, where the white nations rule for the benefit of native races, and should preserve, as far as possible, the indigenous artistic traditions. In the past, Spain and Portugal colonised countries with climatic conditions which were very similar to those of their homeland.

GREEK AND ROMAN COLONIES

Our nearest historical parallels are those of the Alexandrian and Roman Empires in Asia and North Africa. Perhaps the most romantic page in the history of civic art is that of the reign of Alexander. During the ten short years of his conquest of the world, he planned and built no less than seventy new cities in Asia Minor, Syria, Mesopotamia, Armenia, Afghanistan, India, and Egypt. Alexandria and Herat are still of importance. The great art which, as Horace said, took captive the conquering Romans, was not so much that of Greece as of the Hellenistic cities of Pergamon, Antioch, and Alexandria. Later a wonderful development of Roman architecture took place in the Eastern Empire, and as Byzantine art at Ravenna, and later at Venice, changed the character of the architecture of Italy. Thus the Greeks and the Romans founded new architectural styles in their colonies, which in time exerted considerable influence on those of the mother country.

In studying our new problem we cannot wholly trust the written history of architecture. Books on southern styles that we must read have been written by northerners, who were travellers, and not inhabitants, of the countries which they wrote about. Ruskin, for instance, chose for his written architectural masterpiece the subject of Italian Gothic. He selected this, as we know, because he caught a severe cold whilst sketching in Salisbury Cathedral. Otherwise he might have written of "The Stones of Westminster." The influence of the Italian sun on building problems would appear in a different light to an invalid foreigner in search of warmth and to a native. You know Lord Rosebery's jest after a short trip to India—that he had not been there long enough to know the country, but quite long

enough to write a book about it. So I think South Africans and Australians should study architectural problems, if they want to get to the bottom of them, both historically and practically, from a rather different standpoint to that of the northern student.

THE DOME

It is my belief, for instance, that the more essential qualities of Gothic architecture had their origin in the desire of the Norman-French inventors that the maximum of light and sun should be admitted into the interiors of their buildings. But this theory is not emphasised in any text-books. Again, it is an interesting matter of speculation whether the dome did not become the chief characteristic of the architecture of the east and the south of the Roman Empire, and never thrived—though it was undoubtedly introduced—in the west and the north, because the hotter and drier climate of Asia and Africa were more favourable both to the building and preservation of the dome. Domes were built in Asia cheaply, practically without centring, a ring at a time, with a long interval for each ring to set. This method demanded a dry climate. In Cairo, where it seldom rains, there are domes so thin and unprotected that I doubt if they would stand one Transvaal summer. The dome is still a traditional method of building in the East and Egypt; but, although Charlemagne started mediaeval architecture in North Europe by building at Aix la Chapelle a copy of an Eastern circular dome church (St. Vitale, at Ravenna, itself modelled from a church at Constantinople), yet the example was not followed, and the dome as a feature in architecture was wholly overwhelmed in North Europe (except in a few buildings in South-Western France) by the vault, covered by its high-pitched roof.

Holland and France had a great architectural tradition at the time they colonised the Cape, and England when she colonised America. To the fact that these colonists adapted their traditional method of building so well to the new conditions, is due the vitality of the styles of architecture they founded in the countries named.

I am not proposing to deal only with the influence of climate upon style, but I wish to keep this point in mind as I discuss a few of the more general and elementary principles of architecture.

SIR CHRISTOPHER WREN

Sir Christopher Wren defined architecture as consisting of "Beauty, convenience, and firmness." We can safely treasure every saying of Wren on the subject of architecture. His recorded sayings are few—he lived in happier times, when architects were not expected to give lectures! No greater thinker, perhaps, ever devoted himself to architecture. It may be said that Leonardo de Vinci had a greater mind, and Michael Angelo a greater artistic soul; but architecture formed a small part of their achieve-

ments. Hooke, who with Wren and Halley, by Newton's own admission, anticipated some of Newton's astronomical discoveries, says of Wren:—

"I must affirm that, since the times of Archimedes, there scarce ever met in one man, in so great a perfection, such a mechanical hand and so philosophic a mind."

