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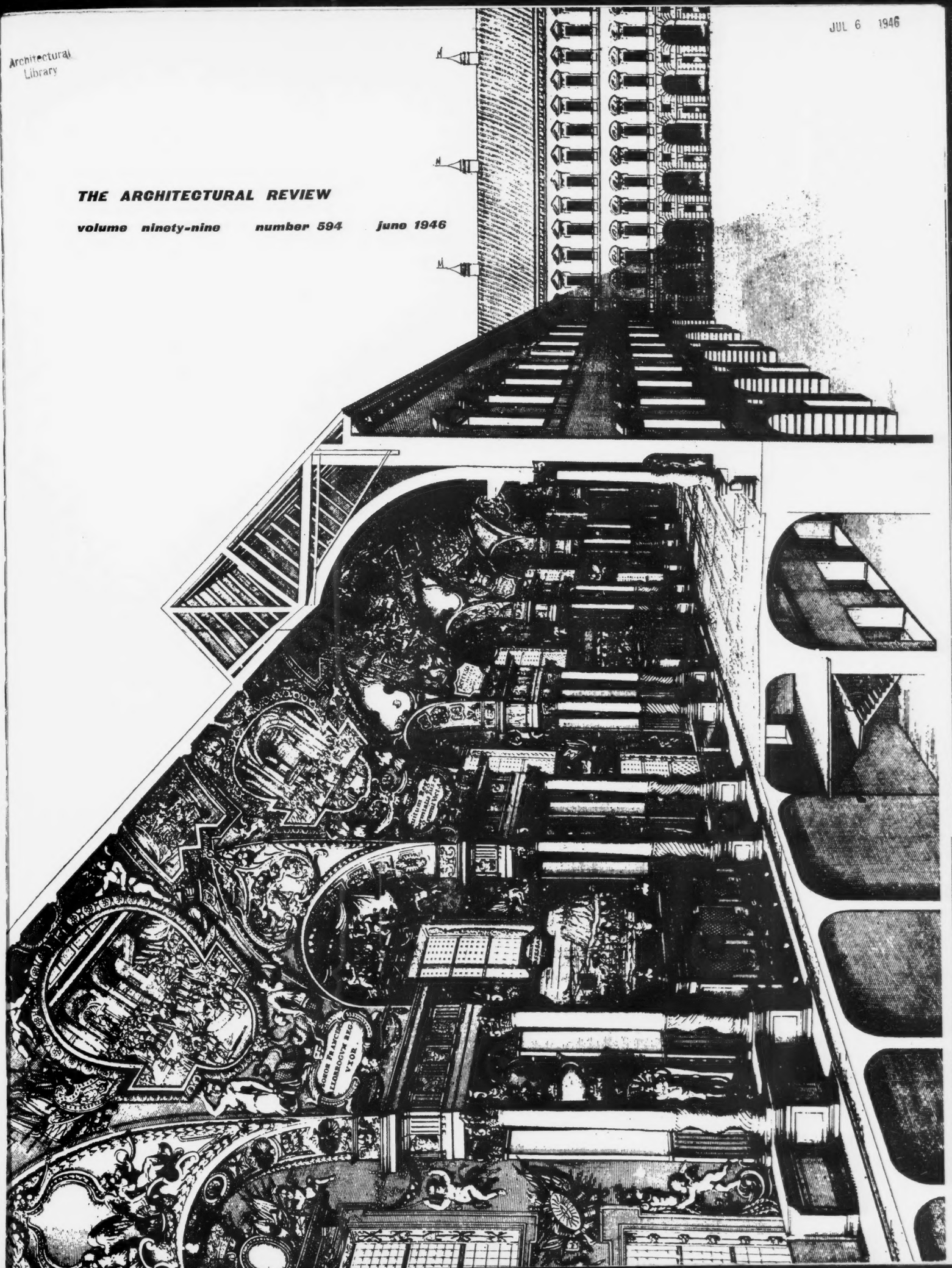

The Architectural Review

CONTENTS FOR JUNE 1946

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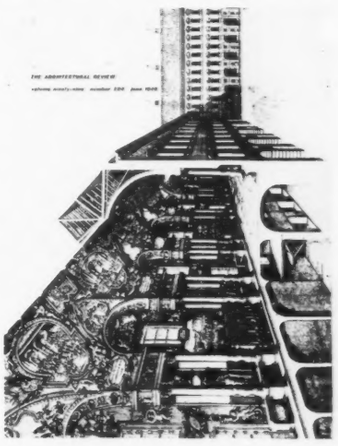
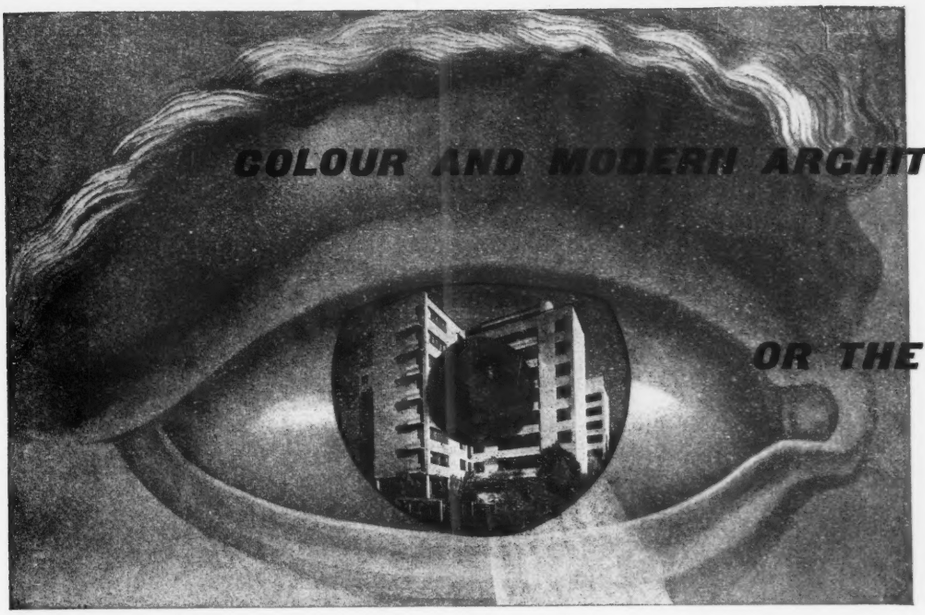
THREE SHILLINGS AND SIXPENCE

THE COVER. The Museum of the Royal Palace at Turin, commonly known as the Gallery, was built by the son of Charles Emanuel I. In it he assembled a comprehensive library of books and manuscripts in Latin, Greek, Hebrew and other languages. There, in the words of Alberts, could be seen preserved, rare animals, four-legged beasts, birds, reptiles, fishes and shellfish; paintings, sculpture, woven textiles, embroidery and pottery, weapons and, in one word, everything rare and interesting in nature or art. In 1659 a fire, which started by accident, almost completely destroyed the building. However, Charles Emanuel II rebuilt it from the foundations, and endeavoured to make it more beautiful and comprehensive as a museum. The superb and originally conceived combined elevation, section and perspective is taken from *Novum Theatrum Pedemontii et Sabaudiae, etc.*, Volume I, Part I. Rutgert Christophile Alberts. The Hague, 1726.



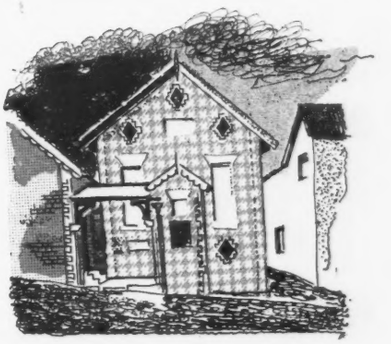


COLOUR AND MODERN ARCHITECTURE

OR THE PHOTOGRAPHIC EYE

The eye, to-day, is starved of colour. For many years advertiser and publicist have turned the grey, dirty-yellow and dark brick of the existing urban scene to good account. Advertisements explode upon the sight with the brilliance of Roman Candles in vivid contrast to the monochromatic streets. The war years have made colour a much more obvious need. But is the architect aware of this? Modern architecture has been, on the whole, a colourless idiom: the vocabulary of new forms it brought was never adequately matched by a new scale of tone, texture or colour values. In this article a painter with an uncommonly sympathetic understanding of vernacular colour traditions is putting the case for a more imaginative use of tone and texture in modern architecture.

text and drawings
by Michael Rothenstein



THE words "a modern city" create in the mind a picture of concrete and glass flats, of lofty blocks of office buildings with uncompromising rectilinear facades, of long low factory workshops with industrial installations of new and surprising shape. "A modern city"; the flat-roofed buildings shine white and immaculate. The endless rows of projecting balconies throw dark grey shadows down the smooth expanse of wall. Everywhere, extended horizontal lines are repeated and where the structures are many storeys high, the regularly spaced window-openings produce a compelling grid-like rhythm. Each surface is hard and clean, each silhouette swift and incisive . . . but this is a picture in black and white—in light and half-tone only. Its forms—like those of a photograph—are clearcut but colourless. One might think that the inventors of this magnificent idiom were colour-blind; for the forms they employ are white, austere, and for the most part, untextured; like those pebble-polished bones one discovers on the sea-shore.

* * *

Can there be a bond of mutual influence between architect and photographer? It is clear that photography befriended the architect; the camera has been the great publicist of modern building. The Zeiss and Kodak lenses have been a valuable ally; without them the new school could never have emerged so quickly and triumphantly. To open any of the books devoted to our subject is to be instantly impressed, through the medium of brilliant photography, by the potency of a great contemporary movement. Is this the reason why the architect—unconsciously influenced by the camera's interpretation—is himself in danger of developing the Photographic Eye?—and why the photographer, in his turn, has so quickly mastered the art of forceful and economical presentation in his separate sphere?

The photographer, then, while publicising this movement so effectively, has also been of some disservice to the cause of architecture; for the Photographic Eye was his invention—the Photographic Eye which sees in terms of black and white and which habitually dissociates form from colour. For here in England the architect must sometimes have relied on photographic representation when forming impressions of those great continental buildings which have influenced him so decisively. This frequent dependence on the camera's interpretation, especially among untravelled and impressionable students, may have helped to foster a conception of architecture deficient in chromatic values. Photographs are misleading in another way; for they so often show us walls and window-openings bathed in clear sunlight. The relationship between

Until 1826 there was only a ferry across the river at Conway, then Telford constructed a pioneer type of suspension bridge. Twenty-two years later Stephenson constructed, parallel to it, the tubular railway bridge, also a pioneer of its kind. Now the Ministry of Transport proposes to replace Telford's bridge with a new one, more suited to modern traffic requirements, and very nearly in the same position. There will be a traffic roundabout just below the castle, continuing into a double carriage roadway, just where the fishing boats lie in the photo on the facing page. The necessity for some such scheme cannot be denied but the siting has received strong criticism locally, first at a public enquiry held in 1939, and more recently from Mr. Evan Harrison who put forward an alternative scheme in *The Architects' Journal* (7.2.46) by which the quayside and entrance to the old wall town over Telford's bridge remain intact. It is obvious from the view given here that the unusual visual qualities of Conway cannot survive the officially sponsored scheme. So far little concern has been shown by the general public. This may be due to the fact that the Ministry's proposals have so far received little publicity. It would be a disaster if they were carried through without a full consideration having been given to all possible alternatives.

different volumes is thus shown to great advantage; while in the cloudy light typical of our own weather, cast shadows rarely lend such vigorous character to the contrasting planes.

The modern architect imitates the photographer; he builds with lights and shadows, with black and white. The infinitely varied polychromatic possibilities of his medium are neglected. The great majority of modern buildings are conceived in an uninteresting chiaroscuro, an empty scheme of lights and half-tones which rely upon the window-openings to afford relief. Yet these are the very areas over which he has least control, since windows may reflect the sky and appear blue or grey in different lights. They may appear as squares of brownish black or some other colour according to the tone of the interior or the character of the muslin or other curtains.

The architect has neglected a great opportunity. A new and exciting language was created; but an integral part of the architectural idiom was forgotten and fell into disuse.

In England, as I have said, the prevailing light is grey. Our climate, then, affords the proper atmospheric conditions for the use of local colour. Further south the architect can place greater reliance upon clear skies and where he can do this it is not unnatural that he should wish to create surfaces which give back the sun. What is more satisfying than the radiant vitality of walls in sunlight? Cast shadows, moreover, lend an energy and decision to intersections of plane and create valuable repetitions of silhouette—which run at unexpected angles —and stress thereby the character of leading contours.

But beneath dull and cloudy skies we unconsciously demand a stronger tonal treatment; the building itself must possess a greater self-sufficiency of design in light, and should create its own pattern independently of the sun. In a veiled atmosphere local colour tints come into their own. Indeed the coloured areas will only assert themselves if they are left to accomplish their task in a restrained and even light.

In many parts of the country tradition has understood this need; it has understood, further, that colour, skilfully employed, may do much to compensate the eye for the absence of cast shadow. In East Anglia, for example, the local builder still uses colour to enhance the latent pattern-values of openings and contours. Beside houses so decorated other buildings seem lacking in clarity and definition.

* * *

The character of modern building is typified by surfaces of great simplicity. But an architecture so dependent upon plain walls, within and without, is likely to become monotonous. For even where proportions are good and the spatial relationships thoughtfully planned, we are apt to feel a certain emptiness; too great a sense of spaces unenriched by living invention. To place the smallest reliance upon the re-appearance of ornament-in-the-round—the capital, cornice and moulding on which the ancient architect depended for the plasticity and fullness of his effect—is to contradict the essential qualities of this tailored simplicity of contour. But it should be recognised that a puritan bareness of surface will sometimes ask more than it can give: too great a strain is thrown upon one side of our sensibilities only. Bare walls, moreover, insist too much upon qualities of structure while denying our eyes the pleasure which colour and texture can provide. May one not hope that a treatment of wall spaces will emerge to compensate the eye for the loss of depth, of broken light and shadow, afforded till now by the traditional method of plastic projection?

* * *

Never had the architect an equal opportunity for using colour; with the manifold resources of the Neo-technic age at his command. The range of tints and textures obtainable should create a designers' paradise. The new possibilities of colour-control are unlimited; yet the architect, far from going forward to meet this magnificent potential, seems to shrink—though perhaps unconsciously—from the implications of his new responsibility. It is hardly necessary to point out that in treating a given wall-space the architect has a big choice open to him, for—quite apart from the various paint-finishes obtainable—panelling and facing in many new materials have created unique opportunities for the use of solid textures. The polychromatic possibilities of the unornamented wall should be understood for it is by this means that " a rich variety may be brought to enliven our streets and that a thrill of colour may be introduced into the house."* We have underrated the importance of texture in our close preoccupation with the problem of structure. New and exciting shapes have been created, but their smooth and naked surfaces make their appeal through line and modelling alone.

* * *

Volume seeks perfection through precision of surface and where tone and colour are used their special function is to deepen and intensify the unique character of the forms they decorate. Thus carrying the designer's conception forward to its penultimate conclusion so much is obvious. The architect has spoken much of spatial relations, but such relations depend for their effect on the visual impressions they excite and may thus be influenced, decisively, by all considerations of tone and colour.

Colour may help the architect to give greater direction and life to surface and makes possible a clearer definition of component parts. It enables the designer to make invaluable plays upon proportion; and to subdivide spaces without the use of modelling. Colour may be used to outline the contour of a given area; to differentiate changes of plane or to concentrate interest on nodal features of pattern.

* * *

Now in the past the architect had the advantage of using materials which were in themselves interesting; nature herself went a certain distance with him. For most of the traditional materials possess an

* Le Corbusier. *The Quarrel with Realism.*

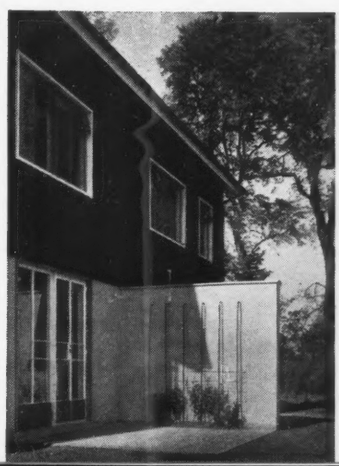
The white of a modern house front skilfully broken by the use of darker tiles. (Denys Lasdoun : House in Newton Road, Paddington.)

Splendid use of strong light accents to guide the eye. (Sir Christopher Wren : Morden College, Blackheath.)

Columns and pilasters. Vigorous modelling in sunlight, but a grey sameness in dull weather. (Facades of the Cathedral of Syracuse and of a house at Burford.)

New and old : the use of colour contrasts to define dado and cornice. (Serge Chermayeff : Gilbey's Offices in Camden Town, and house in Kent.)

A building that typifies much excellent modern architecture. A grey light would flatten and weaken the existing plastic relations of this design.



New and old : examples of the use of light on dark. (Frederick Gibberd : House at Northolt, and eighteenth century fisherman's cottage in Cornwall.)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inherent character and rhythm. At every stage in the growth of a building the uniquely textured products of quarry and forest were, clearly, in league with the designers own creative abilities. And in justice to the modern architect it should be pointed out that manufactured materials are conspicuously lacking in vitality of surface. The precise, impersonal qualities which typify glass and metal—suggestive of a cosmic rather than a vegetable or geological order—deny any direct aid of the above description and, in consequence, their use imposes still further demands on his imagination.

But once the application of these new materials has been successfully mastered their diversity would suggest the likelihood of richer and more varied surfaces upon our buildings. I have noted earlier that photography has shed a spurious glamour on concrete and glass. White and shining surfaces have tended to mesmerise the progressive architect—and not without reason—for he has seen the darkened interiors of an earlier age burst open and glorified by light. But these attractions have gained too exclusive a hold over his imagination. He is still persistently haunted by an image of bronzed sun-bathers lounging on li-lo mattresses which are scattered along glistening, white acres of concrete roof-top.

* * *

Now it is true that a white concrete building standing in a dark and dingy district will brighten the surroundings by a refreshing contrast of lightness and newness to age and drabness—but in the newer districts, where higher tones prevail, how rarely does the idiom of colour extend beyond white concrete, pink brick and Portland stone. The pleasures of tone and texture—as traditionally expressed in the East Anglian village, for example, with its buff, pink and blue supplementing the white, and the simple but exquisitely varied geometry of doorway and window accentuated by a variety of darker tones—are everywhere denied us, in town, in suburb and in the newer rural community alike. The advertiser, taking advantage of this dullness, keys his palette high: remove the hoarding, the cinema and the pub and the urban scene is colourless indeed. The monotony of wartime streets in particular has set the eye searching for brighter colour—and how little the huge drab panorama gives! The pillar-box, telephone booth and bus (one is thankful that they, at least, have not succumbed to the timid greys and insipid greens, the apologetic colour-range of conventional good taste); their gaiety acts upon the sight like the white and red of the signal gantry, or the brilliant figures and buffer plate of the newly painted locomotive, which add such interest and character to the dark and sordid marshalling yard.

Clearly the railways and Post Office have no particular idea about good colour—certainly not for its own sake—and this is just the point. These shapes have to tell, clearly and forcefully, against their respective backgrounds, and in the urgency of ensuring proper function art is forgotten and, quite unconsciously, good sense comes to the right æsthetic conclusion. Instances can easily be multiplied: the black and white banded lighthouse; the bright, contrasted colouring of signal flags; the black, close fitting costume of the ice-skater—again and again good sense has beaten art and beaten it at its own game. And it is good sense which largely accounts for the virtues of the vernacular idiom in the decoration of buildings; those straightforward colour schemes which ring the changes on white and brown or white and black, and are so delightfully easy to look at.

Simple geometrical shapes are used: doorway is set against window, the dark skirting, which separates the lime-washed facade from the street, echoes the slate or tiled roof which separates it from the sky. The areas of contrasted colour may not always coincide with the structural forms beneath, but they do emphasize the essential character of the building. The area of black paint may extend beyond the actual window-surround, but the accent falls in the right place, and the stressing of leading features gives to the building a sense of completeness and conviction. It makes of it an entity.