I will first deal with Wren's definition of "Firmness"; that is stability. A building must not only be stable; but must also satisfy the eye that it is stable. Some of the most renowned buildings of the world owe their beauty to a mere complete and obvious conquest of the forces of gravity. In the quiet strength of the low row of great columns and lintels poised on the rock of the Acropolis lies the magic of the beauty of the Parthenon. The Pantheon at Rome "looks tranquility," as Byron said of it. The huge abutments of St. Sophia would be clumsy if they did not make visible insistence on the stability of the great dome. The eight solid buttresses which interfere with the sequence of the great colonnade of the drum give to Wren's own dome of St. Paul's, through its obvious stability, a sense of enduring beauty which is absent in many of the famous domes of the world.

GOOD PLANNING

By convenience, Wren meant the successful adaptation of a builder to conditions and requirements, and, chiefly, I expect, good planning. The labour necessary to obtain a good plan is too often thought a waste of time. A good plan is a simple plan; and the greater the simplicity, if combined with convenience, the greater the labour—and the greater the triumph of the labourer. "Summa ars est celare artem." One test of a well-planned building is that it should be easy to find one's way about in it. To achieve this result, unity, simplicity, and symmetry, which can be achieved only by great labour, are necessary. We have recently been told that the famous Labyrinth of antiquity was nothing more than the lower floors of the Palace of King Minos at Knossos, in Crete. It consisted of endless winding passages at different levels, connected up and down by complicated staircases. "Lauros," or "Labros," a passage, is supposed to be the derivation of the word "Labyrinth." So an architect who evolves out of complicated conditions a plan which is both convenient and easily understood by anyone with a bump of locality, has the satisfaction of thinking that he has created an Ariadne's thread to guide many a wandering Theseus through the mazes of his building.

There is no sphere of an architect's work on which climate has more influence than on that of planning. The Romans adopted the system of arranging the rooms of their buildings round an open atrium or peristyle. You find it in Roman ruins all over their empire—from Egypt to Assyria, and from Spain to Britain. But in North Europe, where the climatic conditions were unsuitable, the open court was

universally discarded. One of our problems is to consider how far the Roman system is more suited to our South African requirements. Are we to base our plan on the open colonnade or court, or the closed hall and passage ?

In lighting our buildings, where are we to draw the line of the happy mean between the Southern buildings of Damascus and Cairo, which are lit only by little perforations in the stone; and such types of Northern buildings as Beauvais and York Minster, which are poised skeletons of stone, filled to the full between the framing with glass ? If we may believe the modern scientist that it is excess of light, rather than of heat, which converts blonde races to brunettes, and brunettes to black, the lighting of our buildings is almost a question of national importance !

B E A U T Y

I must now have courage to tackle Wren's third definition—Beauty. It is an elusive quality to which the nearer you seem to get, the farther you seem to be away. It is difficult to define the infinite, and I will not make the attempt. But Wren, with his usual lucidity and reasonableness, gives us architects, at all events, a little practical help. He says:—

" The enemies of beauty are departures from uniformity. When there is too little, deformity results; when too much, plainness. Uniformities are best tempered, as rhymes in poetry, alternatively. In things to be seen at once, much variety makes confusion. In things not seen at once, variety is commendable."

In these axioms, though they may sound very obvious, lie a golden key to some of the mysteries of design. Go through any town, noticing especially the skylines, the angles of buildings, where two fronts or facades meet. With this key in your mind, you will understand why so many buildings are not all they might be. The human eye cannot take in a mass of complicated and differing detail at a time. It does on a small scale drawing, perhaps, and this is why assessors and the building public too often reject a simple and choose a fussy design. But in an actual building it is the coup d' oeil which tells. The eye jumps from feature to feature on a building, and if it is to grasp the meaning of the whole, there must be repetition, symmetry, order, and places of rest. The best analogy is in the sister art, poetry. In poetry there is metre, rhyme, and division into verses, and a concentrated and culminating meaning in the whole. The eye's resting-place should be especially well marked in a country of continual sunshine. Great masses of plain walling are never dull in our sunshine, if they are well opposed by contrasting shadow.

No one taught us better than Wren, in example if not in precept, the importance of simple mass and line against the sky. Nothing gives greater dignity and repose to a building than a quiet, firm sky-

line. In the simple skyline, or line and mass seen against landscape or mountain of the Cape-Dutch houses, lies much of the secret of their beauty.