Now the more complex structure of the modern dwelling tends to make us lose sight of this essentially houselike character. The simple dominant idea is obscured. In this context therefore, the vernacular idiom, with its straightforward insistence on door and window-opening, can be no guide, but its broad geometric treatment may be said to provide a pointer—and a specially valuable one—to a successful solution of the much more intricate contemporary problem.

* * *

Perhaps the architect will forgive the suggestion that his grasp of structure has far outstripped his feeling for and knowledge of colour. A position that may indeed adjust itself; for trends which were novel to a previous generation have now established themselves and the younger architects may feel free to attempt a closer exploration of texture and colour values. If the full possibilities of the new idiom are ever realised the words "a modern city" would, obviously, call up an image appropriately endowed with colour associations. Should this desirable fulfilment occur the function of ornament-in-the-round will have been replaced, or partly replaced, by a surface appropriate to the noble austerities of the best contemporary design.

The objects shown in these sketches are not, in themselves, either well coloured or well designed. They have been chosen to illustrate commonly found colour arrangements which possess straightforward, unself-conscious decorative value. The refreshing gaiety of these frankly used patches of bright colour connects with the more obvious "decorative" colour values of the barge or caravan.

Top left. An enamelled advertisement placard may provide a note of brilliant and unexpected colour. Here a pig's silhouette in black against a scarlet background gives quaint, dramatic emphasis to an arrangement of rectangles.

Top right. The letters and figures form a bright focal point in an otherwise sombre object. The fat lettering on the side of a locomotive is generally yellow, shaded with red.

centre middle. The net curtains and pieces of coloured glass found in many cottage windows form a main visual interest of the village street. Certain varieties of lace curtain should be specially noticed for their remarkable texture values.

Centre left. The signal-arm illustrates the value of clear colour in a drab landscape. The most usual colour combinations, yellow and black, red and white, stand out with extraordinary warmth and vividness against the smoky, surly background of the industrial railway landscape. They are the Ben Nicholsons of the marshalling yard.

Centre right. A road-side newsagent and tobacconist. The advertisements, in sharp contrast to the tarred weatherboarding, make a lively and not unwelcome pattern: the kiosk stands on a dreary stretch of road.

Bottom. The recurrent delights of flag decorations on days of public rejoicing are a further reminder of the value of bright colour. They can invest the least distinguished dwelling with gaiety and interest.

The dormitories illustrated on the following pages were built, during the war and under strict Government surveillance, for the Pennsylvania Railroad Company. They provide sleeping quarters and a lounge for railwaymen who find themselves after a day's work at the end of a run and far from home. Until these dormitories were built, the only accommodation was in local rooming houses or casual provisions in railway shop buildings.

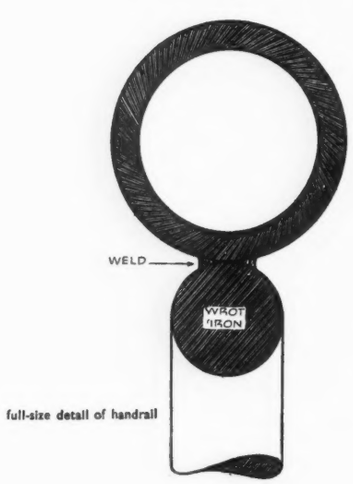
DORMITORIES FOR RAILWAYMEN

1 DORMITORY AT HARRISBURG. **planning** This dormitory building is on a crowded urban site. It is intended for passenger train employees—conductors, brakemen, etc. Accommodation is provided for fifty. The plan shows a careful separation of the three main functions. The dormitory room is set apart from the public space by a passageway and service and storage rooms, and the locker and wash rooms form a third group. The site limitations determined the two-storey scheme.

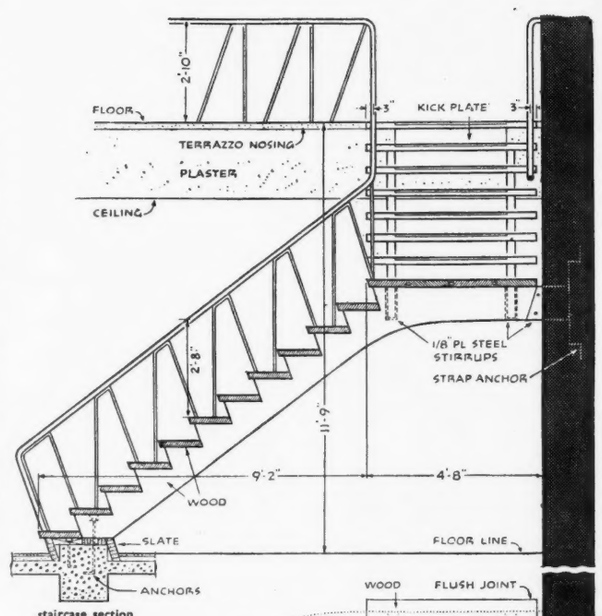
construction and finishes A combination of a light structural steel frame with masonry is used. Exterior walls are of brick with terra-cotta tile backing. Materials were chosen for their durability and easy maintenance. In the dormitory the partitions are metal, the floors asphalt tile, and the ceilings and walls plaster.

2 DORMITORY AT ENOLA. **planning** This dormitory stands on a hill-top with a fine view to the south-west. Accommodation is provided for one hundred and sixty-nine. It is for the use of men who work on goods trains. As in the plan of the Harrisburg dormitory, spaces for sleeping, recreation and washing are clearly defined. The slope of the site has been made use of by placing locker and wash rooms between the ground and first floors, thus avoiding duplication.

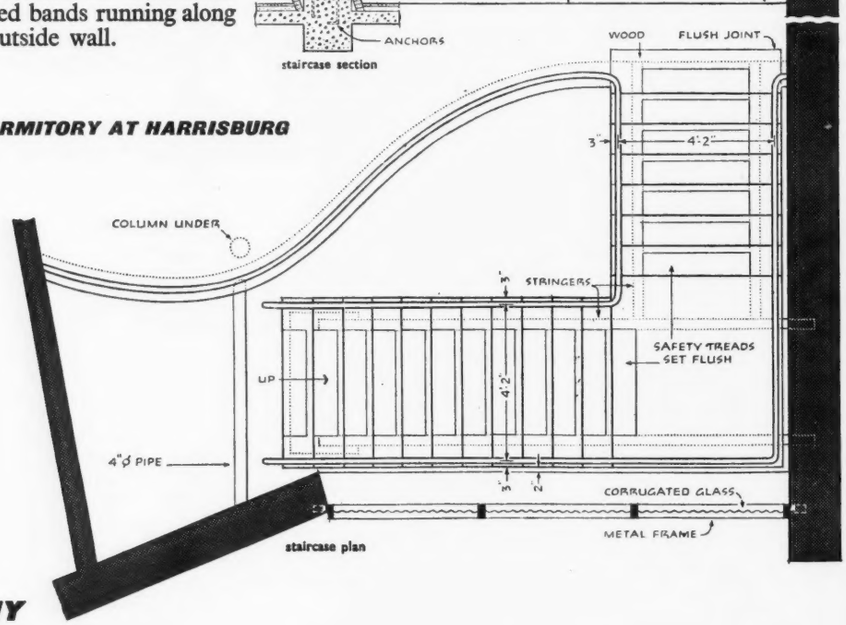
construction and finishes The steel-frame structure is faced on the outside with salmon-red brick (lounge and wash-room wing) and neutral green-blue terra-cotta tiles (dormitory wing). A common requirement of both buildings was that the dormitories should be capable of being used at any time of the day or night. The necessity, therefore, to keep them dimly lighted and well ventilated all the time has resulted in continuous louvred bands running along the outside wall.



full-size detail of handrail



staircase section



staircase plan

1 DORMITORY AT HARRISBURG

LESTER C. TICHY

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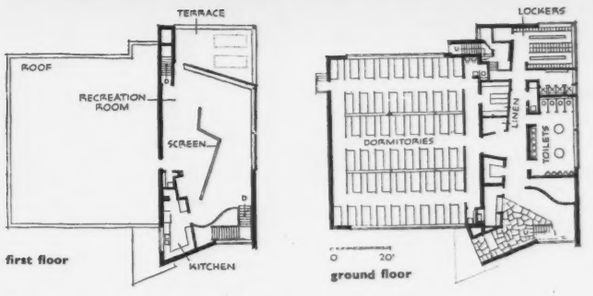
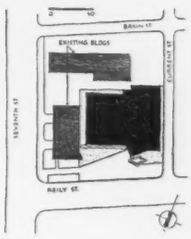


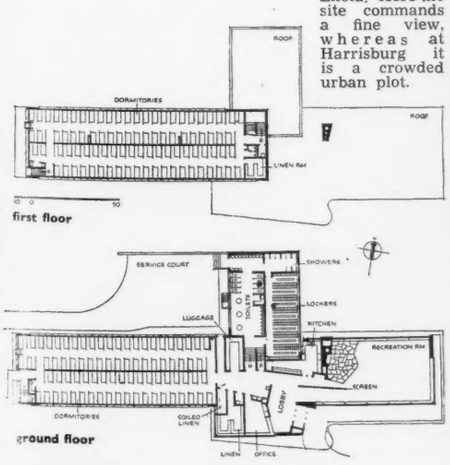
2, the lounge looking towards the staircase, showing the low partition dividing the sitting and eating spaces. 3, looking down to the entrance from the staircase; the hall floor is partly flagstone and partly terrazzo. 4, the long window of the lounge with the pierced roof of the sitting-porch outside. 5, the entrance and staircase window on to Reily Street.

1 DORMITORY AT HARRISBURG



2 DORMITORY AT ENOLA

6, the entrance front and lounge window to the dormitory for workers on goods trains, at Enola. Here the site commands a fine view, whereas at Harrisburg it is a crowded urban plot.



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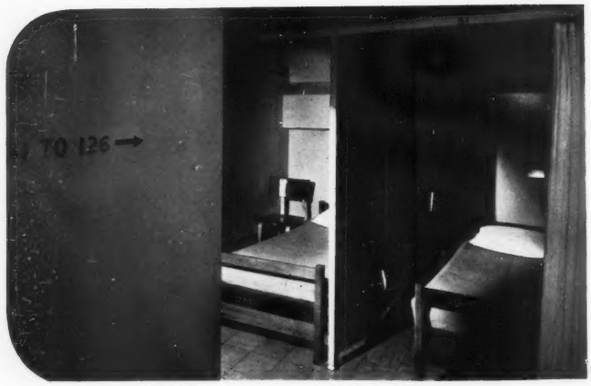
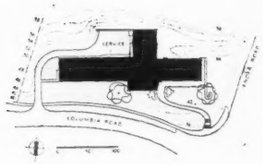
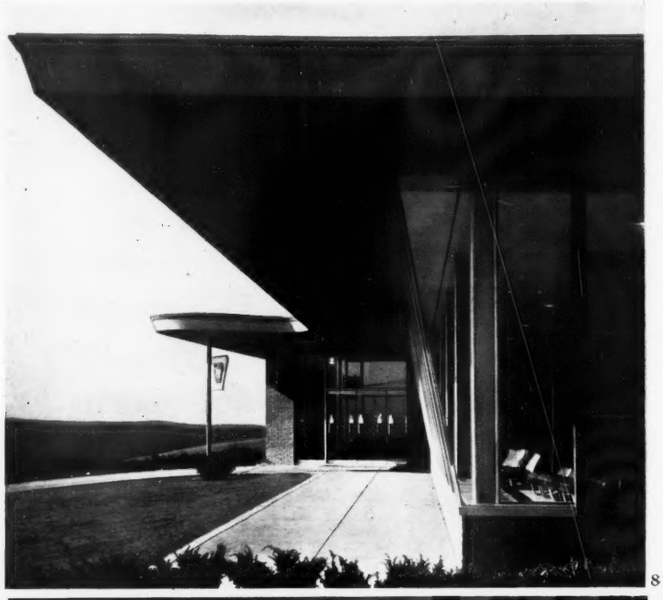


7

2 DORMITORY AT ENOLA

7, part of the dormitory which provides accommodation for one hundred and sixty nine. 8, looking towards the entrance doors. 9, the lounge, with floor of cream terrazzo and chairs in red and green leather. A kitchen is provided for the men to prepare meals in for themselves; the company supplies silver, china and glass. 10, is a general view of the dormitory building at Enola.





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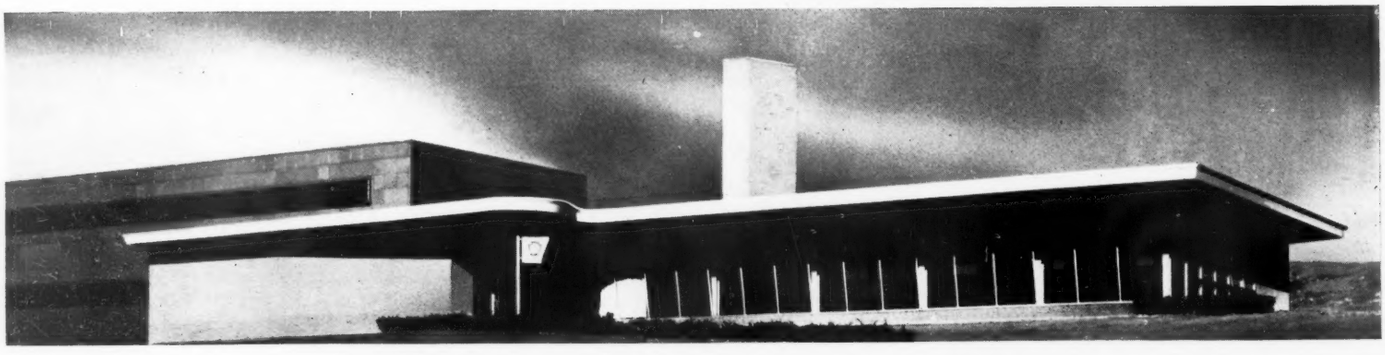
PHOTOS: ROBERT DAMORA



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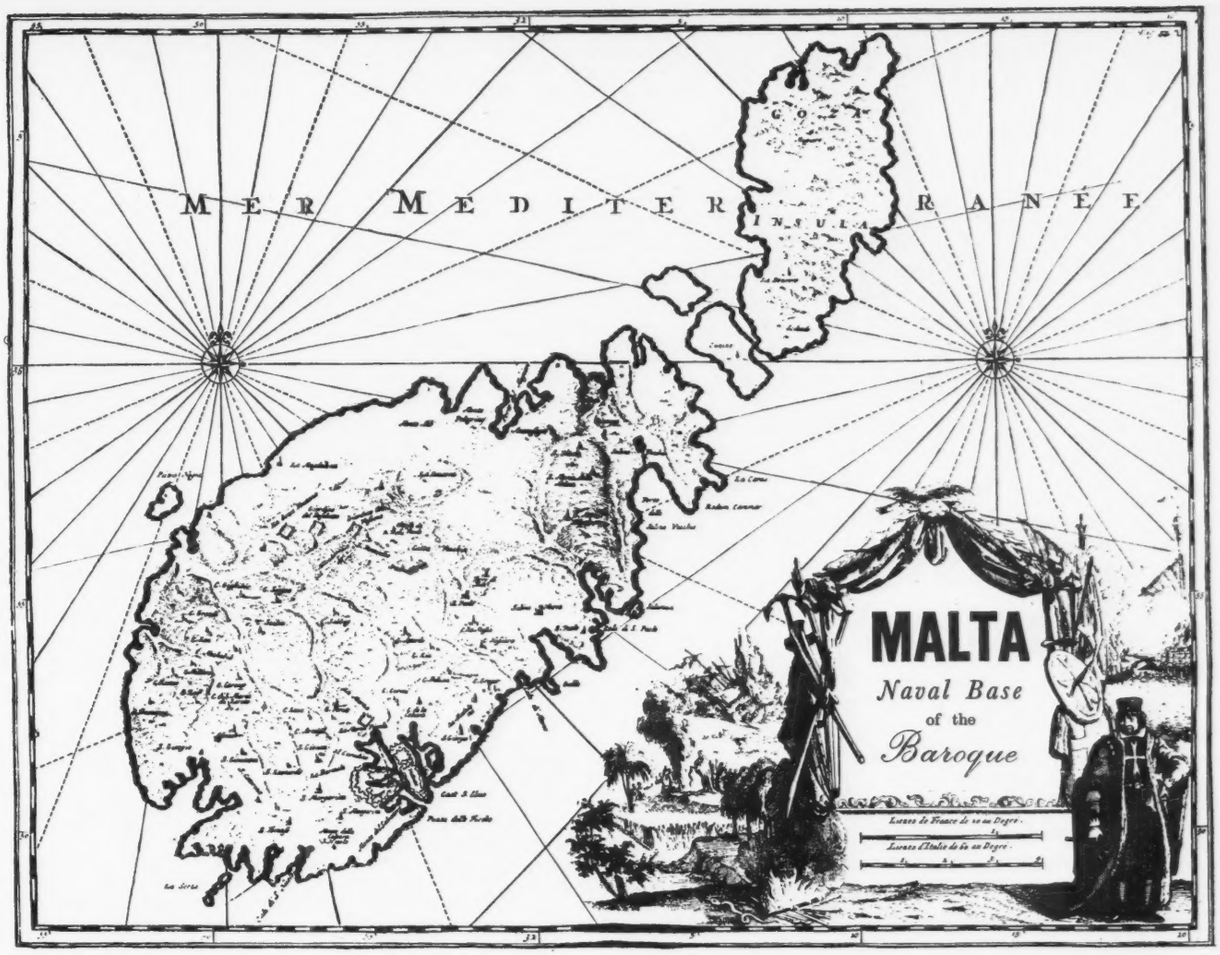


By John Fleming

Destruction has given Malta a renown during the last five years which its nature and buildings would have amply deserved, before air bombing brought them to the notice of a public too ready to forget about the visual qualities of colonies and dominions. In this number two articles are devoted to Malta. Mr. Fleming describes the chief glory of the island, the churches, palaces and monuments put up by the Order of St. John from the sixteenth to the eighteenth century. Mr. Colvin on page 179 carries on and gives a picture of the British and Victorian contribution.

ONE doesn't normally associate Bernini with Dreadnoughts nor is it usual to find any very close connection between British naval bases and the Baroque. Malta, however, is the least conventional of our possessions; for this Outpost of the Empire is also an outpost of high European culture. The combination is unique and startling: instead of a squalid sub-tropical suburb of Aldershot or Portsmouth, which is the hall-mark of British Imperialism the world over, we find in Malta that the barracks and dockyards are built in accordance with the gay and voluptuous tastes of seventeenth and eighteenth century Europe. There can be few places less likely to contain objects of artistic interest than a naval base, and so it is hardly surprising that this centre of Baroque art has been almost entirely overlooked. Who would imagine that the cathedral in Valetta contains a superb set of Gobelin tapestries and the *S. Girolamo* and *Decapitazione del Battista* of Caravaggio: who but specialists in Neapolitan painting realize that nearly every church on the island is decorated with paintings by Mattia Preti. And in addition to all these there is an astounding profusion of strange and charming things which deserve wider recognition than they have yet received. Nevertheless "the iniquity of oblivion blindly scattereth her poppy" and, despite the recent cult for everything odd and out-of-the-way, Malta has evaded the curiosity of ardent *Kunsthistoriker* and still languishes in the unsavoury obscurity of a colonial backwater.

But the oddity and attraction of Malta do not depend solely on its connection with the Empire, piquant though that is. Even if its Baroque cupids and Rococo saints were not surrounded by battleships, Y.M.C.A.'s and Burton Pale Ale, the island would still remain unique, since its barren and treeless landscape is supremely ill-suited to form the background for a flowery and flamboyant architecture. Malta looms up like a stony desert in the middle of the Mediterranean—sun-blazed, sun-dried and sizzling hot like a kiln—it is distinctly more African than European in appearance. There is little vegetation except a few weary down-at-heel palm trees, and its desolated plains are dried and bleached like a skeleton. In this waste land nothing but architecture could grow and, like a rose in the desert, it flourished with unparalleled gaiety and exuberance. The setting is weird, almost surrealist: the buildings have all the disconcerting unexpectedness of some fantastic *objets trouvés*. Huge structures bedizened and bulging with decorated caryatids and flowers and fruits luxuriate in a lunar landscape, gaunt and stark as a corpse. Elegantly Italian or deliriously Spanish churches and palaces rise up with an engaging air of incongruity: barley sugar columns try to look at home among the prickly pears, and a maëlstrom of broken cornices, carved escutcheons, volutes and winged cherubs vibrate and glitter in the glaring African sun.

It was, of course, the Knights who endowed Malta with all its wealth of architecture, sculpture and painting. The Knights of the Order of St. John formed an extraordinary organisation, a cosmopolitan aristocracy curiously combining the careers of monk and soldier of fortune. Every candidate wishing to join the Order had to satisfy one of the seven Languages into which the Order was divided not only of his Knighthood but also of the nobility of his descent in the strictest accordance with heraldic customs (hence the importance of heraldry in their architecture). The founders and original members were devout and pious Christians who spent their lives in fanatical attacks on the Infidel, but by the eighteenth century the Order no longer even pretended to the Christian ideals of its founders, and the gaiety and profligacy of this most select of gentlemen's clubs was notorious throughout Europe. Malta became the playground for the blacksheep and younger sons of the international aristocracy; a Venice or Monte Carlo enlivened by a sham mediævalism,

for of their former piety only the costumes and pageantry remained. During the seventeenth and eighteenth centuries the Grandmasters were generally Spanish or Italian. Fabulously wealthy and accustomed to the splendours of European capitals, these vain and worldly Knights erected huge elaborately carved and decorated palaces in which they might imagine themselves in some tropical Caserta or Escorial.

It has naturally been supposed that the architecture of the Knights was the work of Italian and Spanish architects. But, oddly enough, it was not. It was designed and built exclusively by the local masons. Very little is known about these neglected Maltese artists; though it is perhaps better that most of their work should remain anonymous, since it is essentially the product of the local tradition of stone-workers rather than of individual architects.

The island has always been rich in masons and sculptors; for, among its other peculiarities, Malta has the unique distinction of being, in the most literal sense, one solid block of perfect building stone. It is composed entirely of soft yellow limestone—like a huge lump of bath-brick—which looks as if it could be shaped with a brush and comb. Not unnaturally a large percentage of the Maltese are born to the trade. The Maltese mason does most of his work by eye and excels in ornamental detail which he carries out with great dash and brio. They have always delighted in the more intricate forms of ornament, in all periods from the Norman to the Neo-Gothic, and even to-day carved work is seldom reckoned or separately charged for in building contracts, and foliage, animals, griffins or even gnomes, are inserted on façades in alarming profusion. As craftsmen the Maltese are rather too facile, or perhaps their material is too tractable, for their work is often slick and a bit hackneyed. But whatever they may lack in taste is amply compensated by their southern vivacity and passion. After a warm but inconclusive flirtation with Sicilian Norman they therefore set to work on the great sculptured façades of the Knights with all the zeal of their exuberant though somewhat indiscriminating nature. Maltese fancy went whirling off among the Rococo cannon, trumpets, drums and coats of arms of the Order, and a prolific stream of rather spurious architecture and sculpture poured from their immensely competent hands with unrestrained profusion.

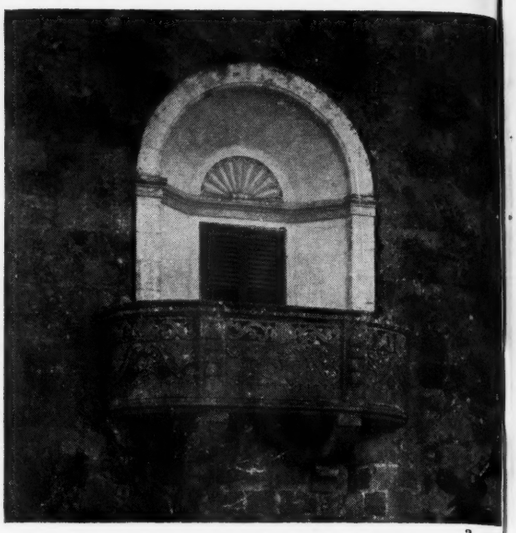
Nevertheless, although locally produced, Maltese architecture can hardly be considered indigenous and there is little or nothing uniquely Maltese about it: on the other hand it is certainly not the foreign importation it is commonly supposed to be. Buildings and styles were not brought wholesale and intact from Europe, as if by conveyor belt, since the Maltese had neither the knowledge nor the technique for an accurate reproduction of the sophisticated styles they tried to emulate. They were extremely quick to imitate mannerisms and tricks of style, but being essentially craftsmen they regarded architecture purely as a form of exterior decoration and grafted the ornament they had copied from Europe on to their own primitive building style as if it were some kind of low-relief wallpaper. Most of the Auberges, for example, were planned and constructed in exactly the same manner as a small village house and afterwards dressed up with sculpture and decoration to look like palazzi. They are the fruit of a cross-fertilisation of two distinct cultures, and behind the façades constructed in the manners of Italy and Spain the elements of an age-old Maltese culture are imperfectly concealed. In this way certain idiosyncrasies of the vernacular survived and combined with the slightly distorted Maltese version of Baroque ornament to produce the curious *fricassé* of styles that is peculiar to the island. Maltese architecture is, therefore, a provincial expression, and some account of the early primitive architecture is necessary for an appreciation of the local character which still lingers in its later Baroque extravaganzas.

The unrest and fear of piratical raids in the southern Mediterranean had their natural effect on the construction of early native houses, but the building tradition was conditioned primarily by the climate and the peculiarities of the local building material. The chief characteristics are directness, strength, a generous use of materials, flat roofs and large wall surfaces broken by a few small openings. The abundance of good building stone combined with the complete lack of any other material for spanning walls or affording support for roofs necessitated certain methods of construction and types of plan which survived until the late eighteenth century. In fact, Maltese architecture developed quite simply from the solutions to their great structural problem of how to roof their buildings. The first solution was found by corbelling out the upper courses of walls, but later rooms were divided up into bays of a *qasba* (just under 7 ft.) which is the maximum width that can be covered by a single roofing slab. In order to eliminate the numerous cumbersome piers which resulted from this flying-arch method of construction, the walls were thickened to take the thrust of the arches and the special type of wall, called *xulliel* which was thus developed has been used ever since. It is of double thickness, the stones being faced on one side only and roughed off to a point on the other, and the centre being filled in with rubble.

In plan, the early houses are equally simple. They are usually ranged along a narrow street on to which the doors open direct. They are of one story only and are divided up into three rooms, the centre one serving as a passage through to the yard behind. Upper stories were not added till the sixteenth century and are usually approached by a simple staircase at the back of the house. All subsequent domestic architecture has followed strictly this simple plan—even in the Auberges of the Knights. Corridors are practically unknown in Malta.

It is difficult to assess the influence of the Arabs, Normans and other conquerors on Maltese architecture; for very few early buildings have survived, and there are, in fact, no buildings on the island earlier than the fifteenth century apart from troglodyte examples. The native masons and craftsmen were obviously very strongly influenced by the Arabs, but since coins and kufic inscriptions are all that remain from the time of their occupation (870-1090), it is not known what experience they gained of Arab methods and construction.

The earliest buildings in any recognisable style are Norman and date from the first half of the fifteenth century. It seems likely that houses of any size and pretentions only began to be built after 1430, when the Normans granted the Maltese the doubtful privilege of appointing Jurats and priests from among their own gentry. Most of the large houses of the Maltese nobility in Mdina, the ancient capital, date from this period; and it may be presumed that the first churches were built or converted from mosques at about the same time, since the first ten parishes were founded in 1436. These early houses and churches (such as the chapel at Bir Miftuh, the best example of the period) are just plain rectangular buildings of walls and arch-supported slab roofs. The doorways and small slits used as windows are covered by hood-moulds decorated with spidery rather Byzantine foliations and turned up at the ends to form rosettes carved with geometric patterns. All the best examples of Sicilian Norman, however, date from a much later period. The Casa Falzon, **1**, and Gatto Murina Palace at Mdina are early sixteenth century and contemporary with the early Knights, and the beautiful and extremely delicately carved Norman houses at Vittoriosa, such as those in North Street, **2**, were most probably built by the Knights before they moved to Valetta. Though there is a considerable amount of Norman work in Malta, principally at Mdina, it was all built during this short period at the beginning of the sixteenth century and had little effect on later developments.



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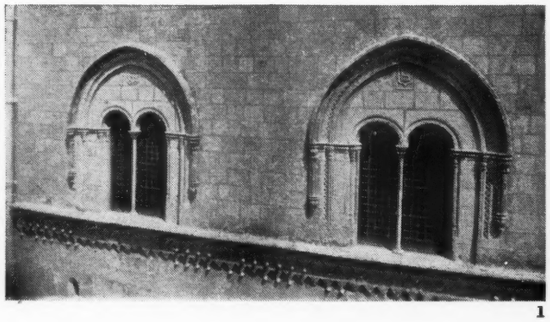
It is surprising that those motifs of Sicilian Norman which derived from Islamic architecture were not used by the Maltese, more especially because the remote Arab influence was to survive and modify their adaptations of later styles. The essentially Eastern taste of the Maltese manifested itself in a preoccupation with pattern that found expression during this period in such things as their intricately carved stone balconies, for example those at Xeuchia and Rabat, Gozo, **3** and **4**, and even more obviously in their use of a curious triple-roll moulding of Turkish origin, which was evidently introduced by the Knights, since it is found on their Auberges in Rhodes and on small houses at Lindos built during the Turkish occupation. For some unaccountable reason this singularly unlovely invention took the fancy of the Maltese who proceeded to employ it for every conceivable purpose. It was used for the surrounds of windows and for cornices on the Palazzo Stanio at Curmi, **5**. It was used on piers and pilasters in the Auberge of Auvergne, for the interiors of parish churches, at Zebbug, for instance, and at odd places such as street corners in Valetta. With the introduction of the Renaissance style it ousted all other mouldings in such buildings as the Casa Dorel in Valetta.

Both this preference for intricate geometric patterns and the taste for spreading the same motif, such as the triple-roll moulding, all over the building may, I think, be attributed to some Arab Oriental tradition. The kind of decorative taste which delights in the repetition, multiplication and overlapping of motifs is essentially Eastern and leads eventually to the monotony of a Casa Dorel. It seems unlikely that the oriental bent of Maltese taste was the result of any direct architectural or generally cultural influence; it is more probably due to the admixture of Arab



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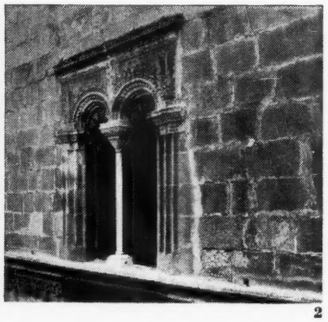

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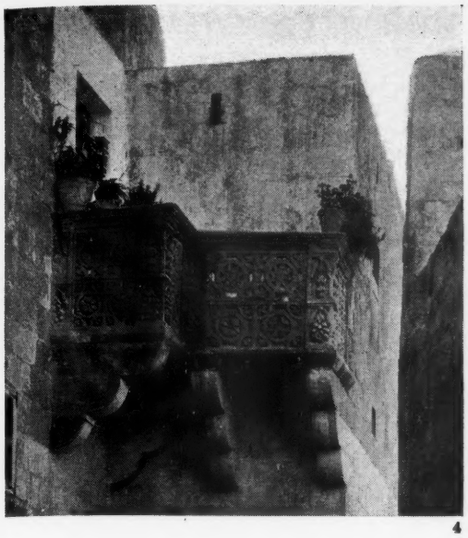

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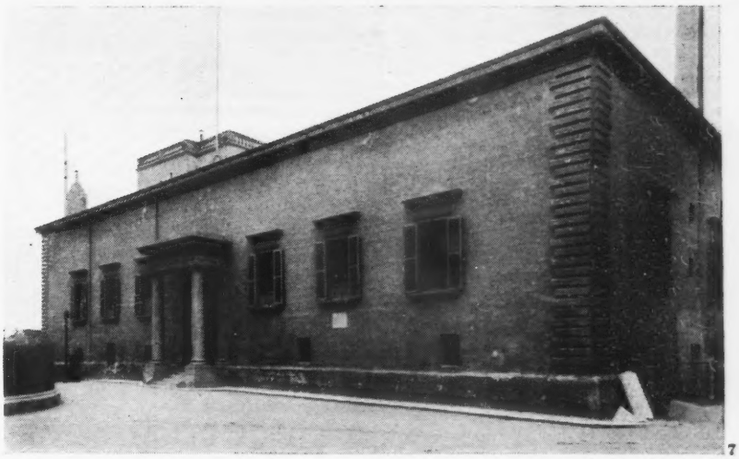

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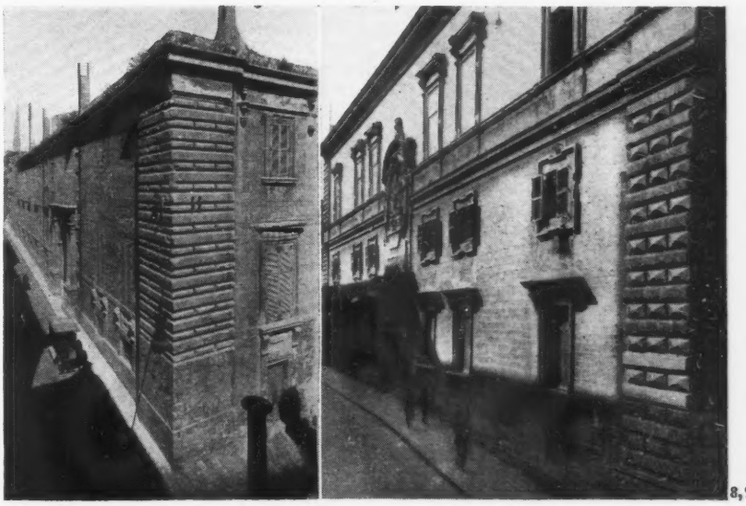

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blood in the Maltese which would favour the development of a luxuriant taste similar to that which produced the *Plateresque* in Spain, but which, unfortunately, never had the opportunity to grow into a fully developed style in Malta. Perhaps their adoption of Baroque as a popular, almost the national style may be attributed to the same cause.

So much for early Maltese architecture. Until the arrival of the Knights the island had been a barren and impoverished possession of its various conquerors, but from 1530 onwards it was the centre of a great international organisation and the habitation of a vast and complicated ideal. The face of the island was completely transformed; Malta became the emblem of the Order's temporal and spiritual power and in its buildings were mirrored the grandeur and fanaticism, the piety and snobbery of this well-bred brotherhood. Fortifications, castles, palaces, churches and seminaries sprang up all over the island almost overnight; complete new towns were planned, laid out and built in a matter of a few years.

The centre of all this feverish activity was the new city of Valetta. The Knights had established themselves first at Vittoriosa, but after the Great Siege in 1565, the Grandmaster la Valette decided to build a new city-fortress on the steep bare ridge separating the two harbours—a very unpromising site, even for Malta, which had never before been occupied by buildings. All the Christian princes of Europe contributed towards the erection of this bulwark against the Infidel, and the first stone was laid on March 28, 1566, with abundant ceremony. La Valette took up his abode forthwith in a hut in the midst of the works which he continued to direct until his death in 1568. Francesco Laparelli and Bartolommeo Genga have usually been credited with the designs for the city, though there is little evidence to support the claim. Laparelli was lent to the Order by the Pope and may have designed the fortifications and town-plan. Genga died in 1558, and so could have had nothing to do with the actual construction; and it seems unlikely that

EARLY OR ORIENTAL MALTESE. Before the advent of the Order in 1530 buildings in Malta had—as place-names still do to-day—reflected an Oriental allegiance later to be effaced by Italian styles. The Oriental flavour is mixed of Normano-Sicilian and vaguely Arab ingredients. 1 is a group of early sixteenth century windows from the Casa Falzon at Mdina, 2 a window from a roughly contemporary house at Vittoriosa, 3 a balcony at Talhamri, Xeuchia on Gozo, 4 a balcony at Mandragg, Rabat on Gozo. A curious motif of Turkish origin is the triple-roll moulding excessively popular for cornices and window surrounds. On 5 it is seen in conjunction with a Renaissance window of the Palazzo Stanio at Casal Curmi.

MANNERISM—THE FIRST STYLE OF THE KNIGHTS. The foundation stone of Valetta was solemnly laid on March 28, 1566. The massive and forceful buildings of the late sixteenth century are mostly the work of Gerolamo Cassar. The prevalent style is the cold and elaborate Mannerism of Italy. The interior of St. John's, the main church of the Order, 6, with its unbroken tunnel-vault and low arcades topped by a monstrously heavy wall on which the vault rests, is a characteristic example. It was built from 1573 to 1577. The Auberge of Aragon, 7, has a Doric porch and quoins of excessive prominence. They were Cassar's favourite motif. With different patterns they occur again in the Auberges of Italy, 8, and France, 9.

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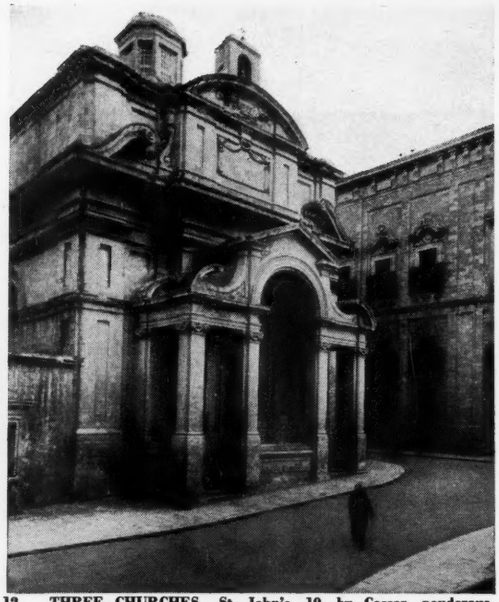

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THREE CHURCHES. St. John's, 10, by Cassar, ponderous, Doric and block-shaped, stands again for Mannerism. The Victory Church at Valetta, 11, and St. Catharine of Italy, also at Valetta, 12, for the flamboyant Baroque that was to culminate in the monuments to the Grand Masters inside St. John's.

his plans were intended for Valetta since, according to Vasari, Genga was sent " to fortify the island of Malta against the Turks, and make two cities by uniting several scattered villages." Genga arrived on the island on March 14, 1558, and, continues Vasari, " when shown what to do, Bartolommeo made fortifications of the utmost excellence, so that he seemed a new Archimedes to the Grand Master and the Knights, who made him rich presents and greatly esteemed him. After making the model for a city, some churches and the palace and residence of the Grand Master in beautiful style, Bartolommeo fell sick of his last illness. . . . He died in 1558, aged forty." The actual construction of the new city and the designs of all the buildings apart from private houses was the work of a Maltese architect, Gerolamo Cassar, concerning whom the following document dated May 18, 1581, is held in the registers of the Council of the Order : " The Grand Master, Jean Levesque de la Cassière, certifies that Gerolamo Cassar, of the Maltese nation, ordinary architect and engineer of the Order, during many years lent his services in the said capacity, from 1565 to 1581. . . . Gerolamo Cassar was one of the engineers under whose direction Valetta was built. The designs for the seven Auberges of the Languages are his ; and that of the Magisterial Palace ; and the most remarkable of all his works is the Church of St. John." A list of other buildings by Cassar follows including, in Valetta, the churches of S. Caterina d'Italia, San Paolo Naufrago, monasteries and churches for the Augustinians, Dominicans, Carmelites and Franciscans; the Capuchin Monastery at Floriana and the fortress palace at Verdala.