WREN AND THE LOUVRE

Wren made one visit abroad—to Paris—which was fraught with importance to the history of English architecture. He went there when the Louvre and Versailles were being built. Mansart—the greatest architect of France, as Wren was of England—was at the time inventing the roof which bore his name. The roof, with its derivatives, has ever since given a restlessness to the roof lines of French architecture. Wren was great enough to see this. His admiration was spent on Bernini's front of the Louvre. He wrote of this facade: "Bernini's design of the Louvre I would have given my skin for; but the old reserved Italian gave me but a few minutes' view." But Versailles, he thought, was overcrowded by "curiosities of ornament"—the effect of bad influence, as he suggested, of the women of the Court of Louis XIV.

But to the reasonableness of Wren's visit—influenced, perhaps, by this memorable visit—we owe the sobriety of English architecture. It is a good school for us to follow in South Africa.

Wren's taste for simplicity was certainly not due to any lack of inventiveness, as he had one of the most inventive minds of the age. We should read a useful lesson in the fact that this great mathematician and astronomer, who helped Halley to calculate the orbit of his comet, delighted in his architecture to employ the simplest geometrical figures, the straight line, the circle, the right angle, the square and double square, the cube, and the sphere.

I think it is also an encouragement to us to know how primitive were the origins of all the nobler feature of architecture: The mud or reed hut, with projecting roof carved on posts, made of tree trunks or bundles of reeds, is the origin, as proved by Professor Dörpfeld, and confirmed by Professor Lethaby, both of the square and circular temple of the Greeks and Romans. The arch and vault were used by the Greeks and even the Egyptians for sewers and cellars many centuries before they were ennobled in architecture. Even the majestic dome has its origin in the roof of a limekiln or a bath. All important features of architecture have had most primitive origins; all have developed on the lines of organic building. And when the Romans did discover the dome, they used it for internal effect only. It was left to the architects of the Renaissance, Brunelleschi, Michael Angelo, and Wren, to appreciate and make full use of its external beauty; for centuries elapsed between the Pantheon, the greatest of internal domes, and that of the duomo of Florence, which was the first dome that was intentionally designed as an object of outward beauty.

UNIFORMITY

The uniformity Wren preached as a golden mean has been the underlying principle of all architecture, in spite of our conception of the picturesqueness born of the irregularity of Gothic buildings and towns. The mediaeval builder was not intentionally unsymmetrical. This irregularity of his buildings has come from alterations during the slow progress of the work, changes of style and conditions, and the restrictions of fortifications in buildings and towns. Until the romantic revival ushered in by Scott and Byron, no one, I think, ever consciously designed unsymmetrically. Even the Gothic cathedral was based on a symmetrical plan, with the atrium placed not on the front (as at St. Ambrogio, Milan), but on the south side—for warmth, perhaps—where it forms the Gothic cloister. The Italian Gothic palace was changed into the Renaissance palace with changes of detail only, not of planning or composition. The plan was classic, whilst the style was Gothic. The Gothic plan was born in the north.

We have seen how Wren was influenced by the Italian, Bernini. The architects of the Italian Renaissance seldom failed to express in their work the qualities of strength and repose. South African architects should especially study the work of San Michele; its qualities of stability would suit our big landscape. Michael Angelo's buildings on the Capitol at Rome, with its simple skyline and grouping, bears some comparison to the work of Wren.

BEST MASTERS FOR SOUTH AFRICA

The French architects, though possibly corrupted, as Wren thought, by the influence of the luxurious French Court of Louis, have always been supreme in technical and artistic skill; and they have, moreover, shown themselves the greatest masters of the art of town planning. But in architecture, I think that the great Italians and Wren are the best masters for the South Africans to follow. We do not know what influence the sober taste of the Dutch William of Orange, for whom he built Hampton Court, had upon Wren. Certainly, Wren's own sentiments were more in sympathy with the Courts of William and of Anne than with those of Charles I and Louis XIV.

The value of texture in material, and the visible workmanship of the craftsman, are new attributes in architecture. The Greeks and Romans and mediaeval architects polished and painted their material! "Shining, glistening, and well-jointed," are the epithets Homer used on the good work! The joints of the stones of Greek temples were rubbed together so finely that they must have been invisible. We find appreciation of material and construction for its own sake first amongst the discoverers of antiques at the time of the Renaissance. Time and decay had eaten off the paint and polish, and the beauty of pure marble dawned on the admiring connoisseur. But since the preaching of Ruskin and William

Morris, and their school, the lamp of truth must always burn, and it is a recognised axiom that emphasis should be given to both the material and the human element as expressed in the craftsmanship. This new doctrine gives us a wide field for invention and originality of treatment, as well as of the development of our national resources.