Most of the works of this indefatigable architect were later reconstructed or embellished with Baroque decoration, but the refreshingly naïve improvisations of his amateurish style can still be observed in the cathedral of St. John, and the Auberges of Aragon and France. His long experience as a military engineer was not calculated to lighten in any way the forbiddingly sombre and severe style that resulted from his method of enlarging the primitive Maltese house to the size required by the Knights for their palaces. For Cassar's Auberges and churches were just this —inevitably so since his only contact with European architecture was through Laparelli and other foreign engineers who came to design fortifications. His style is marked by extreme simplicity of plan (a string of rooms opening into each other) and by his façades which consist of a large wall, unbroken except by small windows, held as if in a vice by two enormous sets of monstrous quoins and firmly clamped down by a ponderous and invariably unorthodox cornice. The austerity was further heightened by the exclusive use of the Doric Order, as for example on the Auberge of Aragon, **7**. This Auberge is perhaps the finest remaining example of Cassar's work, though his specialities, quoins and cornices, can be examined without any difficulty in his other buildings whose later Baroque decorators evidently hesitated at the prospect of their removal or concealment. Cassar employed the same formula for all his buildings, though he did manage to break the monotony of his designs with an occasional flash of ingenuity in his handling of quoins. He had a large repertoire of this feature by which he seems to have been almost obsessed; on the Auberge of Italy, **8**, for example, they are alternately diamond pointed and furrowed and repeated with excellent effect around the doorway ; on the Auberges of Aragon and France, **9**, they are slender and a little less portentous. On cornices his invention was, unhappily, allowed to run riot though that of the Auberge of Aragon, which has no triglyphs but regula every ten feet, is quite charming.

By far the most remarkable of Cassar's buildings is the Church of St. John, the particular church of the Order and now the co-Cathedral, **10**. This church is odd in almost every way. It was built in a phenomenally short space of time for so massive a structure—November, 1573 to July, 1577. The exterior is Cassar at his most severe, while inside there is not a single spot where the eye can rest that is not ablaze with decoration in every conceivable style and medium. In his plan and proportions Cassar contrived to be at once extremely simple and extremely peculiar. It must be remembered, of course, that his knowledge of ecclesiastical architecture went no further than the primitive Maltese chapel. St. John's consists of an enormous nave and side chapels—there is no choir—and two western towers. The West façade is extended laterally in both directions by attached buildings in the same alignment and of equal height with the actual nave, **6**. The oddest thing of all is the preposterous width of the nave (51 ft.) and the low barrel vault of 64 ft. The side chapels are formed between the thick *xulliel* walls which act as buttresses to take the thrust of the vault. The form of the vault is also unusual, being slightly but perceptibly pointed, as are also the belfry windows in the towers, due, presumably, to Cassar's acquaintance with Sicilian Norman at Mdina and Vittoriosa. Furthermore, the vault springs straight from the architrave without any kind of cornice. According to the local guides, when Cassar got as far as the architrave he realised that a high roof would interfere with the clear range of guns from St. James Cavalier and so reduced the height of the vault as much as possible.

Cassar's amateur, clumsy but sometimes very endearing style displays a natural talent for proportion and spacing which, had he enjoyed a training befitting the immensity of his task, might have endowed his simple conventions with dignity and distinction. Gravity and a certain fullness he always achieved, partly by the ruthless domination of horizontal over vertical lines and partly by his use of a few exaggerated features which, with true appreciation of light and shade, he had cut in bold relief and disposed, with perhaps too literal an interpretation of symmetry, on one or two small portions of his façades.

In Maltese architecture we can distinguish two very distinct periods of bloom. The first of these, and by far the most prolific, comes in the sixteenth century, and it includes all but the most primitive examples of Sicilian Norman as well as the Auberges and other buildings of the Knights. This building boom which followed the arrival of the Knights in 1530 so exhausted the economy of the island and Order that no buildings of any importance were erected for the next hundred years, and there is a corresponding hiatus in the sequence of styles ; for by the time the Order had recovered sufficiently to launch out into a new and more extensive building programme, the Baroque had come into being. Apart from seminaries and other foundations of the Church, few new buildings were erected during this second period which covers the late seventeenth and eighteenth centuries. However, most of the buildings erected during the first period were remodelled, particularly during the Grandmasterships of Manoel de Vilhena (1722-1736) and Emmanuel Pinto de Fonseca (1741-1773), and it was, of course, the work of this period that gave Malta its Baroque character.

The Baroque built by the Knights is predominantly Spanish in character, in contrast to that of the church which affected the elegant mannerisms of Italian *finesse*. This must be largely attributed to the Spanish and Portuguese Grandmasters under whose patronage most of it was built, but even without their influence some similarity to Spanish Baroque might have been expected since the special conditions which gave architecture

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BAROQUE DECORATION. Maltese decoration of the late seventeenth and eighteenth centuries is of the richest in the whole Mediterranean, ranging from Baroque sumptuousness to Rococo elegance, and from metropolitan accomplishment to provincial barbarism. 13 is the thickly overcrowded trophy over the main entrance to the Auberge of Italy remodelled in the seventeen-eighties. The cartouche on 14 is from the church of St. James's, 1710. 15 to 17 are the portals of the Palazzo Magistrale at Mdina, c. 1730, the Seminary at Mdina of about the same date, and the Seminary at Floriana, 1751.

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THE GRAND MASTERS. To commemorate the men who built and adorned Valetta and the other towns of Malta, monuments of extreme splendour were put up in St. John's. Only six can here be shown : 18, to Nicolao Cottoner, died 1680, probably by Domenico Guidi ; 19, to Raymon Perellos, died 1720, by Mazzuoli ; 20, to Gregorio Carafa, died 1690 ; 21, to Marco Antonio Zondadari, died 1722, by Massimiliano Soldani Benzi ; 22, to Manoel de Vilhena, died 1736, by the same ; and 23, to Emmanuel Pinto de Fonseca, died 1773.

in Spain its own peculiar exotic character were paralleled in many respects in Malta. In both countries the native taste was strongly influenced by the Arabs and the ideal was to produce an effect of opulent splendour and magnificence rather than graceful movement and rhythms. And so, just as the Baroque flourished in Spain in the guise of a new *Plateresque*, so in Malta it developed from the native crafts and the traditional designs of stone-carvers and masons. It took the form of escutcheons, friezes, panoplies, trophies, shrubbery, pots of flowers, curtains festooned with fruit and all those forms of *appliqué* decoration which were so popular in Spain. In both countries Baroque belongs more properly to the province of sculpture than of architecture.

The Grandmastership of Gregorio Carafa (1680-1690) marks the beginning of this second period of building in Malta. During his term of office the Auberge of Italy was remodelled and the church of S. Caterina d'Italia added, **12**. The most important feature of the new Auberge is the huge elaborately carved trophy which surmounts the central doorway, **13**. A portrait bust in bronze of the Grandmaster is imbedded in the middle of this extraordinary jumble of military bric-à-brac, and the contrast of materials and colour, the dry phosphorescent green patina of the bronze against the soft butterish quality of the stone, produce a charming effect which was later repeated on other buildings with equal success. These monstrous trophies became the principal feature of most of the later buildings of the Knights, and it is in them, and particularly in those of the Auberges of Italy and Castille, that we find the most outstanding expression of the local character. They are always strictly formal in design but indefatigably naturalistic in execution, and though they are often deeply undercut the all-overish pattern of their design gives the surface a low, flattened, softly undulating appearance. They are like some piece of rich lace or embroidery translated with infinite labour and virtuosity into a third dimension.

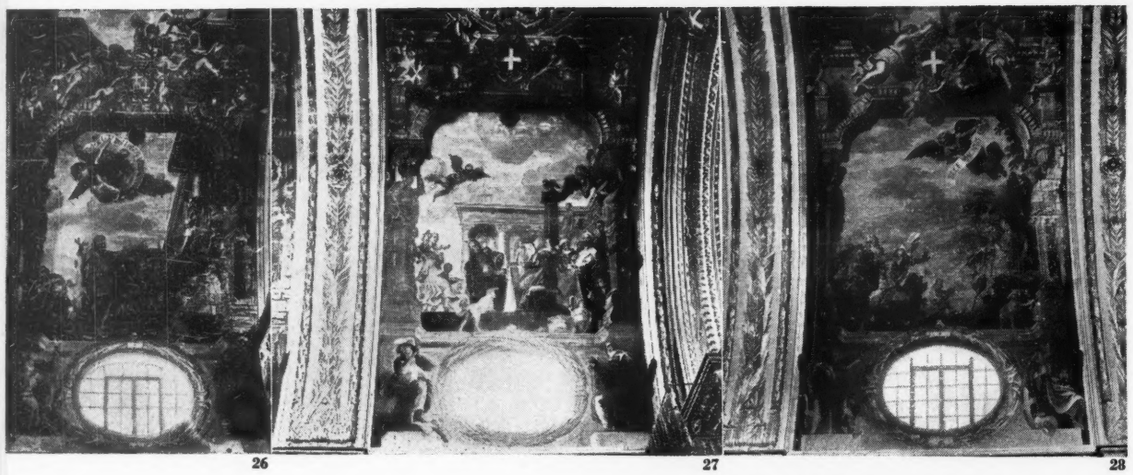
Except for the curious elliptical church of St. James, Valetta, **14**—built in 1710 by the Maltese architect Giovanni Barbara who also designed the charming parish church at Casal Lija—and the Palazzo Magistrale and the Seminary at Mdina, **15** and **16**, built during the Grandmastership of Manoel de Vilhena, all the other pieces of Baroque in Malta were the result of the extravagant and ostentatious tastes of Grandmaster Emmanuel Pinto de Fonseca. His crest—a crescent—is sculptured on innumerable buildings, wharves, storehouses, forts, etc., on the island, but the principal works of his Grandmastership were the Italianate, almost Leccese Baroque Seminary at Floriana, 1751, **17**, the new Victory Church, 1752, **11**, the Castellania and the Auberge of Castille in Valetta. The reconstruction of the Castellania was begun in 1748 by Francesco Zerafa and completed in 1760 by Giuseppe Bonici, both Maltese architects, and it is remarkable chiefly for the sculptured decoration of the façade which has, unfortunately, been partly destroyed, But Pinto's masterpiece was the Auberge of Castille, **25**. This fantastic construction was designed by a Maltese architect, Cachia, who had acquired an original if not particularly lovely style in ornament. His work is always recognisable by the same hand—compare, for example, the Auberge with his great church at Birkikara, **24**. The Auberge of Castille stands on the highest point of the city of Valetta; it was intended, and designed, to be seen in every variety of strong light and the carving of its windows and doorways is the richest imaginable. For the façade Cachia devised a curious arrangement of Doric pilasters and recessed panels. The windows on either side of the central feature are divided by pilasters and the three end windows are recessed a few inches in the panels and grouped a little closer together thus creating a slight accent on either end of the façade. The ends of the façade are marked by enormous pilasters, presumably a relic of Cassar's original structure. The sides are treated similarly, the last four windows being grouped in recessed panels and the slight break forward emphasises the three middle ones. However, though there are the same number of windows on either side they are not quite opposite one another; they are symmetrical but their measurements are never alike. It seems probable, therefore, that the reconstruction was carried out somewhat haphazardly, each side being planned separately. The main feature of the building is, of course, the doorway of Doric columns surmounted by a bust of Pinto surrounded by a preposterous *Churriguer-esque* swag of swords, drums, helmets, banners and grotesque armour.

More astonishing, however, than all these hybrid products of Knightly extravagance and Maltese fantasy is the interior of the co-Cathedral of St. John in Valetta, **6**. It contains the greatest treasures of the island and in it alone can one obtain some idea of the pomp and magnificence of the Knights' lives. It is difficult now to realize the opulence and splendour of their "exile" on Malta, when everyone ate off silver plate, drank out of goblets and dressed in the most sumptuous stuffs imaginable, but in St. John's something of their past glory remains. On to the clumsy and ponderous structure of Cassar later Grandmasters added paintings and sculpture, tapestries and gilt carvings. The vault was decorated with scenes from the life of the Saint. Those parts of the walls that were not covered by tapestries were gilded and carved in very high relief. The floor was completely carpeted with inlaid marble tombstones of the more august Knights—more than four hundred of them, and all Rococo—glistening with an endless variety of coloured marbles among which jasper, agate, and other semi-precious stones were liberally sprinkled. The total effect of all this decoration is incoherent and unsatisfactory, but in detail it is superb. The chapels contain, perhaps, the finest paintings and sculpture; they were dedicated to the different Languages who vied with one another in the richness of their fittings and the nobility of their monuments. The whole building was, in fact, conceived as a mausoleum of the Order rather than a place of worship, and the chapels are filled with the stupendous Baroque tombs of the Grandmasters, commissioned in Rome from the most illustrious sculptors of the generations after Bernini and Algardi, **18** to **23**. The tombs of Grandmasters Zondadari and Vilhena are by Massimiliano Soldani Benzi (c. 1658–1740), a Florentine who had studied with Ferri and Ercole Ferrata, and later on in Paris. Grandmaster Perellos is commemorated by a monument due to Giuseppe Mazzuoli[1] (1644–1725), the sculptor of several figures on the tombs of Alexander VII, Clement X, and Innocent X at St. Peter's in Rome. The seated allegories of Charity and Truth are especially characteristic of his style. But the most interest-

THE MID-EIGHTEENTH CENTURY. Pinto de Fonseca was Grand Master from 1741 to 1773. His buildings and alterations on the island are innumerable. The church at Birkikara, **24**, is one example, the Auberge of Castille, **25**, another, and a particularly sumptuous one. Both buildings were designed by the Maltese architect Cachia.

24

25



26 27 28

THE PRETI FRESCOES. The fame of St. John's are Mattia Preti's frescoes, miraculously undamaged during the war. They are late Baroque at its freest, lightest and most grandiose. Preti left his native Italy in 1662 and went to live in Malta where he died in 1699.

29

THE ALTAR OF ST. JOHN'S. This lovely group of the Baptism of Christ, of the same broad flow as Preti's frescoes, was probably designed by Melchiorre Caffà. It was executed by Mazzuoli.

ing of the monuments in St. John's is that of Grandmaster Nicolao Cottoner, probably by Domenico Guidi (1628–1701). The Cottoner Monument was ordered after the Grandmaster had died in 1680 and dispatched to Malta in 1686[2]. The usual attribution to Melchiorre Caffà, the only known Maltese artist of importance (who carved the altar of Zebbug Parish Church and probably designed the *Baptism of Christ* in the co-Cathedral of Valetta which was executed by Mazzuoli, **29**) can, therefore, not be maintained[3]. The Cottoner Monument with its writhing slaves below and its graceful Fame by the obelisk above is full of animation and brio. It would deserve a double asterisk in any guide-book.

But the pride of St. John's and the *gioia* of Grandmaster de Redin were the frescoes on the vault by Mattia Preti, **26** to **28**. They were to have been done by Caravaggio who came to Malta to paint the portrait of Grandmaster de Wignacourt (now in the Louvre), but he refused the commission and returned to Sicily. Mattia Preti came to Malta from Naples in 1662, and stayed till his death in 1699. In contrast to the sombre colour and melancholy atmosphere of most of his other works, he chose at St. John's a light and highly coloured manner, perhaps in order to compete with the younger Luca Giordano who had overshadowed and eclipsed his reputation in Naples. He chose, too, an unusual technique—he painted in oils on the stone of the vault, the stone slabs of which show quite plainly through the painting. The vault is divided up into panels, each depicting a scene from the life of the Saint. Each panel is treated separately and the view-points change so capriciously that an inspection of the masterpiece entails much wandering around the nave. It is his masterpiece, however, only in the sense that it was his largest and most ambitious work. Preti was inspired by the sensationalism of lust, horror and death; his talent was for the dramatic, particularly the sinister dramatic effects of the *tenebrosi*, and so his attempt at a gayer and more carefree style resulted in the rather painfully unenthusiastic portrayals of banquets and celestial celebrations which decorate the co-Cathedral. He seems to have aspired to the heroic and ornamental mode of Rubens whose cartoons he adapted for some of the tapestries, but though in his early sketches he did catch something of the Baroque sense of grand design, in his great public pieces he could not conserve or sustain that sense which is the mark of the great decorative artist.

The British occupation of Malta has not impressed itself overmuch on the physical aspect of the island. Except for some public buildings and churches, the dockyards with their accessories[4] and a suburb of bow-windowed seaside boarding-houses run up for Naval and Dockyard officials, our influence seems to have been confined to the introduction of those enormous black and white china door-knobs—the kind that don't turn and are such a peculiar manifestation of the English spirit. But by altering so little, all the rest has been preserved. Malta has escaped the fate of a tourist-ridden quaint survival, nor has it fallen into the grasping hands of modern town-planners. There have been few "improvements" and nothing has been pulled down to make way for workers' flats or up-to-date sanitation. Everything remains intact, apart from the few interesting buildings which were bombed[5]; the Auberges have become Sergeants' Messes, Sailors' Clubs or Government Offices; the innumerable churches are still filled with admiring congregations for the Maltese are convinced believers in the supernatural. The beauties of Malta, like those of Cyprus, have never been exploited; their monuments have been preserved by the smothering indifference of the Colonial Office.

NOTES

[1] Pascoli in his life of Mazzuoli (*Vite de'Pittori, Sculptori ed Architetti*, 1736) wrongly attributes to him the monument to Zondadari which is signed by Soldani Benzi. It is clear from his description of the work that he referred to that of Perellos. This and other errors in attribution concerning works in the co-Cathedral were pointed out by V. Bonello in *La Chiesa di S. Giovanni, estratto dall'Annuario della Diocesi di Malta*, 1934. On Mazzuoli see also V. Suboff in *Jahrbuch der Preussischen Kunstsammlungen*, 1928.

[2] Bertolotti, in Gori's *Archivio*, vol. 2, p. 45. I owe this reference to Dr. R. Wittkower who confirms the attribution to Guidi first made by Campori in *Art. Carr.*, p. 134.

[3] On Caffà, see R. Wittkower in *Zs. f. bild. Kunst*, 1928-29. On the *Baptism of Christ* cf. L. Ozzola in Dedalo, vol. 7. Pascoli, in his Life of Mazzuoli, says of the *Baptism*: "Gli fu non guari dopo ordinata un'opera per Malta; ed avendovi rappresentato S. Giovanni, che battezza Gesù con un putto vi si spedì, e ne riportò ogni applauso."

[4] On these see page 179.

[5] On these see page 180.

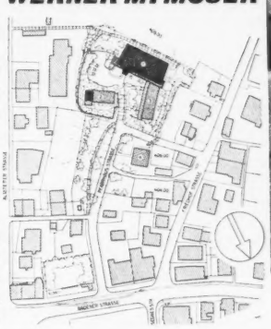
PROTESTANT CHURCH AT ZURICH

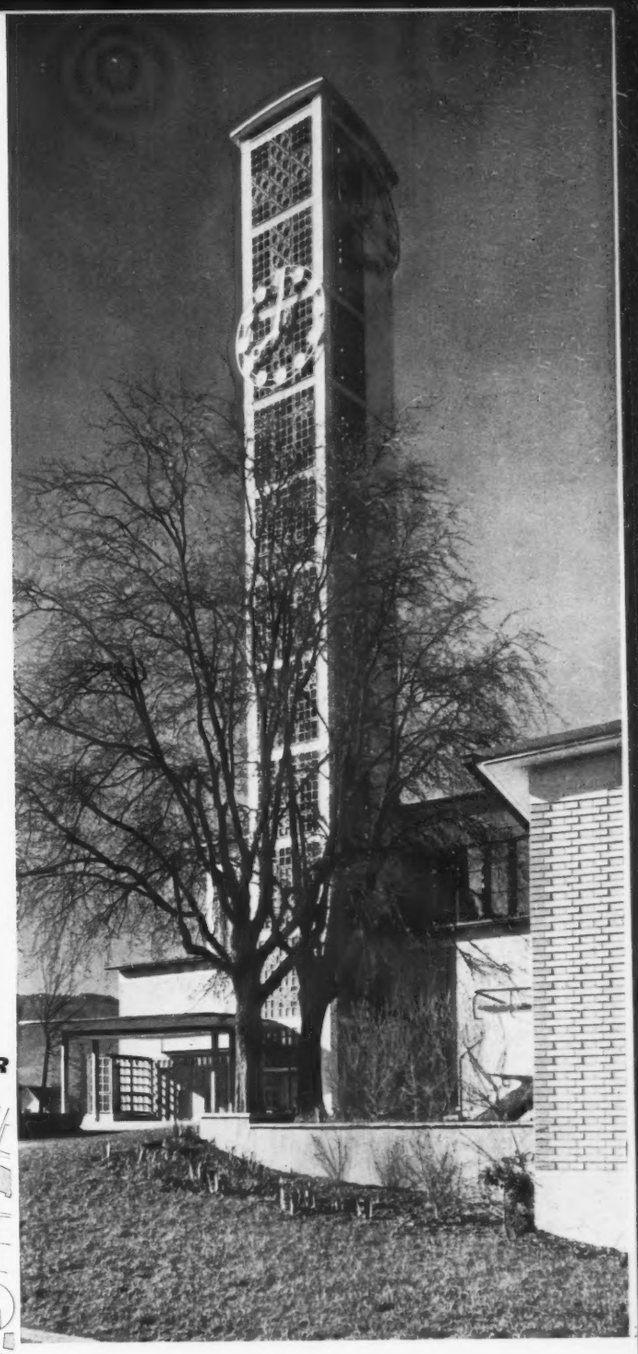
site The church stands on a moraine hill (16ft high) close to an old small church and churchyard with which it is visually tied by means of the obtuse angle between its wings. The new church stands on the edge of the hill and forms a dominant in the background. The assembly-room on the lower ground floor looks directly over the plain. The main eaves of the old and the new church are on the same level.

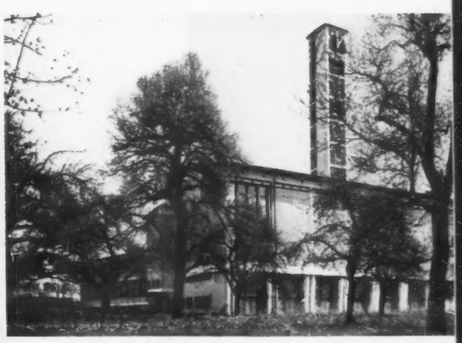
planning Church-floor: the main entrance is situated in the east corner giving a diagonal view of the church on entering. The pulpit stands independent of the back wall on the elevated choir-platform in the west corner. The ceiling is set to a fall sloping downwards from the clerestory windows, thus contributing to a uniform distribution of light. Deep narrow subdivisions serve as anti-dazzle. A dais subdivides the church into two unequal parts. Average length: 111ft. 9in., average width: 58ft. 3in., height: 29ft. 2in. There are 1,069 seats. The wing contains: council-room, class-room, office for parish-sister and sexton's apartment. Lower ground floor in church-block: large assembly-room 82ft. 7in. by 42ft. 1in., 16ft. high, stage 16ft. 2in. deep, side-stage with two changing-rooms, cloak-room, cinema-projector room and tea-kitchen ; in the wing: two class-rooms and a further tea-kitchen.

construction Width of foundation varies from 3ft. 3in. to 4ft. 2in. according to pressure. The south, north and east sides are constructed of solid reinforced concrete slabs (6in. thick) whereas the west side is of frame construction. The infilling panels on the west side as well as those covering the concrete slabs on the south, north and east sides are constructed

WERNER M. MOSÉR

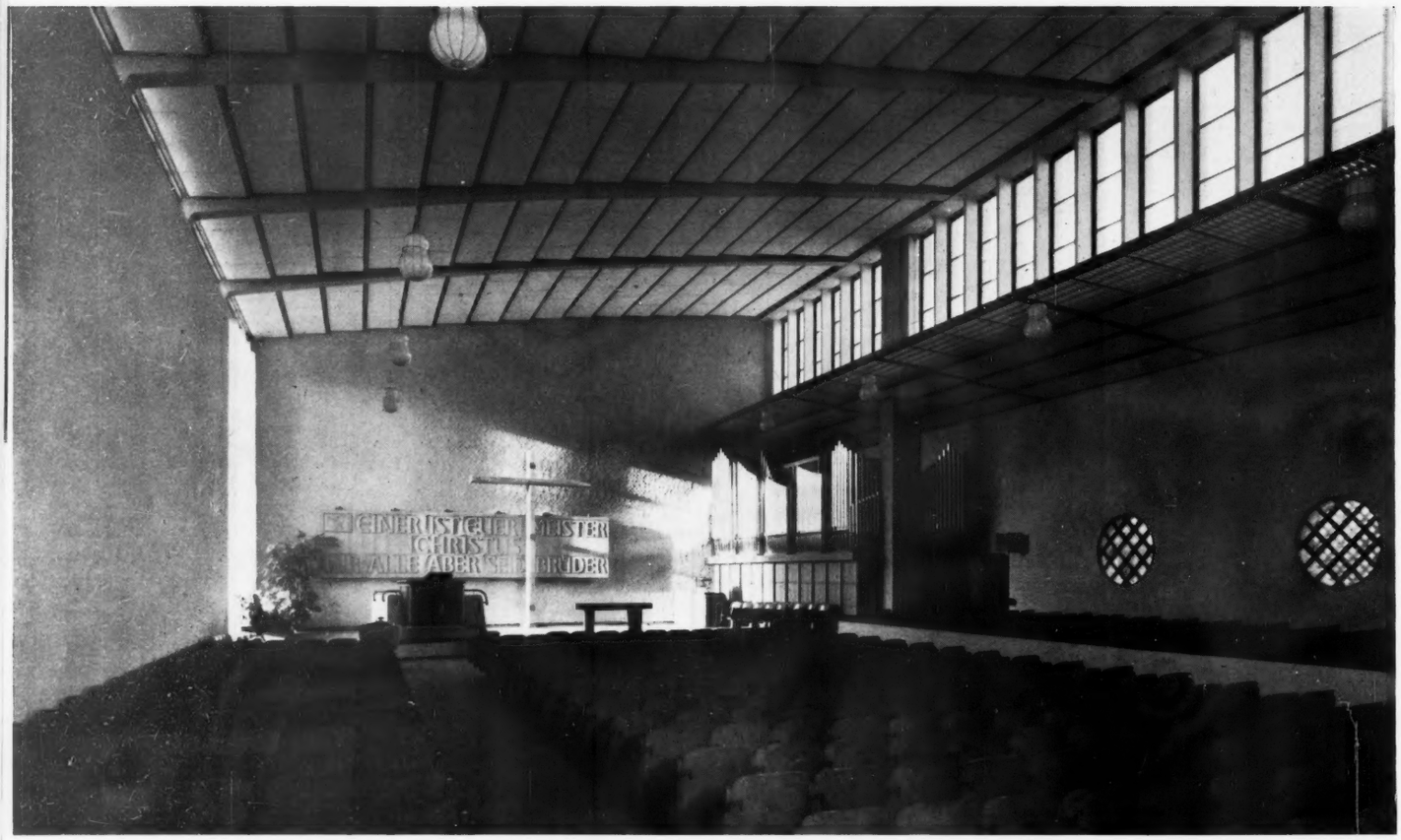






1, the church entrance and thirty-five foot tower. 2, view from the north, showing the extremely skilful landscaping of the new buildings in relation to the old church. 3, the south-west wall of the church.

2



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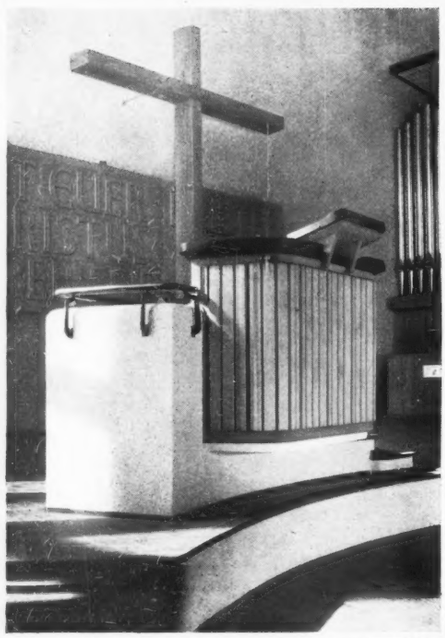

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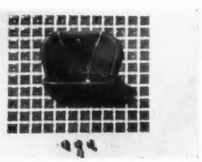
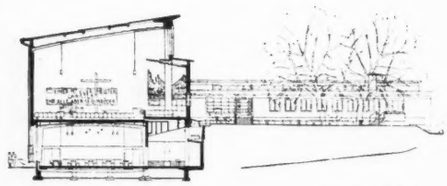
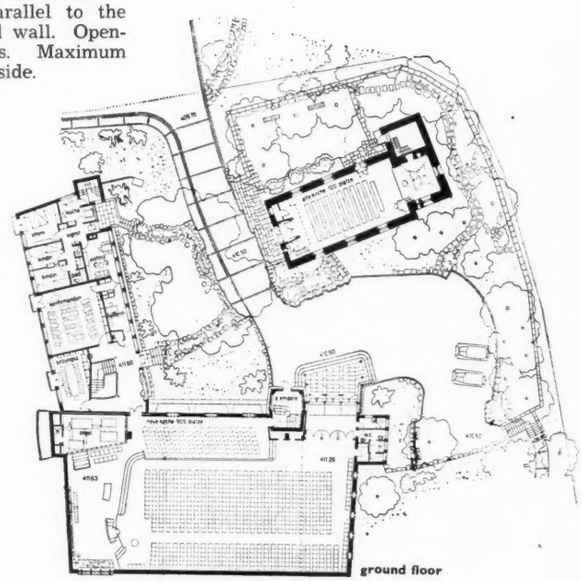


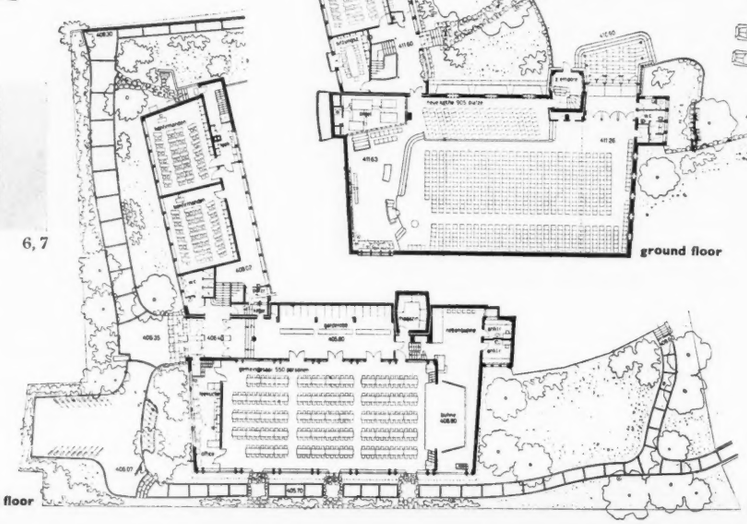
7

of lime-sand-stone masonry left unplastered. The windows are of timber, natural coloured on the outside. Roof: independent reinforced concrete beams. On the north side the ceiling is supported by a beam (span: 60ft. 3in.) running from tower to pillar near organ and continuing on both sides (projection: 25ft. 11in.) thereby making a maximum window area without intermediary supports possible. There is equal sound intensity for every seat. Echoes and sound-concentrations were avoided by the following means: oblique position of the end-walls, sloping ceiling, general application of heavy timber and rough plaster. Tower: The foundation-slab has an area of 947 square feet (4ft. 10in. thick) and weighs 230 tons. Open framework with a transverse stiffener every 11ft. 2in. The sides parallel to the pendulum's swing are half open and have solid wall. Open-worked concrete panels fill in the open spaces. Maximum elasticity (tower height: 35ft. 6in.): 3in. to one side.





ground floor



lower ground floor

4, the interior of the church, a dais, shown on the ground floor plan, subdivides it into two unequal parts. 5, the pulpit standing independent of the back wall. 6, the hymn board, and 7, a drinking fountain.

VICTORIAN MALTA

MALTA was ceded to Great Britain in 1814. Its new governors took over an island splendid with the churches and palaces of the Order of St. John of Jerusalem. English architects added their quota of buildings in the course of the nineteenth century, and when Bernard Shaw unkindly described Malta as "the finest heap of stones in the world," he was no doubt as unaware of how many of those stones were quarried and placed in position under the direction of his own countrymen, as he was of the prophetic significance which his phrase was to assume after the aerial bombardment of 1941-2.

The first works of the English governors were in the tradition of their military predecessors, whose escutcheons were everywhere carefully erased from the battlements and gateways which they had adorned, while over the Doric portico which was added to the former chancery of the knights, were set up the arms of England, with the grandiose inscription :—

MAGNAE ET INVICTAE BRITANNIAE
MELITENSIUM AMOR ET EUROPAE VOX
HAS INSULAS CONFIRMAT A.D.1814

The great line of fortifications begun by Grand Master Nicholas Cotoner in 1670, completely encircling the dockyard cities of Vittoriosa, Cospicua and Senglea, was at last brought to completion, and within a triple ring of defences, whose barbicans and bastions, scarps and counterscarps were the last word in eighteenth century military engineering, the Grand Harbour became the first naval base in the Mediterranean.

But Valetta was liberally provided with public buildings, and the empty Auberges wherein the knights had dwelt were easily adapted for use as law courts, clubs, and military headquarters. The Governor himself found accommodation appropriate to every season in the several palaces of the Grand Masters, and for the people of Malta their incorporation in the British Empire was merely the exchange of an order for a caste—the one religious, the other imperial, but both of them foreign and both of them military. In claiming the temporal allegiance of the Maltese, the British Government was, moreover, scrupulous in respecting their religious beliefs, and for thirty years the Anglican service was not heard outside the privacy of the Governor's Palace. It was not until 1839, during a visit by the Dowager Queen Adelaide, that official discretion was at last overruled by pious royalty, and the Director of Public Works, Mr. Richard Lankersheer, was asked to provide a design for an English church in Valetta.

The result was a handsome Græco-Roman temple (Ionic without, but Corinthian within), in the style made familiar in England by the works of Cockerell, Hardwick, Inwood and Basevi, but without the galleries which disfigure so many of their churches, and in a climate and surroundings far more suitable for an Anglo-classic cathedral—for Malta was to be the second seat of the Bishop of Gibraltar—than those of Camden Town or St. Pancras. Unfortunately Mr. Lankersheer, though evidently a man of taste, was not altogether competent in the mechanical part of his profession. In particular, he failed to realise the peculiar properties of the local stone, and before long sundry "cracks, splits and crushings began to appear" which caused the Building Committee to seek the professional advice of the two Admiralty architects who had just arrived from England on H.M. steamer "Polyphemus." When Captain Brandreth, R.E., and his civilian colleague Mr. Scamp made their report, they stated not only that the columns of the portico had been set up while in so porous and unseasoned a state that all the moisture of the inferior cement employed had been absorbed by the stone, leaving only a thin layer to set round the circumference of the joints, upon which fell the whole weight of the cornice, but that in the interior "a principal column" was found projecting eight or ten inches beyond its intended foundation—and that, in short, the whole building must be condemned as insecure.

Nor was this all : political as well as architectural stability was at stake, and the incompetence of the Director of Public Works gave unwelcome force to a campaign against the English monopoly of government posts which then occupied the Maltese press. Pointed comparisons were made between the failure of the cathedral columns and the security of those forming the facade of the Naval Hospital at Bighi, then being completed under the direction of the Maltese engineer Gaetano Xerri. When the unhappy Mr. Lankersheer died in 1841 at the early age of thirty-eight, it was even rumoured that he had committed suicide. Religious differences did nothing to restrain political agitation, and the derelict cathedral was popularly referred to as "the Devil's den." Lankersheer's successor had not yet been appointed, but the completion of Queen Adelaide's church had become a matter involving the prestige of the British Government in Malta, and the Committee turned to the Civil Architect to the Admiralty as the only competent representative of his profession available.

"A first-rate clever fellow," William Scamp (1801–1872) had for thirteen years been clerk of the works at Windsor during Wyatville's reconstruction of the Castle, before entering the Admiralty Department of Engineering and Architectural Works of which he was later to become the Deputy Director. His mission to Malta, which included the construction of the island's first dry dock, was the earliest of a series which was to re-equip British naval bases for the new fleet of ironclads, and in 1860 an official appreciation of Scamp's work for the Admiralty stated that "the present establishments at Malta, Gibraltar and Bermuda are almost entirely projected by him. Deptford, Woolwich, Sheerness, Portsmouth, Devonport and Pembroke owe many of their best buildings to his professional talent."* Prominent among the offices and workshops in Malta's Dockyard Creek is Scamp's Steam Bakery, a classic building which not only possesses a monumental character of its own equal to some of the best works of the previous century, but, with its four towers and their charming turrets, has just that courteous hint of local mannerism which was to make his cathedral spire such a triumph of architectural diplomacy. These towers it is, that, rising from the four corners of the central block, give the structure that quality of architectural movement and variety of outline which had been praised by Sir Joshua Reynolds in the thirteenth of his *Discourses*, but which had been lost sight of in England between the baroque works of Vanbrugh and Hawksmoor and the Gothic creations of James Wyatt and Sir Charles Barry. Chronologically, Scamp's Bakery (1841) is later than the Houses of Parliament, but in architectural lineage it is heir to the civil works of the younger Dance, and may well be compared with Rennie's great Victualling Yard at Devonport, with which Scamp must have been familiar, and of whose clock-tower he seems to have been not unmindful. If any criticism is called for, it must be the ungenerous one that the building is of an almost unnecessarily monumental character for its utilitarian purpose. But stone is plentiful in Malta, and labour cheap, and no one, looking across the Grand Harbour at the Bakery which was built to supply the Mediterranean fleet with bread and biscuit, could wish that the Admiralty architect had contented himself with a meaner structure in an island where splendid building has been the tradition of its military masters since the days of La Vallette.

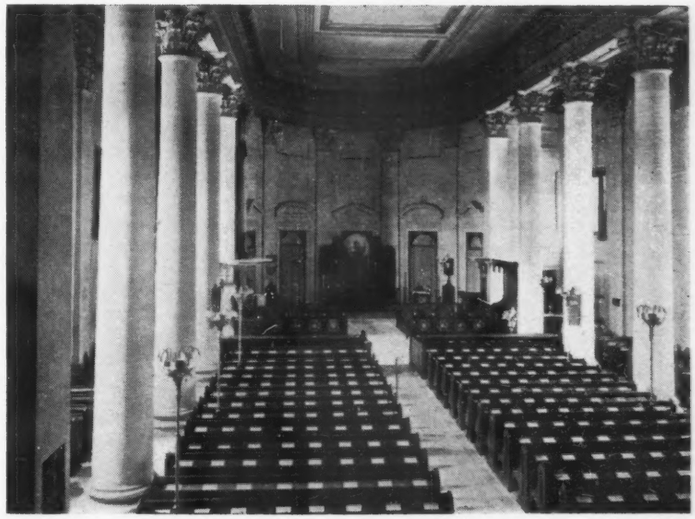
Meanwhile the foundations of the English church were being relaid, and at the northern end the Ionic portico was once more raising its columns opposite the Doric entrance of the Auberge d'Aragon, now the British Institute. The church, as originally planned, lay roughly north-east to south-west, with the altar towards the south, until in 1842, by an unfortunate piece of ecclesiastical pedantry on the part of Dr. Tomlinson, the newly appointed Bishop of Gibraltar, the interior was entirely replanned in order to give the altar a more correct orientation. The organ-gallery was removed to the opposite end of the church, and in its place a sanctuary was contrived by the expedient of an apsidal continuation of the main arcade in the form of a screen-wall with Corinthian pilasters and pedimented recesses for the display of the Ten Commandments, Creed and Lord's Prayer.† Notwithstanding this architectural *volte-face*, the interior is undoubtedly one of the most successful of all English-built neo-classical churches, and there remains only the anomaly of a portico without an entrance—an unfortunate incongruity which has, however, the deliberate precedents of Inigo Jones's St. Paul's, Covent Garden and Hawksmoor's St. Alphege's, Greenwich, and a contemporary parallel in St. Thomas's, Stockport (1822–5), George Basevi's Grecian masterpiece.