TOWN PLANNING

Speaking in Pretoria, where the Government and Municipality are exerting themselves to make the city worthy of the administrative capital, I must add a few words on the art of town planning. It is an art which has but lately come to the front, and been raised to the rank of the older arts. London and Liverpool have recently instituted chairs of civic design in their universities. I hope those are examples which Capetown and Pretoria will some day follow. There is no art which, in the long run, is more profitable to a city, nor any field in which good seed, well sown, will ultimately reap a richer harvest. The seed and the sowing cost little; but as generations may pass between seed-time and harvest, town planning, like forestry, should be husbanded by Governments and not by individuals. John Burns, who has thrown himself so fervently into the efforts to redeem the faults of over-grown London, in a recent speech said: " An enormous amount of the £25,000,000 per annum we are now spending in London would not have been necessary if Wren's plans after the great fire had been adopted; or if, a hundred, or even eighty, years ago, inspired by his plans and ideals as to what the city would have been, they had created a chair of town planning at the London University."

Even in beautiful Paris, the authorities have authorised, I believe, an expenditure of £25,000,000 to undo mistakes made in the past. Most of the larger towns of America—Washington, Philadelphia, and Chicago, certainly—are spending vast sums to rectify the bad initial planning of their towns, which have grown up in the past much in the same haphazard manner in which our South African towns have grown. Every large town, with any civic pride, in the old and new world, is now regretting past neglect, and considering schemes for improvements; so it is full time we in South Africa bestirred ourselves. The capital of the United States was saved by the foresight of General Washington, who employed a French architect trained in the great school of Le Nôtre, the French master of landscape design. As it is, through not keeping strictly to L'Enfants' plan, when the first enthusiasm died, and the usual cold fit came on, millions are now being, and will have to be, spent for expropriation. Jerry buildings and even railways were built on the architect's vistas.



STUDY IN MR. KIPLING'S HOUSE, RONDEBOSCH ARCHITECT HERBERT BAKER

GROWTH OF MODERN TOWNS

Modern towns are not created, as old ones often were, by the fiat of a despot. Democratic communities grow in a less arbitrary manner. Alexander and the great building emperors, such as Trajan, Hadrian, and Constantine, took very direct methods to establish their new cities. They carried with them in the imperial progresses through their empire architects, armies of workmen and craftsmen. Towns laid out on scientific and artistic principles sprang up like magic. Constantine, in his new capital of the empire, not only endowed this new capital with magnificent architecture and all the arts, but he took more direct measures to force population. If the Roman patrician families refused to migrate to the new capital, the emperor ordered the father of the family away to the frontier in Gaul or Britain. When he came back he found that all his family and household goods had been removed and installed in a new house in Constantinople. Peter the Great, I believe, did the same at St. Petersburg. Thus town planning was an easier problem under imperial than under our modern democratic systems.

The mediaeval towns grew in the form that congested sites, bounded by natural features and fortifications, admitted. They are, as a result, generally picturesque, but not always in conformity with modern municipal by-laws. But their defect in this respect affords no reason for us to err in the opposite extreme. Our modern townships are laid out on what is called the "Gridiron" system—roads mechanically standardised, crossing each other at regular intervals, and at right angles, regardless of artistic considerations, and often of natural features. The result, except for an occasional square, is a series of monotonous streets, with broad vistas, it is true, but with nothing to see at the end of them.

PLACING OF BUILDINGS

In the mediaeval towns, by chance, or the natural instincts of the citizens, and in the town schemes of the Renaissance by studied intention, the finest buildings were more often placed at the end of streets, culminating the vista, and making it beautiful. People walking down a street look naturally less at the sides, but more at the ends, and it is at the termination of streets that architectural effect tells most. It is not the number, but the position, of its fine buildings on which the beauty of a town depends. Many of you know the Madeleine of Paris; it blocks a street, but forms a most noble end to a fine vista across a bridge, past an obelisk—between two symmetrical buildings, all on the same axis. This effect, which helps to make Paris pre-eminent for its ordered beauty amongst cities, would not be possible under our present South African system of town planning. The position of the Pantheon, at the end of the Rue Souffot, is a similar example. Wren, in his report on replanning London, insisted that the churches and public buildings should be "conspicuous and insular." In the same report he recommended that the width

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