The tower, which is inspired by that of St. Mary-le-Bow, is, like its original, detached from the main body of the church, and stands in a prominent position on the edge of the Marsamuscetto Harbour, where it forms one of the principal landmarks of Valetta. Scamp, who was wholly responsible for

* His first architectural work, which brought him to the notice of Wyatville, was the Assembly Rooms at Ilfracombe. While working at Windsor he designed the cheap brick church of St. Mary's at Upton (1835–1837), now part of Slough, in a Romanesque style described as "Lombardic." The church has since been rebuilt to the designs of J. Oldrid Scott.

† Since removed, these were "elaborately and beautifully illuminated in the style of the period of Sir Christopher Wren," by the celebrated Mr. Fairs of Hanover Street, London.

THREE STYLES. The headpiece illustrates the basic Maltese contrast—Italian Baroque and English Victorian : the Sarria Church of 1677 and the Wesleyan Chapel at Floriana. Below are the exterior and interior of William Scamp's Anglican Cathedral.



this part of the church, wisely refrained from reproducing the upper portion of Wren's elaborate steeple, and substituted an octagonal stone spire which from a distance might be taken for Gothic, were it not for a series of circular openings framed by scrolls and surmounted by crowns, which provide a subtle link between the native baroque and this alien symbol of Anglican piety. It is, above all, this harmonious combination of the Greek revival and the English renaissance, this hint of the Gothic North with its subtle concession to the baroque South, which raise St. Paul's Cathedral to a high position among its ecclesiastical contemporaries, and make it so uniquely appropriate as the seat of an English bishopric in the Mediterranean Seas.

The gratitude of the royal foundress was signified by the gift of an inscribed candelabrum from Windsor Castle which was presented to the Admiralty architect on his return. The appointments of the new church were, however, far from meeting with the approval of its congregation, and it was not long before there were complaints in the press that "a brazen lectern" and other alterations "principally of a Puseyistic character" had made their appearance. Moreover, as a cathedral, or at least as a collegiate, church—its exact status was as much in dispute as its furnishings—St. Paul's was scarcely less unacceptable as a place of worship to the nonconformist section of the English community than the churches of Rome which lie so thick about it. And so in 1856–7 a Presbyterian church was built in Valetta, whose flimsy buttresses and attenuated tracery betray the hand of some architect who had heard neither of Augustus Welby Pugin nor of the Cambridge Camden Society. Of the same date is the Garrison church of St. George in Castile Square, upon whose "correctness of rule" the Royal Engineers, its architects, were complacently complimented by the *Times of Malta*, though it is impossible to find anything to admire in this arid specimen of Victorian classic, an exact replica of which was economically erected for the use of the garrison within the Cotonera Lines on the other side of the Grand Harbour.

Two more churches, still less to the credit, but no less characteristic, of English architecture, must be mentioned. Exiled among the flat roofs of suburban Sliema, the steep-pitched roof and lancet windows of Holy Trinity church (G. M. Hills, 1866) proclaim their allegiance to the Gothic Revival, and challenge with cathedral glass and pitch-pine pew the marbled walls of its Catholic neighbours. And in Floriana, the dark and cavernous portal of the Wesleyan Chapel, a battlemented box of stone, stands opposite the circular Sarria Church of the Knights (1677)—the latter as urbanely domed, and as conscious of its classic self-sufficiency as the other is out of date and out of place.

In Malta the military and the ecclesiastical have always gone hand in hand. In the troubled days of the seventeenth century a Dominican friar provided the knights with their first modern fortifications, and in the more peaceful ones of the nineteenth the Royal Engineers turned their hands to church-building. Of purely civil architecture there was little, until, under the administration of Sir Gaspard le Marchant the Royal Opera House (1861–6) was erected to the designs of E. M. Barry, architect of the English Royal Opera House in Covent Garden. The interior was reconstructed with an additional tier of boxes after a fire in 1873, but the exterior, with its Corinthian portico to Strata Reale, the main street of Valetta, its friezes of musical instruments, and its keystones carved with bearded masks, remained intact until the aerial bombardment of 1942. Today, with its broken cornice and shattered columns, the building looks even more like a relic of classical antiquity than its architect can have intended, for in this richly-decorated building in the golden-brown stone of Malta, Barry's use of the full grammar of classic ornament had produced an effect of Italianate splendour, which for those who knew his English works, fully atoned for the smutty and uninspired facades of Charing Cross and Cannon Street stations.

E. M. Barry's Opera House has not been the only casualty among the works of English architects in Malta. The cathedral spire has lost one of the four pinnacles which stood at its base, and some of the cornice was wrenched from the top of the tower, while Scamp's Naval Bakery, in the heart of the Dockyard Creek which was for so long the bull's eye of every raid, has been shorn of one of its turrets. But these can be restored, and even the Opera House may yet be rebuilt with the aid of the £10,000,000 which a generous government has given for reconstruction in Malta.

WAR DAMAGE IN MALTA

Those who are concerned for the fate of the better-known architecture of the Order of St. John may care to know that of the seven Auberges which survived at the beginning of the war, those of Aragon and Provence (now the British Institute and the Union Club respectively) are, with the Manoel Theatre (1731) and the Royal Malta Library (1785-96), quite undamaged, while the Auberges of Castile, Italy and Bavaria, though all more or less seriously damaged, can be restored (in the case of the Auberge d'Italie reconstruction has indeed already begun). Two Auberges, those of France and Auvergne, have been almost totally destroyed. The Grand Master's Palace, the Infirmary of the Knights, the Castellania or Law Courts, and the University have all suffered more or less severely, though in no case has the damage been irreparable. The conventual church, now the co-cathedral, of St. John, has lost both its little pyramidal western spires, and the northern cloister one or two bays of its vaulting, but the main structure, with its splendid series of mural monuments and inlaid marble slabs, its coffered aisles and stuccoed walls, and above all the great expanse of its vaulted roof, painted with the life of St. Paul by Mattia Preti, the accomplished "Calabrese," and flanked by an engaging series of attendant monks and scribes, the ingenious *trompe l'œil* of whose gestures would persuade the visitor that they, no less than himself, are living witnesses of the eternal drama above—all this has miraculously survived in the heart of a much-bombed Valetta. The old capital of Mdina or Città Vecchia, with its medieval Norman houses, and its baroque cathedral of St. Paul, has scarcely been touched, and few of the village churches, with their brown cupolas and elaborate western facades, have been damaged.

H. M. COLVIN

DESIGN REVIEW

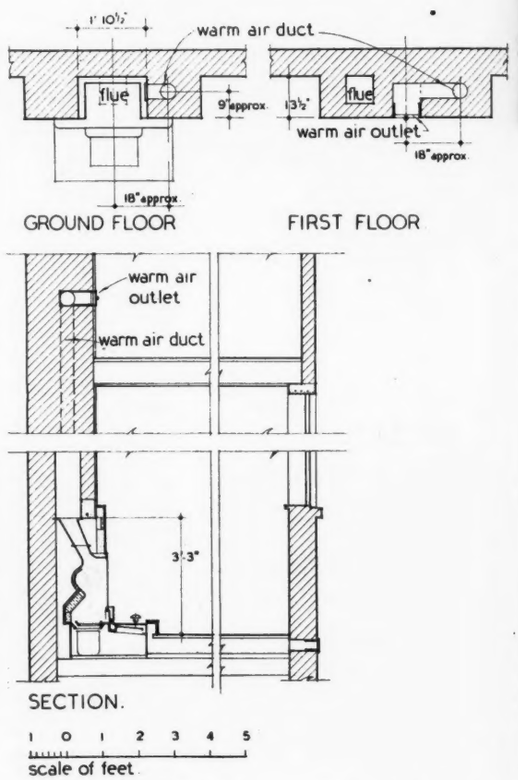
for a discussion of new designs, new materials and new processes, with a view to developing the essential visual qualities of our age: functional soundness, the outcome of science, and free aesthetic fancy, the outcome of imagination.

THE OPEN COAL FIRE IMPROVED

The domestic open coal fire with the smoke it develops and the work it entails for housewives is one of the worst public and private nuisances kept up by thoughtlessness and love of tradition. What should be done about it? There are only two answers. The open fire can be abolished, or it must be improved drastically and at once. There are good reasons—though they are psychological rather than strictly utilitarian—against abolishing the open fire. In a northern country such as Britain it is a sure substitute. It makes warmth visible to the eye. So if its grave disadvantages can be removed, the vast majority of housewives would probably vote for it instead of more reasonable but less cheering methods of heating.

The illustrations shown here are of fires produced by the British Coal Utilization Research Association. The problem they had set themselves was to design an open coal fire giving out all the heat required, but possessing the advantage of a slow rate of burning to save coal, a fire which would burn continuously to eliminate daily lighting, and one with ash removal once a week instead of every day. Hot air from the fires thus evolved can be conveyed through ducts and used for warming other rooms either on the same floor or above, and the fires can be used also for water heating. As this new type of coal fire burns day and night, a really constant economical supply of hot water can be assured without the necessity of making up the fire specially, provided of course the hot water system of a house is well planned. If necessary the fire can also be used for cooking. The housewife cannot afford to wait a long time, especially in the morning, to boil the kettle. With the continuous burning fires, there is almost instantaneous heat available even after the fire has been shut down for several hours.

Finally, research is going on in conjunction with these fires, aiming at the utmost reduction of smoke emission in spite of the use of ordinary domestic coal. The methods evolved hinge, needless to say, on scientific draught control.



148a *Drawings of the Hales fire designed for the British Coal Utilization Research Association. The following pictures 148b to f show its advantages.*

Scamp's Steam Bakery of 1841 is an outstanding example of sound utilitarian yet dignified architecture, Edward Barry's Opera House of 1861-65 a grander Victorian showpiece than is to be found amongst London theatres. In its present shattered state—see the picture on the left—it looks more spectacular than ever. (Photographs by G. A. Cloud.)

b *The Hales fire completely closed up for the night.*

c *Opening up the Hales fire is rather like opening a roll-top desk.*

d *Open; the grid above the ash-box is removed and the box pulled forward by a long handle ready for ash removal.*

e *The ash-box taken out for the weekly ash removal.*

148f *After the ash-box has been emptied it is taken back to the fire and placed into position again. The grid lies on the left ready to be put on top of the box.*

DESIGN BULLETIN

149 *Pottery by Joseph Bourne, of the sturdy bodies and smooth easily cleaned shapes which had characterized quite a number of designs introduced by this firm during the years preceding the war.*

DESIGN REVIEW

next instalment

post-war cars

Three Stages of Swedish architecture

In the recent Swedish publication on that country's architecture of the thirties (reviewed on the facing page), Nils Ahrbom traces three phases since 1930. The three buildings here, irrespective of their precise dates of completion, serve well to illustrate his argument. The buildings are 1, a Secondary School for Girls by Ahrbom and Zimdahl, finished in 1936. 2, the Gärdet Cinema by Sture Frölen and 3, part of the Chapel and Crematorium at Malmö by Sigurd Lewerentz, finished in 1945. These are the phases as Ahrbom sees them : "the first dominated by new experimental forms, and by the discipline of functional research and social statistics ; the second—which might appear to the purists a betrayal of some of the principles of the first—bringing a greater coming-to-terms with traditional forms, a search for colour and texture, and a more romantic sympathy with life ; the third, following the war, in which social and experimental trends come to the fore again, but crystallised into mellower and more acceptable forms."

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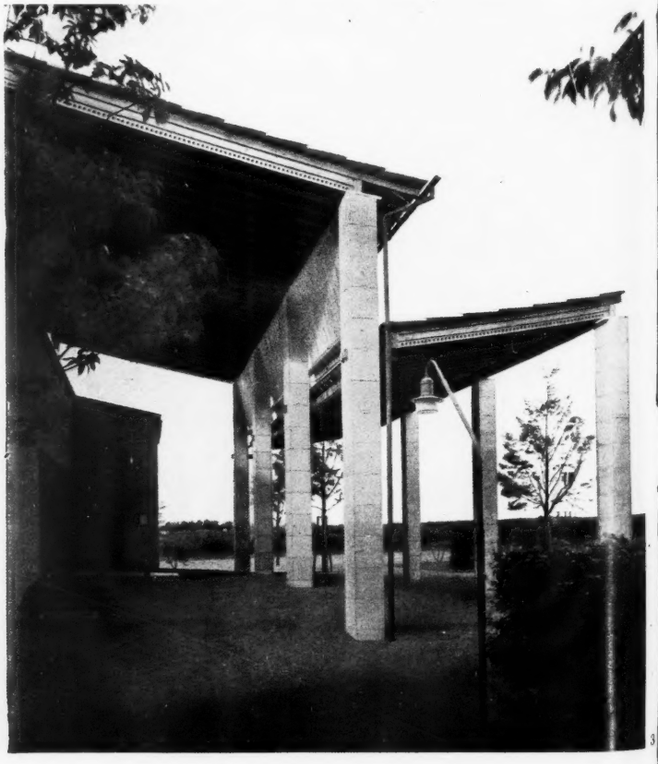

3

BOOKS

Swedish Lessons

TRETTIOTALETS BYGGNADSKONST I SVERIGE (Swedish Architecture of the 30's), S.A.R., Rabén och Sjögren, Stockholm 1943.

IN the autumn of 1942, Svenska Arkitekters Riksförbund organised an exhibition of new architecture in conjunction with Denmark: the Swedish material has been published in an excellent 180-page record, in picture, plan and description, together with some of the lectures given then—by Erik Lallerstedt on Carl Westman, by Ivar Tengbom on his own development, and by Nils Ahrbom on the new course of Swedish architecture for which 1930 was such a significant date.

Already in the first decades of the century Sweden had in reaction to her own brand of Victorian brought forth a movement, led by such men as Westman, Östberg, Lallerstedt, Tengbom, which by its balance and charm had established her as one of the focal centres of architectural development. 1930, the date of Asplund's work at the Stockholm exhibition, marked the beginning of the more recent phase, in which the ideas of functionalism and of social architecture were absorbed, and a Swedish brand of specifically "modern" architecture evolved.

Ahrbom sees three phases since 1930: the first dominated by new experimental forms, and by the discipline of functional research and social statistics; the second—which might appear to the purists a betrayal of some of the principles of the first—bringing a greater coming-to-terms with traditional forms, a search for colour and texture, and a more romantic sympathy with life; the third, following the war, in which social and experimental trends come to the fore again, but crystallised into mellower and more acceptable forms.

As a result of Sweden's neutrality during the war—whether we condemn it or recognise its deeper usefulness—she is practically alone among European countries in not having to squander her resources on the bare reconstruction of minimum accommodation. Ahrbom sees in this an opportunity and a responsibility, in which Sweden can at the same time help her neighbours, both materially and by example, to house themselves quickly and well in the straits of penury in which they now find themselves, and also use her degree of leisure in developing further the architecture which will be the right of man when a new normality is achieved.

So one might bracket Sweden and the U.S.A. together on two scores: Neither has suffered sufficiently from the war to prevent building at home, planning and experimenting, and extending her markets abroad, without the restrictions of poverty and urgency. Further, we can see in Sweden and in the U.S.A. a parallel development of the best modern tradition of temperate-latitude architecture, one which can use brick cleanly and boldly, which is not afraid of the colour white, and whose cool sharp detailing comes from a long apprenticeship in timber. Part of this parallel may date back not only to a similarity of resources, but to a partial identity of tradition, especially in the Scandinavian Middle West. Carl Westman came back from America in the nineties in deep disillusionment—but local potentialities were hardly very evident anywhere at that time.

We are having to admit now that though the functionalist phase of the thirties was an essential one, it was formally pure at the expense of liveability, and that its romanticism was a calligraphic one whose literary background was real to few of the people it was intended to serve.

Of the Big Three who are dominant at present, I fear we have not been big in the architectural sense for some time. By a combination of dull environment and dull visual taste we have been condemned to rely on others to set the pace. And the U.S.S.R.? If we are frank we shall have to admit that it is impossible to be sympathetic to its present aspirations in architecture. Good modern architecture tends to find its expression where there is democracy—perhaps not in its narrow meaning—but where there is social optimism, a sense of participation of the individual in the community, and family life enjoying an expanding standard of living. The large number of excellent Swedish public buildings, town theatres and schools selected by competition is a proof that a vital modern style has found a natural soil in which to grow.

Here a good new architecture is accepted by the public as the appropriate thing, both because something fresh is not necessarily something unfamiliar and hard to assimilate, and also because the architectural texture is softened and enriched by visual fantasy on a human level: by the charm of striped awnings and diapered surfaces, by figured glass, graceful railings, inviting balconies, by the appeal of natural materials like wood contrasted with the more tenuous detailing of glass and metal, and by the excellence and informality of siting and landscaping.

Only a modern-architecture-PLUS will sell itself to the public, and it is largely to Sweden and to the U.S.A. that we now have to look for our best prototypes. This book, which I discovered with pleasure on a visit to Copenhagen, is definitely indicated for a wider market in England: if it is not available there, it should be clamoured for.

MICHAEL VENTRIS

Can we afford Utopia?

THE REILLY PLAN. By Lawrence Wolfe. Nicholson & Watson. 6s.

YOU may laugh at the Reilly Plan, or feel that there is a catch somewhere; but you cannot pretend that there is nothing in it. Samuel Butler is in it, and more than a touch of the young Disraeli; Robert Owen is in it, and Ebenezer Howard; even Le Corbusier is in it, and certainly Jeanneret—with the village clubs which he designed during the war. Ideas from all of these and many more social reformers have been fashioned by Lawrence Wolfe into what he calls "a new way of life," and then, like characters in search of an author, have been placed on the doorstep of Sir Charles Reilly.

If Sir Charles was surprised at being named as the father, he nevertheless adopted his charge in a characteristically generous way. His sketch layout for the Woodchurch Estate in Birkenhead has now grown into a principle, and I should not be in the least surprised if it grew further, into a movement. It will not be Mr. Wolfe's fault if it fails to do so. The strange thing is, that in spite of having an architectural parent, the young idea is not yet worked out properly in three dimensions. It is still a social concept.

Its real importance for the town planner lies in the emphasis it gives to the small social group as a necessary middle stage between the family and the community. The family has its hearth, and the community its centre, and the symbol representing this intermediate grouping is the new version of the "village green."

The green is playground and meeting place in one. It is the extension of the living rooms of the forty or fifty houses which face on to it. It is a pedestrian street; and forms—with its Nursery School—a cell in the town organism. Whereas the idea of the residential neighbourhood, as now current, is based on the elementary school and the community centre, that of the village green is based on the nursery school and the playground. It follows that whereas a residential neighbourhood comprises a population of five to ten thousand, a green caters for about two hundred. But when four or five greens are gathered together, and the population concerned is of the order of a thousand, they are equipped according to the Reilly Plan, not only with a community centre, but with a centralised Meals Service; that is to say a kitchen, cafeteria and restaurant from which food and drink can be despatched at any hour of the day or night in insulated containers, to any or all of the 250 houses in the unit.

After the greens the Meals Service is the most essential element of the plan. Mr. Wolfe claims that it would relieve two-fifths of the houses at least from the need to have kitchens, or any kitchen equipment beyond "a small electric cooker somewhere in a cupboard." And as all houses are served by the Garchey system of refuse disposal, and are provided with warmth and hot water by a system of district heating, it is argued that housing costs would be substantially reduced, while living conditions would be enormously improved.

On these two features, the Meals Service with its attendant relief for the housewife, and the Village Green with its wide range of domestic-social services, Mr. Wolfe builds an elaborate theory of the communal as compared with the "isolationist" way of life. On the chapter in which are described the defects of suburban isolationism, most thinking people will find themselves in agreement. It is only during the war that we have come to a general recognition of the unmerited drudgery which has been the housewife's lot for so many years in this country. Far too often the pride which makes her anticipate the task with pleasure, helps later on to forge the very shackles that bring her near to slavery. This has its unfortunate effects upon the health, the social adjustment and the general education of the children. And although, in making the case against the self-contained family house, Mr. Wolfe indulges a little in reformer's exaggeration (as when he says that only a fraction of one per cent. of schoolchildren enjoy positive health in the full sense, and that all of them, even at five years old, "suffer from self-consciousness and an utter lack of experience in social adjustment and co-operation"), nevertheless the main heads of his indictment are serious and real.

No one can dispute the facts of child fatalities on the roads, of juvenile delinquency, of the unfortunate effect of delayed marriages on the birthrate, of the problems of the old and solitary; and everyone in his own family circle is familiar with drudgery in one form or another, whether it be homework, minding the baby, cleaning, washing-up, or preparing meals which are simply a mechanical process of feeding, and provide no occasion for company nor conviviality. To the extent that the Reilly Plan puts us into the frame of mind to alleviate these burdens and do away with these disasters, it is an admirable conception, and should be a powerful weapon in the armoury of the social reformer.

The real difficulty about the Reilly Plan is not an objection in principle, but a doubt as to how it can be geared into our national economy. It represents an enormous increase in our standard of living, and presupposes both full employment and an increase in domestic consumption. This applies both to materials and to manpower. For instance, district heating is regarded in the Plan as a *sine qua non*. There is, of course, everything to be said for it. Carried out on a large scale, by means of central heating stations, and on a layout designed to make the maximum use of its benefits, district heating would save coal, keep clean the atmosphere, provide hot water and space heating efficiently and conveniently, and save an enormous amount of household drudgery. But the economy of district heating is a large-scale economy; that of the man who banks on the mild climate in Britain and saves fuel by not heating his house at all, is a small-scale economy. The one must be planned for and paid for—not only by an increase of rent, but by an increase of capital goods and mechanisation. The other concerns individual standards of comfort and family incomes. We are quite right to make the luxuries of one generation the necessities of the next, but if we assume that this can be done without a corresponding progress in public morality, public administration and the productive capacity of nations, we are apt to get out of context, and to run the risk of having excellent ideas branded as unworkable when they are really running slightly ahead of time.

The Reilly Plan postulates all sorts of improvements, communally organised. Not only metered heat and hot water on tap, but meals delivered to the doorstep, nurseries, allotments, health services, guest rooms, entertainment space, workshops, games pitches and every kind of social equipment on demand. These requirements, if they are to be efficiently met, will call for a prodigious array of specialist as well as voluntary services. (A glance at the organisation and personnel of the Post Office will give some idea of the number involved). We should have to get right away from a world in which, despite the demands of wartime service and the enrolment of women in industry, we are short of nurses, of teachers, of shorthand-typists, of dentists, and even of civil servants—though this fact always raises a shout of derisive laughter in the House of Commons. And we should have to support an economy in which these and similar occupations in the public, municipal or state service, reached perhaps half the total of insured workers. Productive capacity is going up—but it will be some time before we can lower the employment figures in manufacturing industry to the point where they would allow the necessary quota of professional and specialist services demanded under the Reilly Plan.

Meanwhile, what of the voluntary services? The gist of Mr. Wolfe's argument is that at least some of the time and energy saved by the members of what were previously isolationist families, will be given voluntarily—even selfishly—to help maintain a wide range of social services. I am sure this is the right outlook; in fact the only possible one, unless we face the grim truth as H. G. Wells has faced it in his last book. But it is certainly a hopeful outlook; and we should have to find a deeper and more compelling motive than the satisfaction of running a village green, to overcome the isolationist and the anti-social traits in our own character. We should get tired of the Meals Service, even if its standard were that of the Savoy Hotel, quicker than we should of home cooking; we should grumble at doing our turn at the nursery or the elementary school, or the hobbies room, or the public library, just as we used to grumble after a time at firewatching during the war. To steer a constant course we should need a high proportion of active but self-effacing citizens who thought deeply about the problems of organisation and management, and who were actuated by something more than an

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automatic and selfish urge towards co-operation.

Which makes me wonder why Mr. Wolfe devotes one of the earliest chapters of *The Reilly Plan* to ridiculing documents such as the *Housing Manual* and the *Dudley Report*. It is easy, and quite the fashion, to poke fun at Government publications; but in this case there seems to be little point in it. The Plan is assisted rather than controverted by principles such as those put forward in the section of the Dudley Report dealing with layout; and the Report itself was written by a voluntary committee composed of people with a good record of public or professional service. Surely the quickest way to progress would have been to supplement these reports and not to oppose them. After all, any document concerned with departmental administration has to deal with people as they are; while the Reilly Plan—quite rightly—deals with people as they should be.

In spite of this difference over tactics, I cannot help hoping that someone will have the courage to work out at least some of the features of the Reilly Plan in practice. It is a lot to ask at a time when the first urgency is to put a roof over the heads of hundreds of thousands of houseless families. But it is often the fact that those who plan farsightedly achieve more in the immediate future also, because they are inspired by something more compelling than haste to abate a crisis. The plan itself will need a great deal of consideration if it is to avoid becoming a series of dead ends with untidy patches behind the greens. Otherwise the isolationist family will be replaced by the isolationist group.

STANISLAS T. SCOTT

Evidence of the Divine

THE LEAVES OF SOUTHWELL, by Nikolaus Pevsner. Photographs by F. L. Attenborough. King Penguin Books. 2s.

THE sculptures of the Chapter House at Southwell, dating from the last years of the thirteenth century, are without doubt the most remarkable naturalistic sculptures of plants and foliage that remain in England. The identification of the species represented has already been undertaken in an admirable article by the late Professor C. S. Seward, but in Dr. Pevsner's charming little book the sculptures for the first time find adequate illustration.

Their beauty is hardly less striking in the admirable photographs than it is in the round. They have in them an element of surprise, for such carvings appear as a phenomenon in the English art of the time. The "stiff leaf" tradition in our country prevented that gradual unfolding of naturalistic sculpture from classical roots, which is one of the most amply documented of the developments of sculpture in medieval France. Indeed, the inspiration if not the workmanship of the Southwell carvings [2] is in some measure an alien thing; these plants have grown not in Nottinghamshire meadows, but in the stone of Rheims Cathedral, where they appear nearly fifty years before Southwell Chapter House was built. This gap in date, together with other arguments adduced by Dr. Pevsner, suggests that they were carved by an Englishman who knew Rheims rather than by a sculptor who had wandered from Champagne to England. For this reason his use of foliage is subtly less traditional than that of a sculptor of France, where few but the very latest capitals have altogether renounced the memory of the Corinthian capital. Even in the capitals of the great piers of the nave at Rheims, dating from the middle of the thirteenth century, the trails of leafage with which they are overlaid burgeon with a regularity that creates the illusion of a series of crockets; even in the slightly later capitals at Auxerre [1] there are leafy crockets behind the foliage.

When such naturalistic carving is considered, as that at Southwell inevitably is in any study of purely English art, as a suddenly appearing phenomenon, it is tempting to associate it (as Dr. Pevsner does here) with the equally dramatic appearance of St. Francis and his followers. But if such sculpture be studied on its native soil of France, it is soon evident that it appears much earlier and is an expression of Benedictine rather than Franciscan sensibility. The roses and leafage of the mouldings on the South door of the Abbey of Saint Denis are but the final flowering of a monastic growth. It is neither in Franciscan sentiment nor in what Dr. Pevsner calls a "new worldliness" that the reason for the inclusion of such natural things in church ornament should be sought, but rather in the wider philosophy of such mystics as Hugh of St. Victor, who saw even in such humble things the evidence of the wisdom of God. "Est verum et evidens divinae sapientiae argumentum, quod omne genus similesibi procreat. . . . Vide folium, quomodo serratis dentibus per gyrum distinguitur, quomodo intrinsecus productis costulis luc illucque indexitur; numera unum, numera aliud. . . ."

JOAN EVANS

Planning Prospect

SURVEY BEFORE PLAN. By E. G. R. Taylor. Lund Humphries. 6s.

THIS book is a plea for national planning. Or more precisely, for planning in the interest of the consumer. The time of *laisser-faire* on the producer side has long passed, with combines, rings, cartels, trusts and whatnots ruling more and more our destinies. In this, its broader, sense, planning is an integration of physical, political, economic, and financial, as well as social and cultural organisation of the nation. The participation of the individual in national planning by putting forward suggestions and controlling the carrying out of plans is the foundation of democratic government. The organs of this democratic control are Parliament and the elected local authorities. This does not preclude the drawing up of plans being in the hands of technicians in various fields, irrespective of local boundaries.

The general approach to the problem is what could be termed "neo-liberal": Planning? Yes! but by "general consent" rather than "controls." This sounds ideal, but is it feasible? Nobody suggests controls for controls' sake, but then nobody suggests planning for planning's sake. General consent is of course necessary, i.e., the electorate gives a mandate to its elected Parliament; but once Parliament has passed a Bill, no further "general consent" is necessary. The only safeguard for the carrying out of the executive's orders is compulsion.

One can agree with so much in this book that criticism is put forward with regret. Professor Taylor quotes two examples of successful planning (page 50: The T.V.A. experiment, and planning in the U.S.S.R., referred to as Russia). No disagreement about this! But for the information of Professor Taylor: The N.E.P., New Economic Policy, was started by Lenin in 1921 as a measure after the period of imperialist intervention. It was gradually abolished and died a "planned death" at the beginning of the first five-year-plan in 1928.

It is not the "first ten years of planning" which impoverished the Soviet State, but a four years' war (1914-1918), the rebellion of generals and admirals backed by foreign intervention. As a matter of fact, when the first five-year-plan was put into operation (in 1928), although the greater part of this plan was concentrated on the production of capital equipment, the general standard of living rose constantly.

The general presentation and printing of the book are good.

The use of a mercator projector for maps on pages 18, 19, and 48 is regrettable, especially for maps on page 48 where the comparative sizes of the U.K., U.S.A., and U.S.S.R. are of importance. A conical projection would have been much more suitable. I found the symbols on map 36 difficult to understand, and much too tiny on the map for clearness.

The use of shapes of different sizes to denote population numbers is a very out-of-date method of pictorial statistics. This applies to the circles on page 36 and to the figure of the unemployed on page 20. (Why has the poor man grown so much while on the dole?) The jazzy presentation of photos on page 31 struck me as in curious disharmony with the rest of the book.

There are some statements in the book like the frequent quotation of sayings by the Prime Minister of the past Tory Government, which seem out of date to-day. The idea of apologising for cities and the efficient location of industries is another odd characteristic and common to other books on planning: "It should not of course be a foregone conclusion that the growth of great cities is in itself a bad thing or that it necessarily means overcrowding." (Page 38.)

The frequent reference to the elimination of "cut-throat" competition is also odd. I do not quite understand how Professor Taylor would suggest in a *not* totally planned community, that prices should be arrived at, if not by price fixing rings on the one hand or straightforward "cut-throat" competition on the other.

There is a good bibliography at the end of the book: a glossary would have been useful.

E. GOLDFINGER

Farm Buildings

FARM BUILDINGS (POST-WAR BUILDING STUDIES No. 17). By a Committee appointed by the Minister of Agriculture and Fisheries, H.M.S.O. 3s.

UP to very recently the best comprehensive book in English on farm buildings was dated 1864; and a very remarkable book it was—written and illustrated by Bailey Denton. However, it is, needless to say, somewhat out of date now in a country that, in two wars, had to improvise a mechanised agriculture with the remnants of solid Victorian building equipment, supplemented by haphazard adaptations, some new steel Dutch barns, and a small number of new additions of uncertain standards.

Because of the lack of concise and comprehensive information or training, the architects of Britain have been quite unable to make a real contribution to farm buildings, with a very few notable exceptions such as Mr. Edwin Gunn. Thus farmers and land-owners as a class have gone on living under the impression that to employ an architect is a luxury resulting in showy but ineffectual buildings at a cost quite out of proportion with economic returns.

The appearance of the long expected report by the Committee under Mr. Engledow, coming so shortly after the second edition of Mr. Edwin Gunn's book on farm buildings, effectively fills a gap in the chain of information required by the practising architect or the farmer. The preparation of the report took three years, not really a long time to produce a text-book in a field where expert opinion differs on almost every subject, and where important developments are taking place all the time, without any attempt at scientific controlled experiment. In fact, the committee method, which produces an enormous amount of free evidence, laboriously prepared by experts, institutions and *ad hoc* committees is the only—and a very ingenious—way of getting together a text-book in so short a time.

The position, as it appears from the report, is that the building equipment of most farms is out of date, and that renewal is not only necessary but will be forthcoming in due course, if the farming industry is assured of a reasonably prosperous future. This condition seems to be fulfilled. However, there is going to be an interim period of makeshift and improvisation, during which our farms—to judge from the photographs in the report—will appear much like the hovels of the Basuto tribes, with walls of straw bales and rough poles, and roofs of straw bats, thorns and brushwood. But once the situation of the building trades allows the allocation of priority labour and materials to other buildings than houses, there should be a wide field for architectural activities, not only with a view to new buildings, additions and alterations, but also to master plans for the co-ordination of all parts of a farm old and new. For this work, architects need a certain amount of training which should implement the habitual vagueness of the farming client's instruction.

For the interim period the Committee recommends the setting up of Advisory Stations with headquarters at the Ministry, and Provincial Advisory Centres, with an architect (not necessarily on a full-time basis), to advise on farm buildings, with the help of a panel of architects, builders, land-owners and agents, and farmers. Moreover, a number of Husbandry Experimental Stations are to be set up, which need new buildings, even if they are attached to existing institutions. Here again there are immediate and fascinating tasks for architects.

The Agricultural Advisory Service, under Mr. J. A. S. Watson, has already been set up, and there is no doubt that in the years to come there will be a need for a number of specialised architects and lecturers to train students in this field.

Meanwhile, the Farm Buildings Report gives an interim statement of the best current practice, arranged in such a way as to make reading easy, and beyond that definite recommendations for standardised factory-made farm buildings—an interesting extension of the present range of jobs considered suitable for prefabrication.

G. ROSENBERG

ANTHOLOGY

At Blomfield's

Mr. Blomfield (afterwards Sir Arthur) being the son of a late Bishop of London, was considered a right and proper man for supervising the removal of human bodies in cases where railways had obtained a faculty for making cuttings through the city churchyards, so that it should be done decently and in order. A case occurred in which this function on the Bishop's behalf was considered to be duly carried out. But afterwards Mr. Blomfield came to Hardy and informed him with a look of concern that he had just returned from visiting the site on which all the removed bodies were said by the company to be reinterred; but there appeared to be nothing deposited, the surface of the ground lying quite level as before. Also that there were rumours of mysterious full bags of something that rattled, and cartage to bone-mills. He much feared that he had not exercised a sufficiently sharp supervision, and that the railway company had got over him somehow. "I believe these people are all ground up!" said Blomfield grimly.

Soon there was to occur a similar proceeding on a much larger scale by another company; the carrying of a cutting by the Midland Railway through Old St. Pancras Churchyard, which would necessitate the removal of many hundreds of coffins, and bones in huge quantities. In this business Mr. Blomfield was to represent the Bishop as before. The architect said that now there should be no mistake about his thoroughly carrying out the superintendence. Accordingly, he set a clerk-of-works in the churchyard, who was never to leave during working hours; and as the removals were effected by night, and the clerk-of-works might be lax or late, he deputed Hardy to go on evenings at uncertain hours, to see that the clerk-of-works was performing his duties; while Hardy's chief himself was to drop in at unexpected moments during the week, presumably to see that neither his assistant nor the clerk-of-works was a defaulter.

The plan succeeded excellently, and throughout the late autumn and early winter (of probably the year 1865 or thereabouts) Hardy attended at the churchyard—each evening between five and six, as well as sometimes at other hours. There after nightfall, within a high hoarding that could not be overlooked, and by the light of flare-lamps, the exhumation went on continuously of the coffins that had been uncovered during the day, new coffins being provided for those that came apart in lifting, and for loose skeletons; and those that held together being carried to the new ground on a board merely; Hardy supervising these mournful processions when present, with what thoughts may be imagined, and Blomfield sometimes meeting him there.

FLORENCE EMILY HARDY (*The Early Life of Thomas Hardy, 1840-91, page 57*).

MARGINALIA

Compromised at Chessington

The LCC proposal to acquire five thousand acres of land, stretching from Chessington to the edge of Epsom and Ashtead commons, is a severe blow to all supporters of the Abercrombie plans for London. Not only is most of the land arable and pasture, but 800 acres of it were designated in the County of London Plan as an ideal open space for Londoners. The LCC Housing Committee maintains that the proposal is "a flexible interpretation" of the plan.

The answer to this was given in a forceful letter to *The Times* from A. M. Lupton, Chairman of the Executive Committee of the Housing Centre, in which he pointed out that:

"This is not a question, as the supporters of the scheme suggest, of a flexible interpretation of the Greater London plan to permit the acquisition of a part of the green belt ring to meet an immediate post-war housing need. The Council is asking for permission to ignore the fundamental principles on which the plan is based in order that they may erect a vast dormitory housing estate of the kind universally condemned as the worst feature of housing between the wars. Moreover, the site for this estate is specifically mentioned in the Greater London plan as the one, above all others, where further development should be prevented (paragraph 248).

"The plan is specific in its proposals for creating new towns outside the green belt area and for the controlled expansion of selected existing centres. It will be a disaster of the first order if through lack of legislation to give effect to the plan we are forced to abandon it absolutely."

The fact that 100 acres will be reserved for industry only makes the proposal more disturbing. The arbitrary sprawl of industry as well as housing will thus be encouraged, and no estate planning however neat can alter the fact. At present the main opposition to the scheme comes from the seventeen local planning authorities grouped in the North-East Surrey joint planning committee.

The New Crystal Palace

The result of the Crystal Palace Competition, which it was expected might provide a landmark in architectural history, was announced on May 3. Herbert Jackson and Reginald Edmunds of Birmingham won the first prize; Eric Lyons and Roy Christy the second; and Allan Johnson and Lanchester & Lodge the third. The assessors were: Sir Patrick Abercrombie, Dr. Charles Holden, Alister MacDonald, Sir Kenneth Clark and the Minister of Town and Country Planning. If the assessors' choice, which has caused a storm in architectural circles, establishes no landmark in architectural history, the reasons behind it certainly do. They were expressed in a statement by Sir Kenneth Clark: "The assessors have not awarded the prize to a great pioneer work or to a great masterpiece of architecture. A number of pioneer works have been submitted, but they are not workable. The functional buildings look nice but they do not fulfil their functions, while those on *beaux arts* lines do not look quite so nice but are exceedingly functional."

1951 Exhibition Competition

John Gloag's recent suggestion that a competition should be held for designs for a 1951 exhibition building, and that the age of competitors should be limited to thirty-five, in order to secure young, fresh and contemporary minds for creating a building that may be as outstandingly original as the Crystal Palace was in its day, has provoked an immediate reply.

Felix Goldsmith believes that John Gloag has disregarded three important points. "First, Joseph Paxton, the designer of the Crystal Palace, was, according to different authorities, either 47 or 50 in 1851; secondly, a competition open to all ages would not prevent architects under thirty-five years of age . . . from submitting designs; and thirdly, if a man of thirty-six is to be precluded from entering a competition because he is too old, then in, say, three years' time would-be competitors of that age can reflect ruefully that the past nine years—normally the first years of their active architectural career—have been spent in the army and in repair of war damage and other utility building, and that their opportunity has passed before it has arrived."

The most important point has been missed; it is that the under thirty-fives should be properly represented on the jury of assessors.

Engineering Achievement

Gone are the days when banquets were held in partially finished tunnels to pay tribute to the latest engineering achievement. Other branches of science now compete for popular acclaim, yet none has since provided the occasion or the incentive, perhaps, for such picturesque scenes as attended the building of the first Thames tunnel.

Now the story of another tunnel, a monument to twentieth century engineering genius, is released—six years after completion. It is the extension of the Central London tube from Liverpool Street due to be opened this year. The reason for the secrecy is the fact that, during the war, it was an underground aircraft factory and air-raid shelter.

Difficulties that had to be overcome included—taking the tunnel under the marshes of the River Lea and its tributaries; excavating only six feet under a junction signal box, built of fourteen inch brick walls on marshy land, and driving the tunnel eight feet under the Mile End Road without disturbing the traffic.

The most spectacular part of the railway will be the new station at Gants Hill, beyond Stratford, where, instead of the usual two tunnels, there is a single pillared and vaulted hall, 141 ft. long, 21 ft. high and 73 ft. wide. An excellent place for a banquet.

War Damage in North-West Germany

The following list should cover most of the major monuments not yet recorded in previous issues. It has been compiled from various sources reporting over the last six or eight months:—

AACHEN: CATHEDRAL Carolingian parts intact, Gothic choir some damage—TOWN HALL badly damaged.
ALTENBERG: ABBEY intact.
BENRATH: PALACE light damage.
BIELEFELD: TOWN badly damaged.
BONN: CATHEDRAL severely damaged—PALACE (UNIVERSITY) destroyed.
BRAUWEILER: ABBEY very little damage.
BRUHL: PALACE severely damaged, but the Neumann staircase survives.
BUCKEBURG: CHURCH intact.
CALCAR: TOWN badly damaged—ST. NICHOLAS a shell, but monuments and fittings survive.
CLEVE: TOWN almost gone—STIFTSKIRCHE severely damaged.
CLEMENSWERTH: PALACE survives, but loss of furnishings.
COLOGNE: CATHEDRAL damaged, but in the original parts not too badly. Fittings, etc., safe—ST. ANDREW'S not beyond repair—HOLY APOSTLES severely damaged, especially nave. East parts a little better off, but dwarf gallery and vaults gone—ST. GEORGE almost wholly gone—ST. GEREON burnt out, but repairable. Of the decagon one whole corner blown up—ST. KUNIBERT a total loss—ST. MARY IN CAPITOL severely damaged, right down into the crypt. The Romanesque doors survive—ST. MARTIN'S tower collapsed, but east parts lower down repairable—ST. CECILIA burnt out and blasted. Outer walls stand—ST. PETER an almost complete wreck—ST. PANTALEON severely damaged, but the tenth century west parts preserved—ST. SEVERIN very badly damaged—JESUIT CHURCH outer wall including west front stands. Roof and vaults gone—GÜRZENICH outer walls stand, statuary preserved. Interior burnt out—TOWN HALL only one wall and part of tower remain.
CORVEY: ABBEY intact.
DORTMUND: TOWN severely damaged—ST. REINOLD'S badly damaged—ST. MARY'S less damage.
EMDEN: TOWN almost a total loss, including GREAT CHURCH and TOWN HALL.
ESSEN: MINSTER Ottonian west end survives.
FALKENLUST: PALACE lightly damaged.
FRECKENHORST: PRIORY CHURCH intact.
GANDERSHEIM: ABBEY intact.
HAMBURG: ST. MICHAEL'S lightly damaged.
HAMELN: TOWN HALL ruined—HAMELSCHENBURG intact.
HERFORD: Moderate damage all round.
JEVER: Little damage. Wiemken Monument intact.
JULICH: Severe damage all round.
KNECHTSTEDEN: ABBEY intact.
KONIGSLUTTER: ABBEY intact.
LIPPSTADT: Intact all round.
MINDEN: CATHEDRAL nave and choir vaults destroyed, walls severely damaged,

facade less devastated—TOWN HALL damaged, but arcade intact.

MUNSTER: OLD TOWN almost entirely in ruins, including TOWN HALL, ERBDROSTENHOF and WEINHAUS—CATHEDRAL in ruins, especially the nave. Outer walls stand, Paradise intact—ST. LAMBERT badly damaged, but repairable. South door intact—ST. MARTIN'S almost a total loss—ST. LUDGER in a very bad state. Hardly repairable—DOMINICAN CHURCH badly damaged — ÜBERWASSER CHURCH nave vaults partly and choir vaults wholly down. Tower appears safe—PALACE burnt out.

NEUSS: ST. QUIRINUS virtually intact except for one of the three late Romanesque apses.

OSNABRUCK: OLD TOWN in ruins—CATHEDRAL damage seems comparatively light—ST. JOHN'S light damage—ST. MARY'S gutted.

PADERBORN: OLD TOWN almost entirely in ruins—CATHEDRAL spire gone, but interior surprisingly well preserved. Paradise intact—BUSDORF CHURCH only light damage — ABDINGHOF CHURCH burnt out and vaults collapsed. Crypt intact—ST. BARTHOLOMEW'S CHAPEL essentially intact.

POPPELSDORF: PALACE probably a total loss.

RATZEBURG: CATHEDRAL intact.

RIDDAGSHAUSEN: ABBEY intact.

SCHWARZRHEINDORF: CHAPEL only light damage.

SIEGBURG: ST. SERVATIUS light damage—ST. MICHAEL'S very badly damaged. Crypt collapsed.

SOEST: OLD TOWN badly damaged, though much less than the other centres of Westfalia—CATHEDRAL tower intact. Nave damaged, north aisle vaults down, south aisle vaults survive. East parts seriously affected, with wall paintings gone—ST. PETER'S very badly damaged, especially the east parts—WIESEN CHURCH repairable. Sculpture safe—MINORITES' CHURCH in ruins—HOHNE CHURCH only slightly damaged.

WESEL: TOWN in utter ruin—ST. WILLIBRORD severely damaged.

WIENHAUSEN: MONASTERY intact.

WOLFENBUTTEL: Intact.

XANTEN: ST. VICTOR in utter ruin.

The City of Manchester Plan, 1945

Manchester City, owing to its curious shape and relatively small size, cannot really be treated as an independent planning unit. The average width of the City from East to West is only about four miles, but from North to South the distance is nearer fifteen; the city centre overlaps the boundaries of Salford and Stretford; and the population is a mere 700,000. Mr. R. Nicholas's plan has been designed to fit into a broad regional scheme covering a total area of more than a thousand square miles, and in course of preparation by the Manchester and District Regional Planning Committee (of which Manchester is a constituent member), which is in turn represented on the South Lancashire and North Cheshire Advisory Planning Committee. Unfortunately it has not been possible to publish even the broadest outline of the regional plan without which one cannot value the main traffic and zoning proposals for Manchester City.

The report gives the impression of being based on more than usually complete survey work, and in some respects is very thoroughgoing in its suggestions for reform. For instance, it advocates the installation of district heating as the only effective method of dealing with the smoke nuisance, which is one of Manchester's most pressing problems. But the analysis undertaken to show the connection between block planning and good internal lighting conditions—a welcome innovation—seems to have been limited to sets of conditions which tend to conceal the need for radical change. The housing programme has been based on a sample survey designed to check preferences as between different types of accommodation and location. And a billeting survey taken in 1944 has been used, in conjunction with figures from the last three censuses to estimate the probable range of family sizes and the proportion of dwellings likely to be required in each group. Taken together the figures show a marked preference for houses with gardens, except among old people with no children, 80 per cent. of whom prefer flats. It is estimated that the average size of family which was 3.5 in 1944, will, unless present trends are reversed, have fallen to 3 by about 1966. Densities recommended for Manchester are set out in terms of dwellings per acre, and vary from 18.5 in heavily built-up areas to 6.8 in areas of open development. In terms of people per acre the corresponding figures are 64.75 and 23.8. Compared with densities proposed for the County of London these figures are very low, though the proportion of the existing population to be displaced is only slightly higher—136,000 out of 700,000 for Manchester City, as compared with 600,000 out of four and a half millions for the County of London. No proposals for accommodating the overspill are contained in the report. Alternatives are being considered by a Joint Committee of the Lancashire and Cheshire County Councils, and the Manchester, Salford and Stretford Corporations.

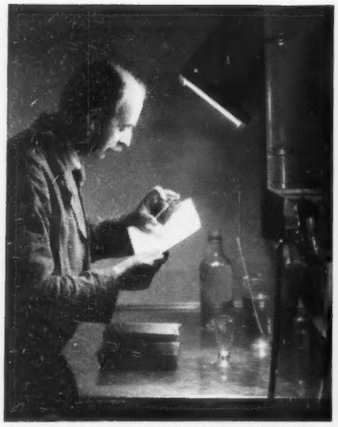
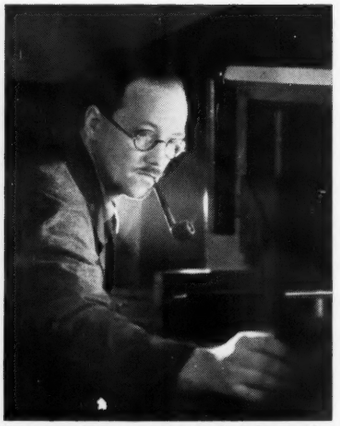
Plastic Bar

An all-plastics buffet car is running on the Southern Railway's *Golden Arrow*. It was a Pullman coach, and has been re-designed, using Warerite laminated plastics. The settle in the foyer is upholstered with woven asbestos in pink with a grey pin stripe; the foyer walls are of the same material but in grey with a pink pin stripe.

In the bar the two colours alternate in sheets each 3 ft. 6 in. wide. For the wall panels the material is pressed up in the Warerite sheet during manufacture. Richard Levin, a member of the industrial design unit of Bakelite, of which Warerite is an associate company, was responsible for the design. A drawing by the designer's wife, running the length of the 20 ft. bar-top, shows an early locomotive and carriages, filled with passengers, with a dog chasing along behind. The original drawing was made on special impregnated paper supplied by the plastics manufacturer and pressed up into the laminated plastics sheet during production.

The general effect is excellent and should be a good influence on the interior design of the long-awaited new rolling-stock for our railways.

[continued on page lxvi

Last month the end of the Dell and Wainwright partnership was announced, owing to the retirement of Mr. Dell. For the past sixteen years they have been the official photographers of this REVIEW. *Above, left, Mr. M. O. Dell, and right, Mr. H. L. Wainwright.*

continued from page lxiv]

Progress of Social Service

The Annual Report of the National Council of Social Service begins by tracing briefly the history of the Council since its foundation in 1919. It emphasises that "the dominant idea underlying its work has been the promotion of an effective partnership between the machinery of Government and the voluntary activities of the community."

Outstanding advances are recorded in the development of voluntary social service in the countryside. Before the war, over 600 Village Halls were built with assistance from funds provided by the Carnegie United Kingdom Trust, and the Treasury, through the Development Commission. Since the end of the war there has been a great revival of interest in Village Halls; the Carnegie Trust has set aside £100,000 over the next five years to continue their assistance, and the Development Commission has recommenced its aid. The scheme has been correlated with the development of Community Centres, and over a thousand new village hall schemes are already under way.

The campaign for the revival of the Parish Council, the smallest unit of local government in the country, has met with success, and the proposal for a National Association of Parish Councils will shortly be implemented.

Under the scheme for aiding Rural Industries, £75,000 of equipment has been supplied during the war to 3,200 village craftsmen.

The Rural Community Councils have continued to provide leadership to their counties over a wide range of activities, including education, music and drama, rural industries, after-care and health services.

The Citizens Advice Bureaux will go on in peace-time. A careful examination has shown that the need for their services is as great now as it ever was in time of war, and a National Conference addressed by the Minister of Health in 1945 confirmed this view.

A development which is noted in the Report is the tremendous enthusiasm all over the country for Community Centres. Emphasis is laid on the importance of the Community Association as a vigorous representative organisation reflecting the life and interests of its neighbourhood. A National Federation of Community Associations has been formed which will focus these organisations on a nation-wide scale. The National Council is pressing forward with its task of encouraging local authorities to provide adequate premises for neighbourhood life.

Mr. St. John Hornby

Mr. St. John Hornby, who died during May, was one of those rare individuals, the successful business man who took his love of the arts further than connoisseurship. Not content merely to enjoy his fine collection of mediæval and renaissance manuscripts, he installed in his private house a press for the printing of the books he liked best in the manner he thought most fitting. The Ashendene Press was from the first a personal venture deriving from the owner's natural leaning towards craftsmanship. He collected round him binders, illuminators, and calligraphers whom he inspired and commissioned. He secured a special type from Sydney Cockerell and Emery Walker, and gave Eric Gill his first job of lettering (to design and execute a fascia for the W. H. Smith shop at Bournemouth) and, what was of the greatest significance, evoked from Gill a standard alphabet of public lettering that led the way for the much larger standardizations such as that which the late Frank Pick instigated on behalf of London's Underground.

But Hornby did even more. He acquired and made part of W. H. Smith's, first in Letchworth and later in London, the Arden Press, at which the inspirations of the Arts and Crafts movement were given commercial application. He did not, however, slacken in his attention to the Ashendene Press, which at Shelley House, on Chelsea Embankment, became a place of pilgrimage for connoisseurs of books from many lands. By 1935, when he closed the career of the Ashendene Press, he had printed 40 major books in as many years.

Windsor Housing

Anthony M. Chitty has been appointed to advise the Borough of Windsor on housing development in the area.

Steel ROLLING SHUTTERS

ARRANGED FOR ELECTRICAL OR MANUAL OPERATION

The rapid clearance of loading bays and garages, which is vital to efficiency, is greatly facilitated by the use of steel Rolling Shutters. Mather and Platt Shutters can be fitted to steel, reinforced concrete, brick, stone or prefabricated structures, and are available for either manual or electrical operation.

MATHER & PLATT LTD
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THIS built-in Prestcold refrigerator, installed in the model kitchen at the British Electrical Development Association Exhibition "Electricity looks forward," has the following important advantages:

Storage capacity of approximately 4½ cubic feet, which will hold all the perishable foodstuffs for a family of four.

Larder space rendered unnecessary. Dry goods and non-perishable foodstuffs would be kept in kitchen cupboards.

Waist-high door, allowing access to interior without stooping. Height adaptable by varying position of supporting frames.

It can be built into kitchen fitments with cupboard space above and below it.

Design provides for adequate ventilation of mechanism without the necessity for special air-bricks or ducting.

Ice making and 'cold cooking' facilities.

Most important too, is the fact that this Prestcold refrigerator provides the food storage temperatures necessary for the proper safeguarding of perishable foods — for instance 35°F for fresh fish and poultry; 40°F for milk — and even the lower temperatures needed to store the frozen foods which will be available later on. In addition, it will be most economical in current consumption, using only one unit a day.

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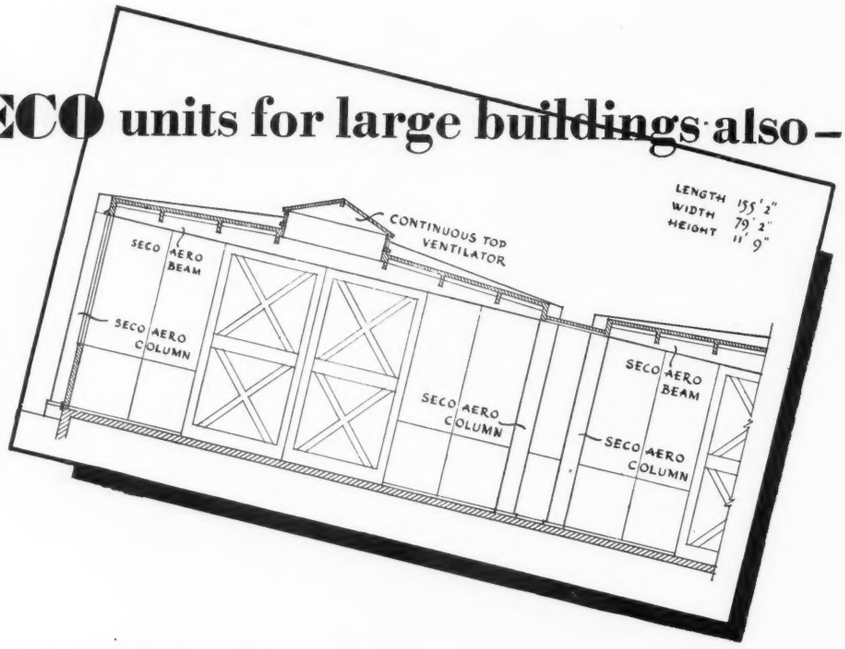
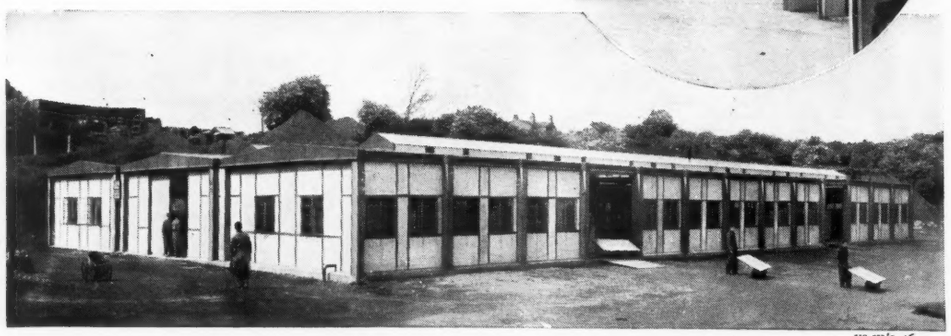


The Seco System of dry unit construction is a permanent method of building not only for houses, but for schools, hospitals, halls and factories Its flexibility is illustrated by these photographs of the new factory for the En Tout Cas Company, Ltd., at Syston, Leicester, consisting of three bays 155′ long, and one and a half units (11′ 9″) high.

TOP: *Interior view showing Seco Aero Beams and columns.*

BOTTOM : *The use of three bays side by side gives a total width of 79ft. 2ins.*



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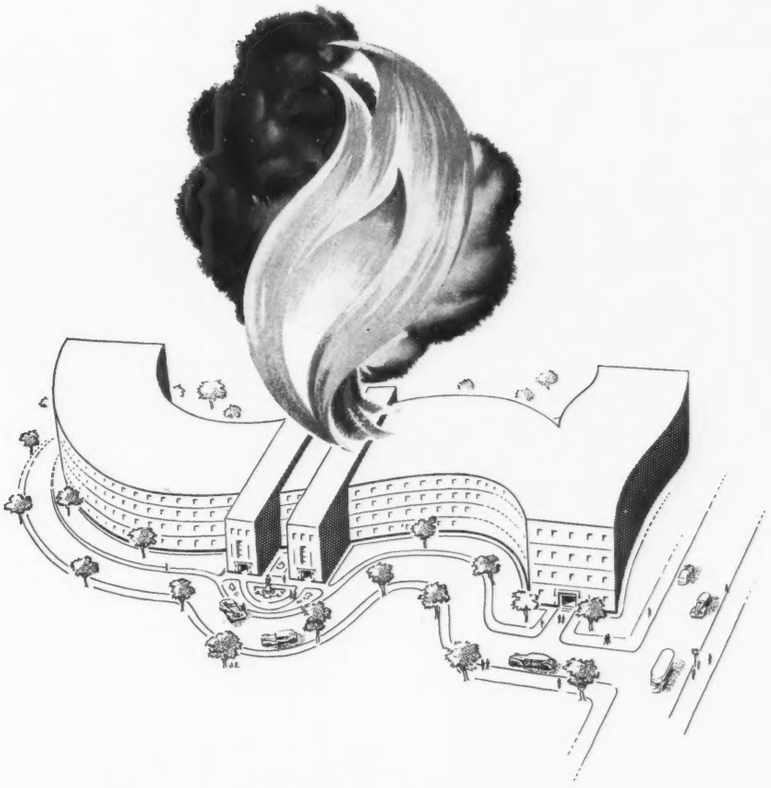
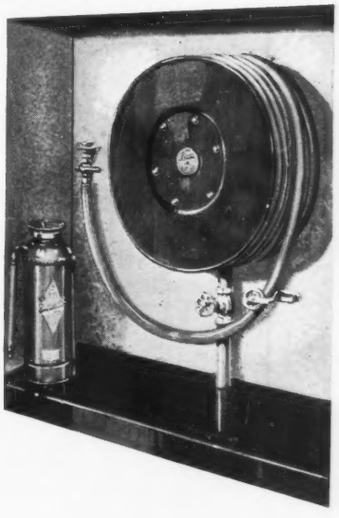


THE APPALLING COST OF FIRE *has taught a lesson in PLANNED PROTECTION . . .*

Once upon a time the placing of fire-fighting equipment, even in the largest buildings, was a somewhat haphazard affair and very often only improved after the bitter and costly experience of actual outbreaks. Today the architect wisely incorporates Pyrene Fire equipment in the right places and plans its unobtrusive inclusion in the general design. On the right is a typical example of a " recessed " " Pyrene " Everyway Hose Reel and " Conquest " soda acid Fire Extinguisher in a modern building. Advice on Fire Fighting Equipment and Architects' blackprints will gladly be provided without obligation on request.



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